



ENIGMATIC INDIAN OCEAN COASTLINES ON EARLY MAPS AND CHARTS *

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Maps by early non-Iberian cartographers tended to rely heavily on Ptolemy's hopelessly inaccurate maps, and on a literal acceptance of Marco Polo's unreliable, second-hand writings. The identification of dubious, frequently imaginary coastlines on such maps is thus usually based on guesswork, or wishful thinking. Only critical examination of the inscriptions can provide reliable identifications. Maps of the Indian Ocean improved as Portuguese charts slowly supplanted Ptolemaic and Polo-esque information.

In recent years there has been quite a spate of books and articles which might justifiably be described as being on the margins of the history of cartography. One way or another, they seek to throw light on the identity of puzzling features on early maps. The majority of these have been in the Southern Hemisphere. Thus, for example, several Argentine scholars have claimed that the most south-easterly peninsula on Martellus's world maps of c. 1489 (Fig. 6) is really a pre-Columbian representation of South America, and that the *Sinus Magnus* west of it is actually a wrongly-scaled representation of the Pacific Ocean.¹ A forthcoming article will examine this hypothesis.

The present article, however, is concerned with the Indian Ocean area. Firstly, let me briefly dispose of two long-standing claims made regarding the identity of large land masses portrayed on its eastern fringe.

§1. *Beach* etc. on Mercator's southern continent

Many have suggested that the part of Mercator's southern continent identified by the names *Beach*, *Locach* or *Lucach*, and *Maletur*,

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immediately south of Indonesia, is evidence of an early 16th century European discovery of Australia. It first appeared, not on his famous 1569 world map, as is widely believed, but twenty-eight years earlier, on his globe gores of 1541,² and was copied or adapted by many, especially non-Iberian, cartographers for many decades (Fig. 1). It has been conclusively shown that it was created by Mercator, primarily as a result of two printing errors in vital contexts in Latin editions of Marco Polo which were included in an anthology of travel literature, *Novus Orbis Regionum* ..., published in Paris and Basle in 1532.³ Above all, the replacement of the name Champa (a kingdom in Central Vietnam) by Java, caused Mercator and many others to believe that a number of places originally described by Marco Polo as being south of Vietnam were actually south of Java.⁴ Mercator was a firm believer in the necessary existence of a vast land mass in the southern hemisphere to counterbalance that which existed in the northern hemisphere. The Marco Polo printers' errors, probably deriving from manuscript errors, together with a passage from Ludovico di Varthema's *Travels*, appeared to confirm his belief.⁵ Mercator joined up his *Beach* / *Lucach* / *Maletur* land mass, both eastwards and westwards, to Tierra del Fuego's north coast, discovered by Magellan in 1521, since it was widely believed to be part of the southern continent.

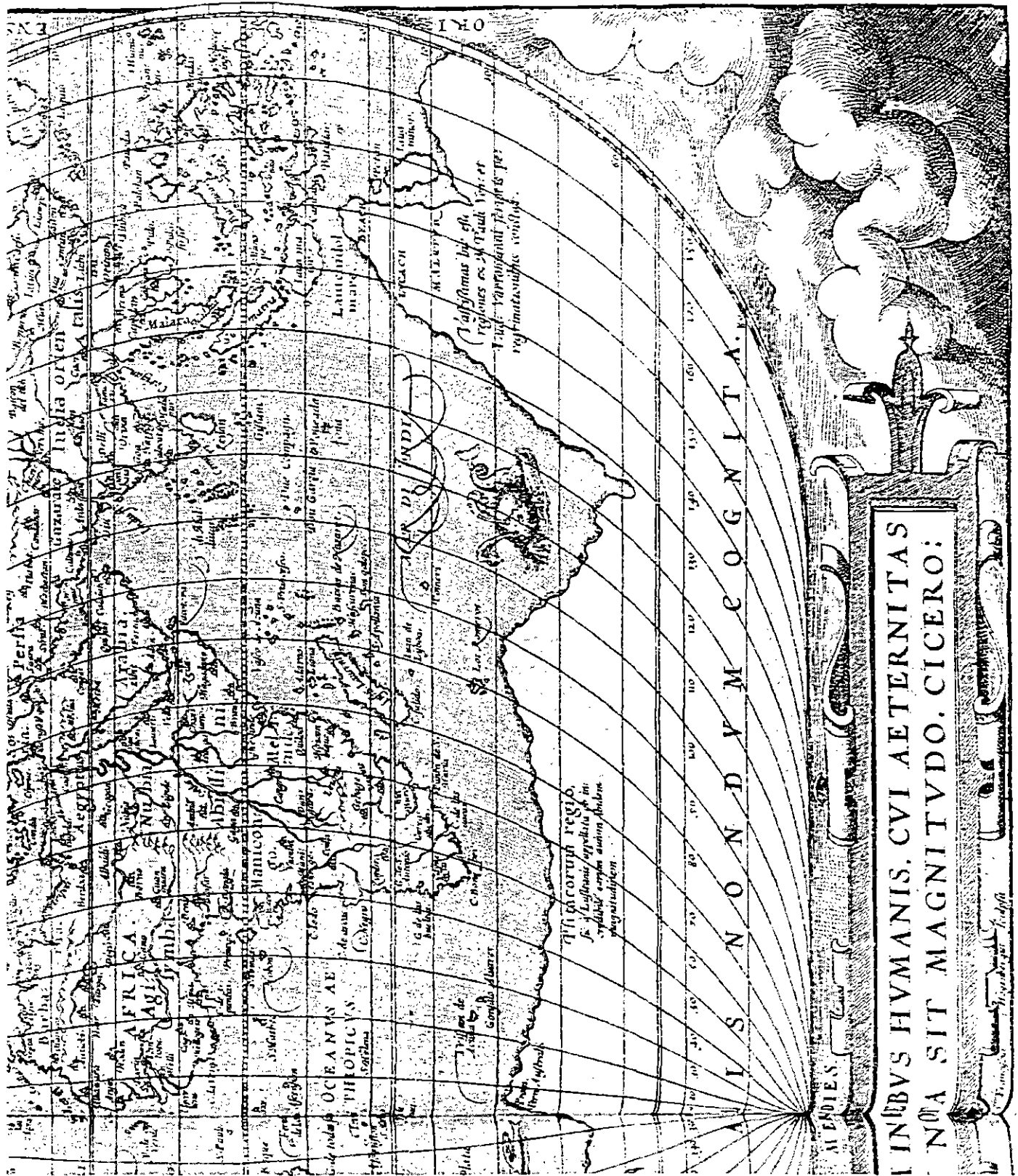


Figure 1. Part of Ortelius's (1570) version of Mercator's southern continent. Note: 1. The Marco Polo-inspired *BEACH, LVCACH, MALETVR* land mass south of *Iaua maior* (Java), as well as the islands of *Petan* (Bintang) and *Iaua/minor* (the misunderstood Arab name for Sumatra). 2. *Psitacorum regio* (Region of Parrots) south of the Cape of Good Hope. Many cartographers placed this inscription somewhat further east (see §. 9). 3. The island of *Los Romeros*, just off the coast ENE of *Psitacorum regio* (see §. 13).



Figure 2. The outline of *Jave-la-Grande* on the Dauphin (Harleian) map superimposed on the modern outline of SE Asia and Australia, assuming that the north coasts of Java and Sumbawa should coincide and that the rest of each map is on the same scale. The Harleian map's scale, however, is far from consistent overall (Courtesy of Jens Smith).

§2. *Jave-la-Grande* on the Dieppe maps

A second large land mass on the eastern fringe of the Indian Ocean is that called *Jave-la-Grande* or *Java-la-Grande* on a number of mid-16th century manuscript maps known collectively as the Dieppe maps, after the French city where they were made. Many Australians are aware that this 'continent' has been declared to be evidence that the Portuguese were the first Europeans to reach Australia (Fig. 2).⁶ The inscriptions on *Jave-la-Grande*, however, do not support its identification as Australia.⁷ *Jave-la-Grande* is merely a French translation of *Iaua Maior*, the name by which many Portuguese knew Java, following Marco Polo's adoption of Arabic usage. The apparent continent is actually composed of two early, primitive, Portuguese sketch charts, of the coast of Vietnam, and part of Java's south coast, which the French map compilers were unable to identify correctly. The Javanese identification was made almost exactly a century ago by Edward Heawood, and more recently by Andrew Sharp, but neither discovered the confirmatory place-name evidence.⁸ The charts were evidently on different scales from the one prevailing in the rest of the world, and were probably misplaced under the impression that they were parts of the same vast, hypothetical southern continent that Mercator believed in. Several Dieppe cartographers did join up *Jave-la-Grande*, partially or completely, to the north coast of Tierra del Fuego.⁹ The fact that 16th century Portuguese charts left the south coast of Java blank may well have provided an additional motive for the false siting of the two Portuguese charts.¹⁰ Adherents to the Australian identification theory wishing to dispose of the inscription evidence will have to explain it away, place-name by place-name, and also produce a more convincing, point-by-point case, showing how each one relates to Australia rather than to Java and Vietnam. A flat denial, based on wishful thinking but unsupported by evidence, will not suffice.

§3. The world map in Benito Arias Montano's Polyglot Bible (1572)

The world map in Benito Arias Montano's Polyglot Bible of 1572 (Fig. 3),¹¹ shows a piece of coastline south of features which evidently represent Sumatra, the Malay peninsula, even though it is portrayed as an island, and Borneo. The coastline concerned is incomplete, for it has no southern coastline. That fact, as well as its positioning, would suggest that it is a representation, not of Australia, as maintained by some,¹² but of that other, particularly important Indonesian island, Java, which otherwise is not represented, even though its correct location had been quite accurately known from as early as 1511, when the first Portuguese ships reached it. As pointed out above, most (if not all) 16th century Portuguese charts omitted Java's south coast. It was not until the arrival of the Dutch that that coast was seriously examined. It was of no commercial interest to the Portuguese, since all international trade was confined to the north coast.

§4. *India Meridionalis* on Heinrich Bünting's world map of 1581

Certain sectors of the press in Australia are always ready to make extravagant historical claims on the scantiest of 'evidence'. In November 1995, a copy of Heinrich Bünting's world map of 1581 surfaced in Perth and hit the headlines (Fig. 4).¹³ It was evidently unknown to Emeritus Associate Professor Leslie Marchant, who was approached by the press, for he was quoted as claiming that it was a new, sensational discovery, providing an accurate portrayal of Australia's west coast.

Figure 3. (On next page). World map in Benito Arias Montano's Polyglot Bible of 1571 [1572]. Note: 1. The portrayal of the Malay peninsula as partially an island. 2. The positions of what are clearly intended to be Sumatra and Borneo. 3. The large 'island' lacking a south coast, SE of Sumatra, in the position of Java, not in the position of Australia. For long, most Portuguese maps portrayed Java without a south coast, since it was not well known.

8 Die eigentliche und wahrhaftige gestalt der Erdenbild des Welt. COSMOGRAPHIA VNIVERSALIS. 9



Figure 4. The world map in Heinrich Bünting's *Itinerarium Sacrae Scripturae ...*, of 1581 Note: 1. The appallingly bad portrayal of the then known world. 2. The 'remarkably accurate' portrayal of *India Meridionalis* ('Western Australia'!). 3. The absence of any indication of latitude (see §§ 4, 5 and 6).

It was stated that it turned correctly east exactly in 34°S, despite the fact that there is no indication of latitude on the map whatsoever. Leslie Marchant presumably assumed that the Cape of Good Hope was correctly positioned, and that therefore, what he took to be Cape Leeuwin, which is actually in the same latitude, was also correct. He apparently failed to observe the astonishingly inaccurate portrayal of those parts of the world that were then very well known; the boot of Italy points in the wrong direction, for example! It is ludicrous to suggest that, in 1581, the most correctly-mapped part of the world was the west coast of Australia. The suggestion that its supposed accuracy was due to Arab maps, reveals ignorance of Gerald Tibbetts' research,¹⁴ and in any case, there is so far not one shred of evidence to substantiate the implied arrival of Arab mariners on Australia's coastline in the 16th century. The name *India Meridionalis*, which I will comment on later (§6), was ignored.

Was *India Meridionalis* mere cartographic licence, as has been suggested, perhaps to counterbalance the astonishingly inaccurate land mass of South America? (North America does not appear at all). Conceivably. But there is a remote possibility that Bunting may have derived the outline ultimately from a specific source.

The famous Portuguese world map of 1502, known as the 'Cantino', contained information concerning Asia beyond the west coast of India, which was the most easterly point then reached by the Portuguese.¹⁵ It must therefore have been obtained from Asian, probably Arab, sources.¹⁶ It will be remembered that Vasco da Gama engaged an Arab pilot in Melinde (Malindi) to guide him to India. The Malay peninsula is shown on the 'Cantino' projecting south almost as far as the Tropic of Capricorn. This misinformation was copied by some later cartographers. What is believed to be the first map specifically of the Indian Ocean, probably by Jorge Reinel, is a case in point.¹⁷ It is dated 1510, just before the Portuguese reached Malacca. Apparently because of the circular frame of wind roses

adopted, the southern section of the Malay peninsula appears as an incomplete piece of land on the eastern extremity of the Indian Ocean, extending from the Equator (originally carelessly identified as the Tropic of Cancer) almost as far south as the Tropic of Capricorn (see also §5). It does, therefore, seem possible that the outline of Bunting's *India Meridionalis* may have been derived from some descendant of the Jorge Reinel Indian Ocean map.

§5. Hapgood's 'Australia'

C. H. Hapgood, in his sensational *Maps of the Ancient Sea Kings*, jumped to the conclusion that the same Jorge Reinel Malay peninsula fragment was Australia's west coast, even though he observed that it was seriously misplaced.¹⁸ He evidently did not take the elementary precaution of examining the original, or a reproduction sufficiently large to enable the inscriptions to be read. Against a city on this land there is an inscription in Portuguese which in English reads: 'the very populous and rich city of Malacca which is as yet neither known nor discovered by us'. The island off the coast, which Hapgood either failed to notice, or ignored, is clearly identified as Sumatra. The name *Taprobana* which appears on Bunting's map between India (*Calicut*) and *India Meridionalis*, was sometimes applied to Sri Lanka, sometimes to Sumatra. It is therefore not possible to be sure which Bunting's *Taprobana* is meant to represent. However, Hapgood's error emphasises the necessity of reading the inscriptions on early maps, rather than relying on apparent coastal outline resemblances alone, when seeking to identify enigmatic features.

Figure 5. (On next page). The world as conceived on the basis of Ptolemy's writings. Note: 1. *Aurea Chersonesus* (Golden Peninsula), generally believed to represent the Malay Peninsula. 2. The *Sinus Magnus* (Great Gulf) east of it, to this day not reliably identified. 3. The southward extension of Asia joined up to Africa, turning the Indian Ocean into a vast lake.



§6. Source of the name *India Meridionalis*

Bünting would appear to have adopted the name *India Meridionalis* (Southern India) from one of several early 16th century non-Iberian cartographers who used it. Maps based on Ptolemy's co-ordinates show, on the eastern extremity of his world, a southward extension of China which eventually joins it to Africa, making the Indian Ocean a vast lake (Fig. 5).¹⁹ The German cartographer, Henricus Martellus, in c. 1489, after Bartolomeu Dias had rounded the Cape of Good Hope, opened up the Indian Ocean south of Africa, and turned Ptolemy's southward extension of China into a peninsula, the one which some Argentine writers claim is really South America (Fig. 6).²⁰ On this peninsula Martellus placed Ptolemy's still unidentified city of *Cattigara*, and a series of names derived from Marco Polo, some of which identified places actually in SE Asia, while most belonged properly in India. A jumble of islands were placed east of it. Several of those non-Iberian cartographers who copied or adapted Martellus's new peninsula, placed the name *India Meridionalis* in the vicinity of some spelling of the name Champa (i.e. part of Central Vietnam) at the upper end of Martellus's extra peninsula, as in Waldseemüller's 1507 world map (Fig. 7).²¹ It almost invariably appears north of the Equator, and is often used in contradistinction to *India Superior*, which seems to have been used to indicate an area north of China (*Mangi* and *Cathay*). It is possible, however, that Bünting may have derived the name from the fact that several early maps referred to the Indian Ocean

Figure 6. (On previous page). One of Henricus Martellus's world maps of c.1489 (Courtesy of the Biblioteca Medicea Laurenziana, Firenze).

Note: 1. The opening up of the Indian Ocean south of Africa, following upon Bartolomeu Dias's rounding of the Cape of Good Hope. 2. The removal of Ptolemy's coastline bordering the Indian Ocean to the south. 3. The transformation of Ptolemy's southward extension of Asia into a huge peninsula. With the exception of Ptolemy's *Cattigara*, the names on it are derived from Marco Polo's description of Asia. 4. The jumble of islands east of it, whose real locations were unknown. Later cartographers variously portrayed them, with names derived from Marco Polo (see Figs 7 and 10).

as *Oceanvs Indicvs Meridionalis*. The 'Cantino' map actually used *Oceanus yndicus meredionalis* not only for the Indian Ocean proper, but also for the sea south-east of the Malay peninsula.

§7. Edward Wright's 'Australia' (1599)

It has been suggested that the unnamed, incomplete coastline south of Java is part of Australia's north coast. However, since the map was an adaptation of Mercator's 1569 world map made specifically to illustrate and explain Mercator's projection, it would seem clear that it represents the *Beach* part of Mercator's southern continent, concerning whose real existence Wright was justifiably sceptical.²²

§8. Manuel Godinho de Erédia and *India Meridionalis*

Whatever the origin of Bünting's *India Meridionalis*, it is certainly not Western Australia, despite the remarkable similarity in their outlines. The only Portuguese cartographer to use the name was the hopelessly confused Manuel Godinho de Erédia.²³ Most of his surviving maps and

Figure 7. (On next page). Part of Waldseemüller's world map of 1507, showing his adaptation of the northern half of Martellus's fourth Asian peninsula. For the southward continuation of it, see Fig. 10. Both figures show the utter confusion of cartographers trying to portray places they only knew of from written sources. Note: 1. Ptolemy's *SINVS / MAGNVS* bottom left. 2. *INDIA MERIDIONALIS* just below *Cyamba prouincia* and *CYAMBA / PROVINCIA / MAGNA* (i.e. Champa, a kingdom in central Vietnam). 3. *INDIA SVPERIOR*, north of another naming of *Cyamba prouincia magna*. 4. A nearby headland called *fulicandora*. This name is undoubtedly derived ultimately from either the 'Cantino' or the Caverio map. On both it was attached to the Con Son islands off the Mekong delta, and to the tip of the delta. 5. The Marco Polo islands of *IAVA / MAIOR* (Java), *Can/dur* and *San/dur* (i.e. *fulucandora*, or *pulo condor*, now the Con Son islands), *REGNVM MVRFULI* (Mutfli or Motupalli in India) and *LOACH PROVINCIA* (almost undoubtedly Mercator's *BEACH / LOCACH*, probably part of Thailand).



writings were produced between 1600 and 1616. His contemporaries, with good reason, regarded both as of no account. Even the briefest examination of his varied portrayals of the Indian Ocean and the area south of Indonesia makes quite clear that he had no idea whatsoever of what lay in either region. Mercator and Gastaldi had both portrayed those areas in accordance with their own, differing, imaginative interpretations of the defective Marco Polo passages mentioned in §1. Erédia's maps of the same areas are mainly a confused amalgam of 'information' culled from the maps of those two cartographers. So *his* use of the term *India Meridional* for different areas south of Indonesia, cannot have been the source of Bünting's *India Meridionalis*, nor justified Kenneth McIntyre's completely baseless claim that the Portuguese knew Western Australia by Erédia's version of the name.²⁴

§9. *Psitacorum regio* ('Land of Parrots')

One inscription on that part of Mercator's non-existent southern continent south of the Indian Ocean has been the cause of some speculation. The *Psitacorum regio*, placed on his southern continent, was copied by numerous other cartographers (Fig. 1). It is not a misplaced inscription referring to Australia, as has been suggested.²⁵ Nor does the name indicate that Portuguese navigators were unable to distinguish between parrots and penguins or albatrosses. The presence of specific types of birds was used by them as helpful location indicators. - *Psitacorum regio*, or *Terra papagalli*, a variant version of the name, was an early, popular name for Brazil. It eventually became transferred to where Mercator placed it, through a complicated series of misinterpretations and misconceptions by several different people. It has been dealt with in detail elsewhere.²⁶

§10. Erédia's *Portugueses com artilharia* ('Portuguese with artillery')

Erédia placed this mysterious inscription on a southern Indian Ocean coastline adapted from Mercator's fictitious one (Fig. 8). It has been suggested that this is a faulty recording of a Portuguese discovery of one of the islands in the southern Indian Ocean, perhaps Amsterdam Island or St Paul. It is not. Erédia's compatriot, Pedro Fernandes de Queirós, in 1606, discovered the island of Santa Cruz in Vanuatu, and claimed that it was part of the great southern continent. Erédia was a firm believer in Mercator's actually fictitious land mass, and had a burning ambition to be the actual discoverer of that part of it that lay south of Indonesia, and the part that formed the southern bounds of the Indian Ocean. He was so short of real evidence of its existence that he would seize on any straw that could possibly be interpreted as confirming his belief. He evidently heard rumours that a Dutch ship had discovered, somewhere in the Indian Ocean, the descendants of the survivors of a Portuguese ship wrecked a century earlier.²⁷ We now know the identity of some of the people who were on the Portuguese ship wrecked in 1505, almost undoubtedly on the east coast of Madagascar.²⁸ We also know that the Dutch ship was probably one of those in the fleet commanded by Cornelis Matelieff in 1605. Unfortunately, although a printed account of the voyage in English translation exists, it deals only with that part of it from Mauritius onwards.²⁹ Matelieff's manuscript journal has not survived in the archives of the VOC (Dutch East India Co.), and the journal, as printed in the Commelin (1645) and Joost Hartgers (1648) Dutch voyage anthologies, does not mention Madagascar.³⁰ Did Erédia mix up two rumours? In any case, he merely used his gift for wishful thinking, and sited the discovery of the survivors where he would have liked them to have been found! His writings make clear that an inscription referring to the presence of 'white people' on another part of his Mercator-inspired southern continent on another map is another reference to the same event.

TYPVS: ORBIS: TERRARVM:

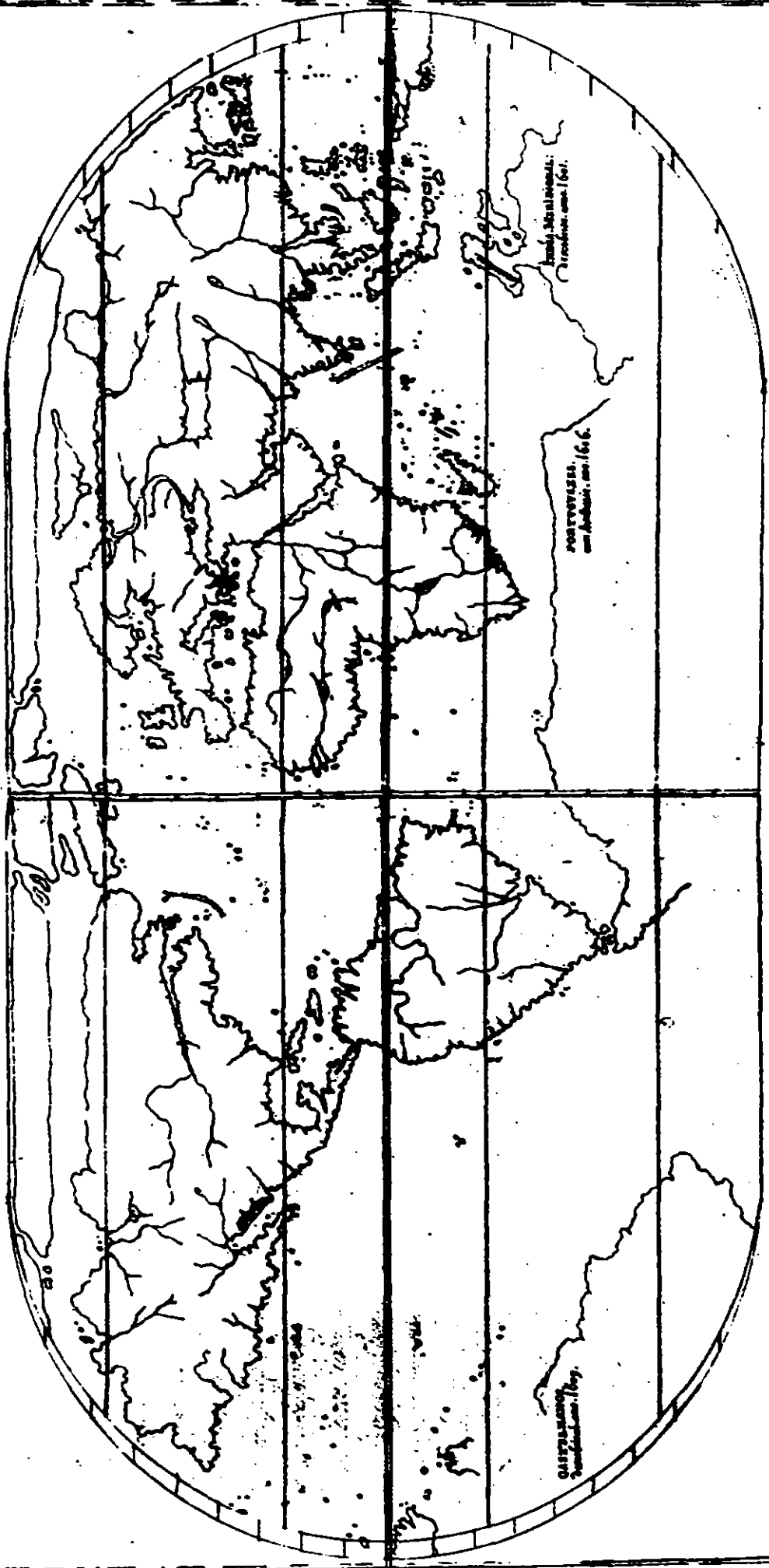


Figure 8. One of Erédia's adaptations of Mercator's southern continent, inscribed *Portugueses com Artelharia*.

§11. Erédia's *Lusantara*

Several of Erédia's maps bear the inscription *Lusantara*, in a variety of spellings, against different geographical features in his ever-changing portrayal of the area south of Indonesia.³¹ He also wrote two accounts of its 'discovery'. In fact, a close examination of them makes clear that both are inventions of his own in support of his ambition to discover the southern continent. He had heard the word *Lusantara*, a variant form of modern *Nusantara* (Javanese *nusa* + *antara*), and did not understand its meaning, 'another island' or 'other islands'. It did not indicate any specific island.³² It is now used to refer to the whole Indonesian archipelago.

§12. The 'Island of Giants'

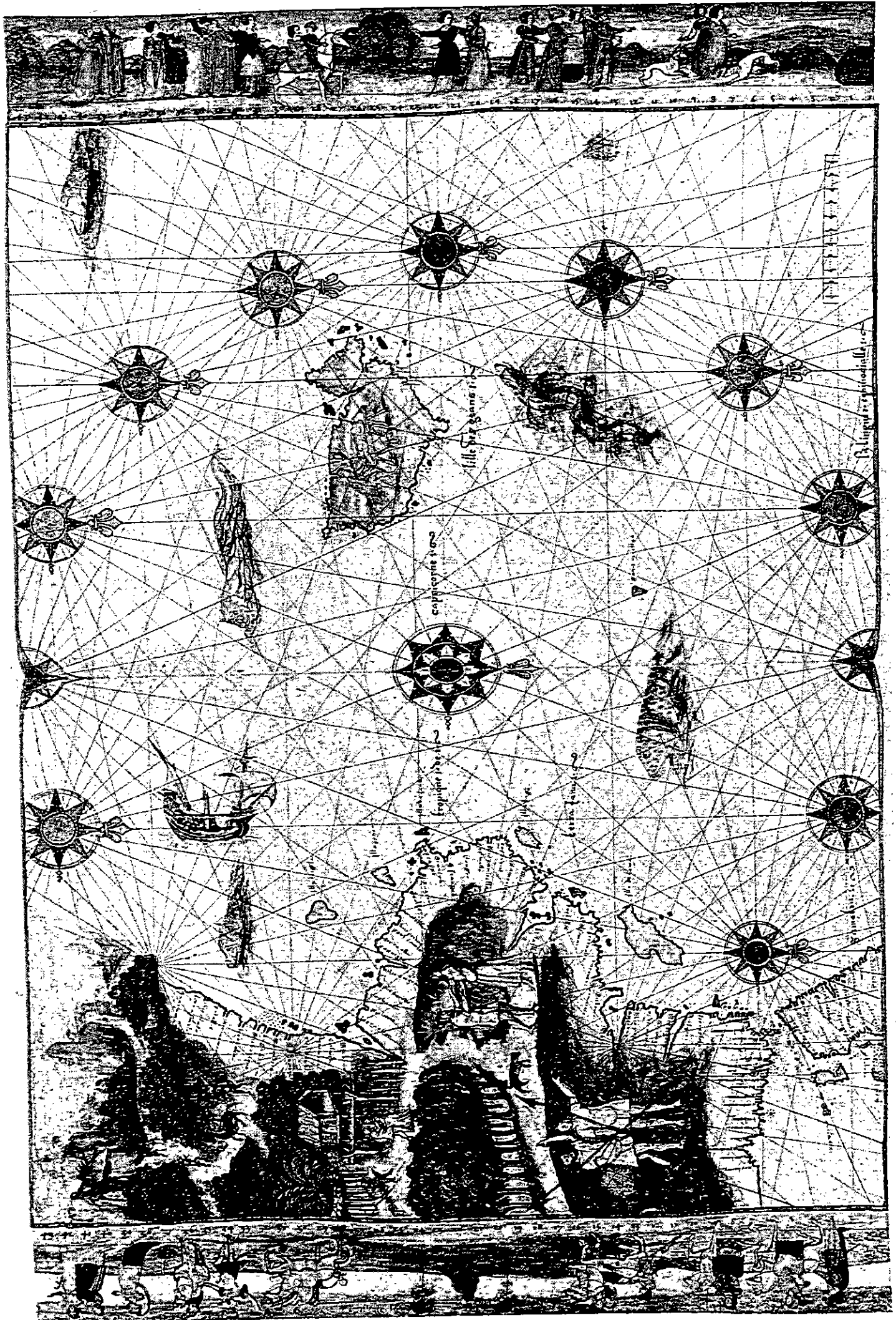
A number of 16th century maps and charts depict one particular island in the southern Indian Ocean in a variety of different positions. One of the Dieppe maps in the 'Vallard' atlas of c. 1547 (Fig. 9), shows one version of it off the west coast of *Jave-la-Grande*, the would-be Australia.³³ It is named in French *lille des geans*. It appears on other Dieppe maps, thus as *Islonde of ye giants* in Jean Rotz's atlas of 1542.³⁴ The late Dr Helen Wallis, in defence of her claim that Jean Rotz only put on his maps places whose existence he was sure of, suggested to me that his version of it represents Amsterdam Island or St Paul. However, an examination of numerous early 16th century maps makes abundantly clear that it is yet another of those numerous cartographic creations derived from Marco Polo's *Travels*. It is quite evident that his description of Zanzibar is second-hand. He was unspecific about its location, though implying that it was somewhere in the vicinity of Madagascar. It was stated to be 2,000 miles in circumference, and have many elephants. Its inhabitants were said to 'have the appearance of giants'.³⁵ Confirmation of the identity of this island would seem to be provided by the inscription *ZANZIBAR: / YSLE DES / GEANTZ* against it, on the Dauphin or Harleian map.³⁶ The presence of

sandalwood on Zanzibar is recorded on Waldseemüller's 1507 world map (Fig. 10), though I have not seen it mentioned in any version of Marco Polo's work I have examined.

Anonymous globe gores of c. 1535 show an island bearing the inscriptions *Sādales* ('Sandalwood trees') and *Cabo* ('Cape') *Godanige*, in approximately the position originally given to Zanzibar.³⁷ It seems just possible that *Godanige* is a very corrupt, misunderstood rendering of *Gigantes* ('Giants'). I have been unable to find any other word even remotely resembling it in that area on any other map.

From as early as Francesco Roselli's world map of 1492-93 it appears on numerous maps as *Zanzibar*, in many different locations far out in the Indian Ocean.³⁸ On a map of 1515 by Gregor Reisch it appears, as *Zamziber*, amongst a number of islands derived from Marco Polo, south of a version of Martellus's fourth Asian peninsula.³⁹ On Robert Thorne's world map of 1527 (1582) it appears among a similar jumble of Marco Polo islands, though Martellus's fourth peninsula is no longer there.⁴⁰ In 1532 it was still around, still named *Zanzibar*, on Oronce Fine's bi-cordiform map, north of his fictitious southern continent, and east of Madagascar.⁴¹ Even long after Zanzibar's true location was generally known, some cartographers continued to include fictitious, variously-placed versions of it, but eventually replaced the name *Zanzibar* by some reference to *giants* derived from Marco Polo's description.

Figure 9. (On next page). The west coast of *Jave-la-Grande*, with *lille des geans* off it, on one of the charts in the 'Vallard' atlas (1547). (Courtesy of the Huntington Library, San Marino). It is one of the later representations of the early, peripatetic, misplaced Zanzibar. After Zanzibar's real position became known, many cartographers continued to portray the old version of it under the name 'giants', derived from Marco Polo's description of it.



§13. *los romeros, pomeri,* and *S. Paulo*

An island usually bearing the Portuguese name (*I.*) *dos Romeiros*, sometimes in an abridged form, appears in various positions in the Indian Ocean on most 16th century maps and charts.⁴² The common meaning of the word *romeiros* is 'pilgrims', and some French maps translated the name as *les pelerins* [sic]. The name *pomeri*, which also appears on some maps, would seem to be a misrendering of *romeri*, the Italian translation of the word. Bearing in mind the various, very isolated positions of the island, it was a strange name. It first appeared in its Spanish form, *los romeros*, in 38°S on a world map of 1525 by Diogo Ribeiro, a Portuguese cartographer working for the Spaniards in the *Casa de Contratación* in Seville.⁴³

The only ship known to have sailed anywhere near the area before 1525 was the *Vitoria*, the one surviving ship of Magellan's fleet. The pilot, Francisco Albo, recorded the discovery of an island in that latitude in the Indian Ocean, but did not mention its name.⁴⁴ It is undoubtedly *Ios romeros*, but the name must have been given on account of the 'pilot fish' (also called *romeros*) seen in the area. Some time in the 1530s, a Portuguese cartographer, probably Gaspar Viegas, carelessly recorded the island in 28°S.⁴⁵ Since subsequent Portuguese cartographers copied this error, when the Portuguese vessel *S. Paulo* 'discovered' the original *los romeros* in 38°S

in 1560, it was not surprisingly thought to be a new discovery, and was re-named *S. Paulo*. In due course, the name *S. Paulo* was also carelessly shown in 28°S on some Portuguese charts, so when the Dutch, who originally relied heavily on them, 'discovered' the original *los romeros*, it was again thought to be a new discovery, and re-baptised. The discovery of another island just south of the original *romeros* later led to further identification confusion. The British and the Dutch for a long while differed in their naming of what are now Amsterdam Island, and St Paul. This confusion was still on some charts in the early 19th century, for example on L. S. de la Rochette's chart of 1817, approved by the Chart Committee of the British Admiralty. Moreover, the false *Ilha dos Romeiros* was also still there, as well as a strangely positioned *Pomeri*, not to mention the non-existent island of *João de Lisboa* south-east of Madagascar.⁴⁶

§14. Pierre du Val's *I. de Pines*

Maps by Pierre du Val in the 1670s attach the name *I. de Pines* as an alternative name to a 28°S version of *Romeiros Castellanos* ('Spanish *Romeiros*').⁴⁷ It is a strange name, for the French word for 'pine trees' is *pins*. This is not a careless printer's error, as one might surmise, nor does it have anything to do with pine trees. In 1668, Henry Neville published a booklet entitled *The Isle of Pines*, which was subsequently translated into several languages. The title page of the Dutch translation provided a map of part of the island. A Dutch sea captain, Henry Cornelius van Sloetten, the previous year, was stated to have discovered, on an island somewhere south of Madagascar, the descendants of survivors from an English ship wrecked there some ninety years earlier. From its vaguely given position, du Val assumed that it must have been *los romeros*. Between the shipwreck and the discovery of the survivors, the one male survivor, a certain George Pine, and four women are said to have produced a population of between 10,000 and 12,000 persons. Even this phenomenal breeding rate

Figure 10. (On previous page). The southern Indian Ocean on Waldseemüller's world map of 1507.

Note: 1. The Marco Polo-derived imaginary outlines of Madagascar and Zanzibar. 2. East of Madagascar are the three islands of *dina / morare*, *diba / mar/gabin*, and *dina / arob/ij*, derived from Arabic sources, via either the 'Cantino' or the Caverio world map (see §. 16). 3. East of them is *Iona* (probably for *Iaua*, i.e. Java) (see §. 19). 4. East of *Iona* is *Callenzuam*, so far unidentified. 5. *Mallaqua* (Malacca) is misplaced on the west coast of Martellus's fourth Asian peninsula. 6. The islands north of the inscription *OCCEANVS INDICVS MERIDIONALIS* are derived from Ptolemy. 7. *TAPROBANA INSVLA* is here meant to represent Sri Lanka, though later, the name was applied to Sumatra. 8. *Circobena*, (unidentified) SW of Madagascar.

did not alert du Val to the fact that the whole *Isle of Pines* story was one of the many works of romantic travel fiction associated with the Great South Land which were so very popular in the mid- to late-17th century.⁴⁸

§15. Mercator's *Los Roccas / insula* and Münster's *Insulae grifonum*

In 1541, Mercator first produced his famous, partially Marco Polo-inspired southern continent on globe gores.⁴⁹ Three years before, he had produced a bi-cordiform world map clearly adapted from Oronce Fine's one of 1531 [1532].⁵⁰ South of *Iaua/maior* (i.e. Java), he placed two islands, the more westerly of which he named *Los Roccas / insula*. Not merely were *Beach* etc., and the peripatetic island of *Zanzibar* derived from Marco Polo; so was/were *Los Roccas*. Even though not located in the area described by Marco Polo, they undoubtedly represent the islands where the huge, elephant-carrying birds called *rukhs* were said to be found.⁵¹

The *Insulae grifonum*, some 40° south of the Malay peninsula, on a world map of 1540 in Münster's edition of Ptolemy's *Geographia*,⁵² is another version of the same Marco Polo feature, for his book states that *rukhs* was the local name for gryphons.⁵³

§16. *dina morare, dina arobÿ* and *diba marga/bim*

On Waldseemüller's 1507 world map, Madagascar appears astride the Tropic of Capricorn, with Zanzibar south of it. East of his Madagascar, there are the three above-named islands (Fig. 10).⁵⁴ They first appeared on the famous 'Cantino' map of 1502. With the exception of some maps in the so-called Miller atlas of c. 1519,⁵⁵ the Portuguese were not in the habit of putting Ptolemaic names on their maps. Nor, until early in the 17th century, via Mercator, did they include any Marco Polo ones. The thoroughly unreliable Erédia (fl. c. 1600-1616) did, as also did Juan Lavanha and Luís Teixeira on their world map of 1612, and João Teixeira Albernaz I as well,

in 1628,⁵⁶ just before the Dutch discovery of the West Australian coast became generally known. It therefore seems unlikely that these three islands are fictitious. In any case, none of the three names is derived from either Ptolemy or Marco Polo, so they almost certainly represent the islands now known as Réunion, Mauritius, and Rodrigues, or just possibly Tromelin. Since no Portuguese are known to have reached them by 1502, it seems certain that their names are derived from Arab sources, since *diba*, and *dina*, for *diua* (i.e. *diva*), are variant renderings of the Sanskrit word *dvipa* ('island'), which still survives in the names of the Maldivé and Laccadive archipelagos.⁵⁷ I have so far been unable to discover the meaning of the islands' actual names. They appear on other maps, such as the world map of 1516 by Waldseemüller.⁵⁸ On that one, Madagascar, early known to the Portuguese by some spelling of the name *São Lourenço* (St Lawrence), appears as *INS.S.GEORII / SIVE MADAGAS[CAR]* (*Island of S. George or Madagas[car]*). It is slightly nearer its correct shape, but is further south, and Zanzibar is no longer shown, unless it is presumed to be hidden under the nearby cartouche. The three islands, in the same spelling, are SE of Madagascar.

On the Johann Ruysch world map of 1507,⁵⁹ they appear east of *CAMAROCADA*, evidently Madagascar (see §17), as *DINANOROA*, *DINA ROBIN*, and *MARGABYN*. To the south of the last one there is the inscription *ZVACANAR*. What it refers to is not certain, but it seems probable that it is a mistranscription of some rendering of Zanzibar, which otherwise does not appear on this map.⁶⁰

§17. *comorbina.in*

This name is attached to Madagascar on a world map by Bernard Sylvanus (1511).⁶¹ It is composed of two words, Arabic *qamar* (moon) and, yet again, the Sanskrit *dvipa* ('island'). It would appear that the form *bina* is due to a printing error, *b* for *d*, and the common confusion between *u* and *n*. The additional *.in* is an abbreviation for Latin *insula* ('island'), appended tautologically by someone who, not

surprisingly, did not realise that *bina* was almost certainly a faulty rendering of *diua* ('island'). The Arabs used the word *qamar* to refer to the Magellanic clouds, indicating the 'south', and the word was also used as a general name for all the islands to the south, including Madagascar. It later became restricted to the Comoros Islands at the northern end of the Mozambique Channel between Mozambique and Madagascar.⁶² The first element in the name *CAMAROCADA* mentioned in §16 is also clearly derived from *qamar*, but the meaning of the second element is obscure.

§18. *Lantchidol Mare*

This sea is depicted south of Indonesia on numerous 16th century maps (Fig. 1). The meaning is quite clear from the explanation given by Pigafetta, the Italian traveller who was one of the few survivors of Magellan's expedition.⁶³ It is merely an Italianised spelling of two Indonesian words run together, *laut kidul* ('south sea'), with the frequent miscopying of *n* for *u*.⁶⁴

§19. *Iona*

The identity of the island of *Iona*, which appears in many different positions in the Indian Ocean on early maps, is uncertain (Fig. 10).⁶⁵ It seems most likely to be an early, mistranscribed, and hopelessly misplaced representation of *Iaua* (Java), even though its products are incorrectly stated to be silk and porcelain, though that could possibly be a reference to items available there, in view of its status as a major entrepôt. Java did not figure on maps in its real location until some years after the Portuguese first reached it in 1511. It frequently appeared as *Java Major*, in some spelling or other, following the Arab terminology adopted and passed on by Marco Polo. It was most commonly placed, or rather misplaced, by numerous non-Iberian cartographers, as one of a jumble of Marco Polo islands, east of the fourth Asian peninsula they adopted from Martellus (see §6 above and Fig. 7). *Java Major* would seem first to have

appeared in that vicinity on the Francesco Roselli world map of 1492-93,⁶⁶ but variant versions of it stayed there on maps by non-Iberian cartographers for some years.⁶⁷ Java did not figure at all on the Portuguese 'Cantino' map of 1502, nor on the very similar Caverio map of 1505, from which Waldseemüller obtained much of his information. In 1516 he represented Java, as *GIAVA.SEV.IAVA.INSV/LA MAXIMA* ('Java, or Java [a] large island'), south-west of the Malay peninsula and south of the Tropic of Capricorn.⁶⁸ In 1522, Laurent Fries placed *Iaua maior* in the middle of the Indian Ocean north-east of Madagascar,⁶⁹ but three years later copied Waldseemüller's 1516 positioning.⁷⁰

The earliest surviving Portuguese charts to position Java more or less correctly are those in the 'Miller' atlas of c. 1519, though it is still far from accurately depicted. On one it is unnamed, on the other it appears as *IAVA. MAIOR. INSVLA*, and strangely, the place names on it are in reverse order from their real positions.⁷¹ Owing to cartographers' reluctance to omit information provided by their predecessors, *Iona* survived on some maps as late as the 1590s.

§20. *patalis regio*

Where this name came from is by no means certain. On Oronce Fine's bi-cordiform map of 1531 [1532], a vast southern continent has a large northerly extension in the South Pacific named *REGIO PATALIS*.⁷² That part of his southern continent in the southern Indian Ocean is named *BRASIELIE REGIO*. The latter name he mistranscribed from the *BRASILIE REGIO* which, in 1515, Johannes Schöner had placed south of South America on his quite different version of a southern land mass.⁷³ The first known surviving map to appear with the name *patalis* on it would appear to be on a printed one of 1522, derived from a no longer extant manuscript one of c. 1440, by Antoine de la Salle.⁷⁴ The inscription *patalis regio* appears far south of India on it, on a vast southward extension of Asia.

The name could be the genitive singular form of the name *Patale* or *Patala*, mentioned by Pliny, the Elder. According to him, it identified a 'small island in the Indus', and elsewhere to be 'triangular in shape', '220 miles in breadth', 'at the very mouth of the Indus'.⁷⁵ Such a description, if correctly followed by de la Salle, would hardly justify his cartographical depiction of it as a vast land mass very far south of India, so Pliny is probably not the direct source from which de la Salle got the name. However, the name India was a very exotic one, and it was applied by different cartographers to many different parts of Asia, even to Ethiopia, and, of course, by Columbus, as 'the Indies', to America. It is far more likely, however, that *patalis* is a genitive singular form derived from the Sanskrit *Patala* ('the nether region' or 'underworld'), the religious term having been interpreted at some time in a literal, geographical sense.

It would seem that Fine's unexplained transference of Schöner's *BRASILIE REGIO* from south of South America to south of India may well have been a fortuitous error, matched by his removal of de la Salle's *patalis regio* from south of India to the South Pacific portion of his southern continent. Such errors were by no means uncommon.⁷⁶

§21. Other Islands

There are a number of other, often peripatetic, islands on early maps, whose identities I have so far been unable to establish. The spelling of their names varies. These include: *Circobena*, near Madagascar and Zanzibar (Fig. 10), and *Callenzuam*, usually well to the east of Madagascar and Zanzibar (Fig. 10). Neither appears on Portuguese charts, and neither figures in any version of Marco Polo's *Travels* I have seen, nor in Ptolemy. *S. Apollonia* and *João de Lisboa*, off the south-east coast of Madagascar, either never existed, or are misplaced, differently-named representations of some of the Mascarene Islands (Mauritius etc.). That island group, and the vast basin south of them, were named after Pedro de Mascarenhas who discovered them in 1505 (c.f. §16).

ENDNOTES

Wherever possible, references to maps cited in the text are to those reproductions most readily accessible, especially to Shirley and Nordenskiöld (see notes 11 and 21b respectively).

1. Gallez, Paul, *La Cola del Dragón: América del Sur en los mapas antiguos, medievales y renacentistas*, Bahía Blanca, Argentina, Instituto Patagónico, 1990; originally published as *Das Geheimnis des Drachenschwanzes: Die Kenntnis Amerikas vor Kolumbus*, Berlin, Dietrich Reimer Verlag, 1980. The other two Argentine authors are Enrique de Gandía and Dick Edgar Ibarra Grasso.
2. G. Mercator, *Les sphères terrestre et céleste de Gérard Mercator*, Bruxelles, Éditions Culture et Civilisation, 1968.
3. W. A. R. Richardson, 'Mercator's southern continent: its origins, influence and gradual demise', *Terrae Incognitae*, 25 (1993), 67-98, especially 74-77. R. H. Major, in 1873, identified the Basle edition as responsible. The Paris one seems more likely.
4. Marco Polo, *The Travels of Marco Polo*, Harmondsworth, Penguin, 1958 and numerous reprints, 251. The British Museum sinologist, Frances Wood's recent fascinating book, *Did Marco Polo go to China?* (London, Secker and Warburg, 1995), has produced convincing reasons for believing that Marco Polo never went to China, and that his book was compiled from a number of different sources. However, whether she is right or not matters little, so far as the influence of his book is concerned, for generations of readers believed in the genuineness of the bulk of it. For long he was regarded as the authority on Asia.
5. L. di Varthema, *The Travels of Ludovico di Varthema*, New York, Burt Franklin, n.d., Hakluyt Soc. ; 1st series, no. 32, 248-251.
6. K. G. McIntyre, *The Secret Discovery of Australia*, Medindie, S. Australia, and London, Souvenir Press, 1977; Roger Hervé, *Chance Discovery of Australia and New Zealand by Portuguese and Spanish Navigators between 1521 and 1528*, Palmerston North, The Dunmore Press, 1983; L. FitzGerald, *Java La Grande: The Portuguese Discovery of Australia*, Hobart, The Publishers, 1984.
- 7a. W. A. R. Richardson, *The Portuguese Discovery of Australia: Fact or Fiction?*, Canberra, National Library of Australia, 1989 (Occasional Lecture Series, No. 3).
- 7b. idem. 'Jave-la-Grande: a case study of place-name corruption', *The Globe*, 22 (1984), 9-32.
- 7c. idem. 'A critique of Spanish and Portuguese claims to have discovered Australia', *Investigator*, vol. 30, no. 3, 83-107, and vol. 30, no. 4 (1995), 131-147.
8. Edward Heawood, 'Was Australia discovered in the XVth century?', *Geographical Journal*, XIV (1899), 421-426; and Andrew Sharp, *The Discovery of Australia*, Oxford, Clarendon Press, 1963, 9-12. Neither author's suggested identification of the east coast of *Jave-la-Grande* is at all convincing. The identification suggested by G. R. Crone, *The Discovery of the East*, London, Hamilton, 1972, 170, while superficially more convincing, also fails because, like the other two, it provides no confirmatory place-name evidence, as the Vietnamese coast and offshore islands do.
9. See maps by: Jehan Mallart (c.1543), Pierre Desceliers (1546) and (1550), Nicolas Desliens (1561?), Guillaume Le Testu (1556), and those in the Pasterot atlas (1587).
10. A. Cortesão & A. Teixeira da Mota, *Portugaliae Monumenta Cartographica (PMC)*, Lisbon, 1960, (6 vols);

- see, for example, in vol. I only, pls 13, 27, 37-39, 52A & B, 58, 80, 97A & B.
11. R. Shirley, *Mapping of the World 1472-1700*, London, Holland Press Ltd., 1983, pl. 107.
 12. Howard Freeman, 'The Montano world map', *Journal of the Australian Jewish Historical Society*, vol. 10/4, 1988, 240-249.
 13. Shirley, pl. 120.
 14. G. R. Tibbetts, *Arab Navigation in the Indian Ocean before the Coming of the Portuguese*, London, Royal Asiatic Society of Great Britain and Ireland, 1971.
 15. *PMC*, I, 7-13 and pls. 4 and 5.
 16. The use of *ful(l)u* for Malay *pulo* (mod. *pulau*, 'island'), east of the Malay peninsula, is evidence of information being supplied by Arabic speakers. The letter *f* regularly appears instead of *p* in the transliteration of foreign language names via Arabic speakers, owing to the difficulty they had in pronouncing the sound *p*. Confirmatory evidence in the same area is the indication of latitude by the use of the *pulgada* (mod. *polegada*, lit. 'inch') for Arabic *isba*, instead of the *grau* ('degree').
 17. *PMC*, I, pl. 9.
 18. C. H. Hapgood, *Maps of the Ancient Sea Kings*, London, Turnstone Books, 1979, (rev. ed.), 118.
 19. Shirley, pls 1 and 20.
 20. *ibid.*, pl. 4. Fig. 6 is another version from the Biblioteca Medicea Laurenziana, Firenze, Plut. 29.25, cc. 66v-67.
 - 21a. *ibid.*, pl. 31. See also, Shirley, pls 40 and 45. See also:
 - 21b. A. E. Nordenskiöld, *Facsimile Atlas*, New York, Dover Publications, 1973, pls. XXXVII, XXXVIII(2).
 22. Shirley, p. 177.
 23. W. A. R. Richardson, 'A cartographical nightmare - Manuel Godinho de Erédia's search for India Meridional', in F. A. Dutra and J. Camilo dos Santos, *The Portuguese and the Pacific*, Santa Barbara, Center for Portuguese Studies, University of California Santa Barbara, 1995, 314-348.
 24. McIntyre, 67.
 25. A. D. Trounson, 'Psitacorum Regio (Region of Parrots): Fact or Fiction?', *The Globe*, 30 (1988), 23-41. See also A. D. and M. Trounson, *Australia; Land of Birds*, Sydney, William Collins, 1987, 72-73.
 - 26a. Richardson (1993), 78-86; or
 - 26b. *idem.* 'The Origin of Place-Names on Maps', *The Map Collector*, 55 (1991), 21-23.
 27. *idem.* 'Cartographical clues to three sixteenth century shipwrecks in the Indian Ocean', *The Great Circle*, vol. 14, no. 1 (1992), 1-20.
 28. *ibid.*, 9-10.
 29. C. Matelief, *An historical and true discourse of a voyage made by the Admirall Cornelis Matelife the yonger into the East Indies ...*, London, 1608.
 30. Personal communication from Dr Kees Zandvliet, Rijksmuseum, Amsterdam.
 31. *PMC*, IV, pl. 412A. Also reproduced in Richardson (1995), fig. 2.
 32. Richardson (1995), especially 338.
 33. 'Vallard Atlas', Huntington Library, San Marino, HM 29, chart 3.
 34. *Boke of Idrography by Johne Rotz* (1542), Brit. Lib., Royal MS.20.E.ix, fols 29v and 30r; reproduced in Helen Wallis (ed.), *The Maps and Texts of the Boke of Idrography Presented by Jean Rotz to Henry VIII*, Oxford, 1981.
 35. Marco Polo, 301.
 36. Harleian world chart, Brit. Lib., Add. MS 5413; reproduced in C. H. Coote, *Autotype Facsimiles of Three Mappemondes ...*, Aberdeen, 1898.
 37. Shirley, pl. 57.
 38. *ibid.*, pl. 24.
 39. *ibid.*, pl. 42.
 40. *ibid.*, pl. 124.
 41. *ibid.*, pl. 60.
 42. W. A. R. Richardson, 'An Indian Ocean pilgrimage in search of an island', *The Great Circle*, vol. 11, no. 2 (1989), 32-51.
 43. *PMC*, I, pl. 37.
 44. Lord Stanley of Alderley (ed.), *The First Voyage around the World by Magellan*, London, Hakluyt Soc., 1894 (Series 1, vol. 52); this contains an abridged translation of Albo's log. See 233-234.
 45. *PMC* I. 49C.
 46. National Library of Australia, Lort Stokes Special Collection, Map 9; partially repro. in Richardson (1989), fig. 1.
 47. Shirley, pl. 342.
 48. Richardson (1992), 3-4.
 49. Shirley, pl. 68.
 50. Nordenskiöld, pl. XLIII.
 51. Marco Polo, 300-301.
 52. Shirley, pl. 67.
 53. Marco Polo, 300-301.
 54. Shirley, pl. 31.
 55. *PMC*, I, pls 16, 19, 20 and 21.
 56. *ibid.*, IV, pls 426 and 459A; João Teixeira Albernaz I, from 1630, adapted Mercator's *Beach* area to the recently revealed Dutch discovery of Australia's west coast, and part of Erédia's fictitious southern continent; see *PMC*, IV, pls 464 and 467B.
 57. H. Yule and A. C. Burnell, *Hobson-Jobson*, London, Routledge and Kegan Paul, 1985 (New Edition), 500 and 546-547.
 58. Shirley, pl. 43.
 59. *ibid.*, pl. 29.
 60. Some of the commonest transcription errors occurred with the letters *n*, and *u*, *v*, and *b*, the last three being virtually interchangeable, especially in manuscript. Often, the changing of lower case to upper case letters added to the confusion. Thus, the form *ZVACANAR* can well have developed through the hands of several copyists from such an original as *zanzibar* as follows: *zançibar / zauçibar / zuacibar / zuacauar / zuacanan / ZVACANAR*.
 61. Nordenskiöld, pl. XXXIII; Shirley, pl. 35.
 62. A. Cherpillod, *Dictionnaire Étymologique des Noms Géographiques*, Paris, Masson, 1986, 120.
 63. Lord Stanley of Alderley, 159.
 64. For an extended treatment see: B. C. Donaldson, 'In search of a sea: the origins of the name *Mare Lantichidol*', *The Great Circle*, vol. 6, no. 1 (1988), 136-148.
 65. Shirley, pls 31, 36, 39, 43, 45, 53, 58 and 63.
 66. *ibid.*, pl. 24.
 67. *ibid.*, pls 28-33, 35, 36, 38-40 etc.
 68. *ibid.*, pl. 43.
 69. *ibid.*, pl. 47.
 70. *ibid.*, pl. 53.
 71. *PMC*, I, pls 16 and 20.
 72. Shirley, pl. 60.
 73. R. A. Skelton, *Explorers' Maps*, New York, Praeger, 1958, fig. 42.
 74. Shirley, pl. 49.
 75. Pliny, the Elder, *Naturalis Historia: Natural History with an English Translation*, London, Heinemann, 1942; see vol. II, book VI, xxiii. 72 and xxiii. 80.
 76. Note, for example, the transference of the 'Land of Parrots' inscription from Brazil to Mercator's southern continent.