

Summaries

Ingrid Baumgärtner, Piero Falchetta, *Lo spazio cartografico, Venezia e il mondo nel Quattrocento. Un'introduzione / Kartographischer Raum, Venedig und die Welt im 15. Jahrhundert. Eine Einführung*

Geographic and cartographical products of the 15th century must be considered as texts of great complexity, which intertwine disparate skills, knowledge, and traditions. This seems to be especially true in Venice, which represented an ideal ground for interaction of “scientific” and literary traditions, nautical experience, geographic information reported by merchants and missionaries, and broad cultural relationships with the European and the Islamic world. The rediscovery of Ptolemy’s *Geography* at the end of 14th century played a role of absolute importance in this context, and during the following century Venetian cartographers like Fra’ Mauro produced maps which offered a new image of the world. The essays in this volume focus on the history of geography, cartography and literature, on projection methods, on the history of the sea and navigation. Their aim is to investigate the cartographic production in 15th and early 16th century Venice, from the Latin translation of Ptolemy’s *Geography* to the beginning of the great age of discoveries. The essays are focused on three main questions: the transformation of the geographic space introduced by Ptolemy’s book; the influence of the new methods and techniques of cartographic representation on the idea of space; the importance and the meaning of the information reported by the voyagers.

Laura Federzoni, *Testo e immagine: i codici manoscritti e le edizioni a stampa italiane della Geographia di Tolomeo*

The humanist revival of geography in Western Europe coincided with the recovery of Ptolemy’s *Geography* and its translation into Latin that gave European intellectuals who were unable to read Greek access to Ptolemy’s work. The

Geography accompanied with the first systematic map collection available in the 15th century enjoyed great success in learned circles. Among the most important Ptolemaic manuscript versions are the works of Nicolaus Germanus, a monk from Reichenbach operating in Florence and Ferrara, that are examined here: the copy for Borso d'Este, Duke of Ferrara, serves as an example of the precious codices that were presented to monarchs, popes and aristocrats. The first editions in print date back to the 1470s: the earliest, without maps, was produced in Vicenza (1475); the second in Bologna (1477) and the third in Rome (1478), the latter two with maps. The Bologna edition was clearly generated within the renowned university and engaged many prestigious artists and scholars from Bologna and Ferrara, yet the inconsistent quality of its maps render it a very controversial work. Only in the 16th century were Italian editions of Ptolemy's *Geography* printed (in Venice), but by this time these works had lost their role as geographic references and become representative of ancient tradition.

Ramon J. Pujades i Bataller, *Mappaemundi veneziane e catalane del basso medioevo: due rami nati da uno stesso tronco*

The article introduces a new interpretation of the relationships between the 14th century *mappaemundi* composed in Venice by Fra' Paolino and Pietro Vesconte on the one hand, and on the other the portolan charts drawn in Mallorca by Angelino Dulceti. The encounter of these two models originated a new one, a kind of "monumental portolan world map", an archetypal map that inspired several significant cartographic works of the following century, from the *Catalan Atlas* by Cresques Abraham (1375) onwards. These maps prove also that Marco Polo's *Milione* circulated in the Catalan area before 1372, the year in which Peter IV of Aragon purchased a Catalan translation of that book.

Patrick Gautier Dalché, *Due contemporanei di Fra' Mauro e lo spazio geografico: il medico umanista Pietro Tommasi e il filosofo naturalista Giovanni Fontana*

By studying the education, culture and works of both Pietro Tommasi and his son-in-law, Giovanni Fontana, this article aims to define the intellectual stances of two Venetian scholars at that critical moment when Venetian culture played an active role in the discourse about the representation of the *orbis terrarum*. Both physicians, educated at the University of Padua, were equally interested in geography and mapping, although driven by different motivations. Tommasi, who was close to the Venetian leadership and a student of Ptolemy's *Geography*, represents a cultural environment influenced by Florentine humanism, civic life and literary culture. Fontana, an Aristotelian, composed his writings in the scholastic Latin despised by humanists; he enhanced his work with "medieval" references and took a keen interest in mechanical arts and techniques. He was, however, more open-

minded; he considered various theories about the structure of the *orbis terrarum* that had been formulated since antiquity, and assessed the different types of maps by their content and their making. It was indeed in the *milieu* of academics and technicians that an elaborate reflection on the potential of Ptolemy's *Geography* occurred as a novel pattern of spatial representation.

Klaus Anselm Vogel, *Fra' Mauro über den Raum außerhalb der Karte. Die Grenzen geographischen Wissens und die Rückseite der Ökoumene*

The cosmographical concept of the Map of the World by Fra' Mauro, a Camaldolese monk of the St. Michael monastery in Murano, is not directly evident. His famous map, today in the Biblioteca Marciana, shows the known inhabited world, the *oikoumene*, in an abundance of details based on latest observations. Its circular shape is formed by the three continents of Asia, Africa and Europe, surrounded by a small stripe of ocean and limited by a massive circular wooden frame. There is no physical world beyond that frame. A vision of the backside of the *oikoumene* can only be deduced from biblical lore and natural philosophical arguments. These arguments are given in two marginalia positioned outside the wooden frame. Following natural philosophers from Paris and Padua and a description of the division of earth and water from Genesis, Fra' Mauro explains the separation of "upper" and "lower" hemisphere by latest philosophical and theological reasoning. Cartography is limited to the "upper" hemisphere. The backside of the *oikoumene*, fully covered by the water sphere, lies beyond empirical geography. The circular wooden frame, marking the borderline of land and sea, indicates the limits of knowledge and curiosity. For Fra' Mauro and his contemporaries, the knowable land, the unknown sea and the asymmetry of the spheres of earth and water are given as fundamental cosmographical principles.

Giampiero Bellingeri, *La turchizzazione di un Mappamondo*

The Turkification of a world map leads us to its context, that is, the multifaceted relations between the Ottoman Empire and the Republic of Venice, where geographic and cartographic exchanges occurred frequently from the 14th to the 17th century. The map's design is a heart-shaped projection invented by Jo. Werner of Nuremberg in 1514 and used by Oronce Finé in 1536 for a world map that was reproduced by G.P. Cimerlino in 1566 in Venice. The long glosses in Ottoman Turkish that frame the map feature «Hajji Ahmed of the city of Tunis», who speaks as its inventor and author «for the benefit of the Muslims». Under the cloak of "Caggi Acmet" (as he was called by Venetians) hid, in all likelihood, various protagonists of Venice's cultural life: G.B. Ramusio, the dragoman M. Membré, the printer M.A. Giustinian, the main wood engraver Cr. Nicostella and the cartographer Giacomo Gastaldi, whose *Universale map* of 1546 supplied the

basis of this representation. The map, dated 1559 (967 AH), was engraved on six woodblocks found in 1795 and still preserved in the Biblioteca Marciana in Venice. The prints we possess were produced in that same year.

Caterina Balletti, *Gli strumenti informatici al servizio della ricerca storica: il caso della cartografia veneziana del XV secolo*

The development of information technology has recently allowed for an evolution in the methods of investigation and dissemination of historical maps, thanks to the introduction of intuitive and immediate interfaces that give instant access to complex functions and make the maps easier to use than they were in the past. Generally, we witness a wide spread of new applications – even in fields traditionally not involved in computer science – that are characterized by their easy handling of complex analyses and by tools for the visualization of results for a wider public. Descriptive and cognitive aspects of historical maps can be emphasized within a system that integrates historical, geographical or economic data. These tools, which correlate heterogeneous information to increase and improve their management and communicability, represent in our time the basic equipment for every research. Some ideas, based on experiments by the photogrammetry laboratory at the Iuav (University Institute of Architecture in Venice) presented below, about the changes in communication and knowledge induced by new technologies should be considered: particularly, the new systems for storing, cataloguing and utilizing digital material from which the management and protection of our cultural heritage will benefit.

Uwe Israel, *Venedigs Welt im Wandel um 1500*

Our mental maps are currently changing significantly as a result of our perception of an extensive globalization. But what were the consequences of the world-changing discoveries, originating from Western Europe at the end of the Middle Ages, for the inhabitants of Venice whose thinking and sphere of influence had traditionally been oriented towards the Levant? The development of a route via the Cape of Good Hope was particularly problematic for the Venetian Republic, because it lost its spice monopoly – with consequences on a global scale. The desired goods were now no longer predominantly imported by Venetians through Arabic intermediaries, but more and more by the Portuguese directly from Asia. If we want to know how the mental maps of the political and economic elites in Venice changed around the year 1500, contemporary documents left by two outstanding chronographers are particularly enlightening: the *Diarii* by Marino Sanudo (1466-1536) and Girolamo Priuli (1476-1547). Their minute records are analyzed here in order to clarify what impact the Atlantic expansion had on the Venetians half a millennium ago and to assess how these discoveries were perceived in a city that had shaped the world and dominated its understanding for a long time before it fell behind.

Benjamin Scheller, *Erfahrungsraum und Möglichkeitsraum: Das sub-saharische Westafrika in den Navigazioni Atlantiche Alvise Cadamostos*

One of the most important protagonists of the exploration and construction of a new *oikoumene* in the 15th century was the Venetian patrician Alvise Cadamosto (1426/1432-1483). In the service of Portuguese Infante Henry the Navigator, he embarked on expeditions to Africa in 1455 and 1456. Exploring West Africa, he and his men reached the mouth of the Gambia River in 1455 and the Geba River and the Bissago Islands in 1456. Sometime after his return to Venice in 1463, he composed a detailed account of his voyages. This account, the so called *Navigazioni atlantiche*, is the only contemporary travelogue by a protagonist of the Portuguese expansion into Africa during the period of Henry the Navigator and must be regarded as one of the milestones in the history of ethnography since the Middle Ages. By scrutinizing the *Navigazioni*, it becomes clear that even in those regions that had already been discovered by previous Portuguese expeditions Cadamosto could draw only to a very limited extent on the experiences made by his predecessors. The West African coast line down to Cape Roxo – already represented in the nautical chart of Venetian map maker Andrea Bianco in 1448 – was obviously not mapped in the chart Cadamosto had with him: he had to discover the coast for himself. In the regions south of the Sine-Saloum delta, Cadamosto entered a space of even higher contingency. Here he encountered peoples who had not yet had any contact with European explorers and whose attitude towards the strangers from the north he had to assess by himself through accurately observing the customs of “a different world”, as he put it in the prologue of his account. Cadamosto’s highly nuanced hermeneutics of the “other”, which have often been noted, must thus be explained by his having to come to terms with a particular space of contingency, constituted of completely unfamiliar geographical sites and people.

Daria Perocco, *La geografia sul leggio. Venezia, letterati e carte geografiche*

In the first half of the 16th century, Venice was a pre-eminent as a publishing centre regarded the production not only of books but also of maps. In this environment worked Giovan Battista Ramusio who, stimulated by the new knowledge deriving from recent discoveries, was interested in geographic culture and keenly felt the need to give an ordered description of the entire world in a single text, written in “high” vernacular. Around him, and no less committed, were some of the greatest intellectuals of his time: Pietro Bembo, Girolamo Fracastoro, Andrea Navagero, the publisher Giunti and Girolamo Gastaldi. The focus of this contribution is the relationship between these important figures.

In particular, the final part of the article regards Gastaldi, who came to Venice from Piedmont while very young and remained in the city until his death. He was not only a great cartographer – as recognized by the Serenissima when appointing him to produce the maps for the Sala dello Scudo of the Ducal Palace – but also an excellent writer and an expert on the geographic reality of Venice and its territories.

Ingrid Baumgärtner, *Battista Agnese e l'atlante di Kassel. La cartografia del mondo nel Cinquecento*

Between 1514 or 1535 and 1564 the Genoese Battista Agnese in Venice produced portolan atlases practically in series. More than 80 extant manuscripts from his workshop are known today – including single maps and complete atlases – only a few of which bear his signature. Agnese dominated the market and, according to owners' inscriptions, also supplied princes and prominent individuals with luxury editions. The article discusses, first, Battista Agnese's substantial output in the context of cartography in late medieval Venice; second, a little known atlas that is dated 1542 and preserved in Kassel (UB-MuLB, 4° Ms. Hist. 6); and, third, the contemporary perception of such atlases as old-fashioned prestige objects.

The production of Agnese's maps can be divided into three stages marked by a successive increase of geographic knowledge. Maps of the second phase (1542-1552) seem especially innovative, with California and other details appearing for the first time. The Kassel atlas originated in this productive period. The manuscript, which comprises 19 sheets of parchment (22.5x16.5 cm), came into possession of the Hessian landgraves in 1686 as part of the Palatine inheritance. This exceptional work presents a declination table and armillary sphere, the planetary system and zodiac, coastal maps for three oceans, charts for various parts of Europe and the Mediterranean Sea as well as two world maps. References to discoveries, such as the sea route from southern Spain to the Moluccas, are characteristic.