

Description: An extraordinary 60-sheet manuscript world map made in 1587 by Urbano Monte and located in the David Rumsey Map Collection at Stanford University. This particular example of Monte's work is the earliest of the three surviving planispheres. It consists of 60 map sections on paper bound together as an atlas. When joined together, the pieces form a massive planisphere stretching three meters across and representing the entire world as it was known to Monte in a polar azimuthal projection. There is also a double page world map (key sheet) and 13 double pages of tables of latitudes and longitudes, distances, temperatures, prevailing winds, eclipses, etc.

At 10 feet square, this map or planisphere is the largest known early map of the world. It was hand drawn by Monte in Milan, Italy, and only one other manuscript copy exists. The digitally joined 60 sheet map image above is the first time that the map Monte made has been seen as one unified map — as Monte intended — in the 430 years since it was created.

In 1587 Monte completed a world map on sixty manuscript sheets that seems originally to have been accompanied by a geographical treatise. Those sheets were designed so that in each the map proper could be cut from its surrounding paper, and then all of the sheets assembled in rings to form a circular map on a north polar projection three meters in diameter. Monte proceeds to give detailed instructions on how to assemble the sheets of the map, and indeed on each sheet there are notes indicating which sheet(s) should be above that sheet, and which below. The cartographer made sure that there was no way the map could be assembled incorrectly. The fact that the map was designed to be rotated means that the viewer could bring the part of the map he or she was interested in close for inspection, and all of the elements of the map, both the texts and the decorations, are oriented so as to be viewed looking from the outer edge of the map inward. According to historian Chet van Duzer, Monte's decision to make his huge map rotatable about its center as a way to make the details of the map, the many images and descriptive texts, accessible to the viewer is an unusual and probably original one.

His maps were the largest non-mural maps of the 16th century, laid out on a north polar projection, and designed to be rotated about their center-point so as to facilitate viewing of the details of the maps despite their large size. Of great interest is the attempt Monte makes to make his map not just a geographical tool but to show climate, customs, length of day, distances within regions — in other words, to create a universal scientific planisphere. In his dedication on *Tavola XL* he specifies how to arrange the sheets of the planisphere and makes it explicit that the whole map was to be stuck on a wooden panel five and a half brachia square (about ten feet) so that it could be revolved around a central pivot or pin through the north pole. This was never done, but now it can be done virtually – Monte's 60 sheet world map digitally assembled into a 10 foot planisphere: The projection, more than nine feet in diameter, is made up of 60 smaller maps, with the North Pole at the center.

Monte's map reminds us of why historical maps are so important as primary resources: the north polar azimuthal projection of his planisphere uses the most advanced scientific ideas of his time; the artistry in drawing and decorating the map embodies design at the highest level; and the view of the world then gives us a deep historical resource with the listing of places, the shape of spaces, and the commentary interwoven into the map. Science, art, and history all in one document. Until digitized by Brandon Rumsey, Monte's manuscript map was seen as a series of 60 individual sheets. The only assembled version is the small single page key sheet of the series. The assembled map, just over 10 feet in diameter, is one of the largest—if not the largest—world maps made in the 16th century. The degree of detail and decoration is stunning and the entire production is surely unique in the history of cartographic representation.

Born near Milan in 1544, Urbano Monte lived a life of leisure and luxury. For him, such freedom meant scholarship, and the accumulation of a library renowned in the region. In his early 40's, his interests turned to geography, and a mammoth 20-year effort to synthesize and consolidate everything known of the world's geography into a few volumes. More than that, he wanted to make a planisphere map of the world "to show the entire earth as close as possible to a three-dimensional sphere using a two-dimensional surface," writes map collector and scholar David Rumsey.

Monte envisaged the component maps – 60 in all – being stitched together, and so left detailed instructions for how to turn them into one giant representation of the world, over nine feet in diameter. Included in the four volumes are also charts showing

the lengths of days at different times of year and an extended geographical treatise on the world and cosmology. Unlike many modern maps, which use the Mercator projection from around the same time, his map shows the world from directly above the North Pole. Today, this perspective is known as the north polar azimuthal projection, most famously used on the logo of the United Nations.

Once assembled, the map shows a lush, highly personalized take on the world, with a surprisingly large collection of real and fantasy beasts carousing and cavorting on land and sea. This is one largely forgotten or overlooked map by cartographers and scholars.

Monte did not come by his geographical knowledge by traveling the world. Rather, most of the map is sourced from others already floating around, and long texts describing the journeys of early voyagers, so it pulls in their various misconceptions about far-flung places, particularly around South America. It's hoped that more study will reveal precisely which texts he drew from. His Japan, on the other hand, was the product of sustained individual study and conversation with visitors from Japan from the 1580s. While it bears no real resemblance to any modern map (and seems to be the wrong way up), the level of detail is impressive.

Monte's depiction of Japan, probably drawn from information provided by the Japanese Embassy to Milan and Italy, is, however, advanced for the time.

Another distinctive feature of Monte's map pointed out by van Duzer is the connection with its northern polar projection, and perhaps to some extent with its rotatibility, is its southern continent. Many earlier 16th century maps show a large southern continent that was a hypothetical construct, not based on any "pre-discovery" of Antarctica or Australia. The configuration of Monte's continent is unusual: rather than being a continental landmass occupying the South Pole and the surrounding region, it is a ring of eight islands around the South Pole. Similar rings of land or islands appear on earlier maps and globes, for example Johann Schöner's terrestrial globe of 1515 (#328). Instead of a discourse on the evidence for the existence of these islands, on their imagined inhabitants, the climate there, and the resources - and on the map there are many depictions of people and animals in the islands - there are just a few brief passages in his geographical treatise where Monte offers vague descriptions of the inhabitants of some of these southern islands as being barbarous idolaters.

At the outer reaches of the ring are eight islands, stretched into mammoth semicontinents thanks again to the projection. These islands reveal some of the sources and ideas that were circulating when Monte drew this map in the 1580s. The larg- est of the islands is dually labeled *Brasielia* and *Nova Guinea*, reflecting the relatively little knowledge Europeans had about the extent and location of the Americas and the Pacific islands. Another of this southern ring of islands is the fiery Tierra del Fuego, which was first sighted by Magellan during his voyage of 1519 to 1522. A third island is *Terra de Lucach*, a name recognizable to anyone who had read Marco Polo's *Travels*. *Lucach*, along with *Beach* and *Maletur* were regions in Java. The conflation of Java with the southern continent stemmed from a mistake earlier in the 16th century. Initially, Polo used Arabic usage of *Java Major* for Java and *Java Minor* for Sumatra. After a printing mistake made *Java Minor* seem the largest island in the world in the 1532 editions of Polo's *Travels* (Paris and Basel), mapmakers started to make a southern landmass to accommodate *Java Minor*, *Beach*, *Lucach*, and *Maletur*.

Throughout the world, Monte took time to sketch exotic fauna—crocodiles, camels, lions, and more. Near a coast labeled "Terra Incognita" (somewhere around

Alaska), a wolf with a cub looks watchfully over its shoulder. Elsewhere there are more fantastic beasts, including griffins and what looks like a huge bird clutching an elephant. The seas feature many-tailed mermen and fleets of well-armed ships. Political leaders, including Philip II of Spain, also make an appearance, as do several portraits of Monte himself. Early mapmakers of the time didn't like empty spaces, filling in many places that they did not know the names of towns and locations, with trees, monsters or text.

Although the maps' size might suggest that they were intended for nobles, the cartographer's desired audience was in fact students. The maps are compilations of both images and texts from a wide variety of contemporary maps and geographical treatises, the products of library research rather than interviews with explorers. Some of the changes he made from his 1587 to his 1590 map were motivated by *horror vacui*, the fear of leaving blank spaces on his map.

Certain political figures are also highlighted. Monte lived during the reign of Philip II of Spain and the power of the Spanish empire is evident across the globe: several Spanish armadas can be found from Atlantic to Pacific. The Spanish ascendancy is also evident in the large vignette in the south Atlantic, which shows Philip with a Spanish knight in a ship with another man who is supposed to the be the King of Peru; the Peruvian is showing Philip the riches of the Americas. The vignette is identical to one from a map by Giacomo Gastaldi and Paolo Forlani of 1561 (#398).

Monte's map survives in three manuscripts. The earliest is the 1587 autograph manuscript acquired by the David Rumsey Map Center at Stanford University in October 2017. It seems that this manuscript originally contained Monte's geographical treatise *Trattato universale*, *descrittione et sito de tutta la terra sinqui conosciuta* [Universal Treatise: Description and Site of All of the Land Thus Far Known] which was written to accompany the map. The second surviving manuscript of Monte's map is the 1590 manuscript, also written in Monte's own hand, in the Biblioteca del Seminario arcivescovile di Venegono. And the third surviving manuscript of Monte's work is in the Biblioteca Ambrosiana and is dated 1590, but includes material as late as 1604.

Monte's map reminds us of why historical maps are so important as primary resources: the north polar azimuthal projection of his planisphere uses the advanced scientiUc ideas of his time; the artistry in drawing and decorating the map embodies design at the highest level; and the view of the world then gives us a deep historical resource with the listing of places, the shape of spaces, and the commentary interwoven into the map. Science, art, and history all in one document.

Until now, Monte's manuscript map was seen as a series of 60 individual sheets. The only assembled version is the small single key sheet of the series. Now that they have joined all 60 sheets digitally (accomplished with great skill by Brandon Rumsey), we can appreciate in a new way the extraordinary accomplishment that Monte made. The assembled map, just over 10 feet in diameter, is one of the largest — if not the largest — world maps made in the 16th century. The degree of detail and decoration is stunning and the entire production is surely unique in the history of cartographic representation.

On *tavola XXV*, Monte claims his sources for the map, citing geographers Piccolomini, Pliny, Ptolemy, Cortes, Fernando Columbus, Juan Gonzalez de Mendoza, Giovanni d'Anania, various Jesuit letters, including Marco Polo, and cartographers Mercator, Gastaldi, Olaus Magnus, Giovio, Lopes and the brothers Zeno.

Locations: Known examples of Monte's planispheres:

David Rumsey example. ca. 1587 with corrections to 1590. 60 sheet manuscript planisphere on a polar azimuthal projection. David Rumsey Collection. Copy S. ca. 1587 with corrections to 1590. 60 sheet manuscript planisphere on a polar azimuthal projection. Biblioteca del Seminario Arcivescovile di Milano in Venegono Inferioro.

Copy A. 1604. 64 sheet printed planisphere on a globular projection. Biblioteca Ambrosiana. Single sheet engraved world map on a polar azimuthal projection. 1603. Biblioteca Ambrosiana Single sheet engraved world map on a polar azimuthal projection. 1603. *Doria Atlas*.

References:

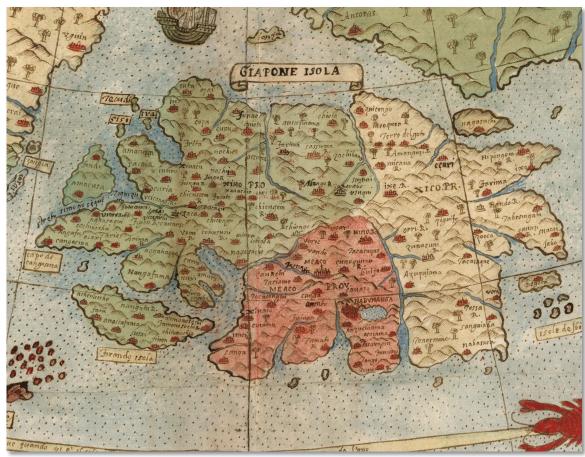
https://www.davidrumsey.com/blog/2017/11/26/largest-early-world-map-monte-s-10-ft-planisphere-of-1587

Goss, John J., "An Unusual Manuscript Wall Map by Urbano Monti 1544-1613," Parker, Dr. Kathrine, "A Mind at Work, Urbano Monte's 60-sheet Manuscript World Map", Stanford Libraries, 2017.

Shirley, R.W., *The Mapping of the World*, pp. 253-255; 260-263.

Van Duzer, Chet, "Urbano Monte's World Maps: Sources and Development", *Imago TemporIs. medIum aevum*, XIV (2020): 415-435. And You Tube: "Talk with Chet Van Duzer: New Research on Urbano Monte's 1587 World Map | Feb 13, 2019"

Scholars have only fleetingly focused on Monte and his works. Paolo Revelli published a study in 1929, as did Roberto Almagia in 1941. More recently, Annalisa D'Ascenzo has offered a refreshing new look that examines the then-known examples (60-sheet manuscript planisphere at Biblioteca del Seminario Arcivescovile di Milano in Venegono Inferioro; 64-sheet printed proof copy at Biblioteca Am- brosiana) in her 2012 book, Cultura geografica e cartografia in Italia alla fine del Cinquecento: Il Trattato universale di Urbano Monte. Dr. D'Ascenzo is currently expanding her study based on the new information now available in the Rumsey example.



Detail of Tavola IX (Japan)

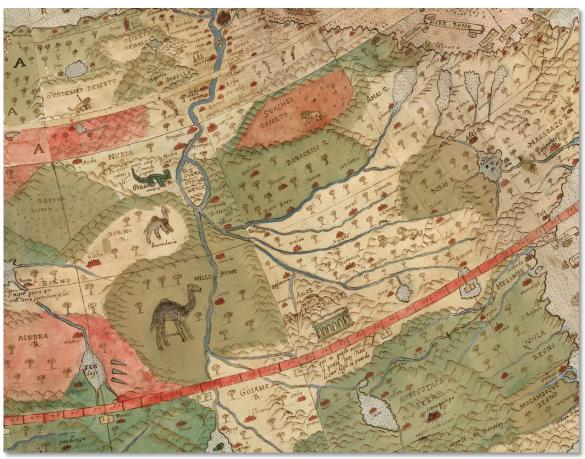
The planisphere covering Japan and parts of the coasts of China and the American northwest is found in *Tavola IX*. This section is of great interest historically for it appears that Monti was able to make use of up to date information gathered from an embassy of Japanese nobles who visited Milano during 1585. This was in addition to the wellknown accounts of Marco Polo and possibly the account of Juan Gonzales de Mendoza, whose description of China and the East was translated and published in Italy as Istoria della China (Venezia 1586) and Il Gran Regno Della China (Bologna 1589). Another possible source is the earliest known European printed map of Japan, by Renward Cysat 'Der groszen, nam hafften, neuwlicher-funden Iapponischen Insel' (Freyburg 1586), which may have been known to Monti in its original Italian form. The general location and area of Japan is greatly emphasized in scale filling almost all of the north part of the Pacific between China and North America. To the north the Strait of Anian, unnamed, separates Asia from America after the Zaltieri map of North America (#391, Venezia 1566), and the regional map by Paolo Forlani (Venezia 1574). It may be that Monti wanted to demonstrate the importance of Japan in the field of Jesuit missionary activities since the first approaches by the 'Apostle of Japan', St Francis Xavier in 1549. Certainly, his map presents far more information in the form of place feature names than is to be found on contemporary works.



The Pacific Ocean



The Great Wall in China



Detail of Tavola XIIII and Tavola XV Joined (Central Africa)

Monte would likely be excited to learn that his little-viewed map is finally getting the audience it deserves. At Stanford University, members of the public can see the manuscript itself, still vividly colored, a full-scale reproduction from the scans, and an interactive digital version of it. It is also available to explore online. In the meantime, researchers are looking closer at this rare masterpiece and the treasures it holds.



Details of Tavola Seconda, Tavola Ottava, and Tavola Setima (Northern Siberia, Central Asia)



Detail of Tavola XXIII (South America, Venezuela, Guyana)



Tavola XI (Eastern United States, Florida, Cuba) Tavola XI



North America



The Strait of Anian





Tartaria, with a unicorn and a strange creature



South America



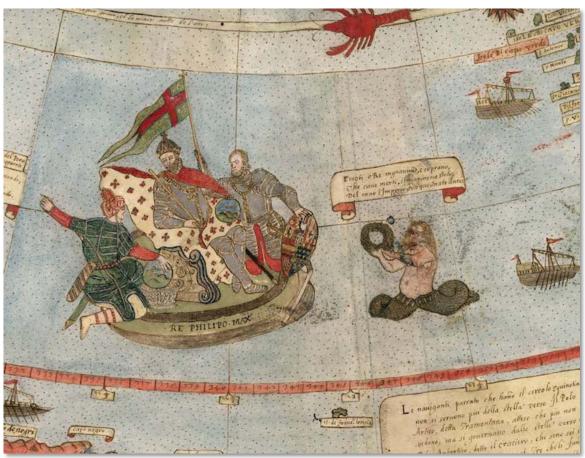
Mediterranean Libro Terzo



Northern Europe Tavola Prima



Monte's full world map planisphere, all 60 pieces put together (Source: Tavola 1–60)



King Philip II of Spain in the mid-Atlantic









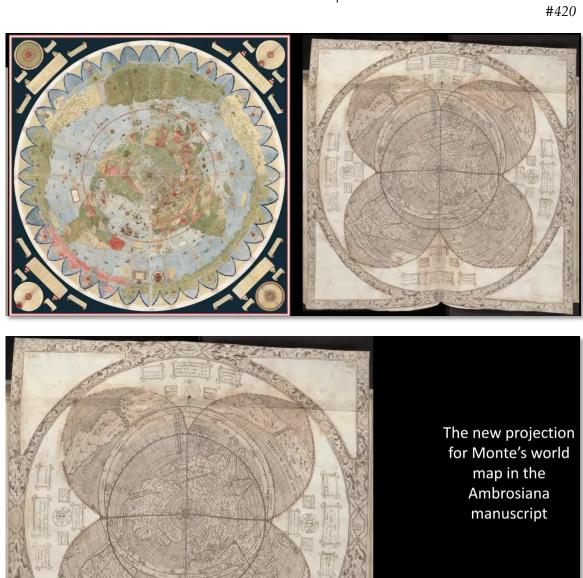
India

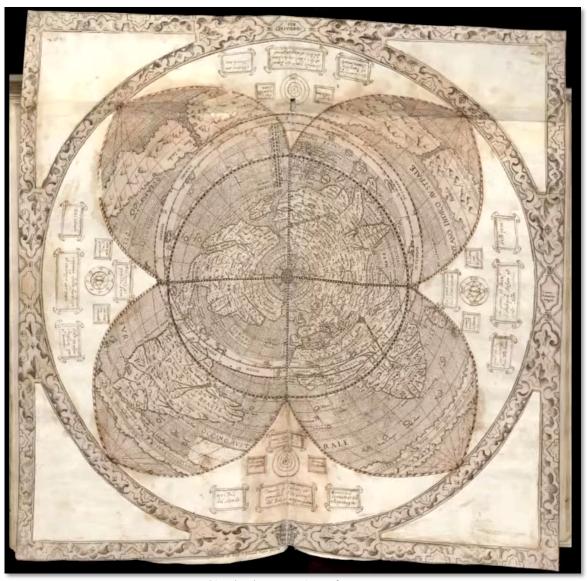




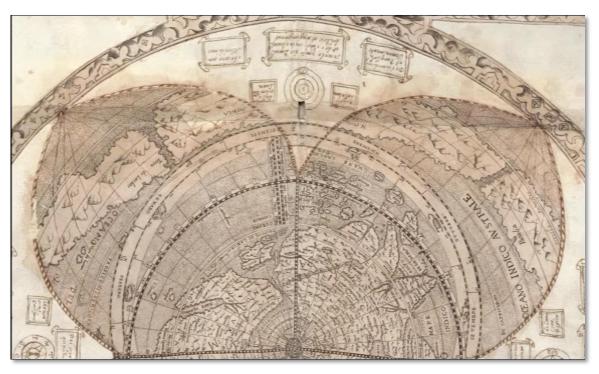








Single sheet version of 1604



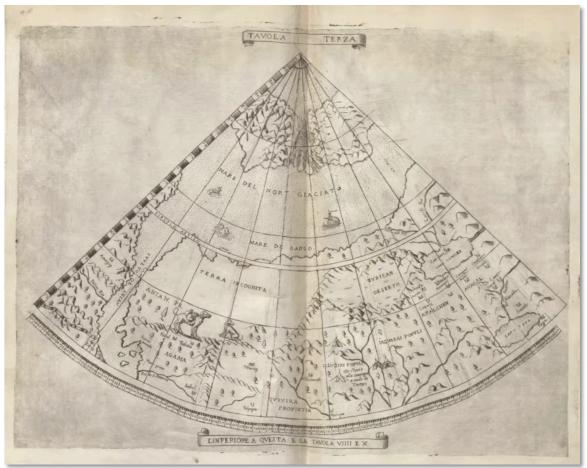
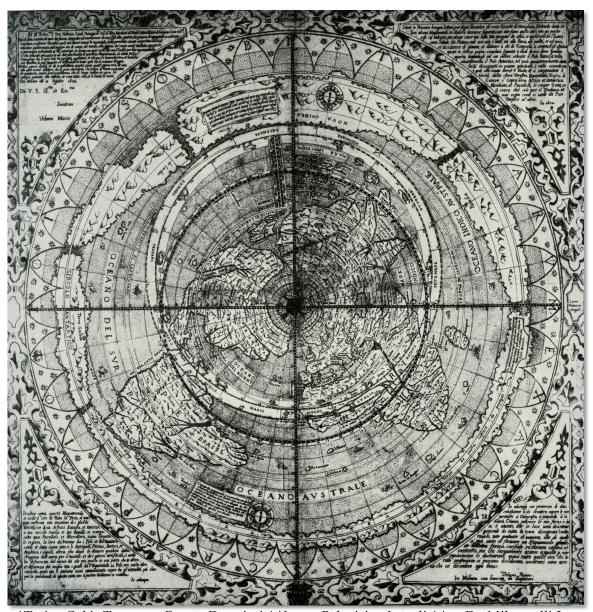


Plate 3 Strait of Ainan



'Totius Orbis Terrarum Exacta Descriptio' 'Leone Palavicino Intaglio' ' ... Da Milano alli 2 Agosto 1603 ... Urbano Monte'.

In 1604 the Milanese cartographer Urbano Monte produced a remarkable circular world map on the north polar projection, made up from the unusually large total of sixty-four sheets. Two preparatory single-sheet versions have been identified. This one is dated 1603, and the other, described earlier, is a much-amended later state of the same plate. The origin of Monte's map goes back to before 1590 when full drawings, also on sixty-four sheets, were prepared in anticipation of publication. Two such manuscripts exist: one in the Biblioteca Ambrosiana, Milan, and another (colored by hand) in the Seminary Library of Venegono just outside the city. The frontispiece of the Ambrosiana manuscript concludes with the date 1590, and an inscription on one of the map sheets indicates preparation in the year 1587. It is not clear why printing was delayed for more than a decade.

Monte was certainly pioneering an unusual form of projection, although the works of Postel (1581) and Picicaro (1597) offer parallel examples. The work which first appeared is a copperplate engraving on one sheet. Its clarity and elegance is typical of late 16th century Italian work, with neat unobtrusive lettering. Almagia suggests that the date on the map may originally have been 1600, amended to 1603.

Urbano Monte's projection, a single circle based on the north pole, is constructed around straight line longitudinals and concentric circles of latitude. He has neither copied the world maps of earlier Italian cartographers nor taken the geographical details entirely from Ortelian sources: the map therefore has a number of composite features. The rendering of Japan is unusual and may derive from information provided by a group of Japanese ambassadors who visited Milan in 1585. Particularly prominent is a large Antarctic continent divided into large islands, one of which is labeled *Nova Guinea*. Beyond this continent is a further expanse of sea and then an outer circumferential border containing the title, with each letter placed in a cusp-shaped niche. Text occupies the four comers and the whole map is framed within an elaborate corniche.

For some reason Monte must have been dissatisfied with the projection used. He made substantial amendments to the plate, resulting in a new lobular projection corresponding to the final version, and this sheet map of 1603 has been recorded, attached to the 16th century composite atlas once owned by the Doria family.