Title: Geocarta Nautica Universale, Turin planisphere

Date: 1523

Author: Giovanni [Juan] Vespucci, Nuño Garcia de Toreno

Description: The first planisphere to be completed after the Victoria returned to Seville was made at the Spanish Casa de la Contratación in around 1523, and is currently kept in the Biblioteca Reale di Torino. No consensus has yet been reached among scholars about its authorship. While some prefer to list it as anonymous, others have proposed that it was drawn either by Nuño Garcia de Toreno, a cartographer of the Casa, or by Giovanni Vespucci, pilot at the same institution and brother or nephew of Amerigo Vespucci. According to Cerezo Martinez, the chart is a copy of the *Padrón Real*, the Casa's official cartographic pattern, and reflects the growing imperial ambitions of the Spanish Crown in Asia.

The *Turin* planisphere is a large manuscript that comes with six sheets of rectangular parchment joined together to form a single piece measuring 112 x 262 cm. It is built on two circles, with the center on the equator tangent at the *Line of Demarcation*, which are arranged on the circumference of the thirty-two wind roses from which branch lines of the winds, crossing, divide the paper into "rumble of wind," traditionally regarded as indications of direction for sailors. Like the contemporary manuscripts cartographic products, the map does not take into account the curvature of the earth; this defect is irrelevant to the Mediterranean, but would cause serious errors for transoceanic navigation.

The chart may also be an unfinished one: its floral border is incomplete, and it does not represent the northwest Atlantic Ocean and the parts of the northeast coast of America visited by Sebastiano Caboto and the brothers Côrte-Real more than 20 years before. Still, some inland ornament has been attempted. In South America, the Amazon rainforest is suggested by dense stands of trees. In Africa, the Atlas Mountains (in the north) and the mythical *Mountains of the Moon* (in the south) are depicted. Interestingly, the painter has tried to use atmospheric perspective when portraying these mountain ranges, creating the illusion of distance by coloring the distant objects with bluer tones.

But the most important feature of this planisphere is that it shows, for the first time, the long coastal stretch of South America to the south of the Rio de la Plata, in which the Strait of Magellan is both depicted and labeled *strecho de todos santos*. As in the anonymous *Kunstmann IV* planisphere (made before Magellan's voyage, #330), the Moluccas are placed near the western margin, and the large island of *Gilolo* (Halmahera) is given a north-south orientation, which would persist in Spanish and Spanish-derived cartography for decades to come.

A further link to the *Kunstmann IV* planisphere is the fact that the equator is graduated in degrees of longitude, with the obvious purpose of showing that the Moluccas fell within the Spanish hemisphere under the terms of the *Treaty of Tordesillas*. Using the island of Santo Anta□o as a reference (which was located, according to the same treaty, 370 leagues, or about 22 degrees, to the east of the dividing line), we find the Moluccas situated 186 degrees west of the *Tordesillas* line – that is, six degrees inside the Spanish hemisphere, corresponding to a longitude error of about 11 degrees.

After voyages like Magellan's, the cosmographers at the Spanish Casa were faced with the difficult task of compiling and harmonizing diverse sources of information. In the hope of improving the quality and quantity of data being brought to the Casa by mariners, as early as 1527 the Spanish king ordered pilots to keep detailed daily logs and to take regular latitude measurements. But the observations of mariners were not always

consistent, and cosmographers had trouble identifying the most reliable accounts. With the world seeming to expand each day, the work of defining, imposing, and satisfying standards for how to depict it was becoming an onerous one. This planisphere is a testament to such struggles, but does show some improvements over its predecessors. The West Indies, for example, have been redrawn to correct the scale exaggeration and latitudinal displacement of Juan de la Cosa's planisphere (#305), errors that had been replicated in subsequent representations. The planispheres produced by the Casa in the years soon to follow, and in particular the works of Nuño Garcia de Toreno (#336) and Diogo Ribeiro (#346), would usher in even more dramatic advances in the cartographic image of the world.

The Geocarta Nautica Universale [Great Universal Maritime Chart], as defined in the recording inventory) is the first known map, drawn before the Junta de Badajoz (before 1524), which takes into account the results of the circumnavigation of the globe by Magellan's expedition (1522); therefore it is the earliest surviving map representing the Strait of Magellan in the southern edges of America and the Moluccas islands in the Pacific. This is very remarkable, as the circumnavigation of the world made by Magellan and Elcano (1519-1522) was completed by Elcano only one year before the map was made. It is the first map that shows the complete representation of the Pacific Ocean. Nevertheless, recent researches have instead attributed this work to Nuño García de Toreno (mid-15th century – 1526), an employee of the Casa de la Contratación [House of Trade] of Seville, the institution that managed the affairs of the New World for the Catholic Monarchs. Regardless of who made the map, it is thought to be a copy of the Padrón Real, the official and regularly updated world map made at the Casa de la Contratación.

The large pink ornament placed on the equator has four gold prongs and four in blue for the eight principal winds, sixteen in the red. The other ornamental roses are all topped by twin spires golden, red, green, blue. The continents are colored yellow; the coasts are delineated with great precision with an outside line drawn in gold and replicated inside the green coast. The islands are colored gold, green, blue, and red (except Florida). The island of Rhodes is covered by the cross of the Knights of Jerusalem who ruled until 1522, forming the only Christian bulwark against the growing spread of Ottoman power. Toponyms perpendicularly to the coasts are indicated in black with the more important places and islands in red. The smaller islands are indicated in various colors. Groups of dots on the other hand indicate shallows & reefs. Colored lines indicate the equator, the tropics, and polar circles.

The Amazon rainforest is displayed through a thick, wide clump of tall trees with flying parrots on the edge of them; the Nile stretches across the African continent to its mythic sources of the *Mountains of the Moon* and the *Athlas Mountains* are represented by a series of hills, topped by skeletal trees to indicate the extreme aridity, which vary in color with increasing altitude: the lowest brown, blue intermediates, and blue the highest. The Arabian Peninsula is a desert colored green.

Europe, Africa, an almost blank Asia, and the known parts of America are depicted. Most of the map is covered by the ocean, and a series of elaborate compass roses form two circles around the planisphere. In the north of Africa, the mountains of Atlas are prominently drawn, and in the southern part of the continent, the mythical *Mountains of the Moon*, which, according to Claudius Ptolemy, were the source of the Nile, are also depicted.

Europe, Africa and Asia as far as India are accurately reproduced and there is a dense set of names that indicate the ports, harbors and sailing to the city, but the main interest is the "new world" and the vast newly discovered ocean that stretched west of South America: a huge waterway to finally reach the rich lands of the East traveling West. Spices and selected raw materials were the treasures, but most of all it was the lure of an Empire "on which the sun never sets."

The New World in this map shows a very accurate relationship and image of all of the aspects of the Caribbean Sea and especially the West Indies, Hispaniola, Cuba, Jamaica, South America, Central America, Yucatan (as a peninsula), the Gulf of Mexico and there is also a blank space. East of this blank space, in its proper relation to Cuba, is a fairly accurately shaped uncolored peninsula labeled *Isla Florida* [Island of Florida] with only the lower portion drawn and nothing above it. If the date is correct (which it probably is not) this would be the first map to show the Florida peninsula properly labeled, shaped or positioned -- except for the *Freducci* map which is a manuscript *portolan* [nautical] chart.

In South America, Amazonia covers most of the continent, and on the southern edge of America, the Strait of Magellan is already visible. This is a very remarkable feature, given that Juan Sebastián Elcano returned from the first circumnavigation of the world in 1522, only one year before. Tierra del Fuego and the Straight of Magellan are shown but not labeled. The sources of the map information seem to be a mixture of Spanish and Portuguese and maybe other authentic sources.

This detail, as well as the inclusion of the Moluccas islands on the far left of the chart, makes this planisphere a unique document: it is not only the first map in history that shows Magellan-Elcano circumnavigation of the world but also the earliest surviving map that depicts the Pacific based on practical sources, i.e. on information from someone who had actually crossed it, rather than stemming from theoretical approaches.

In the ocean, the islands are colored with gold, green, blue, and red, and the British Isles are marked with the red cross of England. We can find a great number of place names all over the coasts of the continents, and, interestingly, the Pacific has been left blank, with the exception of the Moluccas.

The representation of the Moluccas on the left edge of the chart, instead of including them in Asia, can be an indication of the Spanish sovereignty over the islands. It is worth to mention that those islands, also known as "Spice Islands", were a very coveted territory since spices like nutmeg and cloves were exclusively produced there. Thus, the economic control of the Moluccas was a crucial aim both for Spain and Portugal.

The *Padrón Real* [The Official View of the World]. After the first Columbus voyages and the discovery of the New World, the difficulty of managing the economic affairs of America demanded the creation of an institution to handle such a complex function. Thus, in 1503 the Catholic monarchs created the *Casa de la Contratación de Indias* [House of Trade of the Indies] in Seville. The most important navigators, experts, and scientists worked in this agency, training the new pilots for the oceanic navigations and contributing to the technical improvement of the Spanish navy.

One of the most important roles of the cosmographers and cartographers of the *Casa de la Contratación* was the creation of the *Padrón Real*, the official and secret Spanish master map of the known world used as a template for the maps present in the Spanish ships. The importance of this map in the history of cartography is undeniable, given that

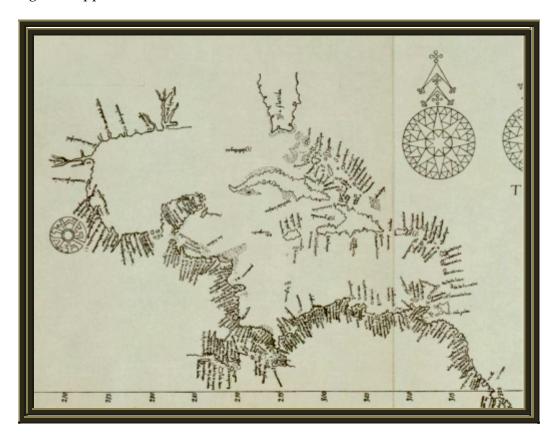
it was the official representation of the world during the 16th century. Although the original *Padrón Real* is not extant, there are several world maps that are thought to be a copy of it, among which the *Turin* world map is a very valuable example.

Locations: Royal Library of Turin, under the shelf-mark Mss. Vari III 175.

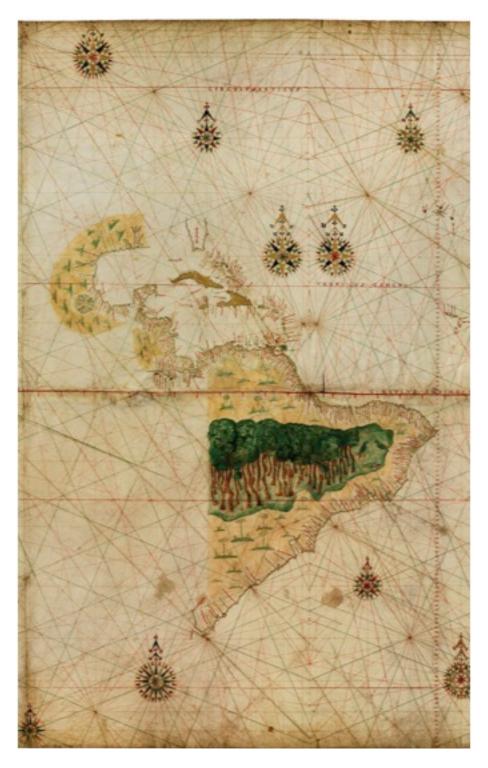
Size: 112 x 261.5 cm/ 3 feet 8 inches x 8 feet 7 inches

Reference:

Gaspar, Joaquim Alves and Sima Krtalic, "A Cartografia de Magalhães. The cartography of Magellan", pp. 164-167.

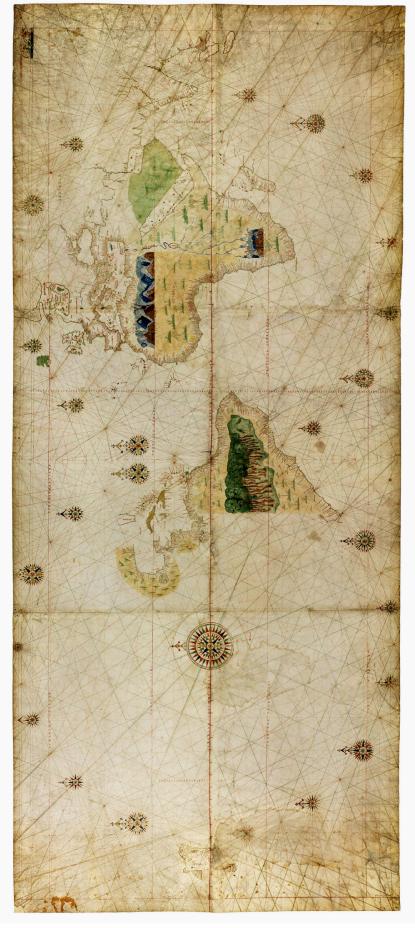


Detail of the Caribbean area



Detail: Western Hemisphere







Detail: Eastern Hemisphere



Detail: the Mountains of the Moon in Africa (the purported source of the Nile River)



Detail: the Athlas Mountains in Africa