Fra Mauro’s World Map  
(c. 1448–1459)

MAPPING, MEDIATION AND THE INDIAN OCEAN WORLD IN THE EARLY RENAISSANCE

Begun around 1448 and completed some time before 1459, Fra Mauro’s world map, illustrated in the figure accompanying this article, is a beautiful object. Its designer was an inmate of the Camaldulian monastery of San Michele on Murano, and worked with the assistance of a workshop including fellow monks and the Venetian mariner and cartographer, Andrea Bianco. Around four metres square and mounted on boards that enable it to be hung on a wall, the map was clearly intended for display, and indeed records indicate that it hung in the church and hall (aula) of the monastery in which it was produced (Falchetta, ‘Introduction’ in Fra Mauro 143–44). Yet an inscription on its face, indicating that it was made as ‘an act of homage to this most illustrious Seignory’ (Fra Mauro inscription and translation no. 2834), implies a close, if undefined, connection with the Republic of Venice and suggests a secular set of motivations for its production. Moreover, this map, clearly well known in its time, generated several partial or complete copies in the fifteenth and sixteenth centuries. The map as a whole is fascinating, and has been an object both of wonder and of scholarship for historians of cartography, exploration and culture for hundreds of years. Recently, Piero Falchetta’s superb edition and English translation of its c.3000 Venetian legends (referred to by number in what follows), published with an introduction, notes and a CD-Rom, has made it accessible, for the first time, to a wider audience of students and non-specialists.

The map’s unusually detailed representation of the Indian Ocean world has also attracted recent scholarly attention (Cattaneo ‘La Mappamundi’; Falchetta ‘Maps of the Eastern Islands’). Even a brief glance shows that the ocean between Africa and China (top; the map is oriented, like many Arab maps of the period, to the south) dominates a large swathe of the map and dwarfs the Mediterranean towards which it reaches out. To create his representation, Fra Mauro clearly capitalised on Venice’s position as a hub in the exchange both of goods and knowledge between East and West (Beckingham et al). Indeed, his map brings together: up-to-date information on Portuguese explorations of the west coast of Africa; information from his collaborator Andrea Bianco, a galley officer who sailed the western Mediterranean and Atlantic coasts between 1437 and 1451 (Woodward 432); detail about military campaigns in East Africa in the 1430s; and, in addition to cartographic convention (the southern orientation of the map), geographical and nautical detail from Islamic sources. In the Indian Ocean, a network of well-informed, linked legends traces the routes of spices, other luxury goods and people: between Indonesia and China; between China and Africa; between Arabia and South Asia; between the Indian Ocean world and the Black Sea, on the doorstep of the Mediterranean. However, the map does not merely reflect Western European conceptions of the Indian Ocean world and of its own relationship with that world at the moment of the map’s production. In common with many maps, this map aims not simply to represent space, but to intervene in and manipulate its political and socio-spatial world.

Maps map, according to Denis Cosgrove, worlds that are ‘material or immaterial, actual or desired, whole or part, […] expressed, remembered, or projected’. Maps are not merely ‘spatial embodiment[s] of knowledge’; they also act as ‘stimul[i] to further cognitive engagements’ that take many forms (Cosgrove 2). Certainly, the world projected on the Fra Mauro map and the activities it stimulated are particularly significant; in 1459, records show that a copy of it – now lost – was made and sent to Alphonso V of Portugal (Cattaneo ‘Fra Mauro cosmographus’). The Portuguese crown at the time was, of course, sponsoring a series of voyages along the western...
Fra Mauro, World Map (1448–1460). In the map’s frame are cosmological discussions and diagrams (top), a representation of the relative distribution of land and water on the globe (bottom right) and an image and discussion of the terrestrial paradise (bottom left). The map is oriented to the south, where (top) a channel separates Madagascar, labelled as ‘Diab’ on the map, from the African mainland. The Indian Ocean’s size dwarfs the Mediterranean to the map’s west (unusual in maps of this era). Reproduced by kind permission of the Biblioteca Nazionale Marciana, Venice.
coast of Africa, documented on this very map, that would eventually take Bartolomeu Dias and Vasco da Gama into the Indian Ocean. An understanding of Fra Mauro’s map, therefore, plays a part in our understanding of the historical development of relationships between Western Europe and the Indian Ocean world.

But the significance of this cultural artefact does not begin and end with its position in a historical process of transition from a period of regional segmentation of trade between the western Indian Ocean and the South China Sea to a period of European dominance in the region (Chaudhuri 102–03). The map is a deeply complex artefact. It is intentionally positioned through the writing of its self-aware cartographer as an object that mediates between Latin Europe and the Indian Ocean world; between oral and written systems of knowledge; between reality and representation and between ‘then’ and ‘now’. It is this mediating position and the cartographer’s exploitation of it that forms the focus of this article. Following a discussion of the detailed graphic and textual representation of the Indian Ocean world that the map respectfully lays out before the Venetian Republic, I explore this artefact’s position as a spatial and temporal junction, filtering information between east and west, between past, present and future, working to shape the world that it purports to represent.

Fra Mauro’s world map is the first surviving European map to represent the Indian Ocean world in detail. However, as cartographic historian Angelo Cattaneo has pointed out, the map’s major cartographic innovation lies not so much in the detail of its representation as in its written and graphic assertion of the navigability and habitability of the oceanic space between east Africa and Southern China (Cattaneo, ‘La Mappamundi’ 110). But we can go further than this. On the map, the Indian Ocean world comes across as positively crowded; populous and well-traversed, it is a cog in the economic machinery of the world. Indeed, the crowdedness of the region occasionally outstrips the representative capacity of the map. ‘In this sea’, Fra Mauro says of the Indian Ocean, ‘there are many islands that cannot be specially noted because of lack of space, but all are inhabited and very fertile in various precious spices and many other new things’ (Fra Mauro #594). Images of islands, rigged ships and legends crowd the region, as do the voices of witnesses who clamour to support the cartographer’s assertions about it: ‘Everyone’, he says (the implication being that there are too many to name), ‘who sails in the Sea of India says that one loses sight of the Pole Star at Cape Chomari’ (#282). The map plots the routes of goods — notably spices — through the three major trade circuits of the pre-modern Indian Ocean that correspond, as Chaudhuri has shown, with the seasonal shift of the monsoon between the Arabian Sea, the Bay of Bengal and the South China Sea. A legend alongside an Indonesian island designated ‘Lesser Java’ points out that goods are taken from ‘eight islands, in which grow fine spices’ around Lesser Java to Greater Java. From there, ‘one part [is sent] to Caiton [southern Chinese port, now Quanzhou] and Cathay, another to Hormuz, Çide [Jidda] and Mecca, by the Sea of India, and the third is sent northwards across the Sea of Cathay’ (#589; see Falchetta ‘Maps of the Eastern Islands’). Another inscription, this time at Hormuz, on the Persian Gulf, follows the same chain of navigation and merchandise from Indonesia all the way to the Black Sea (#348). The ocean represented here is not only navigable, it is already overlaid with a network of intersecting trade routes — routes that bear its influence deep into continental Asia and Western Europe.

The map represents the Indian Ocean not just as internally navigable, but also as interconnecting with the Atlantic. Subsequent developments, both in navigation and cartography, have led us to take the interconnectedness between Indian and Atlantic oceans for granted, a position that makes it easy to underestimate the immense rhetorical effort Fra Mauro put into persuading the map’s readers of this connection. The possibility of navigation between Europe and Asia tended to be dismissed by late-medieval geographers and cartographers for a range of not always consistent reasons. The common late-medieval world view of the habitable world was as a three-part circle of lands (orbis terrarum), surrounded and bordered by an ocean that becomes non-navigable and uninhabitable in the south because of the excessive heat of the so-called torrid zone (Randles). This theory effectively isolated the Indian Ocean from the Atlantic. Claudius Ptolemy’s second-century Greek Geography, which popularised the drawing of maps using co-ordinates to mathematical projections in Western Europe after its translation into Latin in 1406 (Dalché), posited a cartographic vision of an enclosed Indian Ocean bordered by unknown land (terra incognita) that linked eastern Africa to south east Asia. Whether through terra incognita, climate or hydrography, the Indian Ocean was considered closed to European shipping in early fifteenth-century geographical thought.

Against these conceptions of an isolated Indian Ocean, Fra Mauro sets out his conception of an ocean once reached in the past and reachable again in the future:

Some authors write that the Sea of India is enclosed like a pond and does not communicate with the ocean. However, Solinus claims that it is itself part of the ocean and that it is navigable in the southern and south-western parts. And I myself say that some ships have sailed it along that route. This is confirmed by Pliny when he says that in his day two ships loaded with spices coming from the Sea of Arabia sailed around these regions to Spain and unloaded their cargo at Gibraltar [. . .]. Fazio [Degli Uberti] says the same; and those who have taken this route, men of great prudence, agree with these writers. (Fra Mauro #53)

The passage between the Indian and Atlantic oceans is not just navigable in theory but has been navigated in fact. Indeed, in a later legend, Fra Mauro exploits privileged access (he appears extraordinarily well connected and informed) to
the most recent developments in both European and Indian navigational knowledge to buttress his vision. It is supported on the one hand by the authority of those ‘sent by his Majesty, King of Portugal’ who had sailed south-southeast along the west coast of Africa and, on the other, by

a person worthy of trust, who says that he sailed in an Indian ship caught in the fury of a tempest for 40 days out in the Sea of India, beyond the Cape of Soffala [...] towards west-southwest. (#149)

Fra Mauro assembles witnesses past and present, east and west, some known and some, like the traveller on an Indian ship, otherwise unheard of, in order to assert that

without any doubt [...] this southern and south-western part is navigable, and that the Sea of India is an ocean and not an inland sea. This is what is said by all those who sail this sea and live in those islands. (#149)

The cartographic theorist Denis Wood has suggested that maps ‘make the past and future present’ so that ‘whatever invisible, unattainable, erasable past or future can become part of our living’ (Wood 7). To present his Indian Ocean as reachable from the Atlantic, Fra Mauro’s map works precisely in this way. Scattered references to the circumnavigability of Africa drawn from geographies and mariners’ reports produced thousands of years apart are compressed into a single cartographic assertion. The past and present are mined to serve a desired future — direct navigation between Atlantic and Indian Oceans. The act of mapping that desired future is not just a representation, but an intervention that helps to bring such a future about.

Fra Mauro’s map, then, attempts to shape contacts, relations and actions in and between the Mediterranean and Indian Ocean worlds. Yet this is not the only way in which the cartographer manipulates the intermediary role he has fashioned for himself. The world map is a translation in the literal sense of the word; it carries knowledge over, across space and time and between cultures. Translating in the most literal sense of the word, the map carries over to its Venetian audience myriad toponyms and terms of Chinese, Indian, Arabic, Javanese, Malay and other Indian Ocean world origins. Arabic toponyms feature, for instance, along ‘the entire outline of the eastern coast of Africa to the south of the Horn of Africa’ (Falchetta, ‘Introduction’ in Fra Mauro 72). Locally current names appear attached to many of the ports around the Bay of Bengal and eastern Indian Ocean, from Paliechat (Pulicat) and Oriça (Orissa) on the east coast of India to Melacha (Malacca, Malaysia) in modern-day Indonesia (Fra Mauro 227–32). The map uses the toponym Mihen, of Chinese derivation, for the region of Myanmar (#726 and #727) and Cimpangui – from China via Marco Polo – for Japan (#1334). Such translations bring with them traces of the power relations that produced them. The preponderance of toponyms of Arabic origin on the map reflects centuries of Arab dominance in the navigation of the western Indian Ocean (Hourani 83), whilst it is through reports of the Mongol Khan Kubilai’s late thirteenth-century military campaigns in Japan that news of that island filters through to Europe (Morgan 120–21).

Fra Mauro never identifies the sources of the linguistically diverse, locally current place names his map locates. This has led to much speculation about the sources of his data, which can sometimes be found paralleled in Arabic works such as the twelfth-century geography of al-Idrisi and the late fifteenth-century navigational treatise of Ibn Majid (Crone; Falchetta, ‘Introduction’ in Fra Mauro 72). But the cartographer’s deployment of these sources is in many ways more interesting than the unanswerable question of their origin. Indeed, for Fra Mauro, as for all translators and cartographers, the act of translation is not a neutral one; the mapmaker selects and manipulates what he wishes to carry over and silently omits what he does not. In his depiction of the Indian Ocean, he places his linguistically diverse, local place names within a conspicuously Latinate, European framework. Larger geographical and hydrographic areas and features are marked out on the map by Latinate names (often originating in Ptolemy’s Geography), printed in decorated, sometimes gold, capitals. On the lands that border the Indian Ocean we find Africa (Fra Mauro #464), Ethiopia (#464), Garamantia (#526), Arabia Felix (#423), Arabia Deserta (#923), Arabia (#446), Persia (#755), Mesopotamia (#934), India Prima (in the northern region of India, #771) and India Secunda (indo-Chinese regions and parts of south west China #671; #673). The Latinity of these toponyms stands out against the linguistically diverse port and town names that surround them; ‘Mare Indicum’ is inscribed in gold-leaf capitals to the south of the Indian Ocean, between the Arabic-derived Chancibar (Zanzibar, #39) to the west and Diuamoal (Maldive, #31) to the east. Nowhere does the map clearly articulate a principle of selection that explains its maker’s decisions to choose or avoid particular types of place name. In some of the map’s longer inscriptions, though, such a principle is implied. ‘This Abasia’, notes a legend in east Africa, ‘was called Agisimba by the cosmographers’ (#134; #139). In this inscription, Fra Mauro signals that the translation he is making is a temporal one; he has replaced a past place name (in this instance Ptolemaic) with an up-to-date toponym of Arabic derivation.

It would be a mistake, however, to assume that Fra Mauro’s temporal translations are always updates, directed to the translation of past geographies into contemporary terms. On the contrary, there are occasions when the map’s concern seems to be to map the Indian Ocean world of recent report onto an East of timeless myth and legend. To the south of a peninsula that corresponds with the Malay Peninsula on modern maps, the cartographer draws an island called Taprobane. An island located, according to the classical and late-antique geographies of Pliny the Elder, Ptolemy and Solinus, close to India but so far to the south that it was ‘formerly considered another world’ (Solinus 53.1). Taprobane is normally thought by historical geographers to refer to
Sri Lanka. Fra Mauro, however, identifies it as ‘the Island of Siamotra [Sumatra]’ (Fra Mauro #234). Leaving aside the issue of the source of this identification, the unbalanced settlement the map arrives at in its negotiation between ancient and modern in the case of this particular island is surprising. The fifteenth-century toponym Siamotra appears just once on the map, whereas Taprobana(e) appears in six separate legends (#23, #156, #195, #215, #220, #234, #181). Fra Mauro here translates backwards, from the terminology of his present to that of his classical forebears.

A second, particularly significant act of translation from present to past is to be found in Fra Mauro’s depiction of Africa. Like many world maps of the later Middle Ages and Early Modern period, that of Fra Mauro gives a physical location to one of medieval Europe’s most enduring legends — the kingdom of the Priest-King Prester John (Fra Mauro #83). The fame of this mythical figure, styled as ruler of the Three Indies, shot through Western Europe after 1165, when a letter purporting to have been written by the Priest-King addressed to the Byzantine Emperor Manuel Comnenus began to circulate across the continent (Hamilton; Beckingham). Fra Mauro here translates backwards, from the terminology of his present to that of his classical forebears.

Part of the mapmaker’s remit, in Fra Mauro’s view, is to mediate between the geographical frameworks of the cosmographers of the classical world, Christian history and legend, and the knowledge of populations, navigators and travellers. His map positions the Indian Ocean world in relation to a past sometimes distanced from and sometimes brought close to its present. However, it is not just the Indian Ocean world that is shaped by this process, but the image, role and status of the cartographer himself. Fra Mauro uses his locally derived Indian Ocean world place names and cosmographical framework in such a way as to cement his own status as a knowledgeable cosmographer and his map’s status as up-to-date cosmography. The particular focus of Fra Mauro’s efforts here is the recently translated and influential work of Claudius Ptolemy (Edson 10).

Fra Mauro’s relationship with Ptolemy, an authoritative classical geographer whose Geography had only recently become available in Latin translation to fifteenth-century Western Europe, is deeply contradictory. At the same time as
Fra Mauro wishes to define himself against the group he calls ‘the cosmographers’ (Fra Mauro #134, #1043, #1424 etc), foremost among whom is Ptolemy, he nevertheless needs their geographical frameworks. In the Indian Ocean region, this tension and its results become particularly clear in the map’s treatment of Ptolemy’s Geography. The occasions when Fra Mauro silently carries Ptolemy’s geographical framework and toponyms over into his own work are many; borrowings relate to settlements, regions and provinces, mountains, rivers, peninsulas and promontories, guls and maritime regions and peoples. But the map does not advertise these borrowings; they appear on the map without signal. However, when Fra Mauro disagrees with Ptolemy – as he does with Ptolemy’s depiction of the Indian Ocean as an enclosed basin – he sharply foregrounds the completeness and newness of his own cartography against Ptolemy’s perceived limitations.

Concerning Persia he writes, ‘[a]s I have said elsewhere, this province of Persia is divided into eight kingdoms, and extends far beyond the limited borders that Ptolemy gives it’ (Fra Mauro #1490). In a gulf at the furthest eastern edge of China, Fra Mauro yet again highlights his divergence from Ptolemy’s vision of an enclosed Indian Ocean: ‘Southwards from this province of Serica [China], Ptolemy labels as terra ignota (#2243). When Fra Mauro identifies the Taprobane of classical geography with the Sumatra of his contemporaries, he rather unfairly singles out Ptolemy for criticism, noting that ‘Ptolemy, when wanting to describe Taprobana, simply described Saylam [Sri Lanka] (# 215). In short, the mapmaker’s use of Ptolemy falls consistently into a pattern of silent acquiescence coupled with public disagreement. The resulting map is shot through with indications of its cartographer’s need to define himself and his own cartography as up-to-date and complete.

To do so, he manipulates both the figure and the cartography of Claudius Ptolemy, used to represent the cartography of the past whilst silently shaping the cartography of the present.

Fra Mauro also takes on one further intermediary role — that of mediator between lived experience, practice and autochthonous narrative on the one hand and geographical theory on the other. In the map’s representation of the Indian Ocean world, the cartographer’s attempts to translate into cartographic form features that almost certainly derive from local, practical knowledge are particularly frequent and noticeable. A whirlpool to the east of the Bay of Bengal is, Fra Mauro comments, ‘very dangerous for sailors’ (# 240). A chain of uninhabited islands that encompasses the ocean to the south represents, according to an adjacent note, the southernmost limits of navigational practice. ‘[W]hen navigators see the birds of these islands’, he says,

they think that they have come too close to them and they pull away[,] because beyond these islands are the Shadows [le tenebre], which are so dense that if a ship ventured into them it would not be able to go either backwards or forwards. (#25)

The ‘shadows’ are, according to Ibn Mâjid’s late fifteenth-century navigational manual, a region of dark and dangerous seas that circumscribed the Indian Ocean to the south and west (Mâjid 208, 218–19). However, the map does not attempt to plot these. Instead, it attempts to plot the practice of navigators, who use the habits of birds to locate themselves and set courses (Mâjid 196–97). The map lends practically acquired, orally transmitted knowledge the permanence of written geography and cartography.

Yet the position of mediator between oral tale and cartographic product is not a wholly unproblematic one. While the testimony, so often quoted by Fra Mauro, of ‘those who sail in these seas’ or ‘live in these islands’ is often a powerful source of authority, some of the map’s legends reflect unease that it may sometimes have the opposite effect. In these instances, the cartographer takes on the position of an adjudicator, attempting to create and police a distinction between truth and falsehood and between geography and fable. In the east of the ocean, south east of the coastline of Mahabar (eastern India’s Coromandel coast), the map locates the island of Andaman. A gold circle on the island indicates with graphic certainty a feature to which the adjacent legend is only willing to attest obliquely: ‘[o]n this island there is said to be [‘se dice esser] a water which can turn into gold any iron you wet with it’ (Fra Mauro #208, my emphasis). The distancing impersonal construction in this legend indicates a moment of hesitation that has turned into scepticism in a linked inscription at the westernmost edge of the same map.

Following a discussion of an Irish lake said to exist [‘se dice esser] there with similarly marvellous powers, Fra Mauro intervenes:

And if one believes this thing, one can also believe in the lake of Andaman. Those who wish to have plentiful information on these wonderful and these monstrous things should read Julius Solinus’ Polyhistor, Pomponius Mela, St. Augustine, Albertus Magnus and St. Thomas Aquinas in his book against the curious. Similarly, they can read Aristotle’s Meteorology and Pliny on the wonders of the world, and they will see thousands of things of which I have not mentioned one. (#2212)

The map of the world is not the place for ‘wonderful and monstrous things’; readers seeking these are sent on their way with a list of recommended reading. Fra Mauro is perfectly willing both to make use of oral reports about whirlpools, regions of shadow, numbers of islands in the Indian Ocean, voyages between the Indian and Atlantic Oceans, and indeed to use his unparalleled and unprecedented access to such materials to buttress his own cartographic authority. But at the same time he makes it clear that he considers cartography to be a discipline with bounds — bounds that he creates and reinforces through his practices of selection and omission.
Conclusion
When I was first invited to introduce a medieval map of the Indian Ocean world for this volume I chose Fra Mauro’s map, not just because of its extraordinary breadth of knowledge and depth of detail, but because I considered it as a transitional object, a kind of spatial and temporal juncture and crossing-point, facilitating and indeed embodying connections between Indian Ocean and Mediterranean, between oral tradition and written cosmography, between medieval and modern and between periods of Arab and European dominance in the Indian Ocean world. The map may be all of these things, but above all, it is an agent, not a neutral witness. It mediates between places, knowledge systems, world and representation, past and present, to shape not just the graphic space of the map but the real space of the world, at the same time as it foregrounds and aggrandises its cartographer’s mediatory role. Whilst it claims to carry over the words of witnesses from the Indian Ocean world, these words can sometimes be dislocated, anonymised, subordinated and even suppressed in the mediation process. The process of translation – of carrying over – in which the map engages also involves a certain amount of leaving behind. Aspects of the region’s geography are consigned by the map to a past that the same map constructs. At the same time, the map carries other aspects – most notably the navigability of the Indian Ocean and its connection with the Atlantic – into the cartographic and political future. In so doing, the map, which we must remember was swiftly copied for the Portuguese king, helps to bring this future about.

Works Cited