## Paper 3

# Cartographers of the Low Countries in the Age of Discovery

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#### ABSTRACT

The Europeans, and particularly the Dutch, were the driving force behind the early charting of Australia. They knew there was a land mass in the southern hemisphere before contact with the continent was first recorded. In the Seventeenth Century several cartographers from the Low Countries produced maps showing the existence of "Australia". But, did these cartographers share their information and ideas or did they keep it a secret? This paper examines that question.

#### **BIOGRAPHICAL NOTE**

Steve Philips was born in Belgium in 1978. He graduated with a Masters Degree in early modern history in 2002 and later worked as a teacher of history. He has published articles on early cartography, navigation and astronomy and has a particular interest in the work and influence of the astronomer Copernicus. He is currently a doctoral student at the University of Ghent in Belgium where he is researching the work of cartographers in the Low Countries during the Age of Discovery.

## Cartographers of the Low Countries in the Age of Discovery

I'm working as a researcher on a project at Ghent University entitled "A Re-evaluation of the sciences in the period of the Renaissance and Humanism: the Low Countries in a European Perspective". In the course of my research I have seen some early examples of maps of Australia. Nowadays we know that the Europeans, and more exactly the Dutch, were the driving force behind the mapping of the fifth continent. They knew that there was land in the Southern Hemisphere even when no European had landed on the continent. For example one of the first men who mapped Australia was the Dutch mapmaker Hessel Gerritz. On his 1622 map of the Pacific we can see little of substance from the chart; it should be a part of the Australian continent in the Cape York Peninsula. In time, however, representations of the unknown continent changed as more land was discovered and explored.

There has in fact been a great deal written about the maps of the Australian continent. But where the maps came from and where they were printed and sold has not until now been the subject of specific research and publications. In this paper therefore I will examine the period before 1604. I will try to answer the question how the different mapmakers in the Low Countries exchanged their knowledge of the new continent in the Southern Hemisphere and will focus my discussion on the crucial role the printer Christopher Plantin, whose printing house was located in Antwerp, played in the dissemination of this information. For Plantin's Officina was not only an important center of Humanism, it was also and for the purposes of this paper pivotal for the circulation of maps and nautical charts.

At the end of the fifteenth century Antwerp took over the position of urban pole from Bruges and to some extent also from Venice. By shipping spices along the African coast, and erecting a monopoly in Antwerp, the Portuguese provided serious competition to the Venetian and Genoese spice trade. The 1490s marked the actual beginning of the period of Antwerp's metropolitan position, which lasted until 1565. It was during this short period of some seventy years that Antwerp can be called the urban pole of the European economy. The role of Antwerp in international trade was mainly that of a transit market. Because of the extraordinary position which the port of Antwerp occupied in European trade, it made the city a prime meeting-point for many cultures and peoples<sup>1</sup>. For example the English cloth staple was the main distribution centre for continental Europe, as was the case for the Portuguese spice staple, which was installed in 1501 as a monopoly for Europe north of the Alps and the Pyrenees.

One area where economy and art were interrelated was book production. Antwerp played a prominent part in Dutch typographical history from 1481 on. By the end of the fifteenth century, the greatest share of book production in the Southern Netherlands was contained within the city. In the second half of the sixteenth century, Christopher Platin's Officina,

<sup>&</sup>lt;sup>1</sup> LOMBAERDE P., Antwerp in its golden age: 'one of the largest cities in the Low Countries' and 'one of the best fortified in Europe' In <u>Urban achievement in early modern Europe.</u>, Cambridge, Cambridge University Press, 2001., p. 99.

established in 1555, became a centre of Humanism<sup>2</sup>. Together with his friend, the geographer Abraham Ortelius, he served as a core around which men such as Justus Lipsius, Joris Hoefnagel and Gerard Mercator could organize their Antwerp editorial and financial affairs. The greatest editorial achievement of Plantin's Printing House was the Polyglot Bible (1572) on which many scholars worked under the supervision of the Spanish theologian Arias Montanus. In addition to printing Latin literature, both old and new, the Plantin printing house began very early on to print and sell maps and over the years it produced, bought, delivered and sold more and more cartographical material. These materials were supplied by 'his' cartographers, like Abraham Ortelius and Gerard Mercator, whom Plantin met in 1558, but also other mapmakers provided him with maps, as for example Gerard de Jode. Furthermore Plantin furnished the mapmakers with material (paper, leather, and most importantly maps). Thanks to his printer house, being a center of Humanism and a seat of knowledge it provided a space where the mapmaker interacted with other people, people who informed them of new discoveries in the world.

Prior to the Renaissance the austral continent was a pure abstraction, as few in the West had traveled to the Southern Hemisphere. Belief in its existence, a point of intense discussion in antiquity, was judged to be heretical during the Middle Ages. The presence of its image on medieval *mappae* mundi, therefore, attests to the persistence of Greco-Roman geographical theory in the scholastic world. But at the end of this period a revived interest in the science and philosophy of the ancients, notably the works of Ptolemy, encouraged renewed speculation regarding Terra Australis<sup>3</sup>.

One of the first world maps to mention the term Australis was the world map of Oronce Finé. Oronce Finé is famous for his heart-shaped world maps. His cartographic knowledge was based on the theories of early mapmakers such as Macrobius and the Alexandrian cosmographer Claudius Ptolemy. Finé was the first to produce maps that were influenced by Magellan's world voyage (1519–22). The map shows America as linked to Asia, and the Pacific Ocean is greatly undersized<sup>4</sup>.

On Oronce Finés' world map of 1531 the continent of Australia was shown, and for the first time called 'Terra Australis' ('Terra Australis: recenser inventa, sed nondu[m] plene cognita' 'Terra Australis: recently discovered but not yet completely explored').

In the Plantin's journals we can see that this map was sold in the early days of the printing house:

Le 4 d'August 1559/ Pour Mons[ieur] d eWestmalle/

<sup>3</sup> W. Eisler. The furthest Shore. Images of Terra Australis from the Middle Ages to Captain Cook., CUP, Hong Kong, pp. 8-10

<sup>&</sup>lt;sup>2</sup> WATERSCHOOT W., p. 245.

<sup>4</sup> http://www.nla.gov.au/exhibitions/southland/maps-1531 Fine.html

<sup>&</sup>lt;sup>5</sup> G. Williams, *The Great south Sea, English Voyages and Encounters 1570-1750*, Yale university press, London, 1997..8

In 1569 Gerard Mercator made a world map that used for the first time a new projection method. Mercator made the south into a monster. Just as Ptolemy had done, he drew the great southern continent that reached almost the tip of South America. (pars continentis australis) <sup>2</sup>. This map was essentially identical in form to his globe of 1541<sup>6</sup>. This sphere was dedicated to Nicolas Granvelle a chief minister of Emperor Charles V.

This globe shows the new Portuguese discoveries in the Indies. He even mentioned the kingdoms lying in the south and east of Indonesia: Beach and Maletur. These realms were formulated in Marco Polo's account of the 14<sup>th</sup> century. The legendary kingdoms on the map occupy the space corresponding to Western Australia.

A third rich empire that Marco Polo mentioned in his travel account is Lucach and we can find this place on Gerard Mercator's world map of 1569. But nowadays we know that Luchach is the same as Beach. It was an error that can be traced to the 1532 *Novus Orbis* of Huttich, which was published in Paris with Finé's map. This volume contained the text of Marco Polo's journey, but it mistakenly corrupts Polo's Luchach to Boëach, which in turn was shortened to Beach. Thus Mercator duplicated the corruption of Lochach or Luchac to Beach, giving cartographic life to the term Beach and starting a precedent with continued well into the following century<sup>7</sup>.

Mercator explained in a legend of the map that Ludovico di Varthema, an Italian traveller who served in the Portuguese army tells us that "on the southern side of Greater Java (Java Maior) toward the south there are certain peoples that navigate by constellations directly opposite to our stars and this to such a degree that they find a day of four hours that is the 63 degree of latitude<sup>8</sup>" Having calculated the latitudes at which this phenomenon would occur, Mercator considered the island's circumference assigned by Marco Polo and concluded that the legendary kingdoms were regions of Terra Australis<sup>9</sup>.

Was this map traded in the Plantin printing house? We can answer this question affirmatively; the Antwerp printer possessed the exclusively privilege to sell the world map called *Ad usum navigatum* or *Mappa Universalis Mercatoris* in the Netherlands. Reproductions of the Mercator's globe of 1541 were also sold in Antwerp:

Adi 27e Septembre 1569: envoyé a Jan Laurens: 2 Cartes de tout le monde nouvelles.... fl. 6.

Adi 18<sup>e</sup> Matrij 1569/ Au Seg[nieur] Jehan de la Rea/ 2 globes Mercator pour le Seg[nieur] Vargas...fl. 24 <sup>10</sup>

<sup>7</sup> TH. Suarez. Early Mapping of Southeast Asia, Tuttle Publishing, p. 160.

<sup>&</sup>lt;sup>6</sup> W. Eisler, 1995, p. 37.

<sup>&</sup>lt;sup>8</sup> Gerhard Mercator Weltkarte ad usum navigatum 1569, Duisburg, 1994, p. 24.

<sup>&</sup>lt;sup>9</sup> Th. Suarez, p160.

<sup>&</sup>lt;sup>10</sup> Plantijn archief 47: Journal 1569: Journal de l' An 1569:

Mercator's vision of the austral continent presented in his Mappa Universalis was replicated by Abraham Ortelius in his world atlas, Theatrum Orbis Terrarum. First published in 1570, the early editions were not printed by Plantin; but he distributed them. The best known map of this atlas is the world map Typus Orbis Terrarum. This map showed the geographical knowledge (including the errors) known at that time. The primary source that Abraham Ortelius used was Mercator's world map. Abraham Ortelius came in 1554 into contact with Gerard Mercator. And a secondary source was the map of Oronce Finé.

On this map the Antwerp mapmaker drew the southern continent "Terra Australis nondum cognita" as a huge landmass. In the east of this continent we see the legendary kingdoms: Lucach, Maletur and the error Beach.

But earlier in 1564 Ortelius also made a wall map of the world. This map mentioned in a legend printed on the Southern continent: "According to the Ventian M.Polo the country locach must be located here. The Latin copy has Boeach, but has almost always used the Italian version." So Ortelius acknowledged that Locach and Beach are the same kingdoms.

Ortelius' wall map of the world did not greatly influence other cartographers, however. Undoubtedly its influence would have been greater if the wall map of the world by Mercator had not already in 1569 began to monopolize attention<sup>11</sup>. Furthermore the wall map had been reduced to the well known map: Typus Orbis Terrarum. In various maps of the atlas we see that New Guinea is described in different ways, sometimes as an island (as on his world maps of 1570 and 1587) or as a part of Terra Australis (as on his maps of America). This was a problem for geographers in that time<sup>12</sup>. The number of names of the coastal places of Nova Guinea that Ortelius mentioned on the map of 1587 is larger than on the map of 1570. This means that in time knowledge of this area has progressed<sup>13</sup>.

We can see in Plantin's journals that the different maps of Ortelius (even the wall map of 1564) and the Atlas were traded.

Adi 26 Junij 1566: Ledit de Abraham Ortels/ 2 Mappa Mundi Ortels blanc..fl. 1-16/ And at the same day sold to a bookseller in Paris Ledit Envoye A Paris....2 Mappa mundi Ortelii blanc...fl. 1-16

1587: Adi 30e de Juin en Anvers/ Faict d ung tonneau delivrez pr Paris/ ..../1 Theatre de monde francois f° Fl. 18-

Abraham Ortelius not only had contact with the Plantin Printing House, he also had a vast network of correspondents. We know that he wrote letters to Mercator in which they exchanged information relating to geography and cartography. He also corresponded with Paludanus of Enkhuizen about Dutch hopes for a northeast passage to China and encouraged the navigational and publication activities of Jan Huygen van

<sup>&</sup>lt;sup>12</sup> Th Suarez: Early mapping of the pacific, tuttle publishing, 2004, p. 54.

<sup>&</sup>lt;sup>13</sup> http://cf.uba.uva.nl/nl/collecties/kaarten/ortelius/cat23.html

## Linschoten<sup>14</sup>.

Linschoten spent five years in the service of the Portuguese Archbishop of Goa from 1583 to 1588. The Dutch who worked for the Spanish and Portuguese provided an important source of information about the East-Indies and Asia to the Dutch Republic 15. The region south of Java was unknown to the Dutch. Many maps (Mercator, Ortelius) suggested a vast southern landmass. Lindschoten's *Itinerario*, *Voyage of Schipvaert near Oost ofte Portugaels Indien (Itinerary, Voyage or Navigation of J.H vL. To Eastern or Portuguese India*) was produced in 1596 after his return from Goa. He described a mysterious Southern continent that refers to the information of Mercator and Ortelius (Terra Australis Incognita)

Here is what we can read in this journal:

Pag. 25. Chapter the Twentieth.

Concerning the island of Java Mayor, together with its commodities, merchandise and dealings, weights, coins and value of the same, and other particulars.

South-south-east, facing the farthest extremity of the island of Samatra, south of the line equinoctial, lies the island called Java Mayor, or great Java...This island begins in 7 degrees Latitude South, and extends east by south a length of 150 miles but of its breadth nothing is known up to now, since it has not yet been explored, nor is this known to the inhabitants themselves. Some suppose it to be a mainland, [forming part] of the land called Terra incognita, which would then extend hitherward from beyond the C de boa Esperança but of this there is no certitude hitherto, so that it is usually accounted an island...

This publication included maps from Portuguese sources. One of those maps was the world map of Plancius. Plancius was able to get hold of Iberian charts, sailing instructions, trade information and so forth. Using this material and other cartographical information, such as Mercator's world map, he succeeded in producing a large wall map of the world and in compiling a set of charts<sup>16</sup>. This map appeared for the first time in 1592

It is the publication of the world map of 1594 that was published in the *Itinerario*. The map presents an image of the world which was relatively unchanged from that which appeared on the maps of Mercator and Ortelius 24 years earlier. We still notice on the Southern continent the 3 kingdoms of Marco Polo. Among the few significant alterations is the addition of the Solomon Islands in the South Pacific.<sup>17</sup>

Another map of Plancius: Insulae Moluccae celberrima... or Chart of East Indies

<sup>17</sup> W. Eisler, 1995, p. 41

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<sup>&</sup>lt;sup>14</sup> D. LACH, Asia in the Making of Europe. University of Chicago Press, 1995, p. 469.

<sup>&</sup>lt;sup>15</sup> Nelson Meers Foundation Heritage Collection 2003; the Gijsbertz map. P. 10.

<sup>&</sup>lt;sup>16</sup> G. Schilder. *Monumenta cartographica Neerlandica*, 2003, p.105

*Archipelago* of 1593 was adapted from two maps of the Portuguese mapmaker Lasso (1590). Plancius represents New Guinea in more detail, asserting that it probably belongs to the southern continent:

Partem autem esse continentis Australis magnitude probabile facit

The maps of Plancius were co-produced in the Southern Netherlands by Joan Baptista Vrients who was a printer in Antwerp and a close colleague of Plantin. We see in the Plantin Journal that the Plancius World map was traded:

 $F^{\circ}$  135: Adi  $4^{e}$  Augusti./ A Monsr de Silleri conseilllier d'estat a Paris sont a envoier les cartes suivantes en une casse a adresser a Paris:/ 1 Carte Universelle de Plancius...fl.  $8^{18}$ :

At the same time a map Cornelis de Jode appeared. This map was part of the atlas *Speculum Orbis Terrarum* (Mirror of the World). The chart: *The Novae Guineae forma & situs* shows East New Guinea, the Solomon Islands and an imaginary coast of Australia with mythical beasts. This map can be considered the first separate map of this continent. One of the primary sources for the chart was the map of Plancius. But this is very logical since de Jode engraved some of Plancius' map. The map is frequently used to illustrate the knowledge of Australia prior to the Dutch landing on the west coast of Cape York Peninsula in 1606. Certainly the accompanying text lends weight to this viewpoint. The text from the atlas states "... south of this region is a large Terra Australis, and it will, when explored, become a fifth continent...."

We see in the Plantin journal of 1594 that the Speculum Orbis terrarum was traded.

Adi 18<sup>e</sup> Junii/ A Sr Fogghers, op de Steenhouwersveste:/ 1 Speculum Orbis f° coloré perg...fl. 27

Another source for the exploration of the great Southern continent was the Atlas: *Descriptionis Ptolemaicae Augmentumi* by Cornelis Wytfliet, who lived in Louvain. This book contained a map: *Chica sive patagonica et australis Terra* (1597). The atlas was also traded in the Plantin printing house:

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Anno 1600. Jan Bapta Vriendts doibt donner pour: .... Adi 27e Martij: 1 Augmentum Ptolemei Wytvliet....fl. 3-1/22 theatrum latine a 28 fl<sup>19</sup>.
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This work appeared at the same time as the *Itinerario*. This book contained a chart on which not only Java figured as an island, but which also represented New Guinea as an island by itself, separated from Terra Australis and there was an accompanying text, that

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<sup>&</sup>lt;sup>18</sup> Plantiin arch nr. 75: Journal 1598: Au nom de Die en Anvers. Journal de lc'an M.D.XCVIII".

<sup>&</sup>lt;sup>19</sup> Grand livre du soleil 1600-1608 f° 58.

also stated that Terra Australis will be the fifth continent.

The South-land... the southernmost of all countries, extends immediately toward the Polar Circle, but also towards the countries of the east beyond the Tropic of the Capricorn and almost at the equator its confines are to be found, and in the east, separated by a narrow strait it lies in front of New Guinea, but is explored only at a few coastal places, because after one and other voyage that route has been discontinued and thence rarely sails are set except that ships are driven off by cyclones. It takes its beginnings two or three degrees under the equator and is assigned such an extension by some that it may well appear to be the fifth continent after having discovered fully.

I can conclude from this evidence that the Plantin Printing House served as an important center for and played a dominant role in the exchange of knowledge regarding the Southern continent. Already from the start of his printing business in 1555 Plantin printed the first copies of maps and geographical documents which he sold in his shop. This was a very shrewd business move on his part as the printing and selling of maps and cartographic material were very profitable. But this business strategy likely had other farreaching consequences. The presence of his Officina in Antwerp, an important international port, meant, I would argue, that these maps, atlases and other documents were distributed as well to other major commercial cities such as Frankfurt, Amsterdam, Paris, London etc. And the dissemination of these cartographic materials also guaranteed that the understanding and idea of the *Terra Australis* were spread in the Netherlands and throughout Europe. Consequently I do not think it would be an exaggeration to suggest that many of these sources, originally published by Christopher Plantin, played a significant role in, and even probably led, to the discovery of the fifth continent in the first quarter of the seventeenth century.