

AUTHOR NO LONGER UNKNOWN

MAKER OF THE NSZL'S 16th-CENTURY NAUTICAL MAP¹



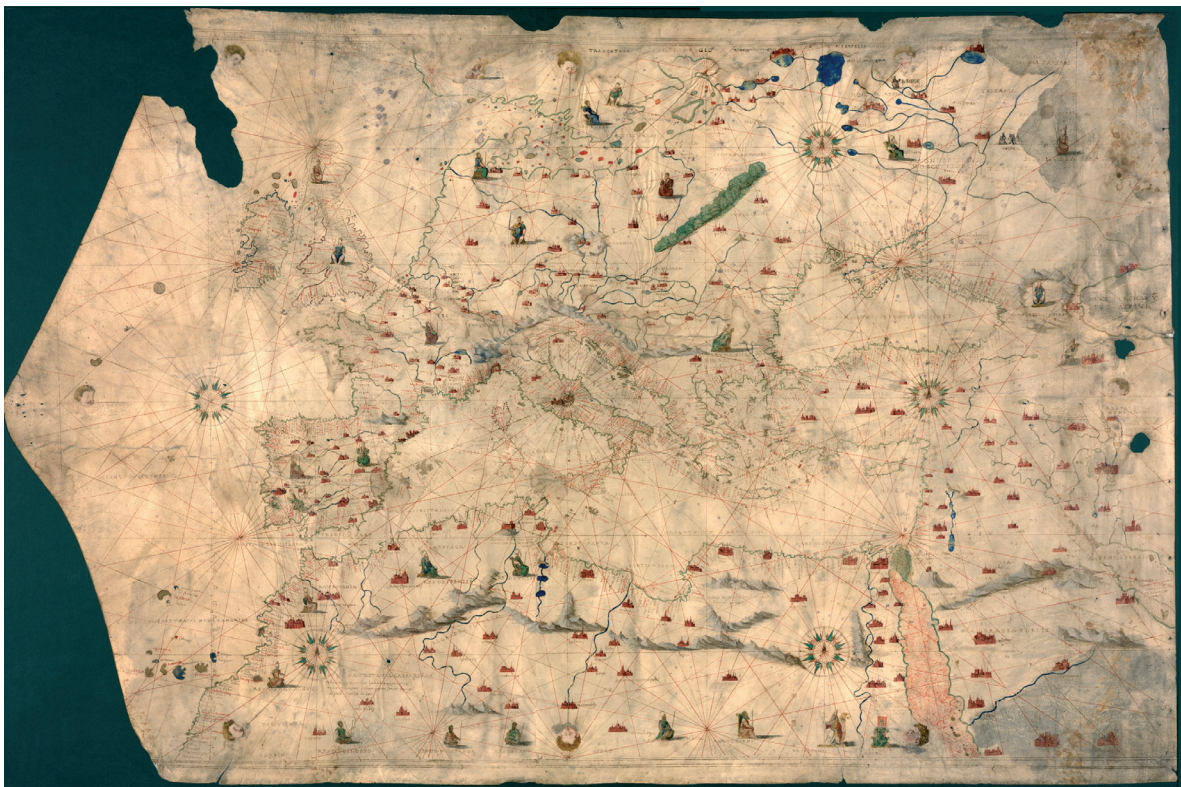
The social and economic changes that started in the Mediterranean region in the 13th century led to a general boom in production. Various goods and products were transported in increasingly large quantities between regions, with the consequence that transport and the movement of goods started developing rapidly. Maritime shipping played a growing role, but the increased demand required ships which were both safe and capable of bearing large loads. Furthermore, there was a need for techniques and equipment to provide orientation at sea.

A new aid appeared alongside innovations in ship-building techniques: the navigation map (portolan chart). The goal of these special maps was not just to facilitate sea travel, but also to assist in the planning of nautical journeys. Precise knowledge of the geographi-

cal environment required a depiction that corresponded to reality, and for this reason portolan charts, unlike other 13-14th century cartographic productions, were made with geographical accuracy resembling that of modern maps. The sea-coasts were drawn in an extraordinarily detailed fashion, whereas areas of dry land with no relevance for navigation were generally left empty. Richly decorated portolan charts which in contrast to those previously mentioned also depicted areas of dry land, were used during journeys of exploration and related economic activities, rather than for nautical navigation. These were already considered to be valuable works of art when they were produced, and usually became the property of rulers or rich ship-owners.

Work of an unknown author. Considered to be milestones in the development of the scientific approach to mapmaking, there are a few examples of portolan charts in the National Széchényi Library collection. One prime example in terms of its beauty and

Cod. Lat. Medi aevi No. 353, unnamed, 70.5 x 106.8 cm,
mid-16th century, NSZL.



mysteriousness is the piece prepared in the middle of the 16th century which, in the absence of the author's name, was given the designation Cod. Lat. Medi aevi No. 353.

What is known of the history of the map is that the Hungarian National Museum bought it in 1889 at the time the National Széchényi Library's collection was expanded. This large map is in good condition, its rich labelling is still readable over a large area, and it is decorated with artistic miniatures prepared with particularly fine strokes.² Despite all this, only Count Pál Teleki published a brief description of it in 1906.³ In the article, published in the seventh issue of the *Geographical Gazette*, he briefly summarised everything that could be gleaned from the so-called nameless nautical map "at first glance". The map depicts almost all of Europe, North Africa, and the Middle East. On its west side we find the British Isles, two imaginary islands (*brasil* and *las maidas*), two of the Azores (*lupo*, *corvo*), Madeira and the Canary Islands. The west coast of Africa south of Rio de Oro down to Terra Darena is portrayed. To the north the Scandinavian Peninsula, the Baltic Sea and north-eastern Europe appear with minimal detail, but Livonia and the Moscow region are depicted in great detail. The map is bordered to the south by all of North Africa (including Morocco and Mauritania), most of the Red Sea and the Arabian Peninsula, to the east by the Caspian Sea and Persia, and to the south-east by the northern part of the Gulf of Arabia. The coverage of the Mediterranean is the most detailed, and the reader is given extra information by the use of explanatory labels, images, and drawings in several places.

To this day there has been no attempt to uncover the origin and identify the author of this map, even though it is extremely rich in both mapping and decorative features, while the base material has remained undamaged and clean over a large area. Teleki considered identifying the author to be impossible, and thus paid it no attention. He determined the date it was made based on the drawings of rulers that appear on the map. Of the 19 European and 11 African rulers only the names of Philip II King of Spain (*Philipus R Hispanie*) and Turkish Sultan Suleiman (*Suleymanssac Imperator Turc*) are noted. Since Philip II ruled from 1556 to 1598 and Suleiman from 1520 to 1566, it is obvious that the map was prepared after 1556, and no later than 1566/68.

Life and work of Battista Agnese. Some of the elements of the map, for example the characteristic compass roses and the miniatures of rulers are peculiarities of nautical atlases originating from the workshop of Battista Agnese. Despite the fact that Agnese (c.1500-1564), born in Genoa, could be considered Italy's most important 16th century mapmaker, surprisingly little information about him survives. What is certain, however, is that he started his career in Venice, where he

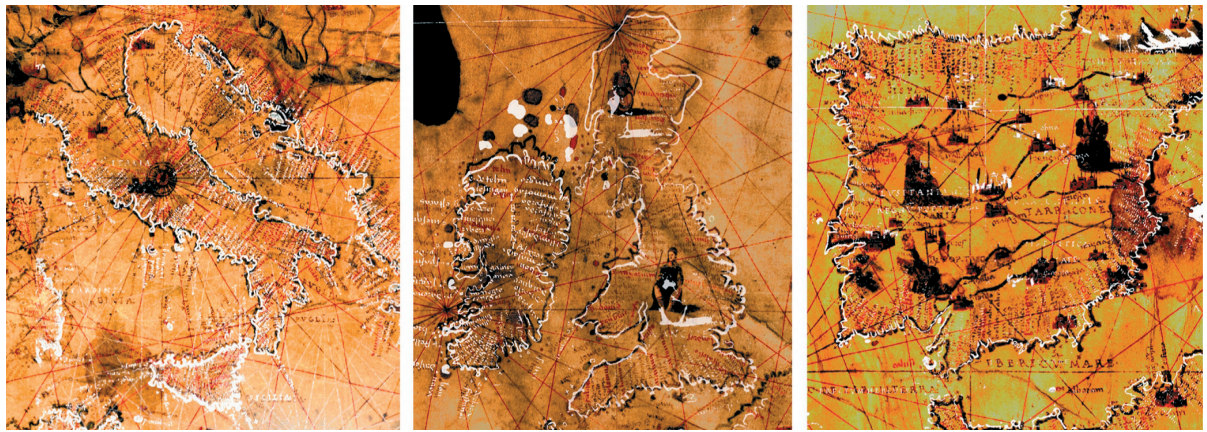
later established a mapmaking workshop. His works were primarily nautical maps, of which a substantial number survive to this day, but only a few copies of traditional portolan charts are known. In public collections around the world there are 73 atlases and eight maps attributed to Agnese, but it can be assumed that many currently unnamed maps and atlases come from his workshop too.⁴

Based on the coats of arms found at the beginning of the atlases, we know that Agnese's productions were popular among the nobility. His high-ranking patrons included Charles V, Holy Roman Emperor, Henry VIII, King of England, and Philip II, King of Spain.

Similar strokes. In the case of a map for which there is no information known about the author, the year of preparation or anything else, we can only draw conclusions about the mapmaker and the approximate time of issue from data on the map which is both visible and can be interpreted. The more information and detail are visible on the map, and the more the base material has remained in good physical condition, as far as circumstances have allowed, the greater chance there is of achieving a useful result. For the comparison I used reproduced editions of atlases made by Agnese in 1546 and 1553.⁵

In the analysis of labelling used on the Cod. Lat. Medi aevi No. 353 manuscript map the list of geographical names consisted of the names which had survived in a legible and easily interpretable condition. Only in one or two cases were there differences in content between the three maps for the regions of central and southern Italy and the Iberian Peninsula, and only in a few places can differences be noted in the form of the writing used for the names. The names used for German, Austrian, Polish and Czech territories also match nearly perfectly. As far as Hungarian names are concerned, all three maps include the names of Hungary, Transylvania, Esztergom, Buda, Belgrade, and Várad, as well as of the Danube, Drava and Sava rivers. The city of Pest can be seen on the 1553 map and is also featured on the NSZL map.

When comparing the drawing of coastlines, I removed the size differences caused by the difference in scale, and then highlighted the contour lines visible in the reproduced atlases and placed them above the unnamed map. The coastlines for all territories, except for one sub-territory, corresponded. Because of the almost perfect correspondence, it can be assumed that all three maps were prepared using one and the same template. The territory where a difference can be seen is Scotland on the 1546 map, which with its rough outlines still appears as an island. This conclusion is supported by the distortion network drawn using 201 checking point pairs with MapAnalyst software, which indicate only minimal differences caused by deformation of the base material.⁶ The depiction of rivers and islands in rivers is draft-like when com-



Comparison of the depiction of the coastlines of Italy, the British Isles, and the Iberian Peninsula. The base is Cod. Lat. Medi aevi No. 353, but the white outlines originate from Agnese's 1553 atlas.

pared to that of the sea-coasts. Despite this, the distinctive course of the Danube and its estuary corresponds, with slight differences, on all three maps, and the four islands that are depicted appear in the same places. The change in the way Lake Balaton is presented is interesting. The lake is named and depicted on the 1546 map, but is completely missing from the 1553 version of the map; it appears again on the unnamed map but only as a drawing without the name next to it.

Settlements are represented on all three maps by red coloured city drawings decorated in gold. The various arrangements of spires, gates and windows do not reflect the real appearance of the cities. These are actually schematic drawings that give a unique appearance to each settlement by repeating and varying distinct graphic elements. The 1553 map and the map without a name also have imposing domes in their city drawings. The approach to depicting settlements on these two maps is visibly the same, and this can be seen in various elements of the maps. Certain cities on the unnamed map (Buda, Pest, Belgrade, Várad, and Nuremburg) are extraordinarily similar to those seen on the 1553 map, and can be considered as almost identical.

In Agnese's works the mountain ranges and the swathes of forest running north-east to south-west between Lithuania and modern-day Ukraine were given a characteristic form. These elements appear with minimal variations on the map without a name too.

Portraits of rulers constitute a spectacular group of ornamental elements. The figures can be seen on their thrones and carpets in front of their cities or tents. These miniatures had a role in making the political situation known, though in some cases it is possible that the maps displayed information that was out-of-date. Less strict rules applied for the portrayal of rulers than in the case of relief or other ornamental elements. The draftsmen did not attempt to produce realistic

depictions when preparing the miniatures, and for this reason each ruler appears with a unique background, different features, and their own colours. However, the features of Sultan Suleiman are exactly the same on the 1553 and the unnamed map, which clearly shows that the two maps were produced in the same workshop.

The most well-known element of portolan charts, the compass rose, was usually in a decorative style. The mapmakers always tried to decorate their work with unique compass roses which were characteristic only of themselves, and because of this we can consider these elements as a sort of signature. Looking at the three maps it is clear that the compass roses were prepared with the same geometrical structure and using the same colours. On ornate portolan charts it was customary to depict the main directions with four wind-blowing heads. The heads are located on the edge of the map on an appropriate line of bearing and looking towards the inner part of the map. Faces can vary within one map, but were always drawn in the same style. By examining the wind heads, which are portrayed as those of children on the unnamed map, it is obvious that they correspond to those seen in the 1553 atlas. The fact that the drawings of compass roses and wind heads correspond does not provide unequivocal proof of the identity of the producer of the map, but it does confirm the opinion formed during the comparison of other elements of the maps.

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The comprehensive comparison unequivocally proved that the National Library's unnamed portolan chart was prepared on the same map structure and ornamentation principles as the two examined map sheets from Battista Agnese's atlas. Based on these results, we can assert that the Cod. Lat. Medi aevi No. 353 map originates from the workshop of Battista Agnese, the 16th century's most important Venetian master mapmaker.

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Notes

¹ The research results summarised in the articles are part of the author's doctoral dissertation entitled "A Digital Analysis of Portolan Charts." First published as Krisztina Irás: Anonymous Portolan Chart in Hungary: A Possible Agnese work. Poster A 23. International Conference on the History of Cartography publication (2009), p. 124.

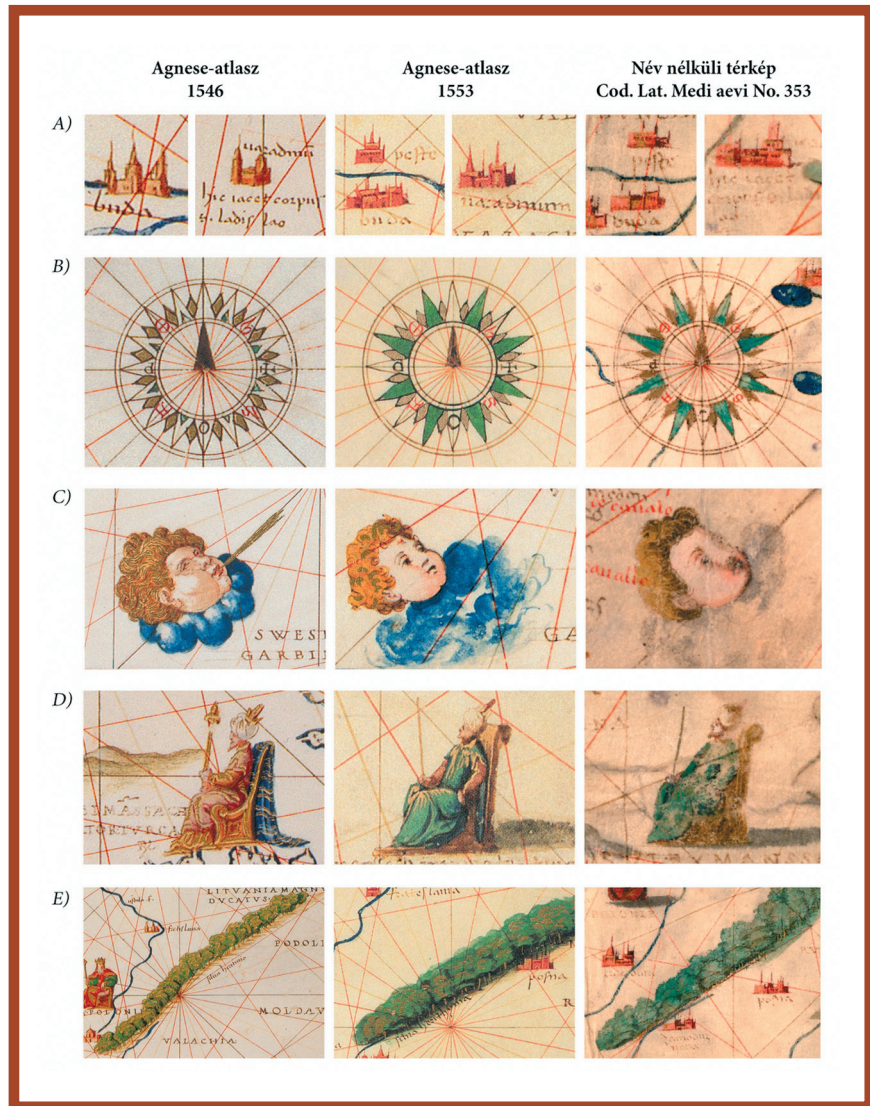
² The dimensions of the map are 70.5 x 106.8 cm, and by my calculations the scale is 1:7,000,000.

³ Pál Teleki: A few artefacts of 15th and 16th century cartography in the National Museum. *Geographical Gazette*, 1906, volume 7, pp. 281-287.

⁴ Corradino Astengo: The Renaissance Chart Tradition in the Mediterranean. In D. Woodward (ed.): *The History of Cartography*, vol. 3, *Cartography in the European Renaissance*, Chicago, 2007, The University of Chicago Press, pp. 238-259.

⁵ Battista Agnese: *Nautical atlas*, 1546. Reproduction: *Portolan Atlas von Battista Agnese* (1546). Graz, 1993, Desertina (Switzerland), Akademische Druck (Austria), Verlag Autor (Russia). Zentralbibliothek, Zurich (Atl. 3349). Map sheets used:

Europe (No. 8), Italy (No. 11), Iberia and North Africa (No. 9), Africa and the Indian Ocean (No. 7). The dimensions of the sheets are 29 x 43 cm. By my calculations the scales of the maps vary - 1:5,000,000 (e.g. No. 11) and 1:7,000,000 (e.g. No. 9). BATTISTA AGNESE: *Atlante Nautico di Battista Agnese* 1553. Reproduction: Venice, 1990, Marsilio Editori. Zentralbibliothek Zürich, (Atl. 3328). Map sheets used: Europe (No. VIII), Italy (No. X), Iberia and North Africa (No. IX), The Black Sea (No. XII). The dimensions of the sheets are 36 x 51 cm. By my calculations the scales of the maps vary, 1:5,000,000 (e.g. No. X) and 1:3,000,000 (e.g. No. XII).



Other map elements compared:
a) cities and labels, b) compass roses,
c) wind heads, d) Suleiman, Turkish sultan, e) forest.

⁶ During the comparison of the maps Agnese (1553) No. X and Cod. Lat. Medi aevi No. 353, the distortion-free grid was drawn on the basis of control points placed on the Agnese 1553 map and the distortion network was drawn on the basis of the location of control points on the unnamed NSZL map. Other map elements compared: a) cities and labels, b) compass roses, c) wind heads, d) Suleiman, Turkish sultan, e) forest.