



Nova, et Integra Universi Orbis Descriptio

Cartographer: Oronce Fine

Date: 1531

Size: 16 x 11.5 inches / 29 x 42 cm

Description: An example of the first edition of Oronce Fine's (a.k.a. Orontius Finaeus) double cordiform map of the world, published in 1531. This double cordiform map of the world is one of the most striking and influential maps of the world published in the 16th century. First issued in 1531, its earliest appearance is first appeared in the 1532 Paris edition of Johann Huttich and Simon Grynaeus' *Novus orbis regionum*, a collection of travel accounts that had also been published in Basel several months before. As noted by Shirley:

The eminent French cartographer Oronce Fine prepared this double-cordiform map: a rendering considerably in advance of any others printed earlier. . .

Fine's map is a detailed woodcut, geographically much superior to the large oval map by Sebastian Münster-Hans Holbein in the Basle editions. Much of the right-hand (or southern) cordum is taken up with the new Terra Australis, noted as being 'recently discovered but not yet explored.' Beyond the tip of South America is marked the Mare magellanicum, one of the first uses of the navigator's name in such a context. Central America contains numerous place names reflecting the conquests and explorations of Cortez in the early 1520s, but further north Fine has unambiguously made the North America continent part of the eastern extremity of Asia. Four islands make up the north polar regions. The separate island of Greenland is named, and a large promontory marked Gaccalar (supposedly Labrador) extend from the North American land mass into the Atlantic.

There is a detailed floral surround to the map, two mermaids, two muscular cherubs, the French royal coat of arms and, at the head of the map, the title in a flowing banner. Oronce Fine's map is one that deserved enlargement on to two sheets. Unfortunately, in many cases the margins of surviving copies are badly frayed as after folding once for insertion into the book they were still too wide for the binding.

Based on sophisticated geometric principles for reducing the spherical earth to a two-dimensional image, Fine's depiction of the world became a model for the next several decades, before the more popular oval formats, double-hemispheric maps, and ultimately Mercator's projection would become the primary means of mapping the world, although none more distinctive than of Fine's double-cordiform.

The present example is state 1 of the map, retaining Fine's name in the lower cartouche. The second state, also dated 1531, includes the imprint of Hermannus Venraed, in place of Fine's name, but retains the 1531 dating. In all there are six states of the map, dated 1536, 1540, 1541 and 1555 respectively. While all states are rare, the first edition of the map is especially desirable.

One of the most compelling questions facing mapmakers in the first half of the 16th century was that of the relationship of the New World to the Orient. The question almost always pertained to North America; South America had grown on its own as truly a new world. If South America bore any continuity with the Orient, it was only via Central and North America. But with this map, Finaeus adopts a different and very radical stance: North and meso-/South America are each individual extensions of Asia. This is the completion of a cycle that began late the previous century with the demise of the old land-bridge connecting southeast Asia to Africa on Ptolemaic maps. After the Portuguese succeeded in reaching the Indian Ocean by way of Africa, some cartographers opened the land-bridge but left its residue in the form of a very large "extra" southeast Asian peninsula. By coincidence, the peninsula occupied the approximate place that meso-America would if the West Indies were Australasian islands, and thus its appearance on some maps lent credence to the belief that meso-America was part of an Asian peninsula, the *Cattigara* of Ptolemy. Here in the final phase, Finaeus has predicated this map on this very contention, transforming the earlier vestige of Ptolemy's Africa-Asia land-bridge into "true" meso- and South America. Thus there are three Asian peninsulas in Finaeus' Indian Ocean (upper left-side of map). Counterclockwise they are India, the Malay peninsula, and meso- /South America, the last being mapped as a descendent of Ptolemy's land-bridge, complete with the metropolis of *Cattigara*. The dominating new forces which consummated this evolution were the expeditions of Vasco Nunez de Balboa, who traversed the Central American isthmus in 1513, and Ferdinand Magellan, word of whose circumnavigation of the earth (1519-22) spread through Europe during the later 1520s.

Magellan was a Portuguese seaman sailing in the employ of Spain. Of the five ships and 270 people who departed Lisbon in 1519, one ship and thirty-one men returned (eighteen with the expedition itself, and thirteen separately). Magellan himself perished in the Philippines. The voyage clearly was one of the most staggering achievements of navigation, dwarfing that of Columbus barely three decades earlier. But Finaeus' map, while strongly influenced by the voyage, equally demonstrates how poorly it was understood. The voyage appears to have reinforced, rather than dispelled, the belief that Ptolemy's *Cattigara* was in reality part of the New World. According to Martyr, Magellan and his crew had *Cattigara* on their minds, *intendying as much as were possible, to approche to the cape cauled of the owlde wryters Cattigara: The whiche is not founde*

[illegible]

In order to adopt this configuration Finaeus had to contort his geography in two ways. First, he had to place nomenclature from the east coast of Asia on the west, rather than east, coast of Amer-Asia. This was the only way that he could map meso-South America as the *Aurea Chersonesus* [Golden Peninsula] of Ptolemy while not contradicting the knowledge that Marco Polo had sailed from Zaiton to the Persian Gulf on his return to Venice from China. Secondly, Finaeus necessarily minimized the extent of ocean between America and Asia. As with *Cattigara* and the depiction of South America as an Asian subcontinent, this is ironic: Magellan's maiden circumnavigation of the earth should have instead painfully impressed upon Finaeus the vast extent of ocean that lay between the two continents.

Magellan's strait, or series of straits, separating the southern tip of continental South America from the islands of Tierra del Fuego is recorded here nine years after the return of the survivors of his expedition. Finaeus labels the waters just west of it in his honor: *Mare magellanicum*. This is the first verbal reference to Magellan's voyage on a printed map.

With regard to Europe's perception of Magellan's circumnavigation, it is interesting to note that as late as 1538 the Spanish cosmographer Pedro de Medina, attempting to demonstrate the sphericity of the earth, offered various circumstantial arguments but never invoked Magellan's voyage as irrefutable proof.

Magellan's strait posed a new question for mapmakers: What was the nature of the land that formed its southern shores? Most geographers interpreted it to be continental in nature, thus creating out of Magellan's Tierra del Fuego the *Terra Australis*, or antipodal southern continent long thought to exist as a balance to the known northern landmasses. Finaeus has here christened the trend, Gastaldi and the Italian school soon adopted it, and the Dutch/Belgium school, notably Mercator and Ortelius, would continue it. The opinion was not, however, unanimous; Sebastian Münster, for example, believed that "the land which [Magellan] had on his right hande, he doubted not to be mayne lande: and that on the left hand, he supposed to bee Ilandes."

In any case, Magellan presumably believed that Tierra del Fuego was at least large, for had he suspected otherwise he logically would have tried to sail around it rather than navigating its tricky straits. The fact that Tierra del Fuego was only a series of islands, with open ocean to the south, remained unknown for nearly a century.

Finaeus' polar oriented double cordiform projection allowed him to confront *Terra Australis* directly. His depiction bears a noticeable resemblance to true Antarctica in general contour, and as a result the map has been studied as evidence of lost ancient knowledge. "True" Antarctica is not known to have even been sighted until the early 19th century. Although it can be assumed that many monumental renaissance and ancient voyages of discovery remain unknown to us, history as we accept it clearly precludes the possibility for unrecorded voyages by Finaeus' time to have actually charted Antarctica so completely. The origin of his *Terra Australis*, if not a fluke of whimsy, remains a mystery.

Along the Indian Ocean shores of *Terra Australis* lies the Brazil of South America (*Brasielie Regia*). The transposition of Brazil to a hypothetical southern continent is found as early as the 1515 globe of Schöner (#328), and appears to have arisen from at least two separate sources. Schöner seems to have displaced it in an attempt to follow an account of a Portuguese voyage along the Brazilian coast. Other proponents of an antipodean Brazil appear to have read a confusing account of Cabral's 1500-01 voyage by the

with the German pamphlet *Copia der Newen Zeytung ausz Presilig Landt* (i.e., “News from Brazil”), which is believed to have guided Schöner. That publication reported that a voyage sailed south of the “Cape of Good Hope,” apparently meaning not the tip of Africa but rather an allegorical reference to the southern tip of America, its presumed counterpart. The report was, however, confusing: “*They reached the Cape of Good Hope, which is a point extending into the ocean, very similar to Nort Assril, and one degree still further. When they had attained the altitude of the fortieth degree, they found Brazil, which had a point extending into the sea ... After they had navigated for nearly sixty leagues to round the Cape, they again sighted the continent on the other side, and steered toward the northwest ... Driven away by the Tramontane, or north wind, they retraced their course, and returned to the country of Brazil.*”

The term *Nort Assril* is unclear but has been taken to mean the (southern) point of Africa. But it appears that Finaeus took the Cape of Good Hope reference literally, and so charted his antipodean Brazil to the southeast of Africa. The voyage to which the newsletter refers probably reached the Rio de la Plata, and thus may have influenced Schöner’s mapping of a strait between South America and a southern continent (the southern shores of the Plata being that continent), which in turn may have influenced Magellan.

Like his southern continent, Finaeus’ depiction of Greenland is extraordinary, if perhaps less inexplicable. While many contemporary maps depict Greenland as a peninsula of Asia or Europe, Finaeus shows it correctly as an island and in remarkably accurate fashion. Even the island’s westerly bulge above Baffin Bay is primitively represented, an amazing feature at this early date, if not simply cartographic luck. North of Greenland, Finaeus shows the Arctic region as four large islands following a concept apparently originating in a 14th century treatise already used by Ruysch in 1507 (#313).

The imprint in lower center of Finaeus’ map originally bore the date of 1531, at which time it was sold as a separate sheet. In 1532 it was published in the Paris issue of Johann Huttich’s *Novus Orbis Regionum* with the 1531 date unchanged; the present issue bears the date 1540, and was published in Pomponius Mela’s *De Orb is Situ* of that year.

Completed in 1531, the map appeared in the 1532 Paris edition of Johann Huttich and Simon Grynaeus’ *Novus Orbis Regionum* [The new world], a collection of travel accounts that included descriptions of the East Indies, the Holy Land and Africa, as well as several of the Americas. Based on new geometric principles for reducing the spherical earth to a two-dimensional map, Fine’s sophisticated projection became a model for cartographers in the period before Mercator’s projection became the primary means of mapping the world. As with Mercator, Fine’s use of ancient or corrupted sources to inform his depiction of a great southern continent led to ongoing controversy about who first mapped Australia.

Fine (1494-1555) and other cosmographers of the early 16th century aimed to accommodate the newly discovered lands in the geographical and astronomical framework inherited from classical antiquity, as set out in the *Geography* of Claudius Ptolemy (#119). How to incorporate America, a land unknown to Ptolemy, into this world view posed a major challenge for the cosmographers. The purpose of a cosmographic map, like Fine’s, was to harmonize the geography of the earth with the heavenly constellations, to project the latitudes and longitudes of the celestial spheres back onto the earthly sphere. Fine’s map was published before Copernicus’ *De Revolutionibus Orbium Coelestium* [On the revolutions of the heavenly spheres] appeared in 1543, and therefore rested on the assumption that the earth was the center of the

universe.

The representation of the world in Fine's map is similar to that of a number of contemporary maps and globes (for example, the c. 1527 *Gilt Globe*, #344), all based on the 1523 and 1533 globes of Johannes Schöner (#328), a mathematician and cosmographer from Nuremberg. Schöner aimed to fit the world revealed by Ferdinand Magellan's circumnavigation of 1519-1522 into the Ptolemaic world view. Ptolemy had described a *Great Gulf* ('*Magnus Sinus*', the Gulf of Thailand), located at the eastern limit of his world. On its eastern coast, in the delta of the '*Cottiaris*' [Mekong River] stood the port of '*Cattigara*'. Marco Polo's voyage from China to India (1292-1294) was understood to demonstrate that the land of *Cattigara* [southern Indochina] was a peninsula. Christopher Columbus believed he had reached its eastern side (actually it was Costa Rica) in 1502 during his fourth and last voyage. Magellan's aim was to find a way around this peninsula and reach the Spice Islands (Moluccas), situated, he thought, in the *Magnus Sinus*.

On both Schöner's globes and Fine's map, *Cattigara* appears on the west coast of South America, and the *Magnus Sinus* is described as '*Mare de Sur*' [South Sea]. Fine also calls the Pacific Ocean the *Mare magellanicum* [Magellan Sea]. Schöner and Fine believed that Tierra del Fuego, discovered by Magellan, was a part of *Terra Australis*, hence the inscription: '*Terra Australis recenter inventa, sed nondum plene cognita*' [Terra Australis, recently discovered but not yet fully known]. The map shows a large promontory, '*Regio Patalis*' [Region of Patala], attached to *Terra Australis*. *Terra Australis* also bears the inscription, '*Brasielie Regio*' [Region of Brazil], an identification that first appeared on Schöner's globes.

Fine was Henri II's *lecteur royal des mathematiques* [Mathematician Royal] at the College Royal, and his world map may have formed the basis for the so-called *Dieppe* world maps (a series of world maps produced in Dieppe, France, in the 1540s-1560s), with their intriguing depiction of '*Jave la Grande*' [Greater Java] as part of the southern continent. When an example of the Fine map, with '*Regio Patalis*' extending northward almost to the Tropic of Capricorn, was acquired by the British Museum in 1871, the Keeper of Maps, Richard Henry Major, concluded that it appeared to indicate Australia: "I think there only remains the inevitable conclusion that Australia was discovered by Frenchmen ... in or before the year 1531."

References:

Harrisse, H., *The Discovery of North America*, p. 486.

*King, Robert, "Terra Australis not yet Known", *Mapping Our World Terra Incognita to Australia*, pp. 82-85.

*Shirley, R.W., *The Mapping of the World*, 66, state 4.

*Suarez, T., *Shedding the Veil*, pp. 68-72. Plate 12.

*illustrated