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## CAPO LINARO IN PĪRĪ RE'ĪS'S PORTOLAN: AN EARLY MODERN AGE SOURCE FOR THE KNOWLEDGE OF THE CASTRUM NOVUM HARBOUR

FABRIZIO ANTICOLI

**Abstract:** *The Kitāb-i bahriyye, the portolan compiled by Pīrī Re'īs, is a valuable source of information on the coastal landscape of the Mediterranean at the dawn of the modern era. This paper examines the representation of a head north-west of Rome, Capo Linaro. What was registered by Pīrī Re'īs could be useful in reconstructing the shape of this stretch of the coast for a period rarely considered in scholarship. The city of Castrum Novum arose in this place: the different shape the coast had in the past allowed it to build a harbour facing this city. Unfortunately, information on the period following its abandonment is scarce and very little data is available on this area from late antiquity. The analysis of the text and the charts of the Kitāb-i bahriyye suggested that Capo Linaro had retained its importance as a landmark and harbouring place even after the end of the Middle Ages and the rise of the nearby urban settlements.*

**Key words:** *Kitāb-i bahriyye – portolan charts – Castrum Novum – Civitavecchia – Capo Linaro.*

### **Capo Linaro v Pīrī Re'īsově portolánu: raně novověký pramen pro poznání přístavu města Castrum Novum**

**Abstrakt:** *Kitāb-i bahriyye, portolán vytvořený Pīrī Re'īsem, je cenným zdrojem informací o pobřežní krajině Středozemního moře na úsvitu moderní doby. Příspěvek zkoumá vyobrazení mysu Capo Linaro severozápadně od Říma. Záznamy Pīrī Re'īse by mohly být užitečné při rekonstrukci podoby tohoto úseku pobřeží pro období, kterému je v odborné literatuře jen zřídka věnována pozornost. Na tomto místě vzniklo město Castrum Novum: odlišný tvar, který pobřeží v minulosti mělo, dovolil vybudovat přístav obrácený k městu. Bohužel pro období po opuštění města máme jen sporé informace a o této oblasti vůbec je z pozdního starověku k dispozici velmi málo údajů. Analýza textů a map Kitāb-i bahriyye naznačila, že si Capo Linaro zachoval svůj význam jako orientační bod a jeho přístaviště sloužilo dokonce i v období následujícím po středověku a po vzniku okolního osídlení.*

**Klíčová slova:** *Kitāb-i bahriyye – portolánové mapy – Castrum Novum – Civitavecchia – Capo Linaro.*

The *Kitāb-i bahriyye*, the portolan realised by Pīrī Re'īs in the first decades of the 16th century, represents a major source for information on the topography of the regions facing the Mediterranean. It preserves a wealth of knowledge on the coast of the countries overlooking this sea and the features which characterized its shores at the dawn of the modern age.

In this paper, the data provided by the Ottoman admiral will be scrutinized as regards a cape called Capo Linaro and the surrounding areas (Fig. 1). Capo Linaro is a head ca. 55 km north-west of Rome and is a primary landmark for sailing and also a natural shelter for harbouring. As a matter of fact, the most ancient traces of a seaport relate to the colony of Castrum Novum, founded in the 3rd century BC (Enei 2020, 13–14 [with literature]). Here, some structures made of ashlar were identified on the stretch of the sea facing the ancient city (Frau 1979, 8–11 [who attributed these structures to the 5th century BC]; Enei 2020, 25–27).

By abandoning the city, this area lost its importance and information on its frequentation became blurred: thus, the value Capo Linaro and its immediate hinterland had from late antiquity is hardly considered in scholarship (for the summary of research see: Preusz 2021, 219–228). The *Kitāb-i bahriyye* can therefore provide some elements for the knowledge of the harbour of the Roman colony by considering the territory in which it stood as represented in this portolan. Siding the information known from historical topography to the data provided by the *Kitāb-i bahriyye* it is possible to assume that Capo Linaro preserved its character of a naturally-protected anchoring place up to the 16th century, and so rising some new questions as regards the land use patterns of this area after the abandonment of Castrum Novum.

Muḥiddīn Pīrī b. Hājī Meḥmet, better known as Pīrī Re'īs, was born in Gelibolu (in the Marmara Region, Turkey) around 1465–1470 (on the life of Pīrī Re'īs see: Soucek 1995;

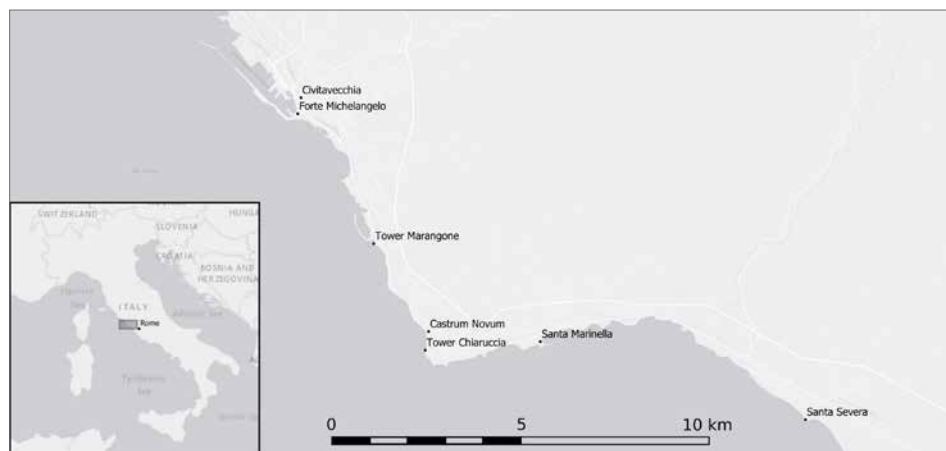


Fig. 1. Main places mentioned in the article.

Obr. 1. Hlavní místa zmíněná v článku.

Isom-Verhaaren 2014, 240–245). Information on his life is known through the *Kitāb-i bahriyye* and some Venetian documents (Pedani 2015). At the age of twelve, he travelled across the Mediterranean following his uncle Kamāl Re'īs – corsair and later admiral for the Ottoman Empire (Bostan 2021) – siding privateer actions with aiding Jews and Muslims fleeing from the Iberian Peninsula.

In 1511, Pīrī Re'īs retired a first time to work on a map of the whole known world which was completed in March–April 1513 (Muharram 919 H) and only preserved for the part depicting the American coastlines (Pistarino 1990; McIntosh 2000; Cuoghi 2003). Although he resumed seafaring in 1517, Pīrī Re'īs did not interrupt his scholarly activity whose outcome was the *Kitāb-i bahriyye*, produced in two versions, the first completed in 1521 and the second in 1526.<sup>1</sup> The choice of working on a new edition is attributed to the hint the vizir Ibrahim Pasha (on his life see: Turan 2009) gave to Pīrī Re'īs. Since he was willing to present the work to Suleiman the Magnificent (r. 1520–1566), Ibrahim Pasha persuaded Pīrī Re'īs to provide the Sultan a work which was more pleasant to read and behold than a pragmatic navigation tool (Casale 2010, 36–37 [with literature]; Fig. 4).

His later work, drafted in 1528, was another world map which integrated that of 1513 with new information (Soucek 2013, 141). In 1547 Pīrī Re'īs was appointed general of the Ottoman fleet for Egypt and the Indian sea but, over eighty years old, he was accused of cowardice, sentenced and beheaded in 1553.<sup>2</sup>

The *Kitāb-i bahriyye* is Pīrī Re'īs's main work and was composed when he retired from active seafaring. This work belongs to the portolan genre: it is a handbook for navigation in which the coasts, islands and main landmarks useful for navigation are described (on this genre see: Campbell 1987; Pujades i Bataller 2007). Being a portolan, the *Kitāb-i bahriyye* belongs to a two-centuries-old literary tradition, yet it features some tracts that make it quite a unique work (cf. Castelnovi 2009, 379). In fact, unlike other portolans, the scale used for drafting the charts allowed him to represent some details otherwise impossible to see on charts with a greater scale (Pīrī Re'īs 1988, 39–43; Lepore–Picardi 2014, 274). Much more noteworthy is the text siding the graphical section. It provides a lot of information on the places represented on the charts making the *Kitāb-i bahriyye* a useful tool for a historic and topographical reconstruction of coastal and

1 D. Loupis also proposed the existence of a third version appeared after Pīrī Re'īs's death which should integrate the information provided in the *Kitāb-i bahriyye* with the works of Italian and Dutch cartographers (Loupis 2004).

2 Such an old age casts some doubts on the identification of the beheaded person (Soucek 1995, 141).

nearby landscapes (Lepore–Piccardi–Rombai 2013, 86; Lepore–Picardi 2014, 274). Also, the author’s personality stands out as the text is studded with a lot of autobiographical information (Soucek 2013, 139).

Despite many copies are preserved witnessing the success of this work (for a list of the known manuscripts see: Soucek 1992, 290–292), the production of portolans did not take roots in the Ottoman Empire where the production of charts turned into a new genre, that of atlases, which gained momentum from the 17th century (Loupis 2000, 395; on the birth of this genre in the Ottoman literature see: Taylan 2022).

The work of Pīrī Re’īs was emerged in the West already in the 18th century when Denis Dominique Cardonne (1721–1783) – holder of the chair of Turkish and Persian at the Collège Royale between 1750 and 1783 – translated a manuscript of the first edition, today in the *Bibliothèque nationale de France* (Ms. Suppl. Turc 220): this text, titled *Le Flambeau de la Mer Méditerranée*, was not published and is held in the manuscript form in the same library (Ms. Fr. 22972).

The first scientific edition was realised by P. Khale who only provided a partial translation in German (Pīrī Re’īs 1926–1927). One of the manuscripts held at the Sülemaniye Library in Istanbul (Ayasofia 2612) has been used for scientific editions of the text and for producing facsimiles, being therefore a standard reference for works dealing with Pīrī Re’īs’s portolan (Pīrī Re’īs 1935; 1988; 2013).

As regards studies on Italy, many essays have been devoted to different parts of the Peninsula: yet an overall work on its shores is missing, there are many papers devoted to single regions that resort to the work of Pīrī Re’īs for topographical reconstructions.<sup>3</sup> Also, A. Bausani devoted some essays to the work of Pīrī Re’īs focusing on the linguistical facet to highlight the rendering of Italian toponyms into Ottoman Turkish (the contributions by Bausani have been gathered in a single volume [Bausani 1990; a list is provided in Bausani 1990, 7–8]).

When dealing with the specific territory concerned, the mention of Capo Linaro in the *Kitāb-i bahriyye* has been already noted but just briefly mentioned, only referring to the translation made by Bausani (cf. Nardi Combescure 2013, 43; 2013a, 92; 2014, 161).

In the *Kitāb-i bahriyye*, Capo Linaro is represented on charts, where it is also denoted by its toponym, and in the textual part. Mentioning Capo Linaro, Pīrī Re’īs noted that:

«From this city [Civitavecchia] and Capo Linaro (*Qavo Olonare*) there are five miles. Capo Linaro is a thin head they also called “Piagge Romane” (*Plase Romane*) [= Roman shores]. These shores extend for a length of 12 miles toward the south – south-east. It is a sandy place, and a head stretching for five miles into the sea.

From Capo Linaro to the mouth of the river of Rome [the Tiber] there are 32 miles to the east a quarter south-east [...] » (translated from Italian: Bausani 1990, 190–191).

It is hard to match this description with the current shape of Capo Linaro. First, the definition of “thin head” can hardly be attributed to the present formation of this cape. Also, it must be pointed out that this head is said to extend into the sea for the same distance between there and the city of Civitavecchia.

It has been noted that the mile (*mil*) used in the *Kitāb-i bahriyye* does not match a univocal dimension (Lepore–Piccardi–Prazini 2011, 66). Some attempts have been made to ascertain what the value attributed to this measure should be. The nautical mile (1.852 km) and the Venetian mile (1.738 km) have been used to check the dimension adopted by Pīrī Re’īs yielding values close to actual measurements just over not excessive distances (Lepore–Piccardi–Prazini 2011, 63).

As a matter of fact, this also applies to the area considered here. The distance of five miles from Civitavecchia, when converted into nautical and Venetian mile gives values of 9.26 km and

<sup>3</sup> Sicily has been dealt in the first study made on this subject by E. Sachau (1910) and more recently by I. Yılmaz (2016) who relied on the information on the island to assess the accuracy of the data provided by Pīrī Re’īs. As for Southern Italy, the data on the Kingdom of Naples and Apulia have been gathered and published in a series edited by A. Ventura (1990; 1990a). Also to this series belongs a wide-ranging work on the different states of Italy (Ventura 1991). A number of contributions was devoted to Tuscany, representing the most systematic discussion on the Italian coast (Galoppini 1993; Lepore–Piccardi–Prazini 2011; Lepore–Piccardi–Rombai 2013; Lepore–Piccardi 2014). Finally, a paper has been devoted to Liguria (Castelnovi 2009).

8.69 km respectively, quite close to the actual distance. On the other hand, as for the 32 miles from the mouth of the Tiber, the values are 59.26 km (nautical mile) and 55.63 km (Venetian mile) being far from the actual distance.

With these values, a somewhat naïve attempt has been made to check the distances through trilateration. By using the aforementioned values for the distance to both the mouth of the Tiber and Civitavecchia (Fig. 2), the result is a point located about 8–9 km off the coast of Civitavecchia (not by chance the length of the head as mentioned in the text). As a check, another attempt has been made starting from the present position of Capo Linaro. Whereas we can consider the values of the distance to Civitavecchia acceptable, the same cannot be said for those to the mouth of the Tiber which is much further south, approximately in the area of Tor Paterno, between the towns of Ostia and Torvaianica, ca. 10 km far (Fig. 3).

Therefore, the information conveyed by the text of the *Kitāb-i bahriyye* does not apply to the current shape of Capo Linaro. Nonetheless, these data are not far from those attainable by the charts that accompany this text, especially in those belonging to the second edition of 1526 (Tab. 1).

The area of Capo Linaro is represented on the charts showing the coast of Lazio and Campania and those of Tuscany and Liguria (I refer here and throughout the text to present-day administrative regions), with Capo Linaro the northernmost point in the former and the southernmost in the latter.

In the first edition of 1521, Capo Linaro is shown as a head with a rectangular shape, stretching into the sea, standing out from an otherwise linear coast; to the east, the Tiber river is barely sketched fading out toward the north just after the depiction of Rome, portrayed as an encroachment of buildings on the two banks of this river. To the west there is Civitavecchia, an urban agglomeration surrounding a circular indentation on the coast and characterized by two towers. Among the charts which have been consulted (see Table 1), some common tracts allow to group different manuscripts showing similar features. Such similarities are shared by the



Fig. 2. Possible positioning of Capo Linaro through trilateration.

Obr. 2. Možná poloha Capo Linaro určená pomocí trilaterace.

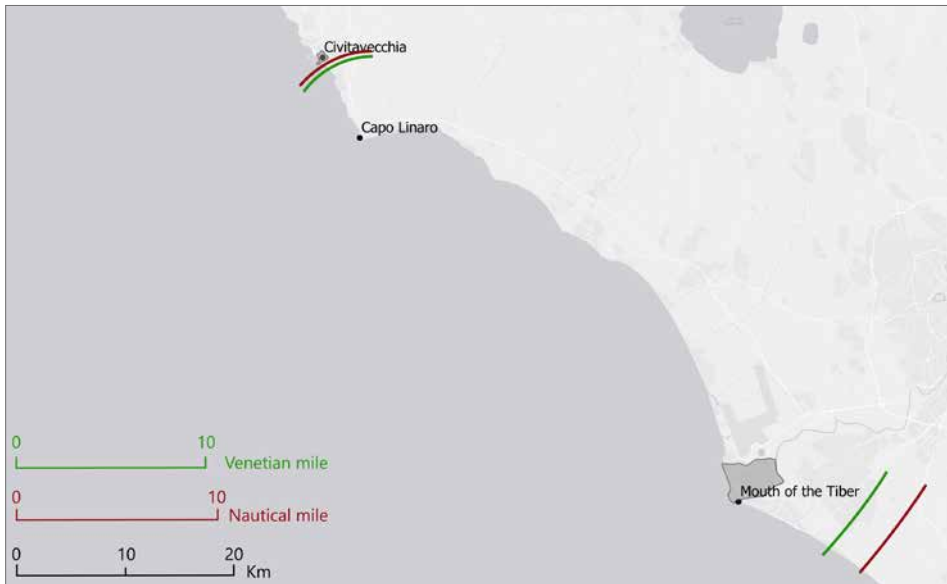


Fig. 3. Approximate distances between the present position of Capo Linaro, Civitavecchia and the mouth of the Tiber as proposed by Pīrī Re'īs.

Obr. 3. Přibližné vzdálenosti mezi současnou polohou Capo Linaro, Civitavecchia a ústím Tibery podle Pīrī Re'ise.

manuscripts held in the National Library of Vienna (Fig. 4) and that of Berlin (Fig. 5), while the exemplar from Dresden (Fig. 6) seems to move away from these two and presents some congruencies with one of the manuscripts held at the Sülemaniye Library, in Istanbul (Yenicami 790). The Vienna and Berlin specimens feature a representation of a more “indented” coast and a more detailed representation of Civitavecchia, whereas the others have a more sober style, where the graphical references are rendered with a lesser degree of detailing and the coast is drawn as a simple line. Of a completely different character is a manuscript from the National Library in Paris (Suppl. Turc 220; *here*, Fig. 7) which shows an even more schematic look: in this case, the drawing is limited to a line separating the sea from the land and some scant elements (for the area of interest here, only the Tiber is sketched) as the identification of places is left almost exclusively to toponyms.<sup>4</sup>

The 1526 edition of the *Kitāb-i bahriyye* is enriched with new information and with charts whose artistic and decorative facet is much more pronounced than in the former version. Capo Linaro is represented with a much more emphasized rendering as it is “bent” westward as to face Civitavecchia in some sort of gulf. All the manuscripts here considered return this representation in a fairly coherent way in which, as just said, the head is more extended to the sea than the 1521 edition.

In portolan charts, landmarks useful for navigation, such as heads or islands, are emphasized in their graphical rendering (Campbell 1987, 377)<sup>5</sup> and is likely that such a process of emphasising could also affect the representation of Capo Linaro in the new edition of the *Kitāb-i bahriyye*.

4 S. Soucek (1992, 290) considers this manuscript as a first version; E. Blochet, who drafted the catalogue of Turkish Manuscripts of the French National Library, defined it *recension abrégée* (Blochet 1932, 268).

5 As remarked by O. Goberk Nallin and M. Gullu: «... it should be remembered that these documents have considerable value as they preserve how their makers chose to portray the world» (Goberk Nallin–Gullu 2021, 10).

**Table 1. List of manuscripts referenced for this paper.**

**Tabulka 1. Seznam rukopisů, na něž jsou v článku odkazy.**

Library	Manuscript	Source
1521 version		
Vienna, Österreichische Nationalbibliothek	H. O. 192 (fol. 86r, 83v)	<a href="https://digital.onb.ac.at/RepViewer/viewer.faces?doc=DTL_8571144&amp;order=1&amp;view=SINGLE">https://digital.onb.ac.at/RepViewer/viewer.faces?doc=DTL_8571144&amp;order=1&amp;view=SINGLE</a> (no. 180, 183) (Fig. 4).
Berlin, Staatsbibliothek	Or. fol. 4133 (fol. 108v)	<a href="https://digital.staatsbibliothek-berlin.de/werkansicht?PPN=PPN771729081&amp;PHYSID=-PHYS_0222">https://digital.staatsbibliothek-berlin.de/werkansicht?PPN=PPN771729081&amp;PHYSID=-PHYS_0222</a> (Fig. 5).
Paris, Bibliothèque nationale de France	Suppl. Turc 220 (fol. 105r, 150v)	<a href="https://gallica.bnf.fr/ark:/12148/btv1b100909449/f105.item">https://gallica.bnf.fr/ark:/12148/btv1b100909449/f105.item</a> (Fig. 7a). <a href="https://gallica.bnf.fr/ark:/12148/btv1b100909449/f106.item">https://gallica.bnf.fr/ark:/12148/btv1b100909449/f106.item</a> (Fig. 7b).
Dresden, Sächsische Landesbibliothek	EB389 (fol. 8r)	<a href="https://digital.slub-dresden.de/en/workview/dlf/103669/1">https://digital.slub-dresden.de/en/workview/dlf/103669/1</a> (Fig. 6).
Istanbul, Sülemaniye Kütüphanesi	Yenicami 790	Lepore–Piccardi–Pranzini 2011, 79 fig. 46.
1526 version		
Bologna, Biblioteca Universitaria	Marsili 3609	Ventura 1991, tav. 10. Ventura 1991, tav. 11.
Paris, Bibliothèque nationale de France	Suppl. Turc 956 (fol. 285r, fol. 281v)	<a href="https://gallica.bnf.fr/ark:/12148/btv1b6000438h/f577.item">https://gallica.bnf.fr/ark:/12148/btv1b6000438h/f577.item</a> (Fig. 10a). <a href="https://gallica.bnf.fr/ark:/12148/btv1b6000438h/f568.item">https://gallica.bnf.fr/ark:/12148/btv1b6000438h/f568.item</a> (Fig. 10b).
Baltimore, Walters Art Gallery	W 658 (fol. 244r, 240v)	<a href="https://manuscripts.thewalters.org/viewer.php?id=W.658#page/278/mode/1up">https://manuscripts.thewalters.org/viewer.php?id=W.658#page/278/mode/1up</a> (Fig. 9a). <a href="https://manuscripts.thewalters.org/viewer.php?id=W.658#page/285/mode/1up">https://manuscripts.thewalters.org/viewer.php?id=W.658#page/285/mode/1up</a> (Fig. 9b).
Istanbul, Sülemaniye Kütüphanesi	Deniz Muzesi 988	Lepore–Piccardi–Pranzini 2011, 101 fig. 72.
Istanbul, Sülemaniye Kütüphanesi	Ayasofia 2612	Piri Reis 1935, 557, 566.

Looking at the representations of the city of Civitavecchia in different manuscripts, and combining this with its textual description, it is possible to grasp some information as regards this way of showing Capo Linaro.

In his text, Pīrī Re’īs stated that the ships entering the harbour of Civitavecchia waited in a place next to its western entrance, where a tower (*pyrgos*)<sup>6</sup> called *Mersoq* stands (Italian transl.: Bausani 1990, 35). The harbour of Civitavecchia was built in the early 2nd century AD by the emperor Trajan (r. 98–117 AD; Correnti 1990). The docking area of this seaport was protected by a breakwater which also guarded the entrance to that, creating two different accesses. This structure had two towers at its extremities: the western one was only preserved in the stairway that runs in its interior and was called by the populace of Civitavecchia *Marzocco* (Cialdi 1877, 11; Giattini 2019, 2; Fig. 8). This name has a strong assonance with the *Mersoq* recalled by Pīrī Re’īs and stood on the western entrance to the harbour, making it possible to recognize it as the *pyrgos* mentioned in the portolan. Possibly, this element is also represented on the charts of some manuscripts (Istanbul [Deniz Muzesi 988], Bologna [Marsili 3609], Baltimore [Fig. 9b]) where the circular indentation of Civitavecchia cove is closed by a little rectangular element that could be some representation of the breakwater which protected the harbour of this city.

<sup>6</sup> This word has been translated as “fortress” (*fortezza*) by Bausani who deemed this *Mersoq* to be Forte Michelangelo, the keep that still today is on the south-eastern edge of the harbour (Bausani 1990, 35). For the reasons explained below in the text, I think that the translation as “tower” is more appropriate.

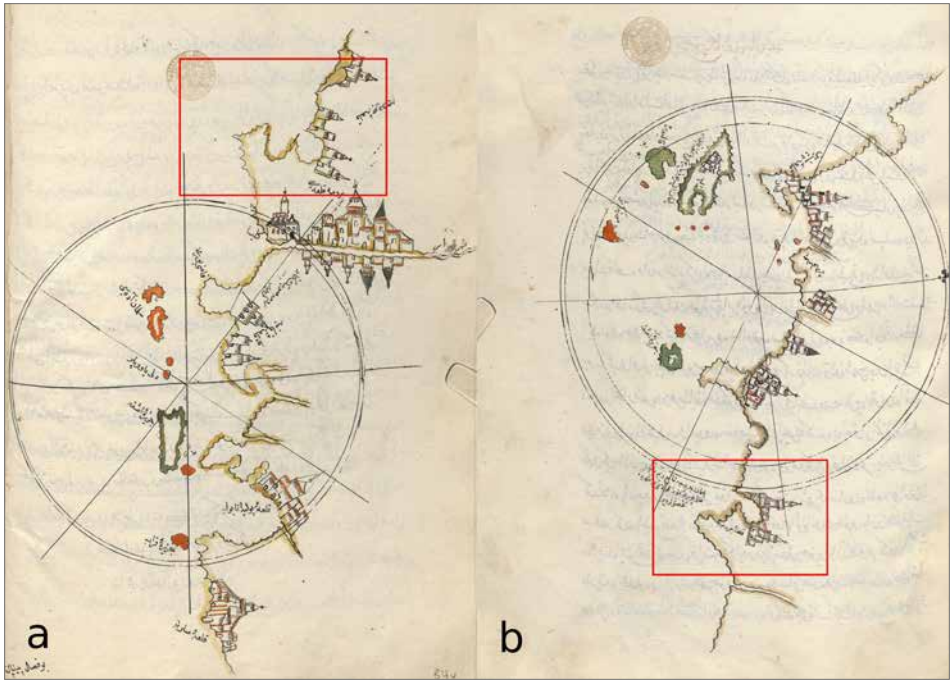


Fig. 4. Manuscript H. O. 192, Österreichische Nationalbibliothek, Vienna; a – fol. 83v; b – fol. 86r.

Obr. 4. Rukopis H. O. 192, Österreichische Nationalbibliothek, Vídeň; a – fol. 83v; b – fol. 86r.

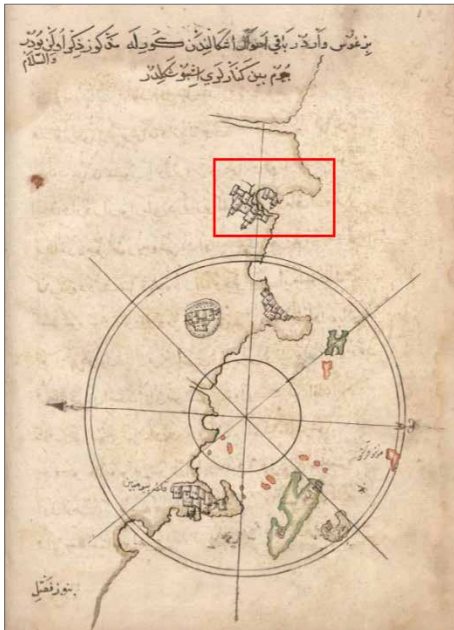


Fig. 5. Manuscript Or. fol. 4133, Staatsbibliothek, Berlin, fol. 108v.

Obr. 5. Rukopis Or. fol. 4133, Staatsbibliothek, Berlin, fol. 108v.

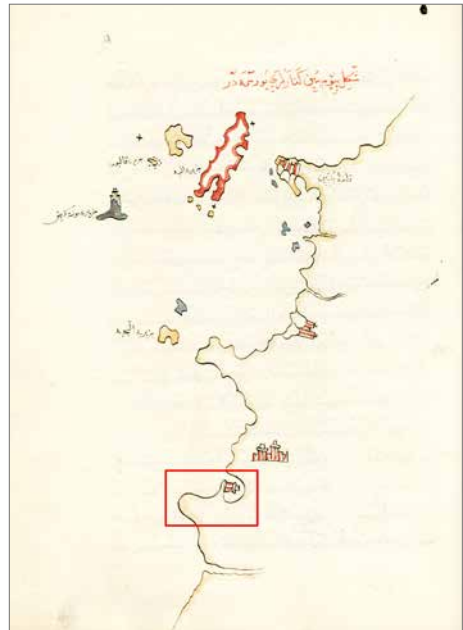


Fig. 6. Manuscript EB389, Sächsische Landesbibliothek, Dresden, fol. 8r.

Obr. 6. Rukopis EB389, Sächsische Landesbibliothek, Drážďany, fol. 8r.



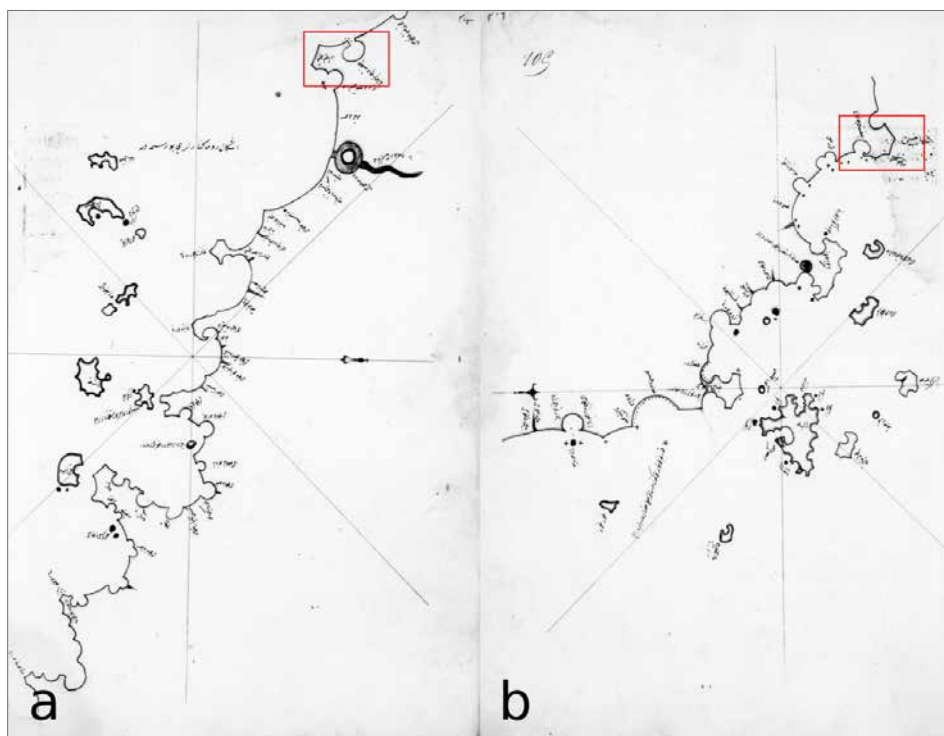


Fig. 7. Manuscript Suppl. Turc 220, Bibliothèque nationale de France, Paris; a – fol. 105r; b – fol. 105v.

Obr. 7. Rukopis Suppl. Turc 220, Bibliothèque nationale de France, Paříž; a – fol. 105r; b – fol. 105v.

When dealing with the charts, another element can be ascribed to the features of the city of Civitavecchia. In the manuscripts of Berlin (Fig. 5), Dresden (Fig. 6), Istanbul (Yenicami 790, Ayasofia 2612), Paris (Suppl. Turc 956; Fig. 10), and Bologna (Marsili 3609), a little tower, detached from the representation of the urban centre, stands on the eastern tip of the cove over which Civitavecchia is drawn. Being on this eastern tip and separated from the city, it is likely that this small tower was the fortress that protected the harbour on the south-eastern side. Despite not being mentioned in the text, it is possible that Pīrī Re'īs added such an element to the charts. The keep in fact stood to the south-east of the urban centre, a little detached from it. Its construction was started in 1508 by Pope Julius II (r. 1503–1513) and in 1527 it was fully operational as it had to face the attack of the Landsknechts (De Rossi 1971, 31). It is therefore possible that Pīrī Re'īs saw it still under construction and therefore did not describe it in the text, but simply noted it down on the charts.

These features – the breakwater and the fortress – are thus two elements that characterise the representation of Civitavecchia and are included into the semi-circular indentation on the maps. Therefore, this element should be considered not an accurate representation of the place but rather a graphic expedient to show the presence of a harbour.

Such an indentation is to be found also on the western side of the head representing Capo Linaro. This is particularly evident in the manuscript in the Walters Art Gallery of Baltimore (W685): on the map showing the shores of Lazio and Campania (fol. 244r; *here*, Fig. 9a), Capo Linaro forms some kind of hook that, bending toward the west, faces Civitavecchia. On the other hand, no such thing is in the chart showing the coast of Tuscany of the same manuscript (Fig. 9b). Two different representations in the same manuscript suggest that in the case of the long head



Fig. 8. View of Civitavecchia from Franz Schott's *Itinerario d'Italia*. In the foreground (on the right), there can be found the stump of Marzocco on the breakwater; behind, it stands Civitavecchia's keep (now known as Forte Michelangelo). After Scotto 1747.

Obr. 8. Pohled na Civitavecchii z knihy *Itinerario d'Italia* od Franze Schotta. V popředí (vpravo) část věže Marzocco u vlnolamu; za ním stojí pevnost u Civitavecchii (dnes známá jako Forte Michelangelo). Podle Scotto 1747.

facing Civitavecchia not the actual shape of the land was depicted, but a quality of the place, namely the existence of a safe anchorage. This assumption may find confirmation when considering the manuscript *Ayasofia 2612* where shores are rendered with a line without indentations: the only irregularity of the linear coast of Capo Linaro is the cove on the western side of the head (see Tab. 1 for references to the pictures).

As regards the manuscripts of the first edition, the specimen in the Sülemaniye Kutuphanesi of Istanbul (Yenicami 790) and that from Vienna need to be mentioned as they present the same characteristic. As in the aforementioned *Ayasofia 2612*, the cove on the western side of Capo Linaro is particularly accentuated on the chart illustrating the shores of Lazio. Therefore, the difference between maps belonging to the same manuscript suggests that the representation of this peculiar feature, namely a deep inlet on one side of the head, represents a characteristic quality of that place and not its actual shape.

Even though the shape of the coast has been emphasized, a similar representation of Capo Linaro is to be found in other cartographic sources. Among those used by Pīrī Re'īs in drafting his work, the situation they yield is almost identical (for the works that influenced Pīrī Re'īs see: Soucek 1992, 277–78; Lepore–Piccardi–Prazini 2011, 143): since Pīrī Re'īs used the data from those, this result is pretty obvious.

Nevertheless, other western charts also plead for the same circumstance, since Capo Linaro is depicted and described as a tip extending for five miles into the sea. This description can be found in the *Compasso da Navegare* (ca. 1250–1265), in the *Atlas Catalan* by Abraham Cresque (1375) and in the portolan of Bernardino Rizzo (1490; cf. Nardi Combescure 2013, 44–45; 2014, 159–161). In addition, thanks to the work of Amato Pietro Frutaz, who gathered the main maps

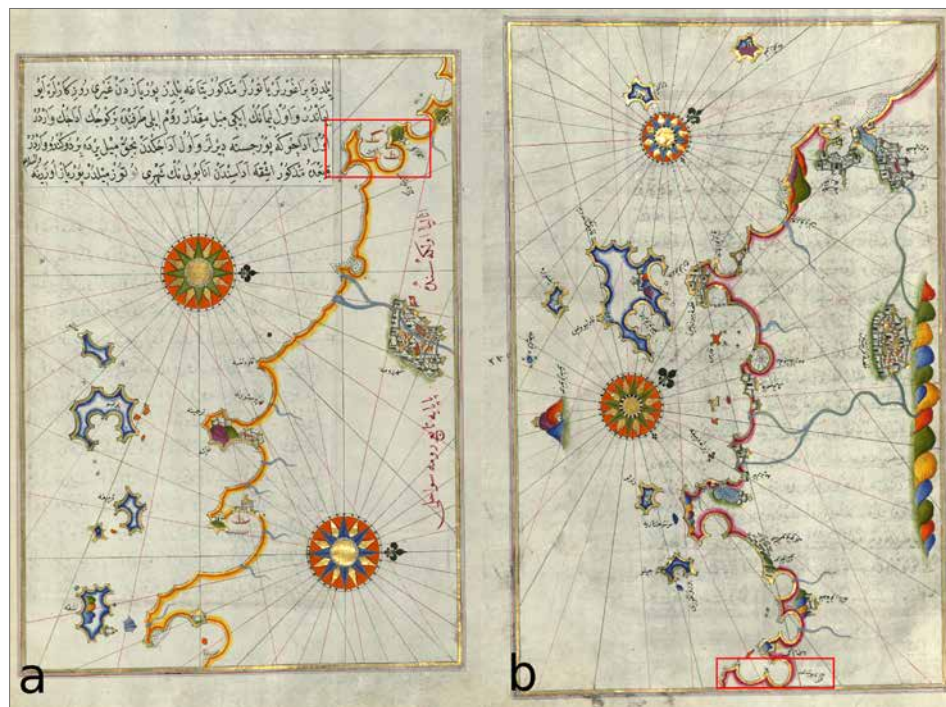


Fig. 9. Manuscript W 658, Walters Art Gallery, Baltimore; a – fol. 244r; b – fol. 240v.

Obr. 9. Rukopis W 658, Walters Art Gallery, Baltimore; a – fol. 244r, b – fol. 240v.

representing the territory of Lazio, it has been possible to carry out a survey of maps produced for aims other than seafaring. In the maps showing the area here of interest the same characterization of Capo Linaro as a tip protruding into the sea is to be found, much more than it does today (Pietro del Massaio [1471; Frutaz 1972, I, 10–13, II, tav. 14], Enrico Martello [1480–92; Frutaz 1972, I, 13–14, II, tav. 19], Taddeo Crivelli [1477; Frutaz 1972, I, 10–13, II, tav. 16], Bernardo Silvano da Eboli [1511; Frutaz 1972, I, 10–13, II, tav. 18], Leonardo Da Vinci [1513–16; Frutaz 1972, I, 15–16, II, tav. 21], Battista Agnese [1554; Frutaz 1972, I, 23–24, II, tav. 37]).<sup>7</sup>

On the basis of the data inferable by the *Kitāb-i bahriyye*, I therefore think that it is possible to assume that the area where the harbour of Castrum Novum stood was still naturally sheltered for anchoring in the 16th century.

A brief mention is to be made to absences. From the Middle Ages, the coast of Lazio was defended by numerous castles, towers and other defensive facilities to prevent Saracens incursions (for a history of Islamic incursions on Italian coast see: Del Lungo 2000): as regards the territory in concern, neither the chart nor the text report anything on the stretch of coast between Civitavecchia and Rome: there is no landmark annotated on the maps between Capo Linaro and the mouth of the Tiber. Some of the towers that stand along this stretch of the coast, built after the promulgation of the papal bull *Constitutio de aedificandis turribus in ore maritimis* (9 May 1567) by Pope Pius V (r. 1566–1572), are obviously missing: tower Marangone, ca. 4 km north of Capo Linaro, and tower Chiaruccia, on the tip of this head, are therefore not represented (on these towers see: De Rossi 1971, 35–38). Less obvious is the absence of the castles that still dominate the sight of the coast from the sea. In the area of today's town of Santa Marinella, a tower was

<sup>7</sup> It must remark that this characteristic apparently disappears from charts from the second half of the 16th century (cf. Lavinio 2022, 28).

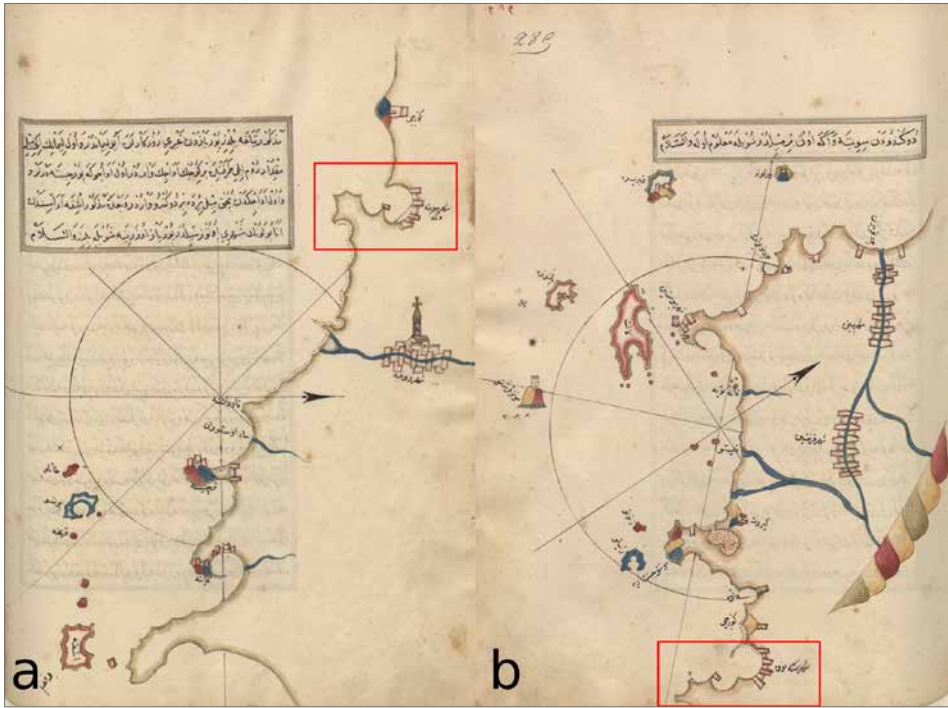


Fig. 10. Manuscript Suppl. Turc 956, Bibliothèque nationale de France, Paris; a – fol. 285r; b – fol. 281v.

Obr. 10. Rukopis Suppl. Turc 956, Bibliothèque nationale de France, Paříž; a – fol. 285r; b – fol. 281v.

erected in the 9th–10th century for patrolling the coast. This tower was later surrounded by walls, probably in the 14th century, giving it the look of a castle (De Rossi 1971, 40–41). Similarly, in Santa Severa, further south, at the southern edge of today’s urban area, another castle stands. This complex too was originally conceived in the 10th–11th century as a tower and later expanded and provided with defending walls. In fact, in the 13th century the walls of the ancient Roman *castrum* were reused there as foundations for the perimetral wall of the castle (Enei 2019, 31, 36). Therefore, in both cases, in the 16th century the castles in Santa Marinella and Santa Severa must have been clearly visible from the sea, making their missed mention remarkable.

As for urban centres, the absence of Santa Marinella should not surprise us since, still in 1837, it was listed among those “small and filthy lands, for which no concern is worth”<sup>8</sup>.

The overview presented here suggests that the north-western shore of Capo Linaro retained its character of a safe anchoring place until the 16th century. If an Ottoman admiral found it appropriate to indicate such an element in his handbook of navigation, it means that this function was retained well after the abandonment of *Castrum Novum*.

The mention of a word such as *Mersoq/Marzocco* used by the population of Civitavecchia and the possible representation of Forte Michelangelo (cf. note 6, above) still under construction could indicate the presence of *Pīrī Re’īs* in those places. On the other hand, there is not a single element denoting the shores south-west of Civitavecchia. These absences are most remarkable if we consider the accuracy shown by *Pīrī Re’īs* in describing landmarks useful for sailing. For instance, when describing the coast of Calabria, he accurately reported the whole coastal defensive

<sup>8</sup> «[...] piccole e ignobili terre delle quali non vale la pena di tenerne proposito» (Manzi 1837, 28).

system and even the last standing column of the temple of Juno Lacinia in Croton (Ventura 1991, *passim*).

Nevertheless, the description of Capo Linaro is perfectly consistent with the work of other cartographers: thus, the coherent picture yielded by different sources and the lack of landmarks south of Civitavecchia could indicate that in the redaction of this part of the portolan, Piri Re'is relied on second-hand sources instead of his direct knowledge of the places. The fact that he reported something that he possibly never saw but that he found in the work of others who conveyed the same information suggests that the shape of Capo Linaro could have been different. However, at the present state of research, there is no way to know whether the five miles the tip stretched into the sea reported by these authors did actually exist or not, but one can assume, with a certain leeway, that the shape of Capo Linaro made possible to host a harbouring place in front of Castrum Novum in the 16th century as well. The abandonment of this city in late antiquity (Enei 2020, 59) marked the end of the presence of a major settlement in this area. *Centumcellae* (present-day Civitavecchia) to the north and *Punicum* (Santa Marinella) to the south assumed the role of principal urban centres. In this context the coast played a fundamental role in the use of land: in fact, regardless of the various interpretative proposals, the importance in late antiquity of the strip of land furthest to the sea – given also the presence of the *via Aurelia* – finds the consensus of all scholars (Bugli 2011, 85 [with literature]). The data put forward in this work suggest how the area of Castrum Novum retained its value as an anchoring place at least until the early 16th century. Accordingly, the persistence of this quality and the possibility to exploit it for maritime activities, even on a small scale, should not escape attention. The area north of Capo Linaro, once occupied by the city of Castrum Novum, was used as a harbouring place and for aquaculture (on the fish-tanks of Castrum Novum see: Giorgi 2016; 2020): on the other hand, this situation seems to have radically changed after the abandonment of the city. Even though the place could have been considered a sheltered spot, as proved by the evidence brought by the *Kitāb-i bahriyye*, archaeological sources are almost silent for the periods following that moment. Therefore, the information provided by the *Kitāb-i bahriyye* and other cartographical sources mentioned here could be taken as an indication on how the relationship between the sea and the land changed from late antiquity and throughout the Middle Ages. The *Kitāb-i bahriyye* confirms that the northern shore of Capo Linaro retained the characteristics that the area had when this stretch of the sea was exploited for human activities. Accordingly, the fact that after the end of antiquity these same activities ceased to exist in the area once occupied by Castrum Novum and there was stable settlement on the neighbouring sites, might suggest a new direction of research in the analysis of the relationship between the sea and the land for the Castrum Novum area after antiquity.

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## Shrnutí

### Capo Linaro v Pīrī Re'īsově portolánu: raně novověký pramen pro poznání přístavu města Castrum Novum

*Kitāb-i bahriyye* je portolán vytvořený Pīrem Re'īsem v první čtvrtině 16. století: díky svým vlastnostem je to zcela unikátní dílo, které poskytuje bohaté informace o pobřeží Středozemního moře, užitečné i pro rekonstrukci jeho topografie.

*Kitāb-i bahriyye* obsahuje vyobrazení pobřeží s mysem Capo Linaro, kde se nacházelo antické město Castrum Novum. Stalo se jedním z nejvýznamnějších urbanistických celků regionu i díky přírodní dominantě – mysu Capo Linaro, jehož severní strana je chráněna před větry a je tedy vhodná pro kotvení a námořní aktivity. Poté, co bylo město opuštěno, není známo žádné využívání oblasti, hlavní osady se nacházely severněji, v Centumcellae (dnešní Civitavecchia), a jižněji, v Punicu (dnešní Santa Marinella). *Kitāb-i bahriyye* podává obraz oblasti kolem Castrum Novum, která si zachovala přírodní vlastnosti, díky nimž bylo toto místo ve starověku osídleno a které vedly k založení města Castrum Novum.

Text, který Pīrī Re'īs připojil k mapám, zřejmě naznačuje, jak se informace, které měl o tomto úseku pobřeží, liší od jeho skutečné podoby. Popisuje bod vybíhající do moře na pět mil, což je stejná vzdálenost, která dělí Castrum Novum od Civitavecchie; podobně vzdálenost, kterou uvedl mezi Capo Linaro a ústím řeky Tibery, neodpovídá skutečné vzdálenosti na satelitních snímcích.

Rovněž mapy v *Kitāb-i bahriyye* poskytují obraz, který je v rozporu s tvarem pobřeží a má nedostatky, pokud jde o topografické údaje o pobřeží mezi Civitavecchií a Římem v diskutovaném období. Co se týče zobrazení pobřeží, v různých verzích map je tvar vzdálený skutečnému tvaru Capo Linaro, ale odpovídá informacím, které poskytuje textová část. Pro oblast jižně od Civitavecchie není zaznamenán žádný orientační bod: tato skutečnost je v příkrém rozporu s tím, co je známo o obsahu *Kitāb-i bahriyye*, kde jsou uvedeny všechny hlavní orientační body užitečné pro navigaci. Pokud jde o zkoumanou oblast, nenachází se zde žádná zmínka o tom, co by bylo na pobřeží vidět z moře. Některé důležité prvky by Pírí Re'í jistě zaznamenal – například hrady v Santa Marinella, Santa Severa nebo Palo, postavené přímo u moře, které by nepochybně představovaly orientační bod pro plavbu v těchto vodách. Paralela s tím, co se uvádí o městě a přístavu Civitavecchia a o jeho grafickém ztvárnění na mapách, naznačovala, že pokud jde o Capo Linaro, Pírí Re'īs neuvádí jeho přesnou podobu, ale spíše popisuje jeho hlavní vlastnost, totiž že v raném novověku představoval bezpečné kotviště. Průzkum map vytvořených pro jiné než námořní účely však poskytl obraz velmi podobný tomu, který poskytl Pírí Re'īs, což vyvolalo určitě pochybnosti o podobě pobřeží na počátku 16. století.

Údaje uvedené v článku naznačují, že oblast Castrum Novum si zachovala svou hodnotu jako kotviště přinejmenším do počátku 16. století. V souladu s tím si zachování této vlastnosti a možnost jejího využití pro námořní aktivity, byť v malém měřítku, zasluží pozornost. Přestože místo mohlo být považováno za chráněné, jak ukazují doklady, které přináší *Kitāb-i bahriyye*, archeologické prameny pro následující období téměř neexistují. Proto lze informace poskytnuté tímto portolánem a dalšími kartografickými prameny považovat za důkaz toho, jak se měnil vztah mezi mořem a pevninou od pozdního starověku a v průběhu středověku. V souladu s tím by skutečnost, že po skončení starověku ustaly tyto aktivity v oblasti, kterou kdysi zaujímal Castrum Novum, a na sousedních lokalitách byla stabilní lidská přítomnost, mohla naznačit nový směr výzkumu při analýze vztahu mezi mořem a pevninou pro oblast Castrum Novum po konci starověku.

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