

# WHAT MAY THE DIFFERENT WRITINGS ON THE MAPS SAY?

Cosimo Palagiano

*Sapienza Università di Roma*

## Abstract

The writings of some ancient maps are very interesting because they let us know some aspects of the views and the life models of the ancient societies.

Keywords: Planisheres, Nautical maps, Religious faith, Historical events.

## INTRODUCTION

The geographical map is defined as a design in the plane of part or all world superficies. Its properties are the symbols, the reduction and the approximation. About the symbols, as geographical objects and writings are not only of these geographical objects, but also notes and explanations, which are, in particular, on the ancient maps. On this aspect, I discuss in detail in this paper .

The concepts of reduction and approximation are clear. The reduction is due to the impossibility of reproducing an area that is likely to be much larger on a small sheet. The approximation is due to the need to use artifacts to draw a curved surface on a plane. The reduction is solved by means of a reduction system called scale, while the approximation is solved with a system of projections.

Both scale and projection may be many. But above all, the projections tend to limit the approximation, but they cannot be completely eliminated. A severe criticism of the map system has been carried out for some time by a well-known geographer (Farinelli, 2009, *passim*)<sup>1</sup>. The speed of an airplane in flight must be calculated in relation to the earth curvature. Therefore, the speed is calculated on the ground.

The route of a ship or an airplane follows the rhumb line, which is a double curved line that crosses the virtual meridians always at the same angle. The rhumb line is reproduced like a right

<sup>1</sup> Farinelli writes, p.37 : “ La pialla (*plane...*) è il progetto (*plan*), vale a dire la mappa; la piallatura (*planning*) è la pianificazione (*planning*): in ogni caso il problema consiste nell'appiattare tutti i bitorzoli e le irregolarità fino a trasformare tutte le curve in linee rette, fino a ottenere una superficie il più possibile simile all'astratto piano matematico” (Farinelli writes, p. 37: The plane is the plan, that is to say the map, planning is planning, in any case the problem consists in flattening all the bumps and irregularities until all the curves are transformed into straight lines, until a surface is as similar as possible to the abstract plane mathematics).

line on the maps of the Mercator's projection. The topographical maps are based on an elaboration of this projection.

Similarly, if I measure the distance between two points A and B on a map, I have to take into account that the real distance on the ground is different due to the earth's curvature. This simple observation contests who think that the maps speak and do not give precise information.

Now in this paper, I place myself as a defender of the geographical maps, taking into account the symbolism, through which we can have very useful information on the territory.

Since we have numerous documents from various periods of the past, we are able to "hear" what the maps want to tell us not only about the territory, but also about the relationships between cartographer, designer, client, owners etc. In fact, the geographical map is not free from the ideological contaminations, often identifiable in the writings and drawings that appear above all in how they are written, in the characters and types of the print.

## *THE PTOLEMAIC MAPS*

The Ptolemaic maps preserved in the Vatican Apostolic Library have a few names of places and regions, as in the example reposted and studied by me of the word map of the *Urbinas Graecus* 82 code. I will not enter into the discussion on the Ptolemaic maps whether they date back to the time of Ptolemy or are later. However, the date of the code, which is a copy of an original, goes back to the 11<sup>th</sup> to 13<sup>th</sup> centuries.

The Ptolemaic maps contain many places, rivers, mountains, peoples and regions names. The letters are written in block capitals, because the author wants to give them much importance. On the right side of the map the different κλίματα are shown.

The map of Mesopotamia that I reproduce here, with the many place names highlighted for reading reasons, show the richness of the writings of inhabited centers, rivers as Τίγρης, Εύφράτης, Σαοκὸρ and the ancient regions in light color .

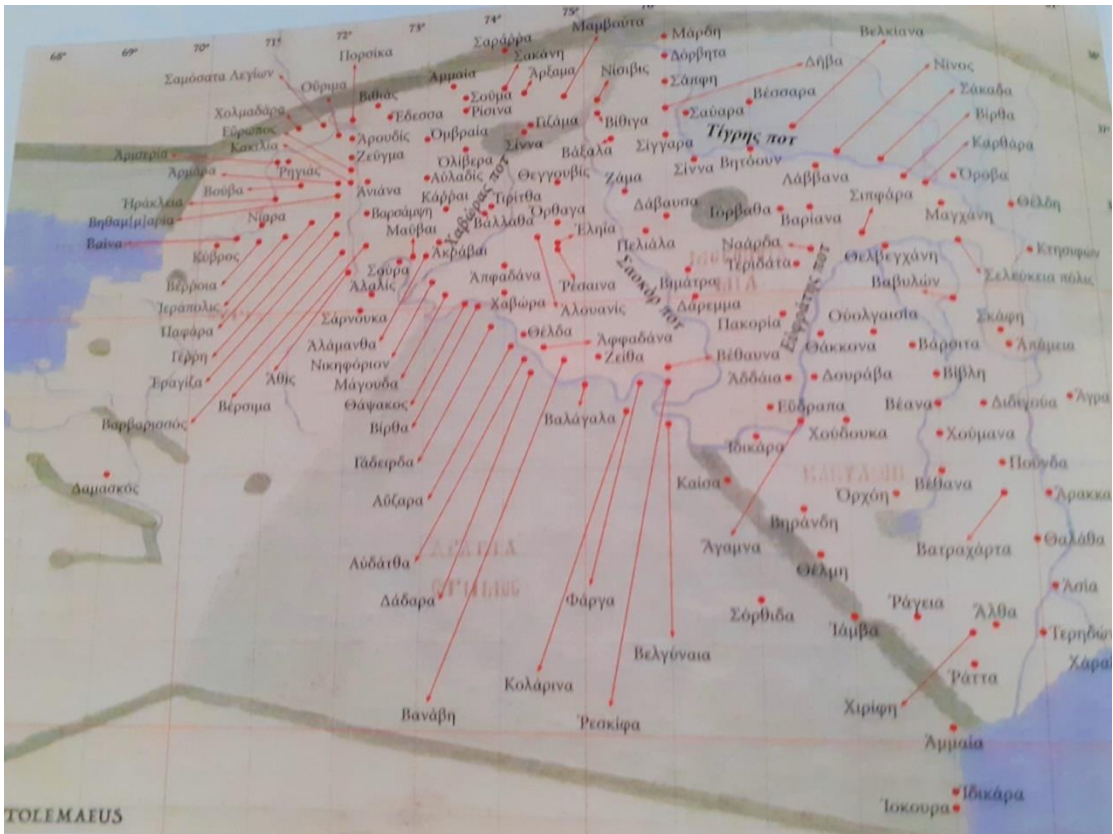


Figure 1. The Ptolemy's Mesopotamia according to edition by Lesti, Palagiano (2020).

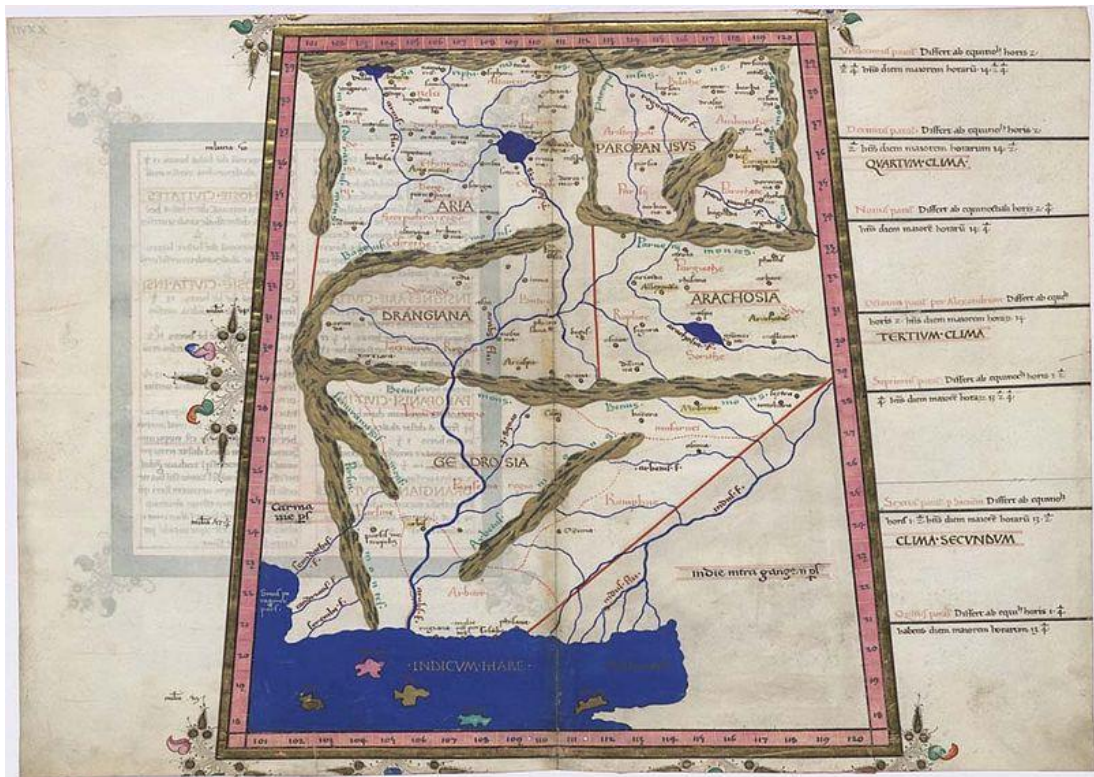


Figure 2. In this Ptolemaic map the names Arachosia, Gedrosia, Paopamisus, Drangiana, Indicum mare and other regions are shown. In evidence the climate is clearly written on the right side.



Arachosia is the Hellenized name of an ancient satrapy of the Achaemenid, Seleucid Parthian, Greco-Bactrian and Indo-Scythian empires. Paropamisus is a mountain range northwest of Pakistan, in Iran.



Figure 3. The city maps of Florence and Rome with writings of the main monuments.

## THE TABULA PEUTINGERIANA

The *Tabula Peutingeriana* is a copy of an ancient Roman map showing the military routes of the Roman Empire, in several parts blackened and difficult to read. It is an *itinerarium pictum* map, i.e. a painted itinerary, which reports a series of information, such as the routes of the Roman roads, the place names, and the distances in Roman miles between various points of interest. In the presented section we can see the Puglia region, then called Calabria, the Calabria region, then called *Brutium*, the Sicily region, the Balkan Peninsula with Greece and part of northern Africa. The names of the regions are clearly distinguished in red. The segments of the roads with the distances in miles, the names of the peoples, of the villages with vignettes, the names of the rivers and inland waters, the names of the mountain ranges are well indicated. Colors and writing characters distinguish the different elements of the map.

In Fig. 4. I have reported the regions of Puglia, which at the time of Ptolemy was called Calabria, Calabria, then Brutium, Sicily, part of the Balkan region and some regions of northern Africa. The writings refer not only to place names but also to regional names. The lengths in roman miles of the road sections are significant, as befits an *itinerarium pictum*.



Figure 4. A section of the Tabula Peutingeriana, with the design of Regions of August, II Apulia et Calabria, III Lucania et Bruttii), Sicily, Sarmatia, Macedonia and Northern Africa.

In medieval and modern times the written and drawings maps illustrate legend and events generally referring to religious beliefs, as I will show in further comments.

The Hereford map. The writings are in black ink, with addition of red and gold, while seas and rivers are in blue and green. Jerusalem is drawn in the center of the circle. The map is oriented east up. The Garden of Eden is inscribed on the border. Great Britain is drawn in the northwest corner. 13<sup>th</sup> century.

## THE MAPPAE MUNDI





Figure 5. A detail of the Hereford Map (13<sup>th</sup> century). We can distinguish some place names, as Antiochia, Laodiciam, Mons Cassius “de quo videtur globis solis ad huc quarta vigilia noctis”, the *Frigia* Region, where it is possible to meet an animal with “caput taurinum et iuba equina”. Laodiciam, today Latakia or Lattakia, was the most important port city in Syria. According to Strabo, 12, p. 750, on the Mons Cassius the people of Antioch celebrated a feast in honor of Triptolemus. Triptolemus was a mythic legislator and king of Eleusis who first spread agriculture in Attica, Plinius, *Historia Naturalis*. vii. 56; Callimachus, *Hymni in Cererem*. 22; Vergilius, *Georgica*. i. 19.

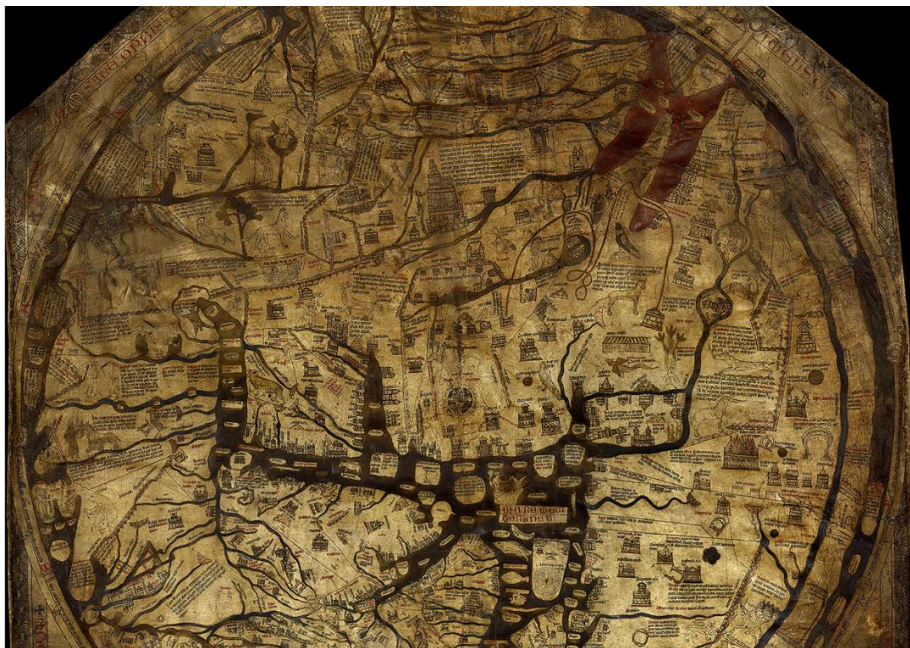


Figure 6. Another large detail of the Hereford Map. The great numbers of writings can be perceived.



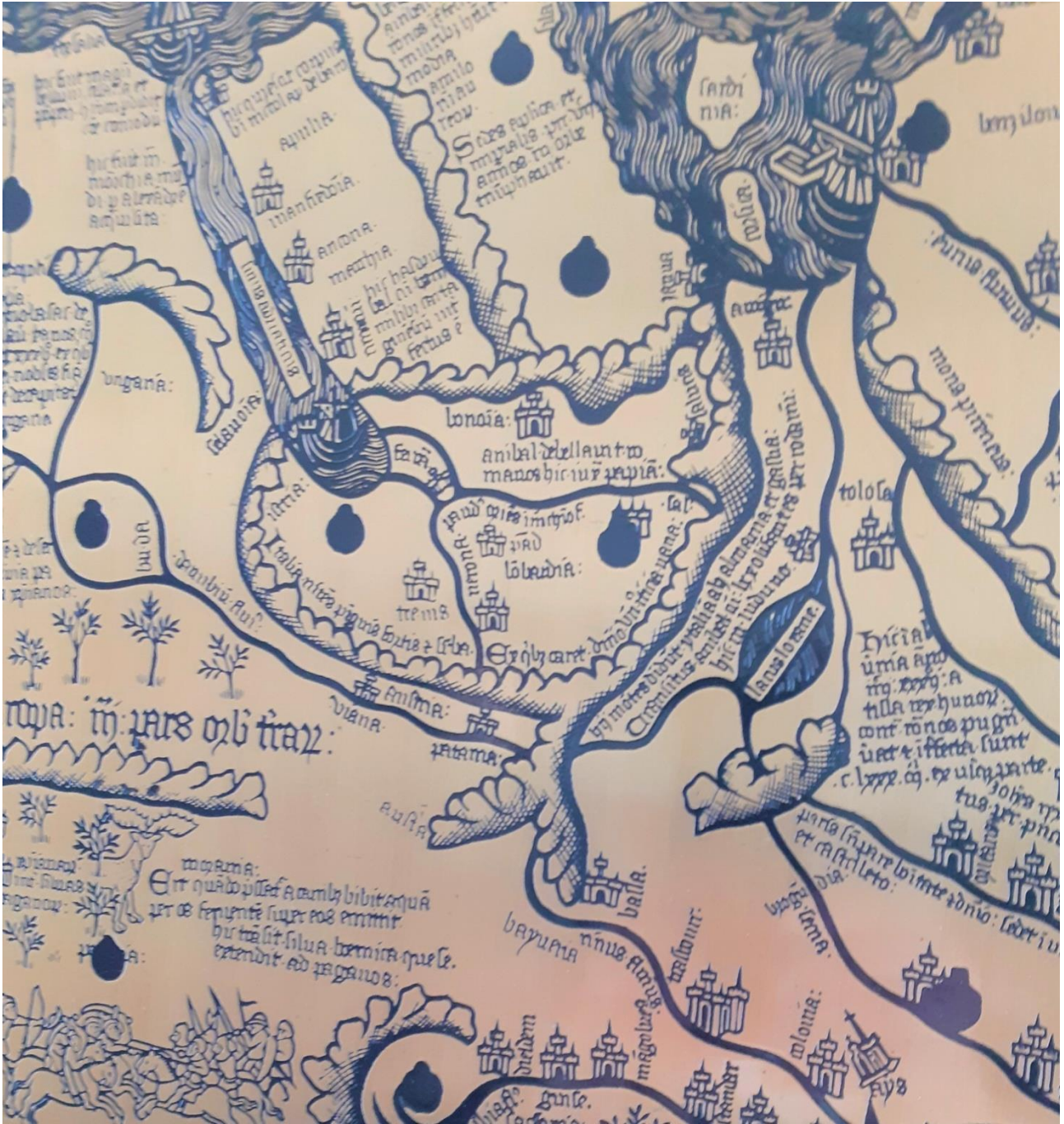


Figure 7. The Borgiano Planisphere or Tavola di Velletri. Many cities in Italy are designed in a quadrangle shape. Some regions, like Lombardia and rivers, are clearly readable.

Under Italy we can read *annibal debellavit romanos*. According to the use of the time the map is oriented south up. The writings indicate geographical names, but also legends and histories of the 15th century. The *Fra' Mauro* map has the same characteristics. The map is oriented south up.



In these maps the division into continents is given by the Mediterranean Sea and the Don and Nile rivers, like traditional O/T maps, generally oriented south up. But some maps are east oriented. The latin term *oriens*, east, where the sun rises, gives the name to the *orientation*.



Figure 8. The *Fra' Mauro* Map of the world.

In the unfortunately unclear detail of a copy kept in the Institute of Geography of the Sapienza University of Rome, some writings are readable such as SITIA in ASIA, i.e. Scythia.



## THE MAPS OF MODERN AGE

Some handwritten maps published by Paolo and Mario Cartaro belong to the second half of the 16<sup>th</sup> century. In the maps in black, the place names are written with the same style and body. The boundaries of the regions are drawn with marked lines. In this period some maps listed the “fires” for each place for fiscal reasons. The fires correspond to the number of families subject to taxation.

Multiplying by 5 or 5.5 the fire numbers we can get the number of inhabitants.

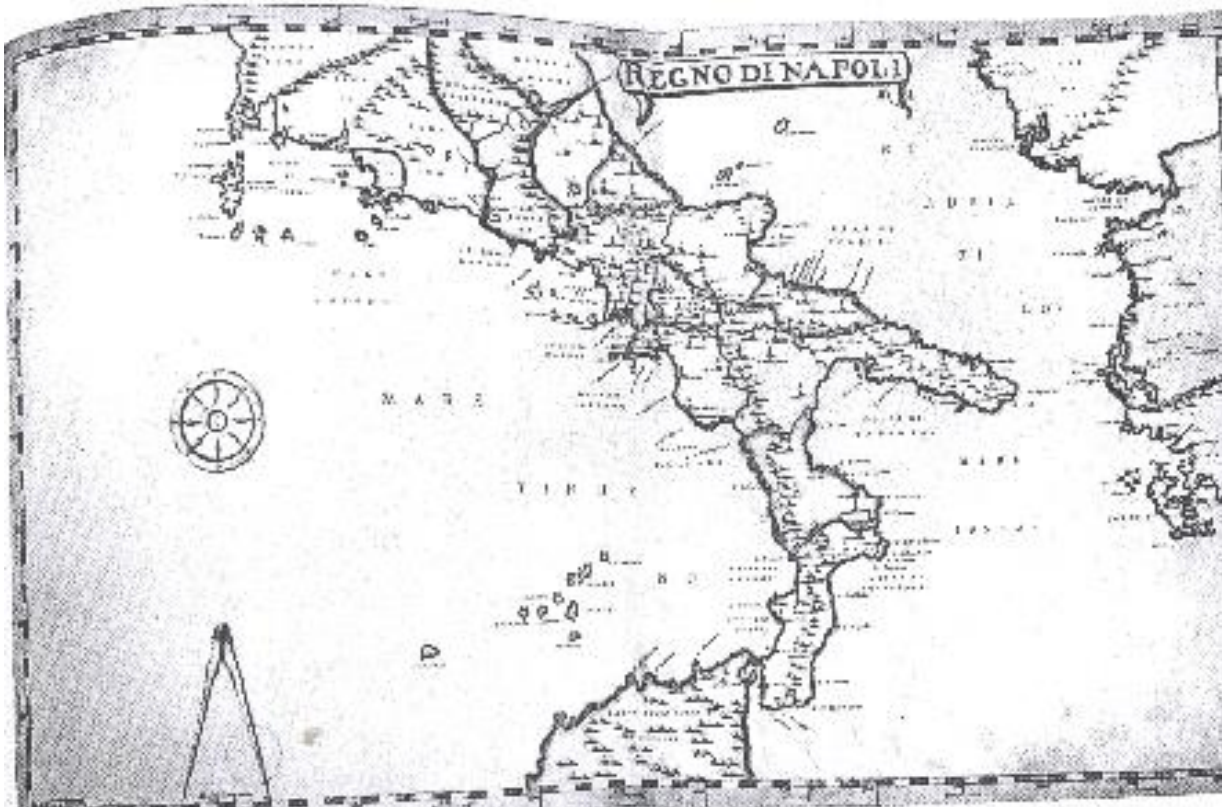


Figure 9. The map of *Regno di Napoli* by Paolo and Mario Cartaro. The wrong Ptolemaic direction of Apulia is evident.

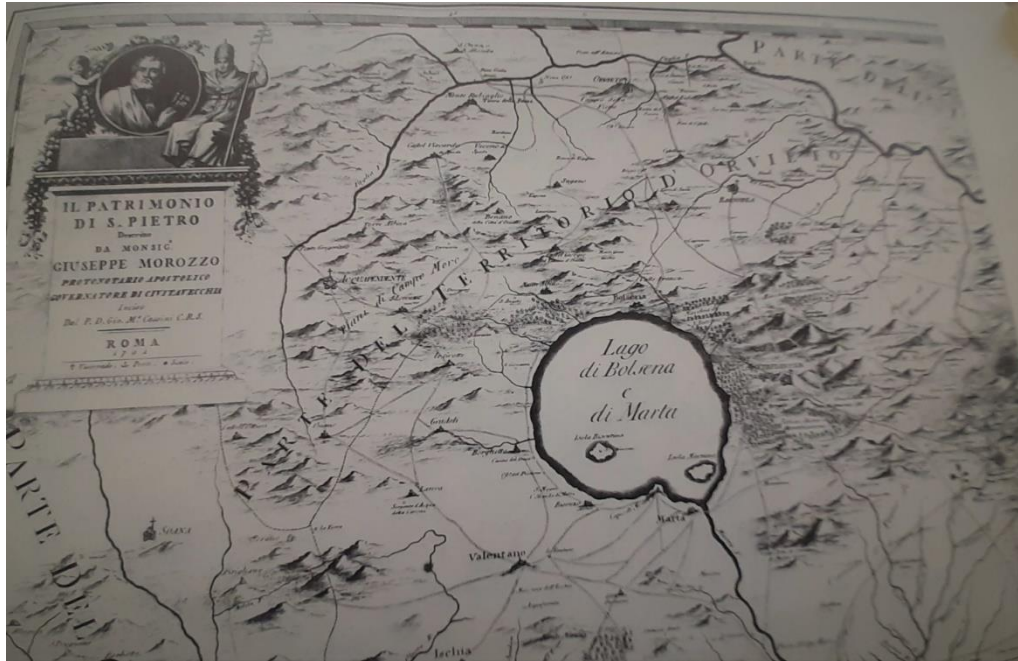


Figure 10. The *Patrimonio di San Pietro* by Giuseppe Morozzo of 1791. The map presents with rings in detail the ecclesiastic properties at that time. The hills are designed with the system of the *mucchi di talpa* (piles of mole) according to the pre-geodetic cartography.

The maps of the Alexandrian land registry are interesting for the contribution to the maintenance of the consular roads. The place names are marked by the drawing of the vignette of the villages. The approximate 400 watercolor maps were collected by the Presidency of the roads in 1660-1661.

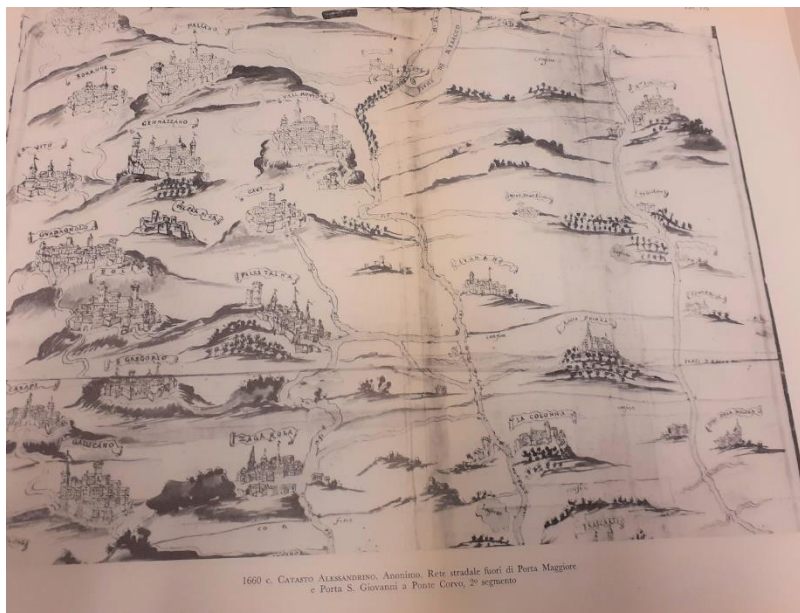


Figure 11. Catasto Alessandrino. Road network out of Porta Maggiore and Porta S. Giovanni at Ponte Corvo, Rome (about 1660).



## THE NAUTICAL MAPS

The modern nautical maps are rich in writings, with information on characteristics of coastal and the depths and the direction of the main routes. In addition, they present some information about danger or limitations established by the maritime authorities.



Figure 12. On this nautical map of the Island of Cyprus by Jon Martines of 1587. The network of the *corse*, i.e. the magnetic lines which the seamen have to follow the different directions of the routes. The coastal line is very clearly definite.



Figure 13. Nautical Map of Elba Island, with writing on maritime, nautical, astronomical and route information.

## CONCLUSION

The task of this paper is to illustrate the writings that appear on the geographical maps, which does not concern only the richness of the toponyms, but also the true and legendary narratives of historical or legendary facts. Most of these writings refer to religious traditions, but also to significant historical events.

## REFERENCES

- CATTANEO A. **Fra Mauro's Mappa Mundi and Fifteenth-century Venice**, Turnhout, Brepols, 2011.
- EDSON E. **Mapping Time and Space: How Medieval Mapmakers Viewed Their World**, in *British Library studies in map history*, The British library, 1997.



FARINELLI F. **La crisi della ragione cartografica**, Torino Einaudi, 2009

LESTI L., PALAGIANO C. **Ptolemy's Place Names of Mesopotamia. Change and Persistence**, in Capezzone L. (ed.), *Before Archeology. The Meaning of the Past in the Islamic Pre-Modern Thought (and After)*. Roma, Editoriale Artemide, 2020, pp. 21-30.

PALAGIANO C. **Gli atlantini manoscritti del Regno di Napoli di Mario e di Paolo Cartaro**, in "Pubblicazioni dell' Istituto di Geografia della Facoltà di Lettere e Filosofia dell' Università di Roma", 1974, serie B, 3, Roma, pp. 21.

PALAGIANO C. ET AL. **Cartografia e territorio nei secoli**. Roma, NIS, 1984, pp. 198

PALAGIANO C. **Il mondo del mappamondo borgiano tra iconografia e scienza**, pp. 323-325, in Nocca Marco (ed.), **Le quattro voci del mondo: arte, cultura e saperi nella collezione di Stefano Borgia 1731-1804**. Giornate Internazionali di Studi. Velletri Palazzo Comunale – Sala Tersicore 13-14 maggio 2000. Napoli, Electa, pp. 325.