Spring 3-2016

Venetian Cartography and the Globes of the Tommaso Rangone Monument in San Giuliano, Venice

Jill E. Carrington
School of Art, jcarrington@sfasu.edu

Venetian Cartography and the Globes of the Tommaso Rangone Monument in S. Giuliano, Venice*

Jill Carrington

Highly specific stone reliefs of a terrestrial and a celestial globe flank the bronze statue of physician and university professor Tommaso Rangone (1493-1577) in his funerary monument on the façade of S. Giuliano in Venice (1554-1557; installed c. 1558) (Fig. 1).[1] The present essay is the first to examine the strikingly specific imagery of these globes; it compares them to actual maps and globes, argues that the features of the globes were inspired by contemporary world maps likely owned by Rangone himself, relates the globes to the emergence of globe pairs at the time and situates them within the thriving production of maps, atlases, and treatises in mid-sixteenth century Venice and in the very neighborhood where these cartographic works were produced and sold.

Globes are associated with three main types of users frequently portrayed in art. First, they are among the instruments of measurement and study that are often included in portraits of scholars and symbolize learning and teaching. Second, they are representative of professions such as geography, astronomy, astrology, cosmography, navigation, and medicine. Third, when the globe is held, it symbolizes the worldly power of its bearer, so leaders of all types are often shown holding a

* This essay is dedicated with immense love and admiration to Gary M. Radke—teacher, mentor, scholar, and fellow parent.

[1] Figure 1 does not show the lower parts of the Rangone monument flanking the west portal of San Giuliano. The most comprehensive treatment of Rangone's biography and patronage is Erasmo Weddigen, "Thomas Philologus Ravennas, Gelehrter, Wohltäter und Mäzen," *Saggi e memorie di storia dell'arte* 9 (1974): 7-76. Rangone acknowledged receipt of the bronze portrait statue on 8 February 1558 (1557 *more veneto*). He lived until 29 August 1577. For documents related to the commission, see Rodolfo Gallo, "Contributi su Jacopo Sansovino" *Saggi e memorie di storia dell'arte* 1 (1957): 81-105, with additions and corrections by Bruce Boucher, *The Sculpture of Jacopo Sansovino*, 2 vols. (New Haven: Yale University Press, 1991), 1: 213-217, docs. 179-190. For recent literature that treats the monument in the context of the rebuilding of the church, see Lorenzo Finocchi Ghersi, *Alessandro Vittoria, Architettura, scultura e decorazione nella Venezia del tardo Rinascimento* (Fonti e Testi, Raccolta di Archeologia e Storia dell'arte) (Udine: Forum, 1998), 99-102; Manuela Morresi, *Jacopo Sansovino* (Milan: Electa, 2000): 297-305, cat. no. 34 with bibliography.

Fig. 1. Alessandro Vittoria, *Tommaso Rangone Monument*, S. Giuliano, Venice, completed 1557, installed c. 1558 (Photo: Public Domain).

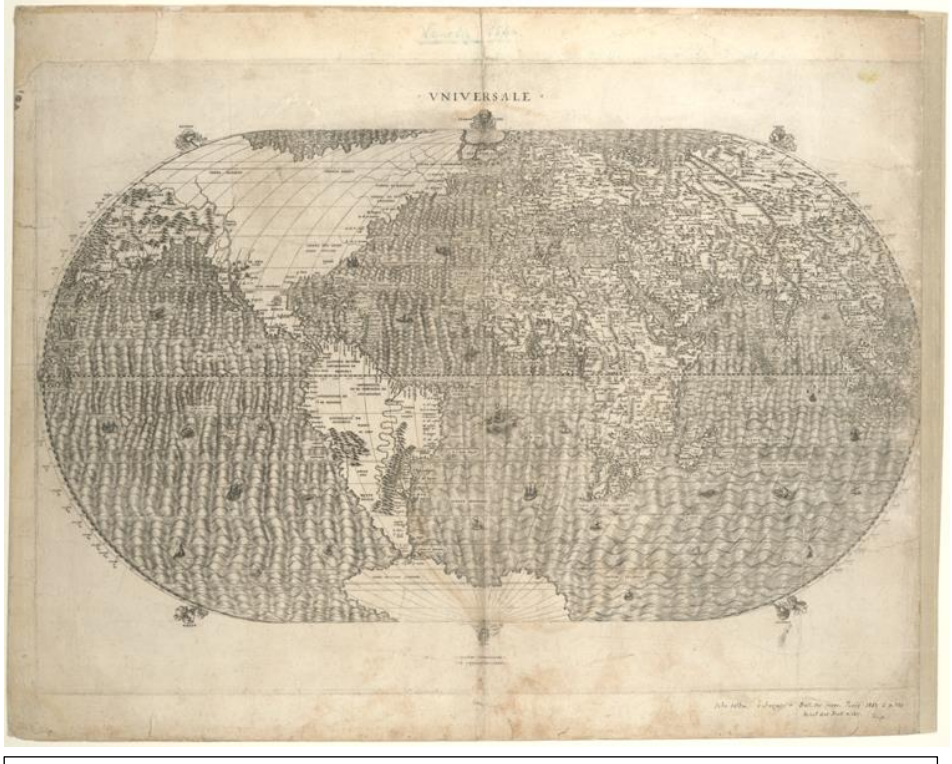

Fig. 2. Giacomo Gastaldi, *Cosmographia Universalis* world map, seventeenth-century reprint of the original published in 1561, London, British Library (Photo: Public Domain).

globe.[2] Rangone mainly used globes in the first two ways; the globes, along with the books, portray him as a scholar and teacher, and specifically proficient in astrology and medicine.

Previous scholars have only briefly mentioned the globes and their possible significance to Rangone. Erasmus Weddigen posits that the terrestrial and celestial globes symbolize the microcosm and macrocosm, respectively, due to the fact that they appear suspended and without stands.[3] Bruce Boucher finds the globes indicative of Rangone's interest in geography and astrology, notes the vital role of astrology in the training of physicians, and emphasizes the evocation of a scholar's study filled with books and globes.[4] Martin Gaier compares the terrestrial and celestial globes to the active and contemplative life, respectively, that Rangone held out as an ideal.[5] While these meanings are credible, the globes still have not been fully investigated in relation to contemporary developments in cartography and in the context of the flourishing production of maps and globes in Venice itself.

The terrestrial globe to the viewer's left displays Europe, Africa, and the Americas as broad landmasses that incorporate the ever-increasing cartographic knowledge gained from voyages of discovery and overland exploration. Stretching across the southern part of the globe is the fictive *Terra Australis*. The shapes of the landmasses suggest awareness of recent cartographic discoveries. Rangone himself owned numerous cartographic treatises, atlases, maps, and globes inventoried in his testament. Among them can be tentatively identified Giacomo Gastaldi's short treatise, *La universale descrittione del mondo* (1561), produced to accompany his 1561 nine-sheet *Cosmographia Universalis* world map (Fig. 2) intended to replace his first *Universale* world map first published in 1546 that incorporated more recent discoveries.[6] Rangone's pivotal role in determining

[2] Elly Dekker, "Globes in Renaissance Europe," in *The History of Cartography*, III: Part 1, *Cartography in the European Renaissance*, ed. David Woodward (Chicago: University of Chicago Press, 2007): 148-149, with extended discussion and images of these subject categories, including globes, on 149-159.

[3] Weddigen, "Thomas Philologus," 66.

[4] Boucher, *The Sculpture of Jacopo Sansovino*, 1: 118.

[5] Martin Gaier, *Facciate sacre a scopo profano: Venezia e la politica dei monumenti dal Quattrocento al Settecento*, trans. Benedetta Heinemann Campana (Studi di arte veneta; 3) (Venice: Istituto veneto di scienze, lettere ed arti, 2002), 223.

the imagery of the celestial globe is strongly suggested by the statement in his final testament of 28 August 1577 that the celestial globe is oriented toward the sign of Leo, thereby highlighting his birth date, 18 August 1493.[7]

The globes show highly specific physical features like those found on functional maps and globes. These features have hitherto gone unremarked and, moreover, are quite unusual for globes in an artistic context. The celestial globe depicts six of the twelve zodiacal constellations along the ecliptic and twenty-two star constellations. Unlike actual globes, however, both globes float, and are thus shown without the usual supporting stands or handles attached to functional globes.

Likewise the wind faces, also known as wind cherubs, which surround each globe are characteristic of functional maps and globes. They depict the number and direction of the winds. Seven wind cherubs with puffed cheeks surround the terrestrial globe and fifteen encircle the celestial globe; the eighth and sixteenth heads that would normally be depicted at the top of the respective globe are omitted. The distinct number of wind heads surrounding each globe reflect the development of two different wind systems: a twelve-wind system developed in antiquity was based on the location of the sun along the horizon; a second geometric system based on compass directions resulted in 4, 8, 16, 32, or 64 winds and directions.[8] On terrestrial maps wind faces are related to compass roses

---

[6] The only known impression of Gastaldi's 1561 *Cosmographia Universalis* world map (Fig. 2) is housed in the British Library. Denis E. Cosgrove, "Mapping New Worlds: Culture and Cartography in Sixteenth-Century Venice" *Imago Mundi* 46 (1992): 74 states that the 1561 map is probably related to text in Gastaldi's booklet. In Rangone's testament (see n. 7) the item "*Alter ab eode novus Maximus cum introductorio Jaci Castaldi*" may refer to Gastaldi's booklet that accompanied the 1561 world map.

[7] Gallo, "Contributi," 15; Weddigen, "Thomas Philologus," 65; Gaier, "Facciate sacre," 224. In the testament Rangone states that he wanted the latitude of 44 degrees, 30 minutes visible on the celestial globe. Weddigen, "Thomas Philologus," 28 states that five copies of the testament are known. The is copy housed in the Archivio di Stato, Venezia, Testamenti, busta 421, no. 1172, folios 1-25. Folios 18r – 20v list Rangone's globes, maps, geographical instruments, and books.

[8] J. B. Harley and David Woodward, *The History of Cartography*, vol. 1: *Cartography in Prehistoric, Ancient and Medieval Europe and the Mediterranean*, ed. David Woodward (Chicago: University of Chicago Press, 1987), 144-153. Elly Dekker, e-mail communication, 9 July 2015, provides a useful summary of the latter system: "the 8, 16, 32, or 64 compass directions serve to orientate the globes such that they correspond with the real world around us." They allow the user to solve "a number of practical problems… such as the rising and setting of the Sun, the stars, etc."

that indicate direction on both maps and portolan charts.[9] By contrast, celestial maps rarely include wind heads since winds physically connect with the horizon, whereas constellations in celestial maps are shown as if seen from the Earth and projected on one or two hemispheres. However, both terrestrial and celestial globes usually indicate wind directions, either by wind heads or wind names engraved on the horizon ring—one of the original fittings of the globe that is often missing—or compass roses printed on the globe's paper covering.[10]

The Rangone globes reflect the production and use of globe pairs emerging at the time. Our modern view of globes as maps of the surface of the earth or the surrounding sky is quite unlike the way globes were used in previous centuries. As Denis Cosgrove observes, terrestrial and celestial globes in Rangone's time were "considered… [mechanical] representations that facilitated a spatial understanding of concepts, conditions, processes or events that mattered to mankind."[11] This view helps one understand why geographers in the sixteenth century were primarily concerned with how to best express the relationship between the terrestrial and celestial spheres, why a well-accepted solution for this dilemma beginning in the 1530s was a pair of terrestrial and celestial globes accompanied by a book of instructions, and why globes thus remained the main instruments of geographical teaching for 300 years.[12]

The creation in the 1550s of the two globes of the Rangone monument coincides with an era in which the first pair of printed terrestrial and celestial globes was produced for practical cosmographical calculations. The Rangone globes themselves, however, do not reference such globe pairs because of their slightly different diameters. Before printing was applied to globe production,

---

[9] Compass roses printed on some terrestrial globes indicate compass directions, as in Mercator's 1541 terrestrial/cosmographical globe, cosmographical being hybrid of the earthly and celestial globes. I thank Elly Dekker for pointing out the Mercator globe in an email on 11 July 2015.

[10] Other examples of wind indicators on the horizon rings of celestial globes are in Elly Dekker, *Illustrating the Phaenomena. Celestial Cartography in Antiquity and the Middle Ages* (Oxford: Oxford University Press, 2013), figs. 5.28**,** 5.47, respectively, for the names of the twelve winds engraved on the horizon ring of the globe made by Hans Dorn in 1480 and the twelve wind faces marking compass directions on the outermost ring of the horizon ring of Johann Stöffler's globe of 1492.

[11] Cosgrove, "Mapping New Worlds," 65 and n. 1.

[12] Dekker, "Globes in Renaissance Europe," 136.

what are termed manuscript globes had to be made one at a time. The development of printing in the fifteenth century opened up globe production as it did so many forms of communication. Globes made by pasting prefabricated printed scales of paper, called gores, onto a wooden sphere debuted at the beginning of the sixteenth century. The first printed gores for a terrestrial globe were made in 1507.[13] Printed terrestrial and celestial globes were first sold as a pair in 1537, when the terrestrial and celestial globes that Gemma Frisius, a cosmographer and physician in Louvain, first produced separately in 1530 and 1537, respectively, were sold together as a pair. Frisius had not envisioned a matched pair of globes when he produced the terrestrial globe, so he included on it a depiction of the sphere of fixed stars that would normally be shown on a celestial globe. This dual-purpose hybrid of the earthly and heavenly globe, termed a cosmographic globe, was developed and popularized during the first decades of the sixteenth century and marks a step in the progression to the matched pair of globes.[14] In 1551, Gerard Mercator imitated his master Frisius by producing a celestial globe to accompany the cosmographic globe that he had created ten years earlier in 1541.[15] Then in 1586 Jacob Floris van Langren and his son Arnold published the first terrestrial and celestial globes that were produced as a matching pair in Amsterdam.[16]

The intersecting circles on the Rangone celestial globe depict the equator and the ecliptic, the latter representing the path of the sun along which the signs of the zodiac lay. The ecliptic rather

---

[13] Globe gores attributed to Martin Waldseemüller, James Ford Bell Library, University of Minnesota Libraries, Minneapolis, Minnesota: https://www.lib.umn.edu/apps/bell/map/WALD/MAPS/GLOBE/globlg.jpg.

[14] Elly Dekker, "The Doctrine of the Sphere: A Forgotten Chapter in the History of Globes" in *The Stewart Museum Globe Symposium*, ed. Edward H. Dahl, Jean-Francois Gauvin, and Eileen Meillon, special issue of *Globe Studies. The Journal of the International Coronelli Society* 49/50 (2001/2002): 25-44 for the development of the cosmographic globe and progression to matching pairs of globes, and 34-39 for Frisius' globe production. A second version of Frisius' cosmographic globe was produced in 1536.

[15] Dekker, "The Doctrine of the Sphere," 39-40 on Mercator's globes.

[16] Only one pair of the second edition of 1589 of the van Langren globe pairs survives. Dekker, "Doctrine of the Sphere," 40. These globes are housed in the National Maritime Museum in Greenwich, UK. See Elly Dekker, Silke Ackermann, and Kristen Lippencott, *Globes at Greenwich: A Catalogue of the Globes and Armillary Spheres in the National Maritime Museum, Greenwich* (Oxford: Oxford University Press and the National Maritime Museum, 1999), 396-401, n. 3.

Fig. 3. Zodiac and star constellations on the celestial globe, detail of the *Tommaso Rangone Monument*, S. Giuliano, Venice, completed 1557, installed c. 1558 (Photo: Public Domain with diagram by Jeffrey Brewer).

than the equator is oriented with the North Pole, following the precedent set by the venerable second-century cosmographer Claudius Ptolemy. The six of the twelve zodiacal constellations visible along the ecliptic and twenty-two of the forty-eight Ptolemaic constellations depicted above and below the ecliptic (Fig. 3) have never previously been identified. The zodiacal and star constellations are generally placed in their correct relative positions, and their images are readily recognizable, although the forms are more simplified than many of their two-dimensional counterparts printed or drawn on actual globes and maps. The bird shown clutching Lyra the Lyre (14) is meant to be an eagle or vulture, since the constellation was often referred to as Aquila Cadens or Vultur Cadens (literally falling eagle or falling vulture).[17] A few images present visual anomalies: Perseus' (8) raised sword points towards Cassiopeia rather than Andromeda; what looks like a torso with a bent leg between Lyra (14) and Hercules's legs (7) is unidentifiable.[18]

Turning to the terrestrial globe, the striking specificity of its landmasses has led to the search for their potential cartographic sources. Rangone states in his testament that he himself provided the models for the globes, and, according to Weddigen, mentions ten three-dimensional models and more than ten planar models that he constructed.[19] Unfortunately the models have not survived and the descriptions in the testament do not allow them to be identified with any known globes or globe gores. Like the procedure for creating actual maps and globes, it is likely that the forms of the

[17] The information about Lyra can be found in any standard guide to the constellations.

[18] The Rangone globe also omits a constellation discovered in the late fifteenth-century, Berenice's Hair, which was first depicted on a globe in 1536. The other new constellation, Antinous, next to Aquila, would not be visible on the Rangone globe. Dekker, "Innovations in the Making of Celestial Globes," 70.

[19] See n. 7 on Rangone's testament. In the section of Eramsus Weddigen's website devoted to Tommaso Rangone, http://erasmusweddigen.jimdo.com/works_in_progress.php (accessed 23 July 2015) entitled "Tommaso Rangones astronomisches Besitzum unkammentiert," he identifies a total of nine globes listed in the testament: three celestial; one terrestrial; and five unspecified. This is one less globe than the ten listed in his earlier publication, Weddigen, "Thomas Philologus," 66. He is the only scholar to have identified a contemporary model for the Rangone terrestrial globe. He observes the realistic image of America recalls the printed globe of Johannes Schoener produced in 1523 in Nuremberg, until recently believed to have been the model for the terrestrial globe in Hans Holbein's *The Ambassadors* (1533), London, National Gallery. The model for the terrestrial globe in *The Ambassadors* has not yet been identified. Dekker, "Globes in Renaissance Europe," (2007), 135 and n. 6.

landmasses on the Rangone globe borrowed and adapted individual features from a number of available maps, rather than following a single model.

Although the coastlines of the Rangone earthly globe seem to be based on those of actual maps, the geographic features resemble contemporary maps comparatively little. The contours of the landmasses are noticeably more generalized and the overall geography highly simplified. Interior markings and rivers are lacking and even the Italian peninsula is missing, as are any modern island nations, including the British Isles and Caribbean islands, which appeared on other maps and globes of the time. These features may have been omitted due to considerations of space and legibility of the Rangone globes from the street below.

Maps were particularly significant in Venice for a number of eminently practical reasons, including maritime trade, environmental planning and military defense of its territories. The central importance of mapping in Venice combined with the city's thriving printing industry made the city one of the leaders of map production in Europe precisely when the Rangone globes were made. [20] Print culture involved a complex matrix of collaboration among mapmakers, woodcutters and engravers, adapters of existing printed matter, publishers and dealers, with individual participants often working in more than one role. Most of the cartographic specialists involved in the production and sale of the world maps which may have served as models for the Rangone earthly globe either spent their entire career or most fruitful years working in Venice, except Gerard Mercator. These include mapmaker Giacomo Gastaldi, engravers Battista Agnese and Paolo Forlani, adapters such as Matteo Pagano, and publishers including Donato Bertelli and Giacomo Franco, among many others, about whom more will be said shortly.[21]

While cartographic production often incorporated recent discoveries from voyages and land surveys, most European terrestrial maps and atlases of the period continued to be based on the cartographic descriptions and map sequence provided by Claudius Ptolemy in his second-century *Geografia*, which bore the weight of authority from the time it was revived in Europe in the early

[20] Most recently, Scruzzi, *Eine Stadt*, 152. Italy began to lose its leadership in European cartographic production to the Low Countries in the 1560s; the work that marked the Netherlands' supremacy came in 1570 with publication in Antwerp of the first true atlas, Abraham Ortelius' *Theatrum Orbis Terrarum*, the most important atlas since Mercator's Ptolemaic version of 1548.

[21] See n. 29.

1400s well into the seventeenth century. At the same time, many of the dozens of editions of Ptolemy's work that were published included woodcut or copper-engraved maps that bore corrections to Ptolemy's maps based on new geographical knowledge. New maps were also added to the Ptolemaic corpus.[22]

Given the caveat about the simplified landmasses of the Rangone terrestrial globe, its correspondence to the most up-to-date geographical features of contemporary maps, globes, and globe gores produced by the leading cartographers in Venice is nevertheless notable. The Rangone globe is quite progressive in depicting North America's westward bulk, albeit in an unbroken mass that omits Hudson Bay, the St. Lawrence Seaway, the Great Lakes, and other major landmarks. It likewise seems modern because it either omits the fictive Northern Passage, which was included on earlier and contemporary maps, or the angle of the globe cuts off this feature; this Passage was a longitudinal waterway that many hoped extended from the Atlantic to the Pacific Ocean to facilitate travel from Europe to Asia. The globe also reflects modern knowledge that the Isthmus of Panama joins with South America below the northern bulge of modern Columbia and Venezuela, unlike its connection north of the bulge incorrectly depicted in the two of the leading world maps, Gastaldi's *Universal*e oval world map, first published in 1546, and Agnese's oval world map that appeared in seventy-one surviving manuscript atlases dated between 1536 and 1564 signed or attributed to him.[23]

The overall shape of South America most closely resembles Agnese's map. The western coast of South America closely resembles that of Mercator's 1538 double cordiform world map, which

---

[22] Summary of the discussion by Denis Cosgrove, "Images of Renaissance Cosmography, 1450-1650," in *The History of Cartography*, vol. 3, part 1, *Cartography in the European Renaissance*, 55-81, 98.

[23] See n. 6 for Gastaldi's 1546 world map. One example of Agnese's "Oval Map of the World with Wind Heads" is housed at the Huntington Library, San Marino, CA: folios 13v-14 in the portolan atlas of 14 folios, signed and dated 1533, Call No. HM 27; http://dpg.lib.berkeley.edu/webdb/dsheh/heh_brf?Description=&CallNumber=HM+27 and click on image no. 386, Oval map of the World. For a comprehensive list of the manuscript atlases made by or attributed to Agnese that include versions of the oval world map, see Henry R. Wagner, "The manuscript atlases of Battista Agnese" *The Papers of the Bibliographic Society of America* 35 no. 1 (1931) (reprinted in book form by Chicago: University of Chicago Press, 1931); idem, "Additions to the manuscript atlases of Battista Agnese," *Imago Mundi* 4 (1947), 28-30.

is his first independent wall map,[24] although the bulge in the map's northeastern Brazilian coast is absent in the relief. However, the shape of South America differs from Ptolemaic maps such as Gastaldi's 1547 version of the *Universale* oval map first published the previous year with its flattened contour on the west coast of modern Peru. Many later maps continue to depict Chile with a non-existent bulge, including the celebrated, modern *Typus Orbis Terrarum* world map first published in 1570 by Abraham Ortelius.

The Rangone globe also incorporates several inaccurate features found on the same contemporary maps. For example, a non-existent bulge on the east coast of the Florida peninsula is found on many maps of the mid- and later-sixteenth centuries, including Mercator's 1541 globe, although the shape of the Florida peninsula and the contour of the Eastern Seaboard differ significantly from these same maps.

Joined to the tip of South America is the anachronistic *Terra Australis*, a theoretical continent that the Renaissance inherited both from the Christian Middle Ages and the revival of Ptolemy. Based on the supposition that the lands of the northern hemisphere should be balanced by lands in the south, it was believed that a land mass continued longitudinally around the earth. The voyages of discovery gradually pushed this region southward, although cartographers continued to gather evidence for this putative southern continent on maps until the voyages of Captain James Cook between 1768 and 1779.[25]

The sole globe with the most potential relevance to the Rangone globe is the one made in Venice around 1574 by Livio Sanuto (Fig. 4).[26] Measuring 68.5 cm in diameter, it represents the

[24] The full title of Mercator's map is "World Map on Double Cordiform Projection." The two surviving copies are housed at the New York Public Library and the American Geographical Society Library at the University of Wisconsin Library, Madison, WI, http://hdl.loc.gov/loc.wdl/wmuw.6766.

[25] R. A. Skelton, *Explorers' Maps: Chapters in the Cartographic Record of Geographical Discovery* (New York: Praeger, 1958), 14.

[26] This is the only example of a globe mounted with the Sanuto globe gores. Marica Milanesi and Rodolf Schmidt, *Sfere del cielo, sfere della terra: Globi celesti e terrestri dal XVI al XX secolo* (exh. cat., 28 September 2007-29 February 2008, Museo del Correr, Venice) (Milan: Electa, 2007), 49-51. For the previously-known globe gores, see Roberto Almagià, "Il globo di

largest printed globe of the sixteenth century and the sole printed globe of the period whose large size approaches that of the Rangone globe, though it appeared some seventeen or eighteen years later. According to a comprehensive list of globes assembled by Elly Dekker, thirty-three terrestrial or cosmographic globes and globe gores date between Mercator's 1541 terrestrial globes and the Sanuto globe of c. 1574.[27] However, none of them are likely to have influenced the Rangone globe due to their small size or, in the case of the manuscript globes among them, their lack of a Venetian or northern Italian provenance. The Mercator globe itself represents the second largest commercially-marketed terrestrial/cosmographical globe produced during the sixteenth century until the Sanuto globe surpassed it, yet it measures

Fig. 4. Livio Sanuto (attr.), Globe, c. 1574 (nineteenth century cradle), Museo Correr, Venice (Photo: Public Domain).

Livio Sanuto," *La Bibliofilia* 48 (1946): 26-27; R. A. Skelton, *A Venetian Terrestrial Globe, Represented by the Largest Surviving Printed Gores of the 16th Century* (Bologna: Garisenda Antiquariato, 1965); Rodney W. Shirley, *The Mapping of the World: Early Printed World Maps 1472-1700* (London: Holland Press, 1983; reprint 1987), 151-155; Scruzzi, *Eine Stadt*, 151.

[27] Elly Dekker, 'Appendix 6.1 List of Globes and Globe Gores made in Europe from 1300 until 1600," in "Globes in Renaissance Europe," 160-171 provides a comprehensive list of globes and globe gores made in Europe from 1300 to 1600.

only 42 cm in diameter, only sixty-one percent the size of the Sanuto globe. According to David Woodward, the Sanuto globe's North American coastlines, interior detail and place names are very similar to Gastaldi's 1561 *Cosmographia Universalis* world map (Fig. 2), a new version of his earlier, smaller *Universale* that incorporated new discoveries.[28] However, the Sanuto globe is arguably less accurate than the Rangone globe in depicting a bulbous Florida peninsula and the angle of the southern coastline along the Gulf of Mexico. For its part the Rangone globe completely lacks the decorative embellishments of the Sanuto globe, which include a bold, undulating wave pattern for the Pacific and Atlantic Oceans, which are populated with numerous sailing ships and several mermaids and sea monsters.

The Sanuto globe is representative of terrestrial globes in general since they tend to exhibit a lesser degree of geographical accuracy than maps, in part due to their more decorative function. The cartographic accuracy of the contours of the Americas in the Rangone terrestrial globe is more closely related to maps, as the preceding discussion has shown. Moreover, the presence of wind heads, which are more often found on maps, and the lack of stands and mountings used in actual globes further suggest that maps rather than globes and globe gores were the primary models.

The Rangone monument is located precisely in the printmakers' neighborhood where maps, atlases, globe gores, and treatises were produced. In fact, the monument faces the Merzaria (Merceria) street that extends from Piazza San Marco toward the Rialto, where shops of engravers and publishers were located. As Woodward has shown, the book and print sellers based on the Merceria during the late 1550s and 1560s included Forlani, who engraved Gastaldi's *Cosmographia Universalis* world map, and Bertelli, a publisher of books and maps, while on the Frezzaria, a street parallel to the Merceria, worked the woodcutter and publisher Pagano, and the map engraver and publisher Franco.[29]

---

[28] Livio Sanuto, Giulio Sanuto, Arthur Holzheimer, and David Woodward, *Holzheimer Venetian Globe Gores* (Madison: Juniper Press, 1987). The sole surviving copy of this map is found in British Library. The American continent is difficult to see in the sole available photo of the entire Sanuto globe, partly because the nineteenth-century wooden stand obscures it.

[29] Woodward, The Italian Map Trade," 779-781 with figure 31.5, p. 780 titled "Area of Printmaking Activity in Sixteenth-Century Venice." For the four men whose shops were located there, see Ashley Boyton-Williams, "Paolo Forlani," Mapforum.com (*Antique Map Magazine)* 11 (December 2000), www.mapform.com/11/11issue.htm; Fabia Borroni,"Donato Bertelli," *Dizionario Biografico degli Italiani online* 9 (1967): http://www.treccani.it/enciclopedia/donato-bertelli_(Dizionario-Biografico)/; Massimo

The Rangone globes have been understood as traditional symbols of scholarly pursuits, specifically geography and astrology as well as referencing other paired qualities of microcosm and macrocosm and the active and contemplative lives. This essay has demonstrated that they signify much more. The terrestrial and celestial globe reliefs accompany the emergence of functional globe pairs in the sixteenth century. The unprecedented specificity of form of both Rangone globes attests to Rangone's engagement with actual maps produced in Venice as well as the maps and globes he himself owned. Their location facing the Merceria, a hotbed of map production that reached its peak at the time the reliefs were carved and newly visible in the 1550s and 1560s surely gratified those in the trade and their clientele as they looked up at them. The globes celebrate the heyday of Italian mapmaking when Venice was its capital.[30]

Donattini, "Matteo Pagano," *Dizionario Biografico degli Italiani online* 80 (2014): http://www.treccani.it/enciclopedia/matteo-pagano_(Dizionario-Biografico)/; Chiara Stefani, "Giacomo Franco," *Dizionario Biografico Italiano online* 50 (1998): http://www.treccani.it/enciclopedia/giacomo-franco_(Dizionario-Biografico)/. Franco is best known in Venetian circles for having engraved the scenes of civic ceremonies in *Habiti d'huomeni et donne venetiane* (160[?]), which he himself published.

[30] Robert Karrow, "Centers of Map Publication in Europe, 1472-1600," *History of Cartography*, vol 3, part 1, *Cartography in the European Renaissance*, 619 for Venice's leadership in all of Europe in the 1560s.