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Hrvatski otoci na kartama u *Velikom izolaru* i peljaru Andréa Theveta

The Croatian Islands on maps in André Thevet's *Le Grand Insulaire et Pilotage*

Francuski kraljevski kozmograf André Thevet napisao je mnoga djela među kojima i *Le Grande Insulaire et Pilotage*. U drugom svesku toga izolara i peljara (plovidbenoga priručnika) priređenog u rukopisu 1586. opisani su hrvatska obala i otoci, a njegov su sastavni dio i karte Krka, Paga, Ugljana i Pašmana, Čiova, Brača, Hvara i Korčule. Ta su Thevetova ostvarenja posve nepoznata u hrvatskoj znanstvenoj literaturi. Predmet su ovoga članka Thevetove karte na kojima su prikazani hrvatski otoci. Njihov je geografski sadržaj uspoređen s kartama objavljenima u drugoj polovini 16. st. u izolarama Giovannija Francesca Camocia (1571.), Antonija Milla (1582.) i Giuseppea Rosaccia (1598.). Istraživanjem je utvrđeno da su Thevetove karte u pogledu izgleda obalne crte i prikazanih geografskih objekata posve različite od karata koje su izradili njegovi suvremenici. Thevetove su karte odraz autorovih osobnih kompetencija, ponajprije geografskih spoznaja i primijenjenih metoda prikupljanja, obrade i kartografske vizualizacije prostornih podataka, a istodobno su i zorno svjedočanstvo o francuskom uvidu u geografsku stvarnost istočne obale Jadrana u razdoblju renesanse.

Ključne riječi: karta, izolar, otoci, Hrvatska, Jadransko more, *Le Grande Insulaire et Pilotage*, André Thevet, 16. stoljeće

The French royal cosmographer André Thevet wrote many works, including *Le Grand Insulaire et Pilotage*. The second volume of this work (a navigation manual), prepared in manuscript form in 1586, describes the Croatian coast and islands and includes maps of Krk, Pag, Ugljan with Pašman, Čiovo, Brač, Hvar, and Korčula. These achievements are completely unknown in Croatian scientific literature. The subject of this paper is Thevet's maps showing the Croatian islands. Their geographical content is compared to maps published in the second half of the 16th century in isolarios by Giovanni Francesco Camocio (1571), Antonio Mill (1582), and Giuseppe Rosaccio (1598). The study shows that Thevet's maps were completely different from those produced by his contemporaries, especially in terms of the contours of island coastlines and depicted geographical features. Thevet's maps were a reflection of the author's personal competence, primarily his knowledge of geography and methods of spatial data collection, processing and cartographic visualisation, and are also a vivid testimony to French insight into the geography of the eastern Adriatic coast during the Renaissance.

Key words: map, isolario, islands, Croatia, Adriatic Sea, *Le Grand Insulaire et Pilotage*, André Thevet, 16th century

Uvod

Prva desetljeća ranoga novoga vijeka podudaraju se s kulturnom epohom renesanse koja je na temelju aktualizirane antičke baštine, velikih geografskih otkrića, kao i dostignuta društveno-gospodarskoga napretka isprepletene razvojem znanosti, tehnologije i umjetnosti doslovno i simbolično proširila europske vidike. To se posebno očitovalo u razvoju geografije i kartografije koje su imale zadaju sistematizirati i predstaviti složen i višeslojan korpus geografskih spoznaja, od onih na lokalnoj, regionalnoj i državnoj razini koje je bilo moguće na različite načine koristiti pri upravljanju prostornim resursima (u administraciji, vojsci, pomorstvu i dr.) do onih na kontinentalnoj i globalnoj razini koje su omogućavale stjecanje uvida u prostornu stvarnost poznatoga dijela svijeta. Plejadi europskih kozmografa i geografa, metodološki utrojenoj u Ptolemejevu *Geografiju*, pripadao je i francuski kraljevski kozmograf André Thevet (Angoulême, 1516. – Paris, 1592.). On je priredio nekoliko djela u duhu renesansne kozmografije koja je obuhvaćala geografska, etnološka, povjesna, pomorska i druga znanja o prostornim obilježjima kontinenata i oceana (Lestringant, 1994; 2003). Po temeljnoj vokaciji bio je svećenik, najprije redovnik franjevac, a zatim kapelan kraljice Katarine Medici i kozmograf posljednjih francuskih kraljeva iz dinastije Valois – Henrika II., Franje II., Karla IX. i Henrika III. Iako nije imao formalnu akademsku naobrazbu iz geografije i kartografije, imao je želju dati osobni doprinos tada popularnom sagledavanju svijeta kao cjeline koju su velika geografska otkrića sve više približavala europskoj javnosti. Zbog toga je organizirao više putovanja, najprije unutar klasičnoga hodočasničkog itinerara na istočnom Sredozemlju s konačnim ishodištem u Svetoj zemlji, a zatim i na Atlantiku, posebno u obalno područje Brazila na kojem je Francuska, koristeći trenutačne slabosti Portugala, nastojala osnovati svoju koloniju (*France Antarctique*). S obzirom na to da je svoja djela nastojao učiniti privlačnijim u odnosu na postojeća istovrsna djela (hodočasničke putopise, kozmografije i plovidbene priručnike), uz dragocjena osobna opažanja s putovanja, nekritički je vrlo nespretno kompilirao različite povjesne i geografske izvore ţeleći na taj način dokazati svoju upućenost, a

Introduction

The first decades of the modern age coincided with the cultural epoch of the Renaissance, which was based on the (re)discovery of classical heritage, great geographical discoveries, and significant socio-economic progress; interwoven with the development of science, technology and the arts, all of which literally and symbolically widened European horizons. This was particularly obvious in the development of geography and cartography, which had the task of systematising and representing a complex, multi-layered corpus of geographic discoveries, (local, regional, or state level) that could be used in different ways to manage spatial resources (in administration, the military, navigation, etc.) at the continental or global level, and enabled insights into the spatial reality of the known world. André Thevet (Angoulême, 1516 – Paris, 1592), a French royal cosmographer, belonged to the group of European cosmographers and geographers who were immersed methodologically in Ptolemy's *Geography*. He wrote several works in the spirit of Renaissance cosmography, covering geographical, ethnological, historical, maritime, and other knowledge of the spatial features of continents and oceans (Lestringant, 1994; 2003). His primary vocation was that of a priest in the Franciscan Order, and he was also chaplain to Queen Catherine de' Medici and cosmographer to the last French kings in the Valois dynasty—Henri II, Francois II, Charles IX, and Henri III. Although he had no formal academic education in the fields of geography and cartography, he wanted to make a personal contribution to the popular way of viewing the world as a whole via great geographical discoveries, and make this knowledge more accessible to the European public of the time. To this end, he organised various journeys, primarily within the bounds of classic pilgrim routes to the eastern Mediterranean, with their final destination in the Holy Land, but also across the Atlantic, particularly to the Brazilian coastline, where France was attempting to take advantage of temporary Portuguese weaknesses to establish its own colony (*France Antarctique*). Since he tried to make his works attractive in comparison to similar contemporary works (pilgrim travelogues, cosmography and sailing manuals) and was able to add valuable personal observations from

dodavao je i tekstove za koje drugi kozmografi i geografi nisu mogli pronaći nedvojbenu argumentaciju. Zbog toga je od mnogih suvremenika bio ocjenjivan kao autor sklon pretjerivanju, plagijator i falsifikator (Silveira Cardozo, 1944; Destombes, 1972; Hair, 1982; Van Den Abbeele, 1992; Lestringant, 1994; 2003; Tolias, 2007). To baca sjenu na njegov opus i umanjuje ukupan dojam o njegovim ostvarenjima, ali ne može mu se zbog toga odreći bilo kakva relevantnost o svim temama o kojima je pisao. Štoviše, o prostoru koji je osobno posjetio dao je dragocjene podatke koji su u znanstvenoj literaturi potvrđeni kao istiniti (Silveira Cardozo, 1944; Lestringant, 1994; 2003). To se na poseban način odnosi i na sveobuhvatno djelo *Le Grand Insulaire et Pilotage d'Andre Thevet, Angoumoisin, cosmographe du Roy, dans lequel sont contenus plusieurs plants d'isles habitées et deshabitéees et description d'icelles* (daleje *Veliki izolar i peljar*), koje je u rukopisu priredio 1586., ali nije uspio organizirati njegovo tiskanje. Thevetov je izolar i peljar (plovidbeni priručnik) doista „velik”, kako po voluminoznosti i bogatom geografskom sadržaju tako i u pogledu brojnih karata koje su u njega uvrštene i koje s tekstom čine funkcionalnu cjelinu. *Veliki izolar i peljar* podijeljen je u dva sveska. Prvi svezak čini 413 dvostranih folija (među njima je 19 folija prazno, bez sadržaja) kojima su kao privitci dodane 33 karte, a drugi svezak čini 230 dvostranih folija (među kojima je 5 folija prazno, a folije 176–179 nedostaju), dva dvostrana dodatka na kojima je ispisan sadržaj (označena s A i B) i 54 karte koje su dodane kao privitci. To čini cjelinu od ukupno 1234 stranice teksta i 87 karata. U prvom svesku opisani su i na kartama prikazani otoci (i nasuprotne kopnene obalne celine) na svim svjetskim oceanima, a u drugom su svesku opisani i na kartama prikazani otoci (i nasuprotne kopnene obalne celine) na Sredozemnom moru, Crnom moru i Kaspijskom jezeru.

Po svjedočenju samoga Theveta *Veliki izolar i peljar* sastavljen je na temelju podataka koje je prikupio iz portugalskih, španjolskih, engleskih, francuskih, talijanskih, turskih, arapskih i perzijskih pejlara (Destombes, 1972; Lestringant, 2003). To bi značilo da je Thevet obavio izbor i zatim sastavio sveobuhvatnu cjelinu koja je uključila sve dotadašnje znanje o svjetskim otocima. Bez obzira na sadr-

his travels, he uncritically and rather clumsily compiled various historical and geographical sources, wanting to demonstrate his familiarity with the topics covered, and added his own writings, which other cosmographers and geographers sometimes took issue with. As a result, his contemporaries tended to think he was prone to exaggeration, plagiarism, and fraud (Silveira Cardozo, 1944; Destombes, 1972; Hair, 1982; Van Den Abbeele, 1992; Lestringant, 1994; 2003; Tolias, 2007). This caused a shadow to be cast over his work and the overall impression of his achievements suffered. However, it cannot be said that he wrote completely irrelevantly about the topics he was interested in. Moreover, he was able to provide valuable information about places he had visited in person, details of which have since been proven correct in subsequent scientific literature (Silveira Cardozo, 1944; Lestringant, 1994; 2003). This is particularly true of his comprehensive work entitled *Le Grand Insulaire et Pilotage d'Andre Thevet, Angoumoisin, cosmographe du Roy, dans lequel sont contenus plusieurs plants d'isles habitées et deshabitéees et description d'icelle*, (hereafter: *Le Grand Insulaire et Pilotage*) which was prepared in manuscript form in 1586, but never printed. Thevet's work is indeed “great” in terms of its size and wealth of geographical content, but also in terms of the number of maps included in it, creating a functional whole with the written texts. The manuscript is divided into two volumes. The first consists of 413 double-sided folios (19 are blank), to which 33 maps are appended, while the second consists of 230 double-sided folios (5 are blank, and f. 176–179 are missing), two double-sided appendices showing the contents (marked A and B), and 54 maps. Altogether, there are 1,234 pages of text and 87 maps. In the first volume, the islands and offshore islands of all the world's oceans are depicted, and in the second, all the islands and in the Mediterranean, Black, and Caspian seas.

According to Thevet himself, the manuscript was compiled on the basis of information he collected from Portuguese, Spanish, English, French, Italian, Turkish, Arab, and Persian travellers (Destombes, 1972; Lestringant, 2001). Presumably, Thevet carried out some sort of selection process and then compiled a comprehensive whole which included all current knowledge of the world's islands. Re-

žajnu neujednačenost, brojna ponavljanja i razlike u točnosti, odnosno pouzdanosti obilje prostornih podataka u *Velikom izolaru i peljaru* čine to Thevetovo djelo jedinstvenim i za tadašnje prilike doista velikim ostvarenjem.

Thevetov *Veliki izolar i peljar* po vrsti sadržaja umnogome se podudara s knjigama o otocima mletačkih autora. Te su kartografske enciklopedije u ranom novom vijeku bile jedne od najčešćih artefakata geografske kulture (Tolias, 2007; 2012). Tijekom 16. st. došlo je do svojevrsne standardizacije izolara kojih su pridonijela djela Benedetta Bordonea, Tommasa Porcaccija, Giovannija Francesca Camocia, Giuseppea Rosaccia i drugih njihovih suvremenika (Stouraiti, 2013). U njihovim su knjigama otoci opisani i na kartama prikazani tako da je za širok krug čitatelja bilo predstavljeno osnovno geografsko znanje, više ono iskustveno nego ono utemeljeno na znanstvenim istraživanjima, najprije o sredozemnim otocima, a zatim i o svim poznatim svjetskim otocima kojih je, zahvaljujući velikim geografskim otkrićima, postupno bilo sve više. Sadržaj i namjenu izolara možda je najbolje iskazao Giuseppe Rosaccio na naslovni svojega djela o putu od Venecije do Carigrada, morem i kopnom, i zatim do Svetе zemlje, objavljenog u Veneciji 1598. Iza glavnoga naslova (*Viaggio da Venetia a Constantinopoli Per Mare e per Terra et insieme quello di Terra Santa*) taksativno je naveo da se u djelu nalaze kratki geografski i korografski opisi sa 72 karte u kojima se raspravlja o gradovima, utvrdama, lukama, zaljevima, otocima, planinama, rijekama i morima (*con brevità descritto – nel quale, oltre à settantadui disegni, di Geografia e Corografia si discorre, quanto in esso viaggio, si ritrova cioe Città, Castelli, Porti, Golfi, Isole, Monti, Fiumi, e Mari*). Na kraju je navedeno komu je djelo namijenjeno, odnosno komu može koristiti: trgovcima, mornarima i istraživačima geografije (*Opera utile à Mercanti, Marinari, & à Studiosi di Geografia*).

Objekt, cilj i metodologija istraživanja

Objekt istraživanja su karte Krka, Paga, Ugljana i Pašmana (oba ih imenuje Zadarškim otokom), Čiova, Brača, Hvara i Korčule koje je francuski kozmograf André Thevet izradio za

gardless of the varied nature of the contents, the many repetitions and variations in accuracy or reliability, the wealth of spatial data means that Thevet's work was unique and a truly great achievement of its day.

In terms of contents, it corresponds in many ways to isolarios by Venetian authors. These cartographic encyclopaedias of the islands were common in early modern geographic culture (Tolias, 2007; 2012). During the 16th century, a certain degree of standardisation took place in regard to isolarios, prompted by the work of Benedetto Bordone, Tommas Parcacchi, Giovanni Francesco Camocio, Giuseppe Rosaccio, and others (Stouraiti, 2013). In their works, the islands were described and depicted on maps in order to present basic geographic knowledge to a wide circle of readers. This was often based more on experience than scientific research, primarily in regard to Mediterranean islands, and all other known islands throughout the world, the number of which continually increased thanks to great geographic discoveries. The contents and purpose of isolarios were perhaps best expressed by Giuseppe Rosaccio on the title page of his work about a journey from Venice to Byzantium and then on to the Holy Land by land and sea. It was published in Venice in 1598 as *Viaggio da Venetia a Constantinopoli per Mare e per Terra et insieme quello di Terra Santa*. After the title, he explicitly claimed that the work contained brief geographic and chorographic depictions with 72 maps, dealing with towns, fortresses, harbours, bays, islands, mountains, rivers and seas (*con brevità descritto – nel quale, oltre à settantadui disegni, di Geografia e Corografia si discorre, quanto in esso viaggio, si ritrova cioe Città, Castelli, Porti, Golfi, Isole, Monti, Fiumi, e Mari*). At the end, it was stated for whom it was intended: merchants; sailors; and geographic researchers (*Opera utile à Mercanti, Marinari, & à Studiosi di Geografia*).

Research aims and methodology

The objects of the research were maps of the islands of Krk, Pag, Ugljan with Pašman (together named the "Zadar island"), Čiovo, Brač, Hvar and Korčula, made by the French cosmographer André

potrebe svojega dvosveščanoga *Velikoga izolara i peljara* (plovidbenog priručnika). Thevet je taj svoj rukopis priredio 1586., a karte je prethodno, najkasnije te godine, tiskao, svaku u više primjera. Velik dio karata uvezan je u rukopis knjige uz odgovarajuća poglavlja u kojima je opisan na kartama prikazani prostor. Taj se rukopis čuva u zbirci rukopisa u Bibliothèque nationale de France u Parizu. Unutar *Velikoga izolara i peljara* ne nalaze se sve za to djelo pripremljene karte, već su mnoge raspršene u brojnim ustanovama, ne tvoreći dio nikakve uvezane kartografske cjeline (Lestringant, 1984). Dio je Thevetovih karata nestao. M. Destombes (1972) navodi da je 160 karata iz *Velikog izolara i peljara* posjedovao kolekcionar antikviteta François Roger de Gaignières (1642. – 1715.) i da su te karte inventarizirane oko 1750. godine, ali su nakon toga nestale.

Ciljevi su istraživanja unaprijediti postojeće spoznaje o prikazima hrvatskih otoka u izolarima i plovidbenim priručnicima u vrijeme renesanse te znanstvenu i širu zajednicu uputiti na do sada nepoznat doprinos A. Theveta u razvoju kartografskih prikaza hrvatskih otoka koji su, s obzirom na geografski smještaj uz istočnojadransku plovidbenu rutu, imali veliko značenje u pomorsko-geografskom sustavu Jadrana i Sredozemlja.

Koliko je autorima članka poznato, ovo je prvo istraživanje Thevetova kartografskoga opusa u kontekstu prikaza otoka istočne obale Jadrana. Uz kratki opis geografskoga sadržaja na Thevetovim kartografskim prikazima dana je i usporedba prikaza na tim kartama s prikazima otoka na kartama koje su, također tijekom druge polovine 16. st., izradili i u izolarima objavili Giovanni Francesco Camocio (1571.),¹ Antonio Millo (1582.)² i Giuseppe Rosaccio (1598.).³ Komparativna analiza tih kartografskih izvora prostornih po-

Thevet. Thevet prepared the manuscript in 1586, while several copies of the maps were printed earlier, or at least in the same year. Most of the maps are bound in the manuscript of the book alongside the relevant chapters describing them. The manuscript is housed in the manuscript collection of the Bibliothèque Nationale de France in Paris. Not all the maps prepared for the isolario are included, and many have been scattered throughout other institutions, where they do not form parts of bound cartographic units (Lestringant, 1984). Some of Thevet's maps have been lost. M. Destombes (1974) says that 160 maps from the *Le Grand Insulaire et Pilotage* were owned by the antique collector Francois Roger de Gaignières (1642–1715), and were inventoried around 1750, but have since disappeared.

The goals of this research were to improve existing knowledge of the depiction of the Croatian islands in isolarios and sailing manuals during the Renaissance, and to indicate to the scientific and wider community the hitherto unknown contribution of A. Thevet in terms of the development of cartographic depictions of the Croatian islands. Since these islands were geographically placed on the eastern Adriatic sailing route, they were of great importance in the maritime-geographic system of the Adriatic and Mediterranean Seas.

As far as we know, this is the first research conducted into Thevet's cartographic opus in the context of depictions of the islands off the eastern Adriatic coast. A short description of the geographic contents in Thevet's cartographic depictions is followed by a comparison with island depictions on maps which were produced in the second half of the 16th century by Giovanni Francesco Camocio (1571)¹, Antonio Millo (1582)², and Giuseppe Rosaccio (1598)³. A comparative analysis of these cartographic sources of spatial data, which have been reproduced with the

1 Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views, Giovanni Francesco Camocio, 1573. Premda je riječ o izdanju Camociovu djelu iz 1573., u njemu su objavljene karte iz 1571. koje su priredene za prvo izdanje toga izolara.

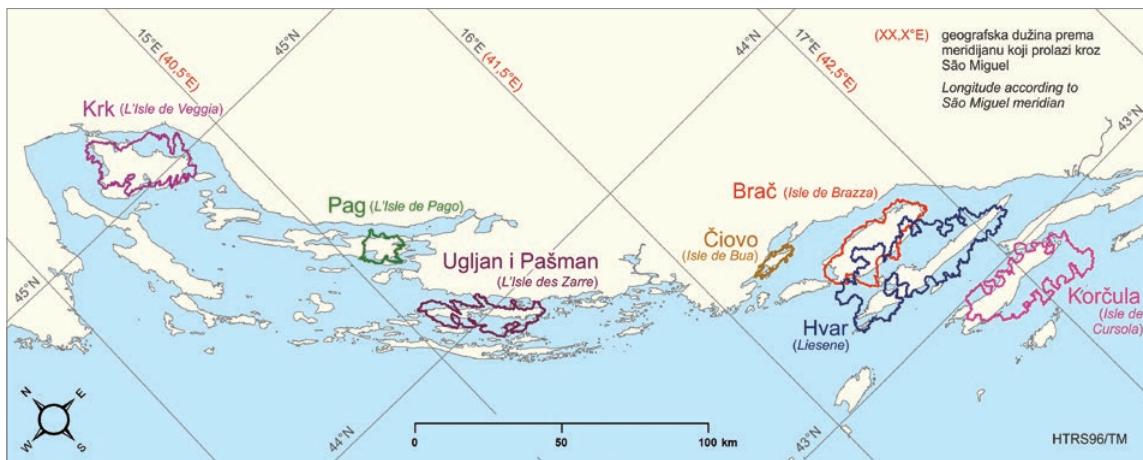
2 Više je izdanja Millova izolara (Kljajić i Razum, 2016). U radu je korišten original izdanja koje se čuva u Sylvia Ioannou Foundation, Liechtenstein, Books and manuscripts, Signatura B.0254, Antonio Millo, 1582.

3 Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views, Giuseppe Rosaccio, 1598.

1 Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views, Giovanni Francesco Camocio, 1573. Although this is the 1573 edition of Camocio's work, maps from 1571 were published in it which had been produced for the first edition of the isolario.

2 There were several editions of Millo's isolario (Kljajić and Razum, 2016). In this paper, we have used the original edition kept by the Sylvia Ioannou Foundation, Liechtenstein, Books and manuscripts, Call No. B.0254, Antonio Millo, 1582.

3 Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views, Giuseppe Rosaccio, 1598.



Sl. 1. Vektorizirani prikaz obalne crte na sedam Thevetovih karata otoka
Fig. 1 Vectorised depiction of the coastlines on seven of Thevet's island maps

Izvor: kartografske podloge: Claus i dr., 2017
Source: cartographic base: Claus et al., 2017

dataka, čije se reprodukcije donose uz suglasnost ustanova u kojima se čuvaju (na čemu im posebno zahvaljujemo) rezultirala je razmjerne detaljnom interpretacijom sadržaja Thevetovih karata na kojima je prikazan hrvatski otočni prostor.

U svrhu usporedbe prikaza otoka na Thevetovim kartama s prikazom tih otoka na suvremenoj karti, digitalne reprodukcije Thevetovih karata (nastale skeniranjem) su, uz digitalne reprodukcije karata G. F. Camocia, A. Milla i G. Rosaccia, u GIS softveru preklapljene sa suvremenom kartom Jadranskoga mora u vektorskome formatu (*shapefile*) izrađenom u *Flanders Marine Data and Information Center*, vektorizacijom predloška u mjerilu 1 : 466 188 (Claus i dr., 2017). Nakon preklapanja sa suvremenom kartom obavljena je vektorizacija prikaza obalne crte svih karata iz uzorka (sl. 1). Vektorizacija obalne crte omogućila je jasnije utvrđivanje izobličenja u odnosu na stvaran izgled obalne crte te u odnosu na izgled obalne crte na kartama istih otoka koje su izradili drugi autori. Interpretacijom Thevetova kartografskoga opusa, koja se uz ostalo temelji na usporedbi njegovih kartografskih prikaza s odabranim kartama drugih autora, upotpunjene su suvremene premise o načinu na koji su njihovi autori tijekom druge polovine 16. st. percipirali istočnojadranski prostor.

consent of the institutions in which they are housed (for which we are particularly grateful) resulted in a fairly detailed interpretation of the contents of Thevet's maps showing Croatian islands and their surroundings. For the sake of completeness, Thevet's maps are accompanied by his descriptions of the islands and navigational instructions for sailors.

For the purpose of comparing the depictions of the islands on Thevet's maps with the same islands on a modern map, digital reproductions (acquired from scans) of Thevet's maps and maps by Camocio, Millo, and Rosaccio were overlaid on a modern map of the Adriatic Sea in GIS software in vector format (*shapefile*) produced at the Flanders Marine Data and Information Centre, by vectorisation of the template in the 1 : 466,188 scale (Claus et al, 2017). After overlaying them on the modern map, vectorisation of the coastline renderings of all the maps in the sample was performed (Fig. 1). This allowed the clear establishment of distortions in relation to the actual shape of the coastline, and, also, their comparison against the island coastline renderings performed by different cartographers. By interpreting Thevet's cartographic opus, based on a comparison of his cartographic depictions, among other things, and selected maps by other authors, we were able to enhance recent understandings of how these authors perceived the eastern Adriatic coastline during the second half of the 16th century.

Postupak preklapanja karata koji prethodi vektorizaciji, poznat i kao metoda najmanjih kvadrata (engl. *least squares estimation*, LSE) (Bevington i Robinson, 2003; Ghilani i Wolf, 2006; Jenny i Hurni 2011) ili georeferenciranje (engl. *georeferencing*), što je naziv koji se u pravilu upotrebljava u softverima u kojima se izvodi, u ovom istraživanju proveden je samo uvjetno – prije svega u svrhu vizualizacije, tj. „smještanja“ tih prikaza u prostor prikazan na suvremenoj, referentnoj karti. Naime, prikaz prostora na svim kartama iz uzorka je, s kartometrijskoga gledišta, izrazito niske točnosti, tj. na njima postoje visoka odstupanja od stvarnoga izgleda prostora, što je vidljivo već na razini opažanja. Ta odstupanja nisu uzrokovana deformacijama svojstvenim primjeni kartografske projekcije, već je riječ o pogreškama koje su posljedica nepoznavanja osnovnih geografskih obilježja prikazanih objekata od strane Theveta i autora karata s kojima je uspoređen Thevetov opus. Prikaz otoka na svim kartama iz uzorka izrazito je izobličen. Utvrđena su velika međusobna odstupanja po različitim pravcima mjerena uslijed čega nije moguće kvantificirati linearne proporcije koje bi barem približno vrijedile za cijelo polje karte. Također, karte su razmjerno „siromašne“ prostornim podatcima koji su popraćeni toponomima, a koje je, uvjetno, moguće svesti na točku s pripadajućim koordinatama (naselja, vrhovi, rtovi i sl.). Koordinate točaka pritom se iskazuju u odnosu na ishodište koordinatnoga sustava odabrane referentne kartografske projekcije u koji su po obavljenom postupku georeferenciranja karte iz uzorka transformirane. Manjak takvih elemenata svakako smanjuje redundanciju ulaznih podataka za kartometrijsku analizu, a s obzirom na iznimno malen broj tih elemenata na kartama iz uzorka validnu kartometrijsku analizu u ovom istraživanju nije moguće obaviti. Naime, na odabranim kartama iz izolara riječ je o (samo) tri ili četiri točke po karti na temelju kojih je moguće obaviti georeferenciranje. U istraživanju je, u svrhu preklapanja prikaza na kartama iz uzorka s prikazom na suvremenoj karti, primijenjena Helmertova ravninska 4-parametarska transformacija uz pomoć koje se ne deformira izvorni izgled karata i za čiju je primjenu potrebno odabrati najmanje tri točke (Mode-

The procedure for overlaying the maps before vectorisation, known as the method of least squares estimation (Bevington and Robinson, 2003; Ghilani and Wolf, 2006; Jenny and Hurni, 2011) or geo-referencing, which is the name usually used in the software in which it is performed, was carried out in this research only conditionally—primarily for the purpose of visualising, or “placing” those depictions in the area shown on a modern reference map. In fact, the island renderings on all the maps in the sample showed a particularly low degree of accuracy from a cartometric perspective. That is to say, there was a high degree of divergence from the actual shape of the area, which was evident even at the level of mere observation. These divergences did not arise from typical deformations in the application of cartographic projection, yet they represent errors that resulted from poor knowledge of the basic geographic features of objects mapped by Thevet and the other authors with whom his work was compared. The depiction of the islands on all the maps in the sample was particularly distorted. Large mutual discrepancies were found along various lines of distance measurement, as a result of which it was impossible to quantify linear proportions which would be at least approximately valid for the entire map area. Large mutual discrepancies were found along various lines of distance measurement. In addition, the maps were rather poor in terms of spatial data accompanied by toponyms, which could provisionally be reduced to a point with the appropriate coordinates (settlements, peaks, capes, etc.). The coordinates of points were then shown in relation to the origin of the coordinate system of the selected reference cartographic projection into which they were transformed by geo-referencing the maps from the sample. The lack of such elements, of course, reduced the redundancy of input data for cartometric analysis and since there were extremely few of these elements found on the maps in the sample, it was not possible to carry out a valid cartometric analysis in this research. In fact, on the selected maps, only three or four points were found on each which could be used as control points for geo-referencing. In the research, for the purpose of overlaying the selected map renderings over a modern map, the 4-parameter Helmert transformation was applied, which does not allow deformation of initial map geometry and requires at least three

Tab. 1. Točke (naselja, rtovi, uvale) prikupljene s karata iz uzorka u svrhu vizualnoga preklapanja s prikazom na suvremenoj karti
Tab. 1 Points (settlements, capes, bays) gathered from the maps in the sample for the purpose of visual overlay on a modern map

| Otok / Island | Thevet 1586 | Camocio 1571 | Millo 1582 | Rosaccio 1598 |
|------------------|--|--|---|--|
| Pag | [1] uvala / Bay Dinjiška* [2] uvala / Bay Vlašići* [3] uvala / Bay Stara Povljana* | - | [1] Pag [2] Šimuni [3] Mandre [4] Stara Novalja | [1] Pag [2] Vlašići [3] Stara Povljana [4] Kolan |
| Krk | [1] rt / Cape Šilo (N)* [2] rt / Cape Škuljica (S)* [3] rt / Cape Glavotok (W)* | - | [1] Omišalj [2] Krk [3] uvala / Bay Sv. Juraj | - |
| Korčula | [1] Korčula [2] uvala / Bay Luka* [3] Lombarda [4] Vela Luka* | [1] Korčula [2] uvala / Bay Luka* [3] Vela Luka* | [1] Korčula [2] uvala / Bay Babina [3] Vela Luka | [1] Korčula [2] uvala / Bay Luka* [3] Vela Luka* |
| Ugljan i Pašman | [1] rt / Cape Sv. Petar (NW)* [2] Barotul* [3] rt / Cape Borovnjak (SE)* | [1] rt Sv. Petar (NW)* [2] Barotul* [3] rt Borovnjak (SE)* | - | - |
| Čiovo | [1] rt / Cape Okrug (W)* [2] trogirski most [3] rt / Cape Čiova (E)* | [1] rt / Cape Okrug (W)* [2] trogirski most [3] rt / Cape Čiova (E)* | - | [1] rt / Cape Okrug (W)* [2] trogirski most [3] rt / Cape Čiova (E)* |
| Hvar | [1] rt Pelegrin (W) [2] Hvar [3] Stari Grad [4] rt / Cape Sućuraj (E)* | [1] rt / Cape Pelegrin (W) [2] Hvar [3] Stari Grad [4] rt / Cape Sućuraj (E)* | [1] rt / Cape Pelegrin (W) [2] Hvar [3] Stari Grad [4] rt Sućuraj (E)* | [1] rt / Cape Pelegrin (W)* [2] Hvar [3] Stari Grad* [4] rt / Cape Sućuraj (E)* |
| Brač | [1] Milna* [2] Bol [3] Pučišća* [4] Sumartin* | - | [1] Milna [2] Bol [3] Pučišća [4] Sumartin* | - |

* – uz točku nije upisan toponim, već je, s obzirom na konfiguraciju prikaza, pretpostavljeno da prikazuje tu lokaciju

/ the toponym is not entered by the point, but it can be assumed that this location is meant due to the configuration of the depiction

(N), (NW), (S), (SE) – krajnji rtovi otoka u skladu s pripadajućim stranama svijeta

/ (N), (NW), (S), (SE) – the extreme capes of the islands according to the appropriate compass points

nov i Parkhomenko, 1965). S obzirom na to da su, u svrhu donekle objektivne usporedbe kartografskih prikaza, odabrane karte drugih autora na kojima su prikazani otoci koje je prikazao Thevet, nastojalo se barem donekle standardizirati uzorak točaka potrebnih za georeferenciranje. To je postignuto za karte s prikazom Ugljana i Pašmana, Čiova, Brača, Hvara te donekle Korčule, dok na prikazima Krka i Paga zbog izrazito deformirana izgleda ili pogrešno upisanih toponima, o čemu je pisano u nastavku rukopisa, nije bilo moguće odabrat istovjetne točke (tab. 1).

points to be obtained as input data (Modenov and Parkhomenko, 1965). Since maps by other authors showing the islands depicted by Thevet were chosen in order to provide a fairly objective comparison, we also attempted to standardise to some extent the sample of points required for geo-referencing. This was achieved in terms of the maps depicting Ugljan with Pašman, Čiovo, Brač, Hvar and (partly) Korčula, while it was impossible to select matching points on the depictions of Krk and Pag, due to exceptional deformation or erroneously entered toponyms, as will be explained later (Tab. 1).

Pregled dosadašnjih istraživanja

Opis hrvatskih otoka i karte koji se nalaze u Thevetovu *Velikom izolaru i peljaru* do sada nisu bili poznati u hrvatskoj znanstvenoj javnosti. Koliko nam je poznato, o tom tekstu francuskoga renesansnog kozmografa Andréa Theveta i njegovim kartama, osim spomena u jednoj bilješki u radu M. Kandido-Rožman o opisima Dalmacije u djelima francuskih putopisaca (Kandido-Rožman, 1990: 1172, bilješka 17), nije napisan nijedan tekst u hrvatskoj geografskoj i kartografskoj literaturi. Međutim, Thevetovi opisi Hrvatske nisu potpuna nepoznanica. O njegovu opisu Hrvatske u djelu *Cosmographie de Levant* objavljenom u Lyonu 1554. kratki zapis dao je P. Matković (Matković, 1882: 76–77, bilješka 2), a o istoj temi dva je članka napisala T. Valčić-Bulić (Valčić-Bulić, 2006; 2007). O Thevetovim opisima Hrvatske u djelima *Cosmographie de Levant* i *La Cosmographie universelle* kratak tekst napisala je M. Kandido-Rožman u svom radu o opisima Dalmacije u francuskim putopisima od Prvoga križarskog pohoda do kraja 18. stoljeća. Ista je autorica u jednoj bilješki spomenula da su poglavljia o Zadru i otoku Čiovu iz rukopisnoga *Velikog izolara i peljara* objavljena u djelu *Recueil de voyages et documents pour servir à l'histoire de la géographie* u Parizu 1890. (Kandido-Rožman, 1990: 1172, bilješka 17).

O Thevetovu *Velikom izolaru i peljaru* objavljeno je više knjiga i znanstvenih članaka, ali u njima nije analiziran geografski sadržaj koji se odnosi na Hrvatsku. Jedini spomen karata na kojima su prikazani hrvatski otoci nalazi se u članku o Thevetu *Velikom izolaru i peljaru* te njegovim putovanjima na Levant koji je priredio F. W. Hasluck (1914) te u katalogu karata iz Thevetova *Velikoga izolara i peljara* koji je priredio F. Lestringant (1984), znanstvenik koji je velik dio svojega opusa posvetio Thevetovim djelima (Lestringant, 1991; 1994; 2002; 2003). Važno je, međutim, za interpretaciju Thevetovih karata hrvatskih otoka uvažiti opće prosudbe o Thevetu kao geografu i kartografu koje su, uz F. Lestringanta, dali M. Destombes (1972), P. E. H. Hair (1982), G. Van Den Abbele (1992), E. Dumotier-Sigwalt (2002) i G. Tolias (2012). Tolias je u svojem radu objavljenom 2012. najavio da s F. Lestringantom priprema za objavu dio Thevetova *Velikog izolara i peljara* koji se odnosi na otoke u Sredozemnom moru. Koliko nam je poznato, to djelo još nije objavljeno.

Overview of previous research

The descriptions of the Croatian islands and maps in the *Le Grand Insulaire et Pilotage* were hitherto unknown in Croatian scientific circles. As far as we know, apart from one mention in a note in a work by M. Kandido-Rožman about descriptions of Dalmatia in the works of French travel writers (Kandido-Rožman, 1990, note 17), not a single text has been written in Croatian geographic or cartographic literature about Thevet's manuscript. However, Thevet's descriptions of other parts of Croatia were not completely unknown. He described Croatia in *Cosmographie de Levant*, published in Lyon in 1554, and P. Matković (Matković, 1992: 76–77, note 2) noted this briefly. T. Valčić-Bulić (Valčić-Bulić, 2006; 2007) wrote on the same subject. M. Kandido-Rožman wrote a short account of Thevet's descriptions of Croatia in *Cosmographie de Levant* and *La Cosmographie Universelle* in a book about descriptions of Dalmatia in the works of French travel writers from the First Crusade to the end of the 18th century. The same author mentioned in a note that the chapters on Zadar and the island Čiovo in the manuscript of the *Le Grand Insulaire et Pilotage* were published in *Recueil de voyages et documents pour servir à l'histoire de la géographie* in Paris in 1890 (Kandido-Rožman, 1990: 1172, note 17).

Several books and scientific articles have been published about Thevet's *Le Grand Insulaire et Pilotage*, but the geographic contents relating to Croatia have not been analysed. The only mentions of maps showing the Croatian islands are in an article on Thevet's *Le Grand Insulaire et Pilotage* and his travels to the Levant edited by F. W. Hasluck (1914) and in a catalogue of maps from a work edited by F. Lestringant (1984), a scholar who devoted most of his opus to Thevet's works (Lestringant 1991; 1994; 2002; 2003). It is important, however, when interpreting Thevet's maps of the Croatian islands, to take into consideration the general opinion of Thevet as a geographer and cartographer expressed not only by Lestringant, but by M. Destombes (1972), P. E. H. Hair (1982), G. Van Den Abbele (1992), E. Dumotier-Sigwalt (2002), and G. Tolias (2012). Tolias announced in 2012 that he was preparing to publish with Lestringant the part of Thevet's *Le Grand Insulaire et Pilotage* which relates to the Mediterranean islands. As far as we know, this has not yet happened.

Hrvatski otoci na kartama u *Velikom izolaru i peljaru* Andréa Theveta

The Croatian Islands on maps in André Thevet's *Le Grand Insulaire et Pilotage*

Thevetovi kartografski prikazi hrvatskih otoka

André Thevet u *Velikom izolaru i peljaru* opisao je hrvatsku obalu, a detaljnije i nekoliko hrvatskih otoka, među kojima je na kartama prikazao Krk, Pag, Ugljan i Pašman (oba imenuje Zadarskim otokom), Čiovo, Brač, Hvar i Korčulu. Uz rukopis su kao privitci uvezane tiskane karte Paga, Čiova, Hvara i Korčule (tab. 2). Te karte, kao i karte Krka, Ugljana i Pašmana te Brača, čuvale su se kao dio kolekcije *King George III's Topographical Collection u King's Library Gallery* u British Museumu, a od 1998. dio su knjižničnoga fonda British Library (tab. 3). Na Thevetove karte hrvatskih otoka u British Museumu prvi je upozorio F. W. Hasluck (1914). Međutim, Hasluck je pogrešno naveo da se karte Paga, Čiova i Korčule ne nalaze u Thevetovu rukopisu, a k tomu nije naveo da se u British Museumu nalazila i karta Hvara. U katalogu karata iz Thevetova *Velikog izolara i peljara* F. Lestringant točno je zabilježio lokacije karata hrvatskih otoka, onih u rukopisu Thevetova djela koji se čuva u Bibliothèque nationale de France u Parizu i onih koje se čuvaju u British Library u Londonu (Lestringant, 1984).

Tekst u *Velikom izolaru i peljaru* tvori funkcionalnu cjelinu s opisom Hrvatske (poglavlje III), a posebno i Dubrovačke Republike (poglavlje IIII), u knjizi XVIII drugoga sveska *Le Cosmographie universelle* (Thevet, 1575: 777b – 783a). Naime, Thevet se u *Velikom izolaru i peljaru* na nekoliko mjesata poziva na svoj tekst u *Općoj kozmografiji*, upućujući čitatelja da je odgovarajuća kraćenja u *Velikom izolaru i peljaru* obavio da se ne bi ponavljaо.

Redoslijed tekstova i pripadajućih karata u *Velikom izolaru i peljaru* nije logičan s obzirom na geografski položaj i smještaj pojedinih otoka, koji je, uz ostalo iskazao i sam Thevet s ozakama vrijednosti geografske širine i geografske dužine koje je ispisao na sredinama međuokvirnoga prostora koji obrubljuje polje svake karte (osim one na kojoj su prikazani Ugljan i Pašman). Hrvatski otoci (osim Ugljana, Pašmana i Čiova) nisu opisani jedan za drugim, već se tekstovi o njima, kao i pripadajuće karte, nalaze među tekstovima o drugim sredozemnim otocima, bilo onima u Jadranskom moru, bilo otocima u Egejskom moru i drugim dijelovima istočnoga Sredozemlja.

Thevet's cartographic depiction of the Croatian islands

In *Le Grand Insulaire et Pilotage*, Thevet described the Croatian coast and several islands in detail and showed some of them on maps (Krk, Pag, Ugljan with Pašman—together named the “Zadar island”—Čiovo, Brač, Hvar and Korčula). Printed maps of Pag, Čiovo, Hvar and Korčula were bound with the manuscript as appendices (Tab. 2). These maps, along with maps of Krk, Ugljan with Pašman, and Brač were kept as part of the King George III Topographical Collection in the King's Library Gallery at the British Museum, and have formed part of the library holdings of the British Library since 1998. (Tab. 3). F. W. Hasluck (1914) was the first to draw attention to Thevet's maps of the Croatian islands in the British Museum. However, Hasluck wrongly claimed that the maps of Pag, Čiovo, and Korčula were not part of Thevet's manuscript, while he neglected to mention that the map of Hvar was also in the British Museum. In his catalogue of maps from *Le Grand Insulaire et Pilotage*, Lestringant correctly noted the location of the maps of the Croatian islands from the manuscript of Thevet's work kept in the Bibliothèque Nationale de France in Paris and the British Library in London (Lestringant, 1984).

The text in the *Le Grand Insulaire et Pilotage* forms a functional unit with the description of Croatia (Chapter III), particularly the Republic of Dubrovnik (Chapter IIII) in book XVIII of the second volume of *La Cosmographie Universelle* (Thevet, 1575: 777b-783a). In the *Le Grand Insulaire et Pilotage*, Thevet refers several times to his own writing in *La Cosmographie Universelle*, indicating to the reader that he shortened it appropriately in order to avoid repetition.

The order of the texts and accompanying maps in the *Le Grand Insulaire et Pilotage* is not logical in terms of the geographical position of the individual islands, despite the fact that Thevet wrote all the relevant latitudes and longitudes in the middle of the inter-frame area surrounding each map field (apart from those showing Ugljan with Pašman). The Croatian islands (apart from Ugljan with Pašman and Čiovo) are not described one after another, but their descriptions and maps are found among material about other Mediterranean islands, in the Adriatic or Aegean seas, or in other parts of the eastern Mediterranean.

Tab. 2. Raspored tekstova i karata koji se odnose na hrvatski otoke u Thevetovu *Velikom izolaru i peljaru*
 Tab. 2 Order of texts and maps relating to the Croatian islands in Thevet's *Le Grand Insulaire et Pilotage*

| Otok / Island | Naslov poglavlja / Chapter heading | Stranice / Pages | Smještaj karte / Location of map | Dimenzijske karte / Map dimensions |
|--------------------|---------------------------------------|---------------------|--|---------------------------------------|
| Pag | <i>Isle de Pago</i> | 33 r – 34 v | karta kao privitak na 33 r / Map appended to 33 r | 14,8 cm × 18,3 cm |
| Krk | <i>Isle de Veggia</i> | 42 r – 43 v | nema karte u rukopisu / No map | – |
| Korčula | <i>Isle de Cursola</i> | 60 v – 61 v | karta kao privitak na 60 v / Map appended to 60 v | 14,7 cm × 18,2 cm |
| Ugljan i Pašman | <i>Isle de Zarre</i> | 65 v – 68 r | nema karte u rukopisu / No map | – |
| Čiovo | <i>Isle de Bua</i> | 68 v – 69 v | karta kao privitak na 68 v / Map appended to 68 | 15,1 cm × 18,3 cm |
| Hvar | <i>Isle de Liesene</i> | 84 r – 85 r | karta kao privitak na 84 r / Map appended to 84 r | 14,8 cm × 18,3 cm |
| Brač | <i>Brazze</i> | 93 r – 93 v | nema karte u rukopisu / No map | – |

r – recto („prednja” strana lista, tj. desna stranica u otvorenoj knjizi pri čitanju s lijeva na desno)

/ r – recto (the ‘front’ of a page, or the right-hand page in an open book, reading from left to right)

v – verso („stražnja” strana lista, tj. lijeva stranica u otvorenoj knjizi pri čitanju s lijeva na desno)

/ v – verso (the ‘back’ of a page, or the left-hand page in an open book, reading from left to right)

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Andréa Theveta

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et Pilotage*

Tab. 3. Signature i dimenzijske karata koje su kao dio kolekcije topografskih karata britanskoga kralja Georga III. donirane najprije British Museumu, a danas se čuvaju u Kartografskoj zbirci u British Library (BL)

Tab. 3 Call numbers and dimensions of maps which form part of King George III's collection of topographical maps donated to the British Museum, housed today in the Cartographic Collection at the British Library (BL)

| Otok / Island | Naslov karte / Chapter heading | Signatura / Call no. | Geografske koordinate / Geographic coordinates | Dimenzijske karte / Map dimensions |
|--------------------|-----------------------------------|-------------------------|---|---------------------------------------|
| Brač | <i>Isle de Brazza</i> | BL, K.Top.113.43 | $\phi = 43 \frac{3}{4}^\circ N, \lambda = 42 \frac{1}{2}^\circ E$ | 15,0 cm × 19,1 cm |
| Čiovo | <i>Isle de Bua</i> | BL, K.Top.113.44 | $\phi = 44^\circ N, \lambda = 42 \frac{1}{2}^\circ E$ | 15,1 cm × 18,3 cm |
| Korčula | <i>Isle de Cursola</i> | BL, K.Top.113.46 | $\phi = 42 \frac{3}{4}^\circ N, \lambda = 43^\circ E$ | 14,7 cm × 18,2 cm |
| Hvar | <i>Liesene</i> | BL, K.Top.113.47 | $\phi = 43 \frac{3}{4}^\circ N, \lambda = 43^\circ E$ | 14,8 cm × 18,3 cm |
| Pag | <i>Isle de Pago</i> | BL, K.Top.113.48 | $\phi = 45^\circ N, \lambda = 40 \frac{1}{2}^\circ E$ | 14,8 cm × 18,3 cm |
| Krk | <i>Isle de Veggia</i> | BL, K.Top.113.49 | $\phi = 45 \frac{1}{2}^\circ N, \lambda = 39 \frac{1}{2}^\circ E$ | 15,0 cm × 18,1 cm |
| Ugljan i Pašman | <i>Isle de Zarre</i> | BL, K.Top.113.50 | nema oznaka | 14,8 cm × 17,9 cm |

Geografski sadržaj na Thevetovim kartama hrvatskih otoka

Svi hrvatski otoci prikazani na Thevetovim kartama su, bez obzira na njihovu stvarnu veličinu, umanjeni (bez matematički usustavljenog postupka jer, uz ostalo, karte nisu nastale kao rezultat geodetske izmjere) u skladu s dimenzijama bakrenih ploča u svrhu bakrotiska. Polje svake karte omeđeno je unutrašnjim i vanjskim okvirom, a po sredini međuokvirnoga prostora brojkama su ispisane vrijednosti geografske širine i geografske dužine u decimalnom sustavu, a koje se odnose na koordinate središta prostora prikazanog na karti (tab. 4). Karta Ugljana i Pašmana pritom čini izuzetak. Na toj karti brojčane vrijednosti koordinata nisu upisane, no kao i na svim ostalim kartama ucrtane su crtice koje predstavljaju isječke slike paralela i meridijana.

Vrijednosti geografske širine izražene su, uobičajeno, u odnosu na ravnicu ekvatora, dok se za početni meridijan Thevet vrlo vjerojatno koristio onim koji prolazi kroz São Miguel u Azorima (oko $25,50^{\circ}$ zapadno od Greenwicha). Razlike u iznosu geografske širine na Thevetovim kartama i „stvarne“ geografske širine geometrijskih centara otoka koje je prikazao na kartama ($\Delta\phi$) nalaze se u rasponu od $0,09^{\circ}$ do $0,54^{\circ}$. Razlike geografskih dužina ($\Delta\lambda$), kada se izraze u odnosu na meridijan koji prolazi kroz São Miguel, iznose od $0,03^{\circ}$ do $0,77^{\circ}$. Primjerice, za Krk je Thevet zapisao vrijednost geografske širine na kojoj se nalazi Gerovo u Gorskom kotaru, a za Čiovo vrijednost geografske širine na kojoj se nalazi Knin. Također, po Thevetu se Čiovo i Brač nalaze na istoj geografskoj dužini, dok je u stvarnosti Brač istočnije od Čiova.

Ipak, vrijednosti koordinata koje je zapisao, kad ih se kontekstualizira u skladu s razdobljem u kojem je Thevet djelovao i točnosti njegovih kartografskih prikaza općenito, prikladno je ocijeniti kao podatke razmjerno visoke točnosti iz nekoliko razloga. Prvo, nije moguće sa sigurnošću utvrditi da je Thevet provodio ikakvu egzaktnu izmjjeru na otocima koje je prikazao, pa tako ni mjerjenje geografske širine (koje je tada bilo moguće razmjerno točno odrediti na temelju opažanja visine Sunca i

Geographic content on Thevet's maps of the Croatian islands

All the Croatian islands depicted on Thevet's maps, regardless of their actual size, were reduced (using no standardised mathematical methods, since the maps were not the result of geodetic surveys) in order to match the dimensions of the copper plates used for printing. Each map field is bordered by an inner and outer frame, while the latitudes and longitudes, expressed in the decimal system, can be found in the inter-frame area and refer to the coordinates of the centre of the area shown on the map (Tab. 4). The map of Ugljan with Pašman is the exception. The numerical values of the central coordinates are not written on this map, but as with all the others, lines are inserted representing excerpts of images of parallels and meridians.

Latitude values are, as usual, expressed relative to the plane of the equator the plane of the equator, while the prime meridian Thevet used was probably the one passing through São Miguel in the Azores (about 25.50° W of Greenwich). The differences in the latitudes on Thevet's maps and the “actual” latitudes of the geometric centres of islands shown on his maps ($\Delta\phi$), range from 0.09° to 0.54° . Differences in longitude ($\Delta\lambda$), when expressed in relation to the meridian passing through São Miguel, range from 0.03° to 0.77° . For example, Thevet's recorded latitude of Krk is in reality the latitude of Gerovo in Gorski Kotar, and latitude of Čiovo on his map is actually the latitude of Knin. Also, according to Thevet, both Čiovo and Brač were on the same longitude, while in reality Brač lies to the east of Čiovo.

However, when the values of the coordinates he noted are contextualised in accordance with the period in which Thevet was active and the accuracy of his cartographic representations in general, it is appropriate to assess the data as being of reasonably high accuracy for several reasons. First, it is not possible to establish with certainty that Thevet carried out any exact land surveys on the islands he depicted, or even measured the latitudes (which at that time could be determined relatively accurately by measuring the height of certain celestial bodies like the Sun and Polaris). Also, at the time Thevet was preparing the maps, a method for the accu-

Polarne zvijezde). Također, u vremenu u kojem je Thevet priredio karte metoda točnoga određivanja geografske dužine još nije bila poznata, stoga je nije bio u mogućnosti osobno primjeniti. Pogreške geografske širine po iznosima slične su pogreškama geografske dužine, zbog čega je opravdano pretpostaviti da je vrijednosti svih koordinata preuzeo iz nekoga starijeg izvora. Drugo, metoda određivanja „stvarnih“ središnjih točaka otoka provedena u ovom istraživanju je računalna, a svodi se na izračunavanje geometrijskih centara otoka prikazanih uz pomoć vektorskih objekata. Međutim, nije moguće odrediti koje je točno objekte u prirodi Thevet odredio za središta otoka koje je prikazao, ako je uopće pristupio određivanju središnjih koordinata na taj način. Treće, razmjerno deformirani i disproportionalni prikazi otoka impliciraju da mu geometrijska točnost prikaza nije bila prioritet ili da mu postojeci korpus geografskih spoznaja nije bio dovoljno velik da bi tu točnost postigao i da je to htio. Thevet, primjerice, na karti Paga nije prikazao čitav otok, nego samo njegov jugoistočni dio iako prikaz ostavlja dojam „zaokružene cjeline“, a nije sa sigurnošću moguće utvrditi zašto je tako postupio.

rate measurement of longitude had not yet been invented, so he could not have applied it in his own work. The latitude and longitude errors on his maps show similar values, so it is reasonable to assume that all these coordinates were obtained from an older source. Second, the method of pinpointing the “actual” centre point of any given island carried out in this study is purely computational, and was done by calculating the geometric centres of islands represented by digital objects in vector graphics. However, it is not possible to determine exactly which objects in nature Thevet assigned as the centres of the islands he mapped, if this was even the method he used to determine central coordinates. Third, the rather deformed and disproportionate depictions of the islands imply that geometric accuracy was not a high priority for him, or that the corpus of geographic knowledge he possessed was not large enough to achieve accuracy even if he had wanted to do so. For example, on the map of Pag, Thevet did not map the entire island, but only its south-eastern part, although the map gives the impression of it being a “rounded whole”, and it is not possible to determine with certainty why he did this.

Tab. 4. Geografske koordinate središnje točke unutar polja karte i stvarne središnje točke tih otoka
 Tab. 4 Geographical coordinates of the central points within the map field and the actual central points of these islands

| Otok / Island | Geografska širina (ϕ) / Latitude (ϕ) | | | Geografska dužina (λ) / Longitude (λ) | | | |
|--------------------|--|---------------------|--------------|---|---------------------------------|----------------------------------|------------------------------|
| | Na karti / On map | Stvarna / Actual | $\Delta\phi$ | Na karti / On map | Stvarna / Actual (Greenwich) | Stvarna / Actual (São Miguel) | $\Delta\phi$ (São Miguel) |
| Krk | 45,50° N | 45,07° N | 0,43° | 39,50° E | 14,61° E | 40,11° E | 0,61° |
| Pag | 45,00° N | 44,46° N | 0,54° | 40,50° E | 15,03° E | 40,53° E | 0,03° |
| Ugljan i Pašman | - | 44,01° N | - | - | 15,26° E | 40,76° E | - |
| Čiovo | 44,00° N | 43,50° N | 0,50° | 42,50° E | 16,29° E | 41,79° E | 0,71° |
| Brač | 43,75° N | 43,32° N | 0,43° | 42,50° E | 16,64° E | 42,14° E | 0,36° |
| Hvar | 43,25° N | 43,16° N | 0,09° | 43,00° E | 16,73° E | 42,23° E | 0,77° |
| Korčula | 42,75° N | 42,94° N | 0,19° | 43,00° E | 16,90° E | 42,40° E | 0,60° |

Na svim kartama ucrtane su kompasne ruže s označenim kardinalnim i interkardinalnim stranama svijeta. Sjever je označen slovom T (*Tramontana*) i stiliziranim vrškom magnetne igle, dok su druge strane svijeta označene početnim slovima talijanskih naziva koji su bili uvriježeni širom Sredozemlja: G (*Greco*; sjeveroistok), L (*Levante*; istok), S (*Scirocco*; jugoistok), O (*Ostro*; jug), A (*Affricone*; jugozapad), P (*Ponente*; zapad) i M (*Maestro*; sjeverozapad). Iz glavnih i sporednih strana svijeta zrakasto se šire kompasne crte ili rumbi u intervalima od 45° (rezolucija ruže od četiri zrake kompasa). Na pet karata rumb sjever – jug ucrtan je usporedno s bočnim stranama okvira karata. Pritom je na karti Ugljana i Pašmana učinio pogrešku na način da je čitavu kompasnu ružu zakrenuo za $+90^\circ$, pa oznaka za smjer sjevera na karti (*Tramontana*) pokazuje istok prikazanoga prostora. Na preostalim dvjema kartama rumb sjever – jug nije ucrtan usporedno s bočnim rubovima karte, već postoji otklon od -6° na prikazu Čiova i -14° na prikazu Paga. Ako se izuzme pogreška zakretanja kompasne ruže na prikazu Ugljana i Pašmana, glavne osi pružanja otoka prikazanih na kartama se na razini opažanja čine razmjerno u skladu sa svojim stvarnim vrijednostima. Po georeferenciranju karata utvrđeno je postojanje rotacije prikaza u odnosu na pravac sjever – jug kao posljedice transformacije i to na način da je prikaz Brača pritom zarotiran za -25° , Čiova za -31° (-25° ako se uzme u obzir rotacija rumba sjever – jug od -6°), Korčule za -3° , Hvara za -23° , Paga za $+60^\circ$ ($+46^\circ$ ako se uzme u obzir rotacija rumba sjever – jug od -14°), Krka za $+19^\circ$ te Ugljana i Pašmana za $+78^\circ$. Budući da zbog izrazito niske redundancije ulaznih podataka ovaj postupak s kartometrijskoga gledišta nije reprezentativan, dobivene vrijednosti rotacije prikaza treba uzeti sa zadrškom. One, naime, ne mogu poslužiti kao dokaz o egzaktnom „raskoraku“ njegovih kvantitativnih podataka i stvarnih vrijednosti, već jedino kao dodatno uporište prepostavke o Thevetovu nedovoljno dobru poznavanju prostora koji je kartirao i o visokoj vjerojatnosti da u svrhu izrade karata nije provodio mjerena.

Prikaz velikoga dijela otoka, prije svega obalne crte, na Thevetovim kartama izrazito odstupa od

Compass roses with marked cardinal and inter-cardinal points of the compass are drawn on all the maps. North is indicated by the letter T (*Tramontana*) and the stylised tip of a magnetic needle, while other points are indicated by the initial letters of Italian names that were common throughout the Mediterranean: G (*Greco*; northeast), L (*Levante*, east), S (*Scirocco*; southeast), O (*Ostro*; south), A (*Affricone*; southwest), P (*Ponente*; west) and M (*Maestro*; northwest). Compass lines or bearings at 45° intervals (the resolution of the rose of four compass points) radiate from the major and secondary points. Five maps contain north-south bearing drawn parallel to the sides of the map frame. He made a mistake on the map of Ugljan with Pašman by rotating the entire compass rose $+90^\circ$, therefore the mark indicating north on the map (*Tramontana*) actually shows east in the displayed area. On the remaining two maps, the north-south bearings are not drawn parallel to the lateral edges of the map, but there is a tilt of -6° on the Čiovo map and of -14° on that of Pag. Excluding the error of rotating the compass rose on the map of Ugljan with Pašman, the main axes of the islands' geographic direction shown on the maps seem proportionate to their true values. Geo-referencing of the maps revealed the rotation of the depiction in relation to the north-south direction as a consequence of transformation, so that the depiction of Brač was rotated by -25° , Čiovo by -31° (-25° if the tilt of the northern bearing is taken into account: south -6°), Korčula by -3° , Hvar by -23° , Pag by $+60^\circ$ ($+46^\circ$ if the tilt of the north-south bearing of -14° is taken into account), Krk by $+19^\circ$, and Ugljan with Pašman by $+78^\circ$. Due to the extremely low redundancy of the input data, this procedure cannot be considered representative from a cartometric perspective, so the obtained values of the rotations of the displayed areas should be taken with reserve. That is to say, they cannot serve as proof of an exact “discrepancy” between Thevet’s quantitative data and actual values, but are merely an additional reason for assuming his insufficient knowledge of the areas he mapped and the high probability that he did not perform any land surveys prior to his map production.

Thevet’s depictions of large parts of the islands, primarily coastlines, are very different from their actual

njihova stvarnoga izgleda. Izobličenja na pojedinih kartama takva su da gotovo onemogućuju prepoznavanje osnovnih elemenata obalne crte i geomorfološke oblike koji umnogome fizionomski određuju otočni krajolik. Premda su i drugi autori karata hrvatskih otoka koje su objavljene u izolarama tijekom druge polovine 16. st. učinili velike greške, Thevet je u svojoj imaginaciji prostornih oblika i odnosa među prikazanim geografskim objektima bio „maštovitiji“. Teško je s velikom sigurnošću utvrditi kako je mogao učiniti tako velike pogreške, posebno jer je, kako je naveo u poglavljju o otoku Krku, osobno video te otroke (tijekom hodočasničkoga putovanja u Svetu zemlju i u druge dijelove istočnoga Sredozemlja od 1549. do 1554., o kojem je pisao u djelu *Cosmographie de Levant*): *Stoga mi još samo preostaje predstaviti vam prikaz nekoliko otoka koji je okružuju* (Sklavoniju – op. a.), **koje sam video u tim krajevima** (podebljali autori): *između ostalih otok Krk, kako ga se imenuje na starim kartama Sredozemnog mora* (Thevet, 1586: 42r). Više je mogućih objašnjenja za Thevetova izobličenja i druge pogreške na kartografskim prikazima hrvatskih otoka. Svakako je najvažniji razlog taj što francuski kraljevski kozmograf nije primijenio niti jedan relevantan geodetski postupak (kao što to nisu činili ni drugi njegovi suvremenici, ali ni mnogi drugi kartografi do 18. st.). K tomu, Thevet se na otocima zadržao vrlo kratko i nije imao vremena za detaljnija terenska opažanja pa se pripremajući karte za *Velik izolar i peljar* kao predlošcima koristio kartama mletačkih kartografa koje su bile objavljene u njihovim izolarama tiskanim u više izdanja u drugoj polovini 16. st. Na to posljednje upućuje i činjenica da je najviše pogrešaka učinio u pogledu prikaza otoka Krka i Paga, koje prije njega mletački kartografi (G. F. Camocio, S. Pinargent, G. Franco, G. Rosaccio i dr.) nisu detaljnije prikazivali. Naime, prikazi tih otoka, izrađeni od mletačkih i drugih autora, u pravilu su postojali isključivo na kartama na kojima je prikazano čitavo Jadransko more ili njegov veći dio. U takve karte se, primjerice, mogu ubrojiti različite inačice Ptolemejeve *V. karte Europe* (s prikazom Ilirika) te karte Hrvatske i susjednih zemalja, no sve su one bile izradene u mnogo sitnijim mjerilima u odnosu na mjerila karata objavljenih u izolarama (usp. Marković, 1993; Kozličić, 1995).

appearances. The distortions on individual maps are so great that it is almost impossible to identify the basic elements of the coastline and the geomorphological formations that determine the island landscapes physiognomically. Although huge mistakes were also made by other authors of maps of the Croatian islands published in isolarios during the second half of the 16th century, Thevet was certainly more ‘imaginative’ in his way of depicting spatial forms and relations between geographical objects. It is difficult to say for sure how he came to make such serious errors, especially since, as he claimed in the chapter on the island Krk, he visited these islands personally (during a pilgrimage to the Holy Land and travels to other parts of the eastern Mediterranean between 1549 and 1554, which he wrote about in *Cosmographie de Levant*). ‘Therefore, it remains for me to present to you a depiction of the few islands that surround it (he was referring to Sclavonia), **which I saw in these parts** (authors’ emphasis): including the island of Krk, as it is named on old maps of the Mediterranean Sea’ (Thevet, 1586: 42r). There are several possible explanations for Thevet’s distortions and other errors in his cartographic representations of the Croatian islands. Certainly, the most significant is that the French royal cartographer did not use any relevant geodetic methods and procedures (neither did his contemporaries or most other cartographers until the 18th century). In addition, Thevet spent only a short time on the islands and could not carry out more detailed field observations, so while preparing the maps for his *Le Grand Insulaire et Pilotage*, he used maps by Venetian cartographers, published in isolarios printed in several editions during the second half of the 16th century, as templates. Among other things, this can also be seen by the fact that he made the most mistakes with his depictions of the islands of Krk and Pag, which had not been depicted in detail by earlier Venetian cartographers (Camocio, Pinargent, Franco, Rosaccio, and others). In fact, the only depictions of these islands by Venetian and other authors were as a rule found exclusively on maps showing the entire Adriatic Sea, or most of it. These maps may have included various versions of Ptolemy’s *Fifth Map of Europe* (which showed Illyricum) and maps of Croatia and the neighbouring countries, however all were made on much smaller scales than those published in isolarios (cf. Marković, 1993; Kozličić, 1995).

Tab. 5. Okvirni izračun modula mjerila Thevetovih karata
Tab. 5 Approximate calculation of scale modules of Thevet's maps

| Karta / Map | Krajnje točke mjerena / Measurement endpoints | | Udaljenost na karti (mm) / Distance on map (mm) | Udaljenost na HTRS96/ TM (km) / Distance in HTRS96/ TM, with scale factor of 1 (km) | Modul mjerila / Scale factor | Prosječni modul mjerila / Average scale factor | Zaokruženi prosječni modul mjerila / Rounded average scale factor |
|-----------------|---|--------------------------------|---|---|------------------------------|--|---|
| Krk | rt / Cape Šilo | rt / Cape Škuljica | 177 | 37,7 | 212.994 | 246.969 | 250.000 |
| | rt / Cape Škuljica | rt / Cape Glavotok | 150 | 30,8 | 205.333 | | |
| | rt / Cape Glavotok | rt / Cape Šilo | 62 | 20,0 | 322.581 | | |
| Pag | uvala / Bay Dinjiška | uvala / Bay Vlašići | 20 | 4,9 | 245.000 | 274.881 | 275.000 |
| | uvala / Bay Vlašići | uvala / Bay Stara Novalja | 21 | 6,4 | 304.762 | | |
| Korčula | Vela Luka | Korčula | 96 | 34,3 | 357.292 | 210.985 | 210.000 |
| | Korčula | uvala / Bay Luka | 30 | 1,4 | 46.667 | | |
| | uvala / Bay Luka | Lumbarda | 21 | 3,8 | 180.952 | | |
| | Lumbarda | Vela Luka | 144 | 37,3 | 259.028 | | |
| Ugljan i Pašman | rt / Cape Sv. Petar | Barotul | 150 | 34,2 | 228.000 | 217.408 | 220.000 |
| | Barotul | rt / Cape Borovnjak | 46 | 9,3 | 202.174 | | |
| | rt / Cape Borovnjak | rt / Cape Sv. Petar | 195 | 43,3 | 222.051 | | |
| Čiovo | rt / Cape Okrug | trogirski most / Trogir Bridge | 70 | 4,4 | 62.857 | 75.588 | 75.000 |
| | trogirski most | rt / Cape Čiova | 135 | 11,8 | 87.407 | | |
| | rt / Cape Okruk | rt / Cape Čiova | 200 | 15,3 | 76.500 | | |
| Hvar | rt / Cape Pelegrin | Stari Grad | 65 | 18,3 | 281.538 | 289.341 | 290.000 |
| | Stari Grad | rt / Cape Sućuraj | 150 | 49,6 | 330.667 | | |
| | rt / Cape Sućuraj | Hvar | 131 | 61,7 | 470.992 | | |
| | Hvar | rt / Cape Pelegrin | 54 | 6,5 | 120.370 | | |
| | Hvar | Stari Grad | 51 | 12,4 | 243.137 | | |
| Brac | Milna | Pučišća | 99 | 24,4 | 246.465 | 234.548 | 235.000 |
| | Pučišća | Sumartin | 68 | 14,4 | 211.765 | | |
| | Sumartin | Bol | 105 | 18,1 | 172.381 | | |
| | Bol | Milna | 58 | 19,0 | 327.586 | | |
| | Bol | Pučišća | 55 | 11,8 | 214.545 | | |

Zbog nepostojanja egzaktne matematičke osnove i prethodno provedene izmjere prostora te zbog niske redundancije ulaznih podataka mjerila Thevetovih karata nije moguće precizno utvrditi, već samo okvirno pretpostaviti. Njihova zaokružena prosječna mjerila, dobivena na uzorcima od dva do pet mjerjenja po karti, iznose oko 1 : 250 000 (ne uzimajući pritom u obzir kartu Čiova čije mjerilo iznosi oko 1 : 75 000), no razlike između vrijednosti izračunanih duž različitih pravaca mjerjenja iznimno su velike (tab. 5). Primjerice, maksimalni raspon izračunanih modula za prikaz Hvara je od oko 225 000, dok na prikazu Korčule taj maksimalni raspon iznosi oko 310.000. Uz opću deformiranost prikaza obalne crte, a s time i oblika otoka, tako velike razlike u vrijednostima modula posljedica su lokalnih preuvečavanja pojedinih prostornih elemenata, primjerice grada Korčule ili uvale u kojoj se nalazi luka grada Hvara. Pojednostavljenogovoreći, Thevetove karte nemaju jedinstveno linearno mjerilo kojim je izražen odnos duljina na karti prema odgovarajućim duljinama u stvarnom prostoru. Vrijednosti mjerila razlikuju se za pojedine prostorne cjeline unutar istoga polja karte, a to vrijedi i za karte G. F. Camocia, G. Rosaccia i A. Milla.

Na temelju usporedbe Thevetovih kartografskih prikaza s prikazima istih otoka na kartama G. F. Camocia, G. Rosaccia i A. Milla posve je razvidno da se Thevetovi prikazi razlikuju kartografikom i geografskim sadržajem (sl. 2 – sl. 21). Thevetova kartografika slična je onoj koju je primijenio Thomaso Porcacchi u izolaru *L'isole più famose del mondo* objavljenom prvi put u Veneciji 1572. Međutim, Porcacchi u svom izolaru nije prikazao niti jedan hrvatski otok. G. Tolias (2007; 2012) navodi da je za graviranje karata namijenjenih za objavljivanje u *Velikom izolaru i peljaru* Thevet angažirao tiskaru Thomasa de Leua.

Razlike između geografskoga sadržaja na Thevetovim kartama i sadržaja na kartama mletačkih i drugih kartografa koji su u drugoj polovini 16. st. objavljivali izolare vjerojatno je rezultat metodologije prikupljanja i obrade prostornih podataka. Dok su veliki izdavači poput G. F. Camocia i G. Rosaccio, a njihovim tragom i mnogi drugi, kom-

Due to the lack of exact mathematical bases and spatial measurements taken in advance, and due to the low redundancy of the input data, the scale of Thevet's maps cannot be determined precisely, but only roughly conjectured. Average values from measurements obtained on samples of two to five distances per map give a result of about 1: 250,000 (not taking into account the Čiovo map, which is drawn at a scale of approximately 1: 75,000), however, the differences between values calculated along different lines of measurement are extremely large (Tab. 5). For example, the maximum range of calculated scale factors of the map of Hvar is approximately 225,000, while the map of Korčula has a maximum range of about 310,000. In addition to the general deformation of the coastline, and thus the shape of the islands, such large differences in scale factor values are a consequence of local exaggeration of certain spatial features, such as the town of Korčula, or the bay where the harbour of Hvar is located. Simply put, Thevet's maps were not made in a unified linear scale to express the relationship between lengths on the map and their equivalents in actual space. Scale values differ for individual spatial units within the same map field, and the same rule applies to maps by G. F. Camocio, G. Rosaccio, and A. Millo.

Based on a comparison of Thevet's cartographic representations and depictions of the same islands on maps by G. F. Camocio, G. Rosaccio, and A. Millo, it is quite clear that Thevet's representations differ in terms of cartographic and geographic content (Fig. 2 – Fig. 21). Thevet's cartography is similar to Thomaso Porcacchi's in his isolario *L'isole più famose del mondo*, first published in Venice in 1572. However, Porcacchi did not depict a single Croatian island in his work. G. Tolias (2007; 2012) states that Thevet hired the printer Thomas de Leu to engrave the maps intended for publication in *Le Grand Insulaire et Pilotage*.

The differences between the geographical content on Thevet's maps and on maps by Venetian and other cartographers, who published isolarios in the second half of the 16th century, were probably the result of the methods used for collecting and processing spatial data. While major publishers such as G. F. Camocio and G. Rosaccio, fol-



Sl. 2. Thevetova karta otoka Krka (British Library, King George III's Topographical Collection, K.Top.113.49)
Fig. 2 Thevet's map of the island of Krk (British Library, King George III's Topographical Collection, K.Top.113.49)

pilirali podatke iz različitih pomorskih, vojnih i administrativnih izvora, angažirajući pritom kao crtače bakroresce brojne suradnike, a među njima i dvojicu Šibenčana, Martina Rotu Kolunića i Božu Bonifačića (Natale Bonifacio),⁴ A. Thevet, slično kao i A. Millo, osobno je obišao prikazane hrvatske otoke. Međutim, Thevetovi i Millovi uvidi, percepcije i fokusi su se razlikovali. Thevet je bio kozmograf zainteresiran za stvaranje opće slike o geografskim objektima, podjednako ističući različite geografske sadržaje, one prirodne i one društvene i ekonomske. S druge strane, Millo je bio pomorac (Kljajić i Razum, 2015) i u izradi

lowed by many others, compiled data from various maritime, military, and administrative sources, and hired many copper engravers as collaborators, including two from Šibenik: Martin Rota Kolunić and Božu Bonifačić (Natale Bonifacio)⁴. A. Thevet, like A. Millo, personally visited the Croatian islands he depicted. However, Thevet and Millo's insights, perceptions, and focuses differed. Thevet was a cosmographer interested in creating a general picture of geographical objects while emphasising various geographical features, whether natural, social, or economic. On the other hand, Millo was a sailor (Kljajić and Razum, 2015) and implement-

4 A. Kisić je argumentirano raspravila Kolunićeva i Bonifačićeva autorstvo pojedinih karata u Camociovim i Rosacciovim djelima, o čemu je do sada u znanstvenoj literaturi bilo dosta površnih navoda (Kisić, 2005).

4 A. Kisić discussed Kolunić's and Bonifačić's authorship of certain maps in Camocio's and Rosaccio's works, regarding which there have been many superficial references in the scientific literature to date (Kisić, 2005).



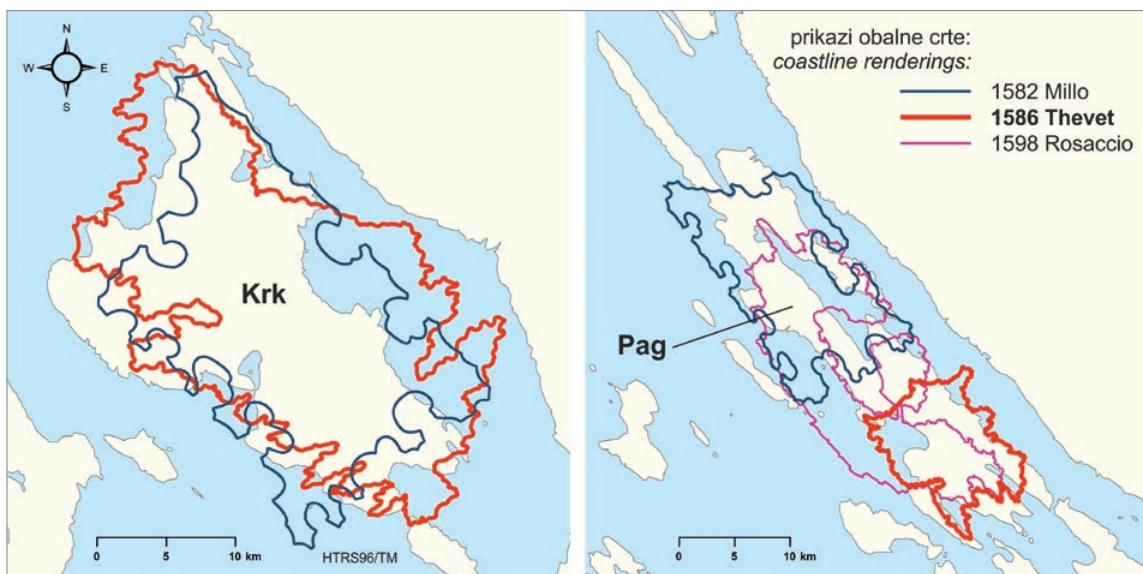
Sl. 3. Millova karta otoka Krka (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 17b)
Fig. 3 Millo's map of the island of Krk (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 17b)

karata iz svoga izolara primjenjivao je kartografi-ku svojstvenu onoj portulanskih karata, s pren-a-glašavanjem horizontalne sastavnice razvedenosti obalne crte (rtovi, uvale, zaljevi).

Imajući na umu da su mnogi suvremenici i znanstvenici osporavali znanstvene domete A. Theveta, posebno zbog njegove sklonosti pretje-rivanju, što je uključivalo i falsificiranje, pri interpretaciji njegovih kartografskih prikaza hrvatskih otoka potrebno je s oprezom donositi prosudbe i zaključke. Thevet je miješao geografsku stvarnost (koju je i sam spoznavao na svojim putovanjima) s izmišljotinama. Bio je sklon dopunjavati svoje bi-lješke i sjećanja s putovanja „činjenicama“ koje su njegovo pripovijedanje trebale učiniti dojmljivim i drugaćijim u odnosu na istovrsna djela njegovih

ed cartographies characteristic of portolan charts when creating the maps for his isolario, emphasising the horizontal components of the coastline indentation (capes, coves, bays).

Bearing in mind that many of his contemporaries (and many scientists) disputed A. Thevet's scientific achievements, especially because of his tendency to exaggerate, which included falsification, we should exercise caution when making relevant judgments and conclusions concerning his cartographic representations of the Croatian islands. Thevet mixed geographical reality (with which he was familiar from his travels) with fiction. He tended to supplement his travel notes and recollections with “facts” to make his narrative more impressive and distinct from similar works by his contempo-



Sl. 4. Vektorizirani prikazi razlike u izgledu obalne crte otoka na Thevetovim kartama i izgledu obalne crte na kartama njegovih suvremenika: otoci Krk i Pag

Fig. 4 Vectorised renderings of differences in the appearance of the coastline of the islands on Thevet's maps and maps by his contemporaries: the islands Krk and Pag

Izvor: kartografske podloge: Claus i dr. (2017)

Source: cartographic background: Claus et al. (2017)

suvremenika (Destombes, 1972). Zbog toga je teško, barem u pogledu prikaza hrvatskih otoka, jasno razdvojiti pogreške koje je činio iz nehaja ili zbog nedostatka kvalitetnih geografskih spoznaja od onoga što je u geografskom sadržaju neobično i upućuje na falsificiranje. Primjerice, teško je sa sigurnošću utvrditi da je na Pagu u drugoj polovini 16. st. bilo toliko stabala naranača kao što bi to proizašlo iz prikaza i bilješke ispisane na karti toga sjevernodalmatinskog otoka (*Orangiers*), a da istodobno agrumi nisu prikazani na otocima srednje i južne Dalmacije na kojima ih ima mnogo više.

Na prikazu otoka **Krk** Thevet je pogrešno smjestio grad Krk (*Ville de Weggia*) podalje od obale, u zaobalju Baške, dok je uz Puntarsku dragu prikazao Vrbnik (*Verbenique*) koji se zapravo nalazi na obalama Vinodolskoga kanala, nasuprot mjestu na kojem je prikazan. Baščansku dragu ucrtao je sjevernije od njezina stvarnoga položaja. Na više mjesta ucrtani su vodotoci. Crtežima stiliziranih uzvisina prikazao je brdovit krčki krajolik, a na sjevernom dijelu otoka, u zaobalju Omišlja i Njivica, bilješkom je naznačio prostor

rarijes (Destombes, 1972). Therefore, it is difficult, at least in terms of his depiction of the Croatian islands, to clearly distinguish the mistakes he made out of negligence or a lack of good geographical knowledge from what is likely falsification. For example, it is difficult to establish with certainty whether there were really as many orange trees on the island of Pag in the second half of the 16th century as seems to be the case from the depiction and notes on his map (*Orangiers*). At the same time, he did not depict any citrus trees at all on the islands of central and southern Dalmatia, where they were in fact more abundant.

In the depiction of the island **Krk**, Thevet incorrectly located the town Krk (*Ville de Weggia*) away from the coast in the hinterland of Baška, while he showed Vrbnik (*Verbenique*) next to Puntarska Draga, though it is actually located on the banks of the Vinodol Channel, opposite the place where it is shown. He placed Baščanska Draga further north than its actual position. Watercourses were drawn in several places. He used stylised drawings of mounds to depict the hilly landscape of Krk and, in the hinterland of Omišalj and Njivice on the northern part of the island, he drew attention to wheat



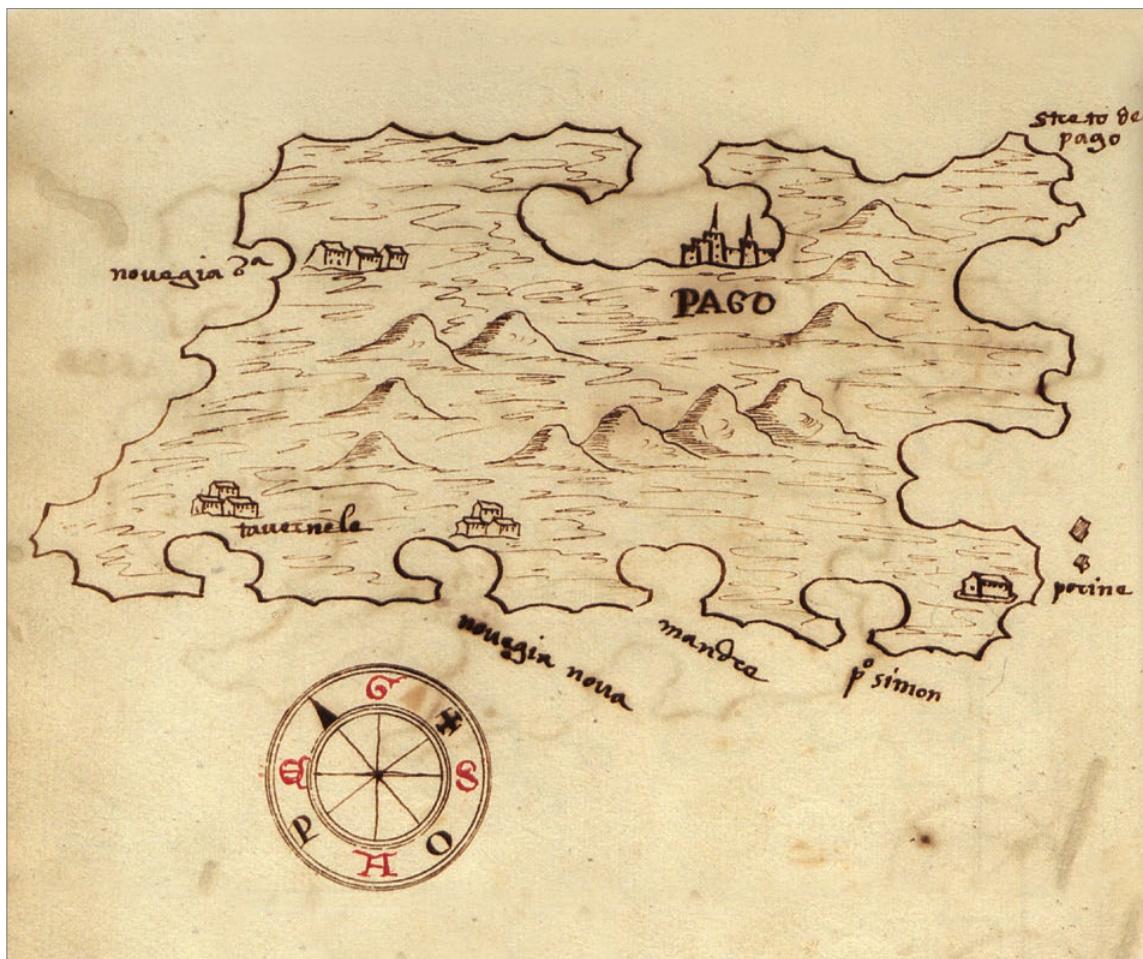
Sl. 5. Thevetova karta otoka Paga (British Library, King George III's Topographical Collection, K.Top.113.48)
Fig. 5 Thevet's map of the island of Pag (British Library, King George III's Topographical Collection, K.Top.113.48)

zasijan pšenicom. Na više mesta crtežima stabala prikazao je šumski pokrov, a stiliziranim crtežima grmlja makiju. Uz obalu Krka prikazani su otočići te među njima brodovi na jedra i brodice pokretane veslima. Mnoštvo brodica upućuje na razvijeno lokalno pomorstvo, posebno u pogledu ribolova i komunikacije s kopnom i među susjednim otocima. Na zapadnom dijelu otoka bilješkom je označio samostan (*Oratoire*). Vjerovatno je riječ o samostanu franjevaca trećoredaca u Glavotoku. U unutrašnjosti umjesto na sjevernom dijelu otoka Thevet je prikazao *Fortresse Unine*. Riječ je o Kaštelu, utvrđenoj rezidenciji knezova Krčkih (Frankopana) u Omišlju.

Nasuprot Krku Thevet je pogrešno ucrtao Jablanac (*Lablana en Dalmatie*), koji se zapravo na-

fields in a note. In several places, he showed the forest cover with drawings of trees, and the macchia with stylised drawings of bushes. Along the coast of Krk, islands are shown, and among them sailboats and boats powered by oars are drawn. The number of boats indicates that local maritime activities were well-developed, especially in terms of fishing and communication with the mainland and neighbouring islands. On the western part of the island, he marked a monastery (*Oratoire*). It was probably the monastery run by Franciscans of the Third Order in Glavotok. Thevet depicted the *Fortresse Unine* inland instead of on the northern part of the island. This was Kaštela, the fortified residence of the princes of Krk (the Frankopans) in Omišalj.

Opposite Krk, Thevet erroneously drew Jablanac (*Lablana en Dalmatie*), which is actually located on



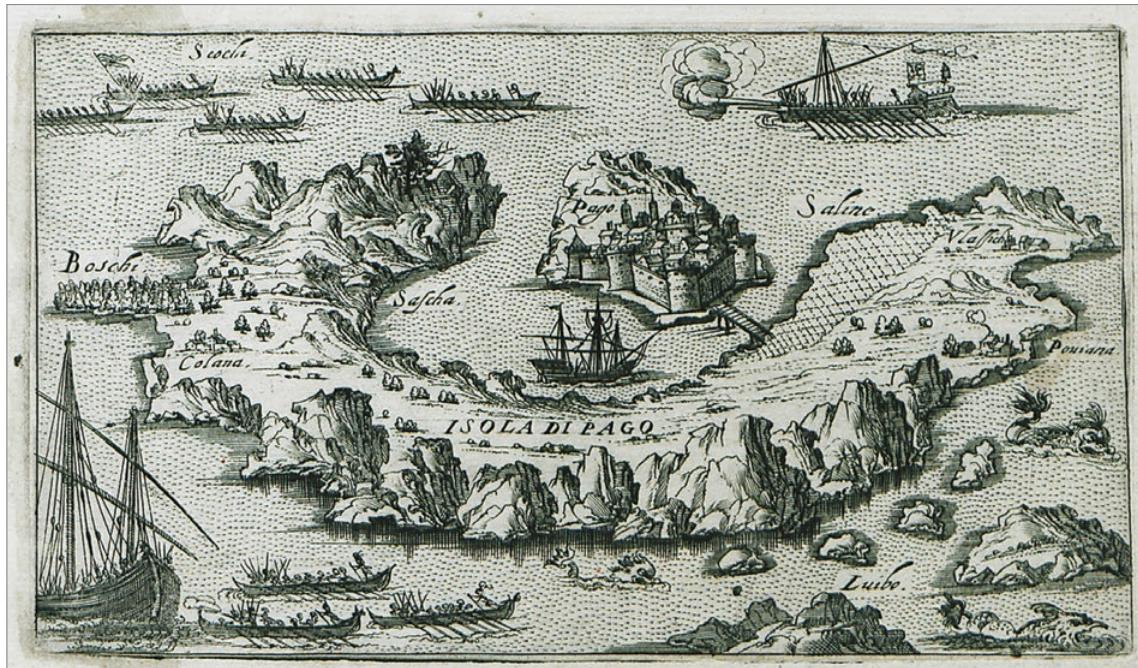
Sl. 6. Millova karta otoka Paga (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 18b)
Fig. 6. Millo's map of the island of Pag (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 18b)

lazi na kopnu podno Velebita, i to nasuprot otočku Rabu. To što je Jablanac geografski smjestio u Dalmaciju odgovara njegovu tekstu u poglavljju o otoku Čiovu u kojemu je naveo da Dalmaciji pripada cijeli primorski prostor između Raše i Drima.

Na karti Krka, a tako i na svim drugim kartama hrvatskih otoka (osim Paga) na morskom je prostoru ispisano ime *La Mer Adriatique*. Tako su u to doba činili i drugi kartografi, uključujući i mletačke, koji su tijekom 17. i 18. st. redovito za Jadransko more koristili ime *Golfo do Venezia*, iskazujući tako mletačke težnje za pravnom jurisdikcijom te političkim i gospodarskim utjecajem na cijelom Jadranu premda ga cijeloga nisu posjedovali.

the mainland at the foot of Velebit, opposite the island of Rab. The fact that Jablanac was geographically located in Dalmatia corresponds to his text in the chapter on the island of Čiovo, in which he stated that the entire coastal area between Raša and Drim belonged to Dalmatia.

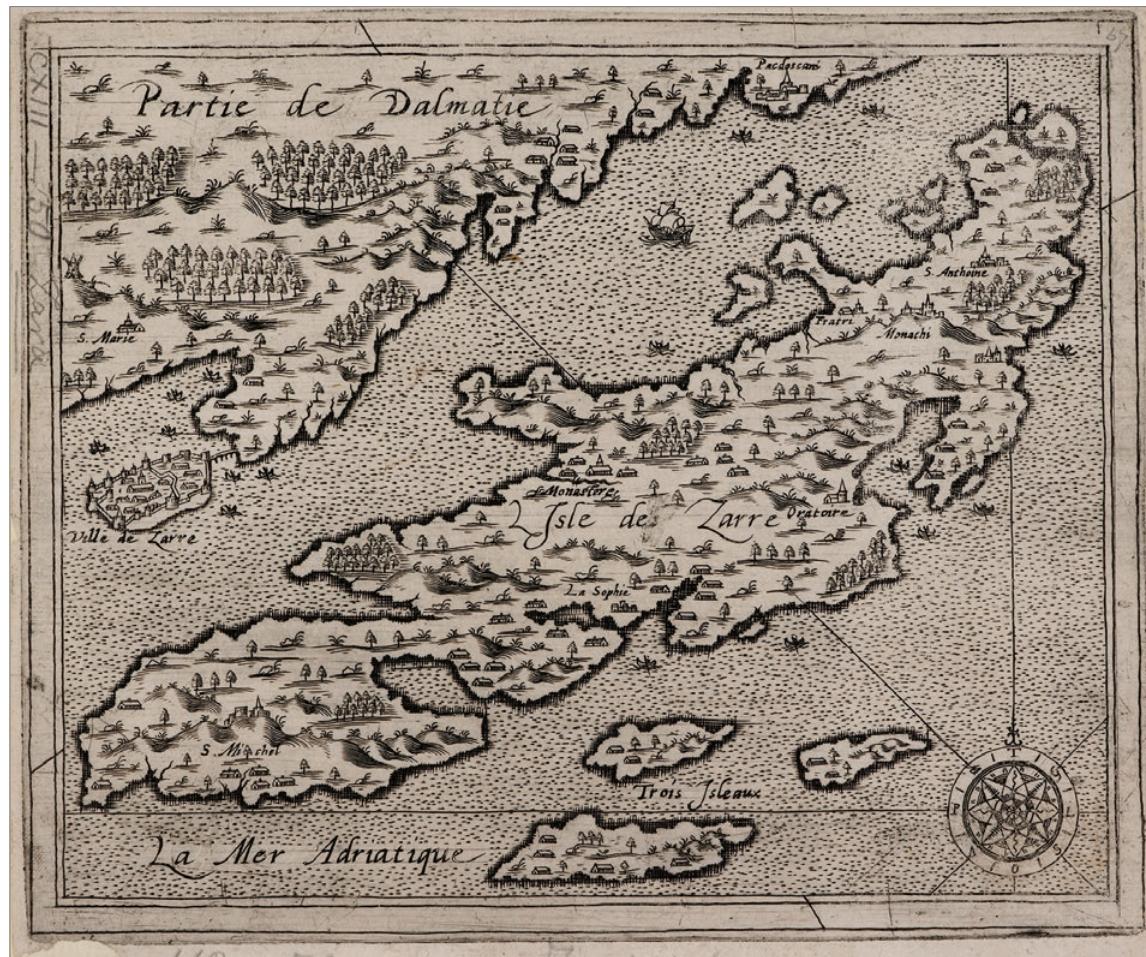
On the map of Krk and all other maps of the Croatian islands (except Pag), the name *La Mer Adriatique* is written in the sea area. This was also done by other cartographers at the time, including the Venetians, who regularly used the name *Golfo do Venezia* for the Adriatic during the 17th and 18th centuries, expressing Venetian aspirations for legal jurisdiction and political and economic influence throughout the Adriatic, although they did not control it in its entirety.



Sl. 7. Rosacciova karta otoka Paga (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views)
Fig. 7 Rosaccio's map of the island of Pag (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travelers' Views)

Na karti otoka **Paga** jedini razmijerno vjerojostojan prikaz odnosi se na jugoistočni dio toga otoka s Dinjiškom uvalom, uvalom Vlašići i uvalom Stara Povljana. Thevet nije prikazao dugački i na otoku prepoznatljiv poluotok Lun premda je ucertao otočić Dolfin (*Delfin*) koji se nalazi zapadno od njega. Zbog toga se stječe dojam da uopće nije prikazan cijeli otok, već samo njegov jugoistočni dio (uvale Dinjiška, Vlašići i Stara Povljana) koji je iz nepoznata razloga poistovjećen s cijelim otokom. Premda je u poglavljju o Pagu naveo da se na tom otoku nalazi grad s jednom od najboljih luka na hrvatskim otocima, Thevet je grad Pag prikazao na obali Košljunskoga zaljeva, a duboko uvučeni Paški zaljev nije prikazao (pa tako nije prikazao ni paške solane, najvažniji ekonomsko-geografski sadržaj na otoku, što A. Millo i G. Rosaccio nisu propustili učiniti). Slično kao što je učinio na karti otoka Krka, brdovit krajolik prikazao je crtežom stiliziranih uzvisina koji ne daju pouzdanu informaciju ni o oblicima tih uzvisina ni o visinskim odnosima i nagibima padina. Crtežima stabala i grmlja prikazan je biljni pokrov podjednako na cijelom otoku pa korisnici te karte, s pretpostavkom da se u osnovnim crtama

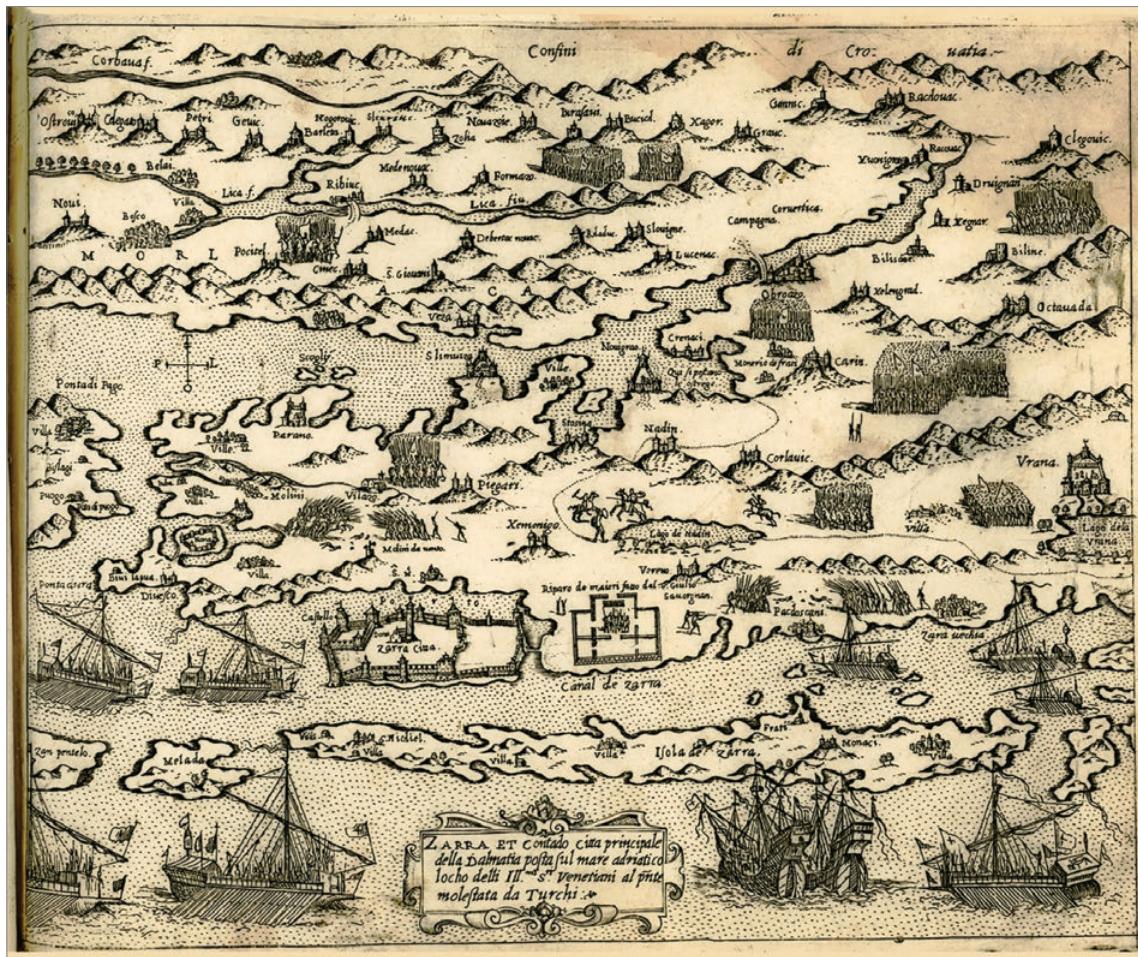
On the map of the island of **Pag**, the only relatively credible depiction is of the south-eastern part of the island with Dinjiška, Vlašići, and Stara Povljana bays. Thevet did not depict the elongated, instantly recognisable Lun Peninsula, although he did draw the Dolphin Islet (*Delfin*) located to its west. Therefore, one gets the impression that the whole island is not shown, but only its south-eastern part (Dinjiška, Vlašići and Stara Povljana bays), which is identified as the whole island for reasons unknown. Although he stated in the chapter on Pag that there was a town on the island with one of the best harbours in the Croatian islands, Thevet showed the town of Pag on the shores of Košljun Bay, but did not show the deeply indented Pag Bay (so he did not show Pag's salt pans, the most important economic-geographical feature of the island, which A. Millo and G. Rosaccio studiously noted). Similar to the map of the island of Krk, he depicted the hilly landscape with drawings of stylised hills that do not provide any reliable information about the shapes of these hills, nor about the relative heights or inclines of the slopes. Drawings of trees and shrubs show vegetation distributed equally throughout the island, so assuming that the actual spatial arrange-



Sl. 8. Thevetova karta Ugljana i Pašmana (British Library, King George III's Topographical Collection, K.Top.113.50)
Fig. 8 Thevet's map of Ugljan and Pašman (British Library, King George III's Topographical Collection, K. Top.113.50)

prostorni raspored biljnoga pokrova podudarao s onim današnjim, nisu mogli steći uvid u razlike između sjeveroistočnih padina otoka velikoga nagiba izloženih mehaničkim udarima bure i posolici te otočnih površina manjega nagiba i debljih slojeva tla obraslih biljnim pokrovom u zavjetri ni u odnosu na buru. Thevet je na karti prikazao Vlašice (*Bislagi*) i dva sakralna objekata, crkve sv. Nikole (*S. Nicolas*) i sv. Dionizija (*S. Denis*). Dok su se u Thevetovo vrijeme na Pagu nalazile dvije crkve sv. Nikole (jedna na Punti Paga i druga u Povljani), nije poznato da je neki od više desetaka paških sakralnih objekata (ili barem neki oltar u nekom od njih) bio posvećen svetom Dioniziju (usp. Hilje, 2011), jednomu od zaštitnika Francuske.

ment of the vegetation corresponds to the present situation, users of the map would not have guessed there was any difference between the north-eastern slopes of the island with their steep inclines exposed to the force of the *bora* wind and sea spray, and the vegetation cover on the shallower slopes where there were deeper layers of soil in locations sheltered from *bora*. Thevet showed Vlašići (*Bislagi*) and two ecclesiastical buildings, the churches of St. Nicholas (*S. Nicolas*) and St. Dionysius (*S. Denis*). While there were two churches dedicated to St. Nicholas on Pag in Thevet's time (one in Punta Pag and the other in Povljana), it is not known whether any of the dozens of church buildings on Pag (or at least an altar in one of them) was dedicated to Saint Dionysius (cf. Hilje, 2011), one of the patron saints of France.



Sl. 9. Camociova karta Ugljana i Pašmana (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views)
Fig. 9 Camocio's map of Ugljan and Pašman (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travelers' Views)

Na karti **Ugljana i Pašmana** ta su dva otoka prikazana kao jedna geomorfološka cjelina. U arhivskim dokumentima ta se dva otoka od srednjeg vijeka redovito navode kao posebni otoci, ali su istodobno na kartama tijekom renesanse redovito prikazivani kao jedan otok. Razlog je tomu činjenica da plitki i uski tjesnac (Mali Ždrelac) među njima nije bio plovni (produbljen je i proširivan u nekoliko navrata tek od 19. st.; Faričić, 2012). Ugljanski dio Thevetova Zadarskog otoka mnogo je kraći od pašmansko dijela toga istog otoka. Među oblicima obalne razvedenosti nije moguće sa sigurnošću identificirati niti jednu uvalu ili rt, iako se može naslutiti da je autor bar pokušao prikazati najveće otočne uvale – Sutomišćicu na sjeveroistočnoj obali Ugljana, Veliku i Malu Lamjanu na jugozapadnoj obali toga otoka te uvale

On the map of **Ugljan with Pašman**, the two islands are shown as one geomorphological unit. In archive documents, these two islands have been regularly mentioned as separate islands since the Middle Ages, yet they were usually shown as one island on maps during the Renaissance. The reason was that the shallow, narrow strait (Mali Ždrelac) between them was not navigable (it has been deepened and widened several times since the 19th century; Faričić, 2012). The Ugljan part of Thevet's Island of Zadar is much shorter than the Pašman part. We cannot identify with certainty any bay or cape among the forms of coastal indentation, although we can assume that the author at least tried to show the largest island bays—Sutomišćica on the northeast coast of Ugljan, Velika and Mala Lamjana on the southwest coast, and Soline, Žinčana and Landin on the southwest coast of Pašman. The



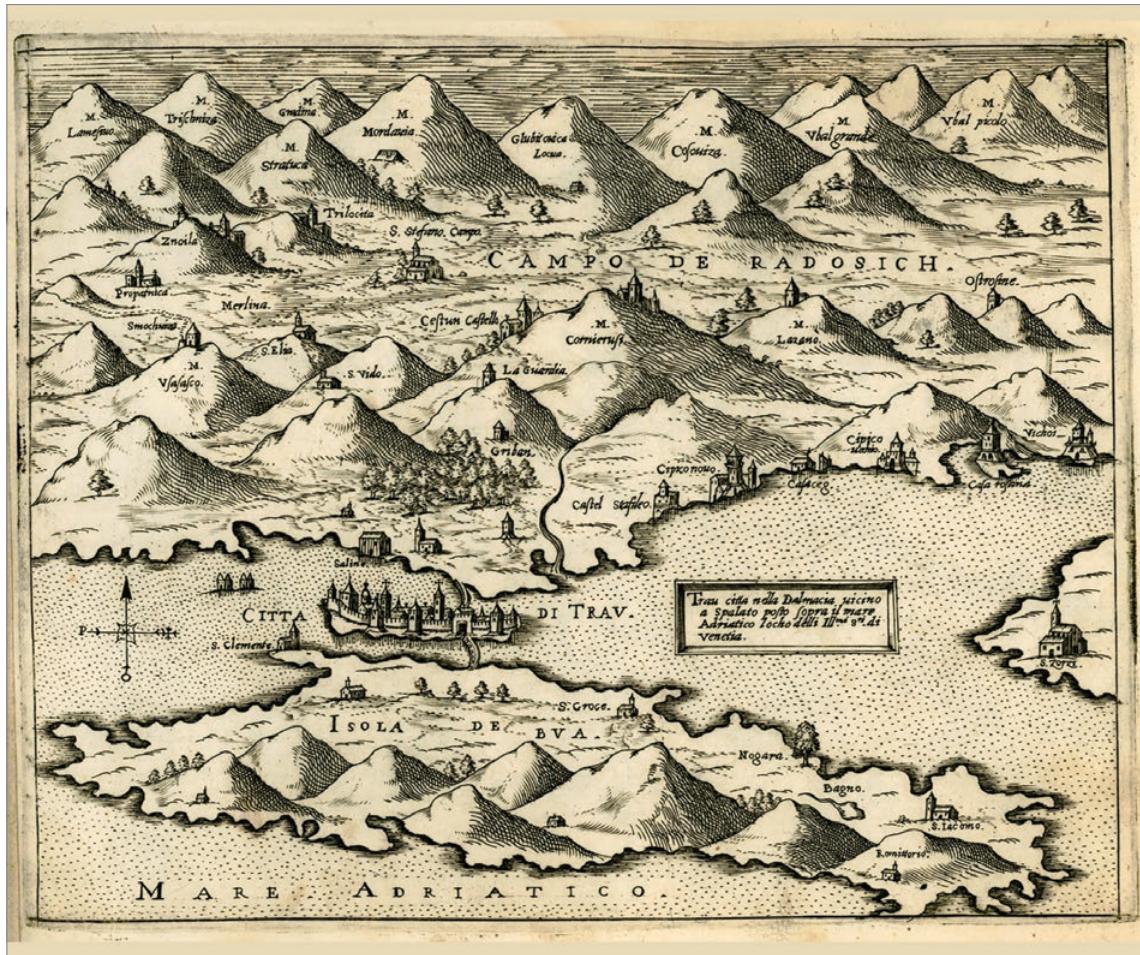
Sl. 10. Thevetova karta otoka Čiova [British Library, King George III's Topographical Collection, K.Top.113.44]
Fig. 10 Thevet's map of the island of Čiovo [British Library, King George III's Topographical Collection, K.Top.113.44]

Soline, Žinčana i Landin na jugozapadnoj obali Pašmana. Biljni je pokrov prikazan slično kao i na otocima Krku i Pagu, ali po Thevetu on je na Ugljanu i Pašmanu bio oskudniji. Podno Sv. Mihovila na Ugljanu pogrešno je prikazano naselje s jugozapadne umjesto sa sjeveroistočne strane otoka.

Na pomorske aktivnosti u Zadarskom, Pašmanskom i Srednjem kanalu upućuju prikazi brodica na vesla, kao i crtež jedrenjaka. Na otoku su prikazana tri samostana: franjevački u Ugljanu (*Monastere*) i u Kraju (*Fratri*) te benediktinski na Ćokovcu povrh Tkona (*Monachi*). Takoder je prikazana crkva sv. Antuna opata u Tkonu (*S. Anthoine*). Zapadno od Ugljana prikazana su tri otoka (*Trois ileaux*), sva tri s naseljima. Teško je u nji-

vegetation is shown similarly to that on the islands of Krk and Pag, though according to Thevet, it was scarcer on Ugljan and Pašman. One settlement is incorrectly depicted on the southwest of Ugljan, at the foot of St. Mihovil, instead of on the northeast side of the island.

Maritime activities in the Zadar, Pašman and Central Channels are indicated by depictions of rowing boats and a drawing of a sailing ship. There are three monasteries on the island: the Franciscan monasteries in Ugljan (*Monastere*) and Kraju (*Fratri*); and the Benedictine monastery in Ćokovac above Tkona (*Monachi*). The church of St. Anthony the Abbot in Tkona is also shown (*S. Anthoine*). Three islands are depicted to the west of Ugljan (*Trois ileaux*), all with settlements. It is difficult to recognise any of them with certainty,



Sl. 11. Camociova karta otoka Čiova (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views)
Fig. 11 Camocio's map of the island of Čiovo (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travelers' Views)

ma bez zadrške prepoznati bilo koji od zadarskih otoka jer to mogu biti Molat, Sestrunj i Rivanj ili pak Sestrunj, Iž i Rava. Sigurno je samo to da nije riječ o Dugom otoku jer na to ne upućuje njihova veličina, mnogo manja od one Ugljana i Pašmana. Na nasuprotnom kopnu prikazan je grad Zadar te zadarsko-biogradsko priobalje na kojemu su među naseljima imenom zabilježene samo Pakoštane.

Na karti Čiova prikazani su taj otok, grad Trogir, dio kaštelanskoga primorja i dio poluo-toka Marjana. Na prikazu čiovske obale prepoznatljivi su zaljev Sladun, uvala Movarčica i Punta Okruk. Thevet je na istočnom dijelu otoka prikazao dvije duboko uvučene uvale kojih na otoku zapravo nema. Primjenio je istu

though they may be Molat, Sestrunj and Rivanj; or Sestrunj, Iž and Rava. None of them can possibly be Dugi Otok, because they are much smaller than Ugljan with Pašman. Zadar and the Zadar-Biograd coast are shown on the mainland opposite, where only the settlement Pakoštane is labelled by name.

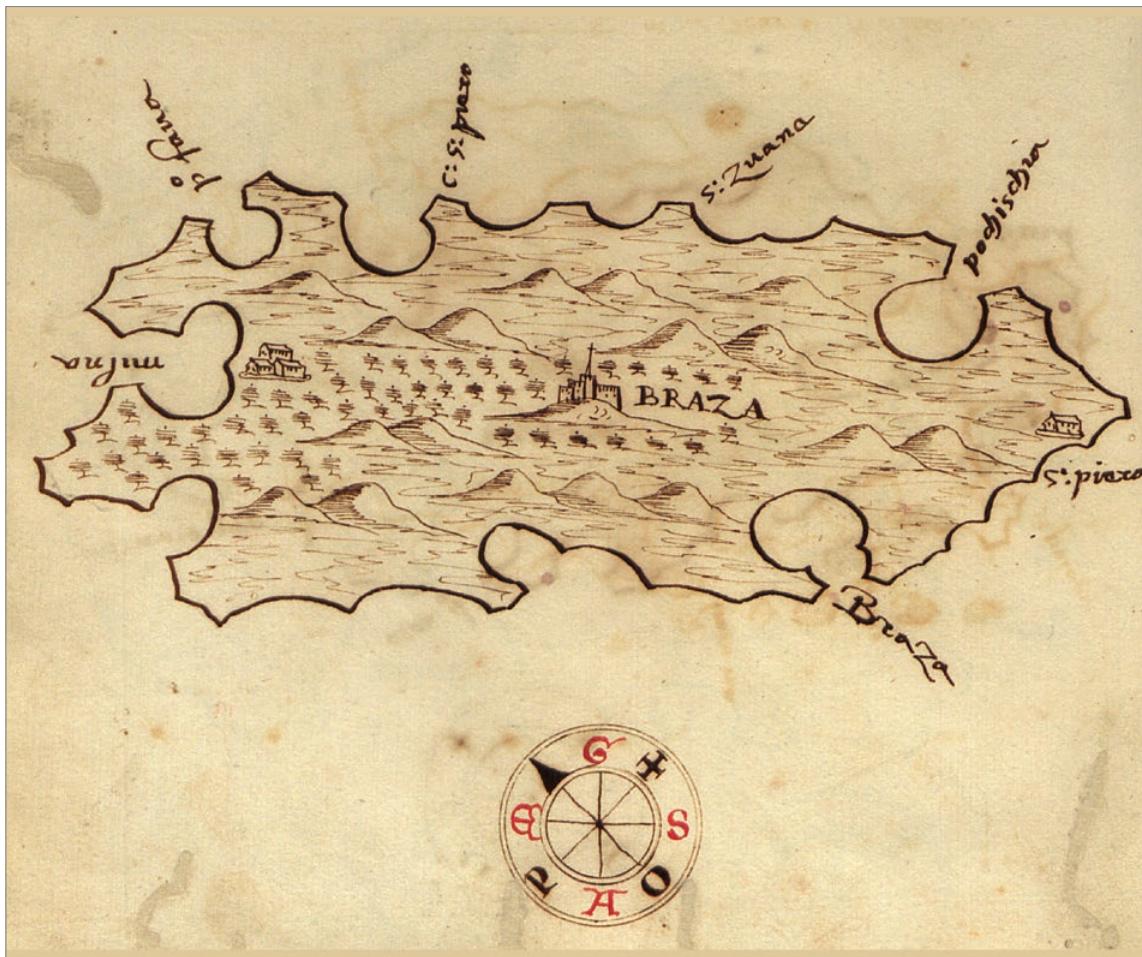
The map of Čiovo shows the island, Trogir, part of the Kaštela coast and part of the Marjan Peninsula. In the depiction of the Čiovo coast, Sladun Bay and Movarčica Bay in Punta Okruk are recognisable. Thevet showed two deeply indented coves on the eastern side of the island which do not actually exist. He applied the same cartography in terms of depicting the island relief and vegetation as on his other maps of the Croatian islands, though this does not really enable a reconstruction of these natural spatial elements. In



Sl. 12. Thevetova karta otoka Brača [British Library, King George III's Topographical Collection, K.Top.113.43]
Fig. 12 Thevet's map of the island of Brač [British Library, King George III's Topographical Collection, K.Top.113.43]

kartografiku pri prikazu otočnoga reljefa i biljnoga pokrova kao što je to učinio i na drugim kartama hrvatskih otoka, a ona ne omogućuje rekonstrukciju tih prirodnih elemenata prostora. U tekstu o Čiovu pozvao se na kartu na kojoj su prikazani mostovi kojima su Čiovo i Trogir povezani s kopnjem. Prikaz je tih mostova točan, i bolje su smješteni nego oni na prikazima Čiova i Trogira na Camociovoj i Rosacciovoj karti. Kao i ta dvojica kartografa, Thevet je na istočnom dijelu Čiova prikazao veliku ujezerenu površinu (*Baing*, iskrivljeno od *Bagno* na kartama citiranih mletačkih autora). Takve hidrološke pojave na Čiovu više nema, ali u Slatinama (čije ime upućuje na pojave voda) ima mnogo zdenaca pa je Thevet vjerojatno prikazao hidrogeografsku pojavu kada je u vrijeme veće količine oborina

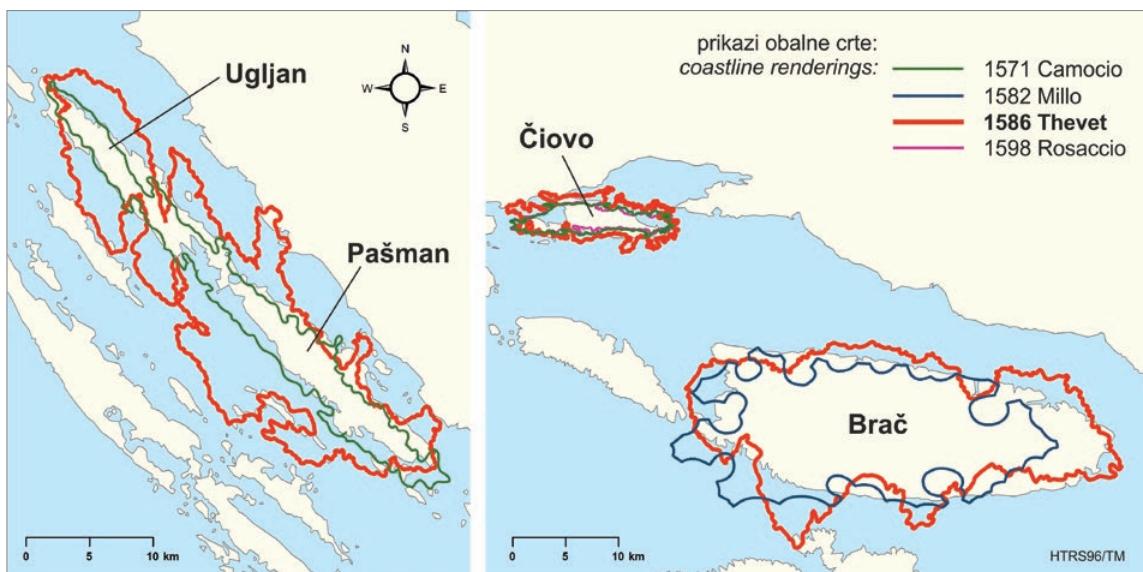
the text on Čiovo, he referred to a map showing the bridges that connected Čiovo and Trogir to the mainland. The depiction of these bridges is accurate; they are more precisely located than those on the depictions of Čiovo and Trogir by Camocio and Rosaccio. Like those two cartographers, Thevet depicted a large lake-like area in the eastern part of Čiovo (*Baing*, a distortion of *Bagno* on maps by the previously mentioned Venetian authors). This kind of hydrological phenomenon no longer exists on Čiovo, but there are many wells in Slatine (the name indicates the presence of water), so Thevet was probably showing a hydro-geographic phenomenon which occurred when the area between Slatine and Gaj, i.e. flooding during heavy rainfall. The ancient ruins mentioned in the text in *Le Grand Insulaire et Pilotage* are not shown on the island, which indicates that Thevet mixed up Čiovo and Sa-



Sl. 13. Millova karta otoka Brača (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 21b)
Fig. 13 Millo's map of the island of Brač (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 21b)

prostor između Slatina i Gaja bio poplavljen. Na otoku su prikazana tri sakralna objekta. Poput Camocia i Rosaccia na rtu Čubrijan na zapadnom dijelu Čiova Thevet je prikazao crkvu Sv. Klementa (*S. Clement*) iako je riječ o crkvi sv. Ciprijana. Točno je prikazao dominikanski samostan i crkvu sv. Križa u Arbaniji (*S. Croix*). Na istočnom dijelu Čiova prikazana je crkva sv. Jakova (*S. Jacques*). Ako je doista riječ o crkvi sv. Jakova, onda je ona prikazana na pogrešnom mjestu jer se taj sakralni objekt nalazi na dijelu otoka Čiova nasuprot gradu Trogiru (s kojim čini funkcionalnu i upravnu cjelinu). Na mjestu gdje je Thevet prikazao crkvu sv. Jakova nalazi se naselje Slatine s crkvama Uznesenja Blažene Djevice Marije i Gospe od Prizidnice.

lona in his writing. However, three church buildings are shown on the island. Like Camocio and Rosaccio, Thevet depicted the church of St. Clement (*S. Clement*) on Cape Čubrijan, in the western part of Čiovo, although it was actually the church of St. Cyprian. He accurately depicted the Dominican monastery and Holy Cross church in Arbania (*S. Croix*). The church of St. James (*S. Jacques*) is shown in the eastern part of Čiovo. If it really is the church of St. James, then it is shown in the wrong place, because that church is actually located on the part of the island opposite of Trogir (with which it formed a functional and administrative whole). The settlement of Slatine with the churches of the Assumption of the Blessed Virgin Mary and Our Lady of Prizidnica is in fact in the location where Thevet showed the church of St. James.



Sl. 14. Vektorizirani prikazi razlika u izgledu obalne crte otoka na Thevetovim kartama i izgledu obalne crte na kartama njegovih suvremenika: otoci Ugljan, Pašman, Čiovo i Brač

Fig. 14 Vectorised renderings of differences in the appearance of the coastline of the island on Thevet's maps and on maps by his contemporaries: the islands Ugljan, Pašman, Čiovo, and Brač

Izvor: kartografske podloge: Claus i dr. (2017)

Source: cartographic background: Claus et al. (2017)

Thevetov kartografski prikaz otoka **Brača**, osim onoga Millova, nema pandana u istovrsnim ostvarenjima drugih renesansnih kartografa. Nije poznata njegova motivacija da uz Milla jedini posebno istakne taj otok jer on nije imao važnost za plovidbu istočnom obalom Jadrana kakvu su imali, primjerice, Lošinj, Vis i Mljet, a koje taj francuski kozmograf (za razliku od Milla) nije prikazao. Na Braču je istakao tri uvale na južnoj strani otoka i jednu na sjeveroistočnoj obali. Dok je moguće samo naslutiti da je najzapadnija od južnih uvala jedna od onih na području Milne, za druge uvale na južnom dijelu Brača nije moguće dati ni tako uopćenu prostornu identifikaciju. Posebno istaknuta uvala na sjeveroistoku otoka (uz koju stoji bilješka koja upućuje na dobro sidrište) mogla bi biti ona uz koju su smještена Pučišća ili ona uz koju se nalaze Povlja jer su te dvije uvale najdublje uvučene na tom dijelu otoka. Na više mjestu Thevet je prikazao potoke, a onaj na istočnom dijelu Brača posebno je označio bilješkom (*Torrent*). Riječ je povremenim vodotocima koji jarugama otječu prema dnima bračkih uvala. Sudeći po prikazu biljnoga pokrova, on je po Thevetu na Braču siromašniji negoli je na svim drugim

Thevet's cartographic depiction of the island of **Brač** has no counterpart in similar achievements by other Renaissance cartographers, with the exception of Millo. His motivation for being the only person apart from Millo to draw particular attention to this island remains unknown, because it was not as important for sailing along the eastern Adriatic coast as were Lošinj, Vis, and Mljet, for example, which the French cosmographer (unlike Millo) did not depict. On Brač, he pointed out three bays on the south side of the island and one on the northeast coast. While it is only possible to guess that the westernmost of the southern bays is one of those in the area of Milna, the other bays in the southern part of Brač cannot be assigned even a general spatial identification. A particularly prominent bay in the northeast of the island (with a note indicating a good anchorage) could be the one by Pučišća or Povlja, because these two bays are the deepest in that part of the island. In several places, Thevet showed streams, and the one in the eastern part of Brač was marked with a note (*Torrent*). These were occasional watercourses that flowed through ravines to the bases of Brač's bays. Judging by the description of the vegetation, according to Thevet it was poorer on Brač than on



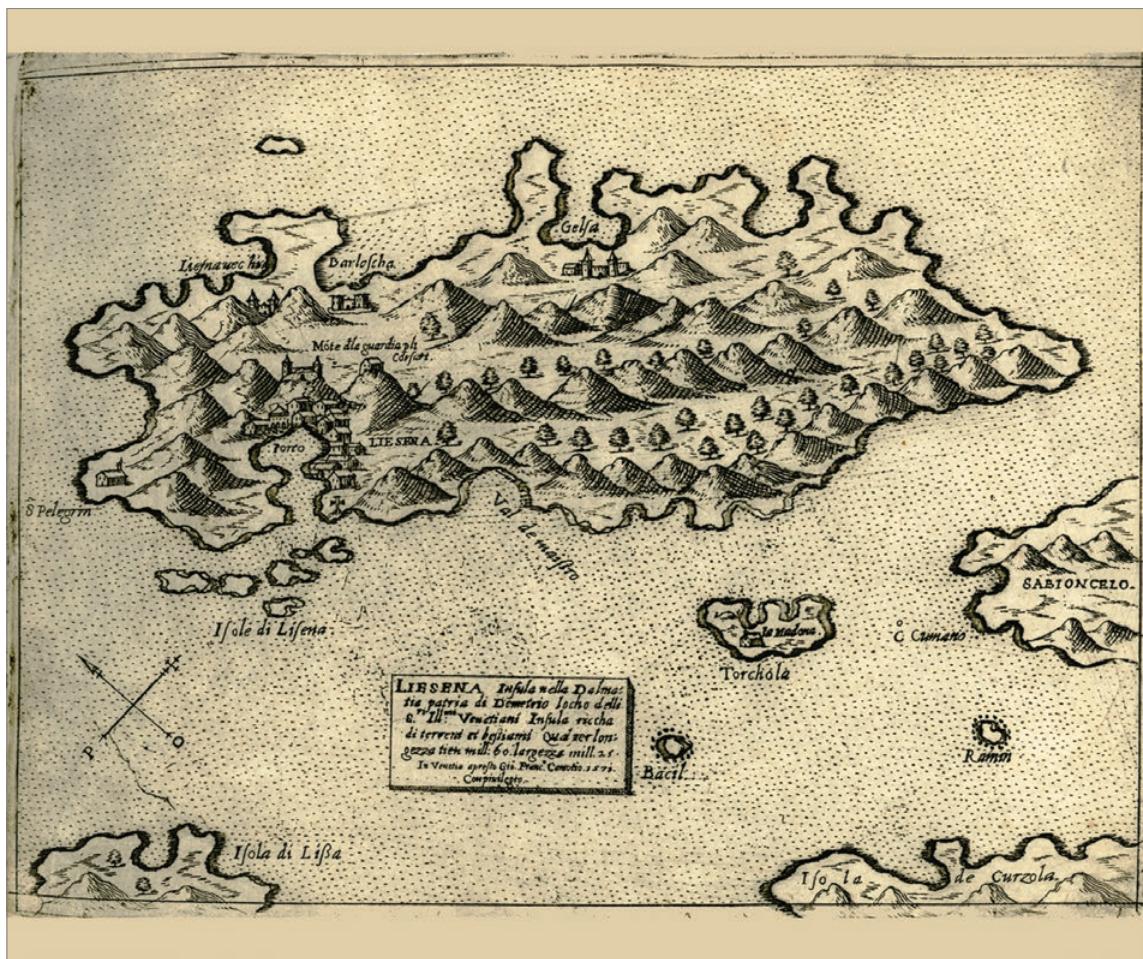
Sl. 15. Thevetova karta otoka Hvara (British Library, King George III's Topographical Collection, K.Top.113.47)
Fig. 15 Thevet's map of the island of Hvar (British Library, King George III's Topographical Collection, K.Top.113.47)

otocima. Zanimljiva je bilješka koju je Thevet ispisao na središnjem hispometrijski najistaknutijem dijelu otoka: *Monts aux esperviers*. U tom se dijelu Brača po tom autoru nalaze brda, odnosno staništa kobaca. Kobac ptičar (*Accipiter nisus*) je ptica zimovalica koja uobičajeno na Braču provodi zimske mjeseca (Cvitanić, 1984). Kobac tada nastanjuje i okolne otoke, a očito je Thevet pri svojem obilasku Brača opazio vrlo mnogo tih ptica kad im je posebno atribuirao otočne uzvisine i, k tomu, posvetio više rečenica u poglavljju o tom otoku.

Uz zapadnu obalu otoka Brača Thevet je prikazao mnoštvo otočića, a tu se zapravo nalazi samo otočić Mrduja. Na mjestu Bola prikazano je utvrđeno naselje koje nosi ime otoka (*Ville de*

all the other islands. He wrote an interesting note on the central, hypsometrically most prominent part of the island: *Monts aux esperviers*. In that part of Brač, according to the author, there were hills which were the habitat of sparrow-hawks. The sparrow hawk (*Accipiter nisus*) is a bird that usually spends the winter months on Brač (Cvitanić, 1984). It also inhabits the surrounding islands, and apparently Thevet noticed many of these birds during his tour of Brač, since he specifically attributed the island hills to them and also dedicated several sentences to them in the chapter on the island.

Along the west coast of the island of Brač, Thevet depicted many islets, while there is actually only one—the islet of Mrduja. Where the town of Bol is situated, a fortified settlement bearing the name of the island



Sl. 16. Camociova karta otoka Hvara (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views)
Fig. 16 Camocio's map of the island of Hvar (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travelers' Views)

Brazza). Na istom je mjestu utvrđeno naselje, ali bez imena, prikazao i A. Millo. Druga naselja na Braču Thevet nije imenovao, premda su prikazana crtežima kuća i crkava. Moguće je da je Theveta na takav prikaz Bola motivirala činjenica da se u tom naselju nalazi(o) veliki dominikanski samostan obrubljen zidinama.

Na prikazu otoka **Hvara** Thevet je, poput Camocia i Rosaccia, preuveličao luku grada Hvara koja je po njemu mnogo veća od Starogradskoga zaljeva (koji je od hvarske luke većim prikazao A. Millo). Možda je tako nastojao naglasiti značenje grada Hvara u pomorsko-geografskom sustavu Jadrana jer je taj otočni grad među svim otočnim naseljima u ranom novom vijeku doista bio najvažniji, a to je podrazumijevalo i značenje njegove

(*Ville de Brazza*) is shown. A. Millo also noted a fortified settlement in the same place, but did not name it. Thevet did not name other settlements on Brač, although they are depicted by drawings of houses and churches. It is possible that Thevet was motivated to represent Bol in this way by the fact that there was a large Dominican monastery surrounded by walls in the settlement.

In his depiction of the island of **Hvar**, like Camocio and Rosaccio, Thevet exaggerated the harbour of the town of Hvar, which according to him was much larger than Stari Grad Bay (unlike A. Millo, who mapped it as smaller). Perhaps he was trying to emphasise the importance of the town of Hvar in the maritime-geographical system of the Adriatic, as this island town was indeed the most important of all the



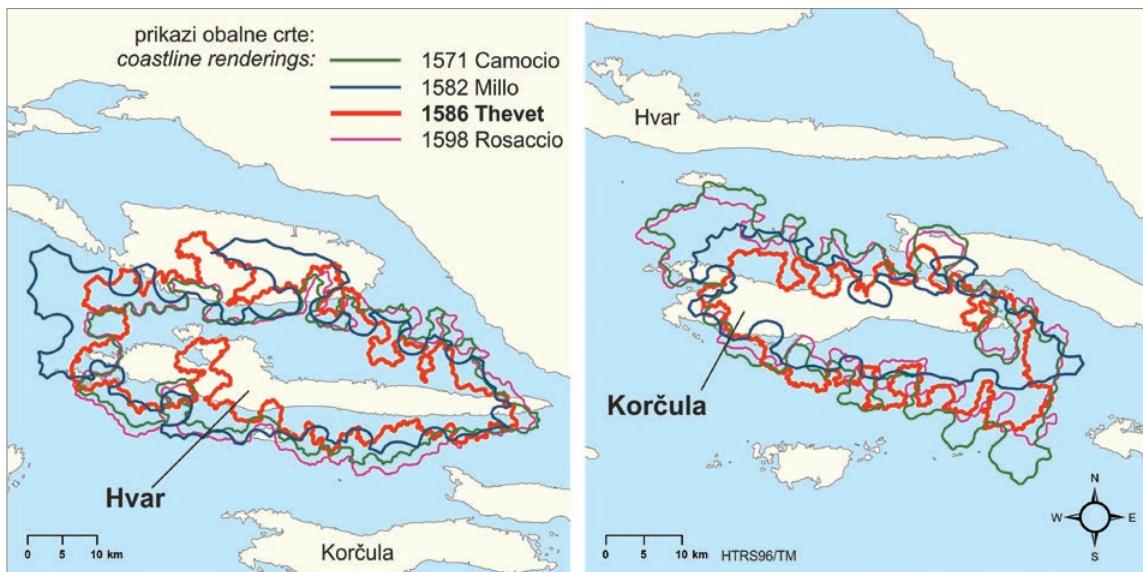
Sl. 17. Millova karta otoka Hvara (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 22a)
Fig. 17 Mill's map of the island of Hvar (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 22a)

luke (Duboković-Nadalini, 1962). Na to upućuje i Thevetov crtež većega broja brodova i brodica u hvarsкоj luci. U pročelju su hvarske luke prikazani Pakleni otoci (*Les Isles de Liesena*), istočno su Vela i Mala Milna (*Val de Mestro*), a južno od otoka Hvara prikazano je Šcedro (*Torchola*) s crkvom sv. Marije (*La Madona*). Prikaz reljefa poopćen je i shematisiran, a tako je i s prikazom biljnoga pokrova.

Uz grad Hvar (*Liesena*), koji je prikazan s mnogo detalja, posebno u pogledu fortifikacijskoga sustava, imenima su na karti otoka označeni Stari Grad (*Vieille Lesena*), Vrboska (*Barlos*) i Jelsa (*Gelso*). Posebno je imenovana i crkva sv. Pelegrina (*S. Pelegrin*) po kojoj ime nosi i najzapadniji hvarska rt. Općenito, Thevetov se prikaz Hvara umnogo-

Croatian island settlements in the early modern age, and therefore its harbour was also quite significant (Duboković-Nadalini, 1962). This is also indicated by Thevet's drawing of a large number of ships and boats in the harbour of Hvar. The Pakleni islands (*Les Isles de Liesena*) are shown in front of the harbour of Hvar; to the east are Vela and Mala Milna (*Val de Mestro*), and Šcedro (*Torchola*) is depicted to the south of the island of Hvar with the church of St. Mary (*La Madonna*). The depiction of the relief is generalised and schematic, as is the map depiction of the vegetation.

In addition to the town Hvar (*Liesena*), which is shown in great detail, especially in terms of the fortification system, the names marked on the map of the island are Stari Grad (*Vieille Lesena*), Vrboska (*Barlos*), and Jelsa (*Gelso*). The church of St. Pelegrin (*S. Pelegrin*)



Sl. 18. Vektorizirani prikazi razlika u izgledu obalne crte otoka na Thevetovim kartama i izgledu obalne crte na kartama njegovih suvremenika: otoci Hvar i Korčula

Fig. 18 Vectorised renderings of differences in the appearance of the coastline of the islands on Thevet's maps and on maps by his contemporaries: the islands Hvar and Korčula

Izvor: kartografske podloge: Claus i dr. (2017)

Source: cartographic background: Claus et al. (2017)

me podudara s onim na Camociovoj i Rosacciovoj karti toga otoka pa bi se s velikom sigurnošću moglo zaključiti da je, s obzirom na kronološki redoslijed nastanka tih karata, Camociova karta i Thevetu i Rosacciju poslužila kao predložak. Slično se može utvrditi i za kartografske prikaze Korčule. Za razliku od karata toga trojca, Millove su karte Hvara i Korčule, premda i one s mnogim izobličenjima, bolje, posebno u pogledu prikaza glavnih elemenata obalne crte. Millo je kao pomoćnik veliku pozornost pridavao sigurnosti plovidbe i mogućnostima sidrenja, tj. vezivanja brodova u sigurnim lukama pa je, zanemarujući unutrašnjost otoka, pozornost posvećivao obalnim oblicima relevantnim u terestričkoj navigaciji.

Na Thevetovu prikazu otoka **Korčule** nije moguće prepoznati izduženost toga južnoodaljinjskog otoka niti glavne elemente obalne razvedenosti. Primjerice, na zapadnom dijelu otoka nije dobro prikazan najveći zaljev na otoku – Vela Luka, a preveličani su prikazi pet uvala na južnom dijelu otoka. Zapadno od grada Korčule prikazane su četiri uvale u čijem je pročelju ispisana bilješka koja upućuje na to da je riječ o dobrom sidrištu (*Bonne*

is also named, which gave its name to the westernmost cape of Hvar. In general, Thevet's depiction of Hvar largely coincides with Camocio and Rosaccio's maps of the island, so we can conclude with great certainty that, given the chronological order of these maps, Camocio's map served both Thevet and Rosaccio as a template. The same can be said of the cartographic representations of Korčula. Unlike the maps by the aforementioned, Millo's maps of Hvar and Korčula are better, though there are also many distortions, especially in terms of depicting the main elements of the coastline. As a seafarer, Millo paid great attention to the safety of navigation and anchoring, i.e. mooring ships in safe harbours. While he neglected the interiors of islands, he paid attention to some extent to coastal features relevant to terrestrial navigation.

In Thevet's depiction of the island of **Korčula**, it is not possible to recognise the specific elongation of the island or the main elements of its coastal indentation. For example, in the western part of the island, the largest bay on the island (Vela Luka) is not depicted well, while the depictions of five bays in the southern part of the island are exaggerated. To the west of the town of Korčula, four bays are shown,



Sl. 19. Thevetova karta otoka Korčule (British Library, King George III's Topographical Collection, K.Top.113.46)
Fig. 19 Thevet's map of the island of Korčula (British Library, King George III's Topographical Collection, K.Top.113.46)

sonde). U cijelom akvatoriju Korčule prikazano je mnogo jedrenjaka, galija i brodica, što svjedoči o intenzivnim pomorskim aktivnostima.

U neposrednoj blizini otoka Korčule prikazani su otočići Pličića (*Ranin*), Zvirinovik (*P. Carbon*) (koji se nalazi ispred luke Karbuni), a skupina otočića istočno od Zvirinovika (Obljak, Kosor, Stupa, Crklica, Sridnjak i Vrhovnjak), prikazana je crtežom dva otoka i imenom *La Lime*. Na sjeveroistočnom dijelu prikazani su otok Badija s franjevačkim samostanom i crkvom Vele Gospe (*La Madona*) te dva otočića imenovana nesoni-mima *Fourches* i *Fornase*. Oni se odnose se na dva od mnogih otočića u skupini koju (uz Badiju) čine Lučnjak, Rogačić, Majsan, Vela i Mala Stupa, Vela i Mala Sestrica, Gojak, Planjak, Sutvara,

in front of which a note is written indicating a good anchorage (*Bonne sonde*). Many sailing ships, galleys and boats are shown in all the waters of Korčula, which testifies to its intensive maritime activities.

The islets Pličić (*Ranin*) and Zvirinovik (*P. Carbon*) located in front of a Karbuni port –are shown in the immediate vicinity of the island of Korčula, while islet group located eastern of Zvirovnik (Obljak, Kosor, Stupa, Crklica, Sridnjak and Vrhovnjak) is represented with of two islands named *La Lime*. On northeastern part of the map island Badija with the Franciscan monastery and the church of the Assumption of the Blessed Virgin Mary (*La Madona*) is shown together with two islets with the nesonyms *Fourches* and *Fornase*, referring to islets Lučnjak, Rogačić, Majsan, Vela and Mala Stupa, Vela



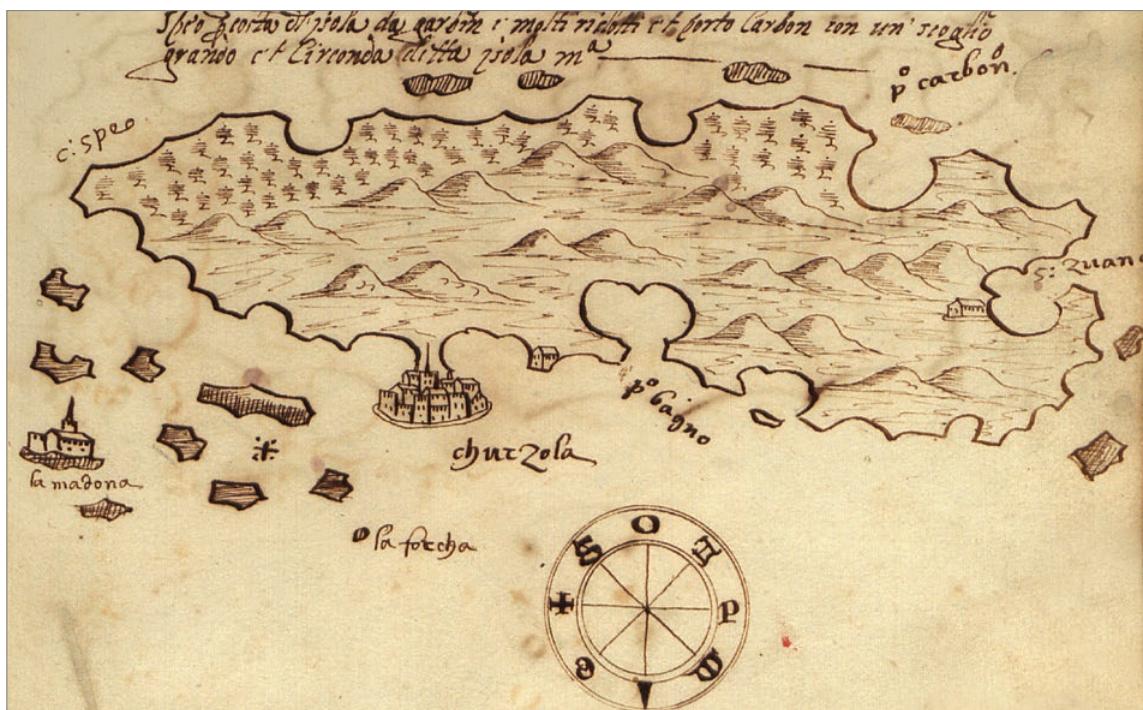
Sl. 20. Camociova karta otoka Korčule (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travellers' Views)
Fig.20 Camocio's map of the island of Korčula (Aikaterini Laskaridis Foundation, Piraeus, Travelogues – Travelers' Views)

Bisače, Vrnik, Kamenjak i Gubavac. Prikazan je dio poluotoka Pelješca kojemu Thevet nije ispisao ime, nego ga je označio bilješkom kojom upućuje na to da je riječ o dijelu Dalmacije (*Pais de Dalmatie*).

Prikaz krajolika je, uz crteže stiliziranih uzvrsina i biljnoga pokrova, dopunjena crtežom omeđenih obradivih čestica koje su na jednom mjestu bilješkom označene kao vrtovi (*Jardrins*). Te vrtote spomenuo je i u tekstu poglavlja o Korčuli. Thevet je na karti posebno označio grad Korčulu (*Cursola*), cijeli okružen bedemima (opet posve podudarno s njegovim opisom toga grada), a među naseljima imenovana je još samo Lumbarda (*Bombarde*). Na jugoistočnom dijelu otoka prikazane su dvije kule, jedna je atribuirana vitezovima

and Mala Sestrica, Gojak, Planjak, Sutvara, Bisače, Vrnik, Kamenjak, and Gubavac that are positioned near Badija island. Part of the Pelješac Peninsula is also shown, though Thevet did not write its name, rather he marked it with a note indicating that it was part of Dalmatia (*Pais de Dalmatie*).

The depiction of the landscape, with drawings of stylised hills and vegetation, is supplemented by a drawing of bordered arable plots, which are marked in one place as gardens (*Jardrins*). Thevet also mentioned these gardens in the chapter on Korčula. He specifically marked the town of Korčula (*Cursola*) on the map, entirely surrounded by ramparts (again completely coinciding with his description of that town), but among the settlements, only Lumbarda (*Bombarde*) was named. Two towers are shown in



Sl. 21. Millova karta otoka Korčule (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 23a)

Fig. 21 Millo's map of the island of Korčula (Sylvia Ioannou Foundation, Books and manuscripts, B.0254, f. 23a)

ivanovcima s Rodosa (*Tourt des Rhodiens*), a druga je imenovana toponimom *Tourt d'Adrian*. Obje je utvrde, bez popratnih bilježaka prikazao i Camocio, dok je Rosaccio prikazao istočniju među njima. Na krajnjem istočnom dijelu otoka Thevet je ucrtao crkvu sv. Ivana (*S. Jehan*) na predjelu Sutivan (koji pripada Lumbardi) i crkvu sv. Petra u Čari (*S. Pierre*). Na karti Korčule Camocio je ucrtao obje te crkve, ali je imenovao samo crkvu sv. Ivana. S obzirom na te sličnosti i razlike između Thevetove karte te Camociovе i Rosacciovе karte toga južnodalmatinskog otoka može se zaključiti da se u osnovi geografski sadržaj na tim kartama podudara, ali su na Thevetovoj karti nešto brojniji toponimi i prateće bilješke. Thevet je u poglavljaju o Korčuli posvetio veliku pažnju tom otoku, što upućuje na to da je o njoj prikupio dosta podataka koji su mu poslužili i pri oblikovanju kartografskoga prikaza. Međutim, nije značajnije intervinirao u Camociovu kartu iz 1571. kojom se prikazu obalne crte Korčule i susjednih otočića koristio kao predloškom koji je dopunio nekim osobnim spoznajama.

the southeastern part of the island, one attributed to the Knights of St. John in Rhodes (*Tourt des Rhodiens*), and the other with the toponym *Tourt d'Adrian*. Both fortifications were shown without accompanying notes by Camocio, while Rosaccio depicted only the eastern one. In the far eastern part of the island, Thevet drew the church of St. John (*S. Jehan*) in the village of Sutivan (which belongs to Lumbarda) and the church of St. Peter in Čara (*S. Pierre*). On the map of Korčula, Camocio noted both churches, but named only the church of St. John. Given the similarities and differences between Thevet's, Camocio's and Rosaccio's maps of Korčula, it can be concluded that their geographical content basically corresponds, although Thevet's map includes somewhat more toponyms and accompanying notes. In his chapter on Korčula, Thevet paid great attention to this island, which indicates that he collected a great deal of information about it, which helped him with its cartographic depiction. However, he did not significantly alter Camocio's 1571 map, which he probably used as a template for drawing the coastline of Korčula and the neighbouring islands, adding his own knowledge and insights.

Zaključak

Tijekom renesanse, na valu novih spoznajnih i metodoloških iskoraka u geografiji i kartografiji, mnogi su europski autori opisivali i prikazivali istočnu obalu Jadrana i najvažnije jadranske otoke. Te prostorne cjeline današnje Hrvatske bile su predmet interesa brojnih država koje su nastojale zagospodariti dragocjenim obalnim i pomorskim prostornim resursima te uspostaviti nadzor nad plovidbom koja je osiguravala razmjenu ljudi, roba, ideja i tehnologija. Istodobno su ti prostori bili u fokusu europske kulture i znanosti, ne samo kao aktualna poprišta vojno-političkoga sraza europskih država i Osmanskoga Carstva, već i kao tranzitni prostor između različitih europskih ishodišta i hodočasničkih odredišta u Svetoj zemlji. U tom kontekstu moguće je sagledati ostvarenja francuskoga kraljevskog kozmografa Andréa Theveta (1516.–1592.), među kojima je i djelo *Le Grand Insulaire et Pilotage* (*Veliki izolar i peljar*), koje je ostalo u rukopisu sastavljenom u Parizu 1586. godine.

Thevet je u *Velikom izolaru i peljaru* opisao i na kartama prikazao nekoliko hrvatskih otoka, i to Krk, Pag, Ugljan i Pašman, Čiovo, Brač, Hvar i Korčulu. *Veliki izolar i peljar* svojim je tekstualnim sadržajem i pratećim kartama bio najopsežnije djelo toga žanra u drugoj polovini 16. st. Činjenica da je u njemu u dva sveska obuhvaćen čitav poznati svijet i da je razmjerno velika pozornost posvećena hrvatskim otocima, upućuje na to da ih je taj francuski autor držao važnima u pomorsko-geografskom sustavu Jadrana i Sredozemlja.

Na temelju vektorizacije obalne crte i georeferenciranja Thevetovih karata utvrđena su znatna izobličenja osnovnih otočnih morfostruktura, dok je kvalitativna analiza upozorila na nesustavan pristup u odabiru geografskih sadržaja. To je posljedica činjenice da prije kartiranja hrvatskih otoka Thevet nije proveo izmjera niti detaljnije topografsko opažanje, već ga je zasnivao na površnom uvidu „začinjenom“ navodima iz dostupnih izvora podataka kojima je, u skladu s tadašnjim stupnjem geografskih spoznaja i razmjene informacija, očito teško bilo provjeriti autentičnost i pouzdanost.

Conclusion

During the Renaissance, on a wave of new discoveries and methodological strides forward in geography and cartography, many European writers described and depicted the eastern shore of the Adriatic and the most important Adriatic islands. These spatial units of modern-day Croatia were an object of interest for many countries which were keen to control the precious coastal and maritime spatial resources and establish control over navigation, in order to control the exchange of people and goods, ideas and technologies. At the same time, these places were a focus of European culture and science, not only as the actual arenas of military-political confrontation between European countries and the Ottoman Empire, but as a transit area between European starting-points and pilgrim destinations in the Holy Land. In this context, the achievements of the French royal cosmographer André Thevet (1516–1592) should be considered. This includes *Le Grand Insulaire et Pilotage* which has survived in manuscript form, compiled in Paris in 1586.

In the *Le Grand Insulaire et Pilotage*, Thevet both described and mapped several Croatian islands: Krk, Pag, Ugljan with Pašman, Čiovo, Brač, Hvar and Korčula. In terms of its textual content and accompanying maps, it was the most comprehensive work of that genre in the second half of the 16th century. The fact that it covered the whole known world in two volumes and paid considerable attention to the Croatian islands indicates that its author was aware of their importance in the maritime-geographic system of the Adriatic and Mediterranean.

Vectorisation of the coastline and geo-referencing of Thevet's maps yielded insights on considerable deformities in the basic island morphological structures, while the qualitative analysis indicated an unsystematic approach to selecting geographic content. This was because Thevet did not carry out a land survey or any detailed topographic observations prior to compiling his maps of the Croatian islands. Instead, he drew them based on superficial knowledge “spiced” with claims from available data sources, the authenticity and reliability of which, in accordance with the level of geographic knowledge and information exchange in that era, was obviously quite difficult to verify.

Komparativna analiza Thevetovih karata s kartama istih otoka koje su izradili njegovi suvremenici Giovanni Francesco Camocio, Antonio Millo i Giuseppe Rosaccio, rezultirala je zaključkom kako je Thevet koristio jedinstvenu kartografiju i djelomično je unaprijedio dotadašnje geografske spoznaje o spomenutim hrvatskim otocima. Dok je u pogledu Krka, Paga i Brača Thevet dao originalne, premda ne uvijek i kvalitetne prikaze geografske stvarnosti, u prikazu Ugljana, Pašmana, Čiova, Hvara i Korčule mogu se prepoznati podudarnosti s prikazima tih otoka na kartama mletačkih autora. To upućuje na činjenicu da je Thevet poznavao dotadašnja djela o hrvatskoj obali i otocima, ali je pokušao dati i svoj doprinos.

Za razliku od autora karata s prikazima otoka koje su objavljivane u izolarima, a koji su geografski sadržaj umnogome prilagodili potrebama pomoraca i putnika koji se nisu dulje zadržavali na hrvatskim otocima pa su im najvažniji bili oni prostorni objekti koji se nalaze neposredno uz obalnu crtu (uvale, rtovi i naselja), Thevet je prostornu stvarnost nastojao promatrati i prikazati ju holistički, ali su mu za čvrstu cjelinu nedostajali mnogi relevantni podatci. Ipak, oni podaci koje je uspio prikupiti omogućili su sasvim nov pogled na hrvatski otočni prostor kakav je izmijenjen tek s detaljnijim topografsko-katastarskim prikazima koji su u lokalnim i mletačkim mjerničkim uredima, a ujedno i kartografskim radionicama izrađivani od 17. stoljeća. Prirodoslovni duh toga francuskog pustolova i kozmografa nije mogao zanemariti važne informacije o otočnom krajoliku (od „sterilnog“ kamenjara na Pagu do intenzivno agrarno vrednovanih predjela na Korčuli) pa i o pojedinim poljodjelskim kulturama (pšenica na Krku, naranče na Pagu) i životinjskim vrstama (kobac na Braču). Na svim kartama Thevet je ucrtao mnogo različitih brodova i brodica. Ti su crteži možda imali estetsku funkciju, ali istodobno su upućivali na intenzivne pomorske aktivnosti (posebno ribarstvo i brodarstvo) duž istočne obale Jadrana.

Thevet je u *Velikom izolaru i peljaru* nastojao predstaviti golem korpus geografskih spoznaja o svim najvažnijim svjetskim otocima, pa tako i onim hrvatskim. Zbog činjenice da to svoje djelo nije uspio objaviti ono nije imalo odjek koji je, unatoč očiglednim kvantitativnim i kvalitativnim greškama,

The comparative analysis of Thevet's maps with maps of the same islands made by his contemporaries, Giovanni Francesco Camocio, Antonio Millo, and Giuseppe Rosaccio, led to the conclusion that Thevet used a unique cartographic approach and to some extent improved contemporary geographical knowledge of the Croatian islands in question. For Krk, Pag, and Brač he provided original, though not always high quality depictions of geographic reality, but for Ugljan with Pašman, Čiovo, Hvar and Korčula, there is a great deal of overlap with the mapping of these islands by Venetian authors. This indicates that Thevet was familiar with previous cartographic works regarding the Croatian coast and islands, and also that he attempted to add his own contributions.

In contrast to the cartographers whose island maps were published in isolarios, and whose geographic content was to a great extent adapted to the needs of sailors and travellers passing through the area, and who were most interested in spatial features close to the shore (bays, capes and settlements), Thevet attempted to observe spatial reality in a more holistic way, though he lacked the relevant data to do so consistently. Nonetheless, the data which he managed to collect allowed a completely new view of the Croatian island area, which was only later replaced by detailed topographic-cadastral depictions produced from the 17th century onwards in local and Venetian surveyors' offices. The spirit of the natural science which informed this French adventurer and cosmographer was unable to overlook important information about the island landscape (from the “sterile” rocks of Pag to the intensive agrarian valorised areas of Korčula), or certain agricultural crops (wheat on Krk, oranges on Pag), and animal species (sparrow-hawks on Brač). On all his maps, Thevet drew various boats and ships. These drawings may have been for aesthetic reasons, but they also indicated the intensity of maritime activity (particularly fishing and shipbuilding) along the eastern Adriatic coast.

In *Le Grand Insulaire et Pilotage*, Thevet attempted to present a huge corpus of geographic knowledge about all the most important islands in the world, not just Croatian islands. Since he never managed to publish the manuscript, it did not elicit the response which it might have had, in spite of its

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potencijalno moglo ostvariti. Zbog toga što je to Thevetovo djelo u desetljećima koja su uslijedila nakon njegova priređivanja bilo nepoznato, gotovo cijelo jedno stoljeće u zapadnoeuropskoj akademskoj i pomorskoj javnosti ostala je „zamrznuta” mletačka geografska percepcija hrvatske obale i otoka koja se od Camocia i Rosaccia nije bitnije mijenjala sve do Coronellijeva kartografskoga opusa koji je nastao na prijelazu 17. u 18. stoljeće.

obvious quantitative and qualitative errors. Due to the fact that it remained unknown for decades after its compilation, the Venetian geographic perception would persist for another century as the picture that the Western European academic and maritime public had of the Croatian coast and islands. It remained unchanged from the time of Camocio and Rosaccio right up to Coronelli's cartographic opus at the turn of the 18th century.

- Bevington, P. R., Robinson, D. K., 2003: *Data Reduction and Error Analysis for the Physical Sciences*, 3rd edition, McGraw-Hill, New York.
- Camocio, G. F., 1571: *Isole famose porti, fortezze, e terre maritime sottoposte alla Ser. Sig. di Venetia, ad altri Principi Christiani, et al Sig. Turco nouamente poste in luce*, Venecija.
- Claus, S., De Hauwere, N., Vanhoorne, B., Souza Dias, F., Oset Garcia, P., Schepers, L., Hernandez, F., Mees, J. (Flanders Marine Institute), 2017: *MarineRegions.org*. (referentna kartografska podloga), <http://www.marineregions.org/downloads> (preuzeto 20. 10. 2017.)
- Cvitanic, A., 1984: Ornitofauna otoka Brača, *Brački zbornik* 14, 142-256.
- Destombes, M., 1972: André Thevet (1504-1592) et sa contribution à la cartographie et à l'océanographie, *Proceedings of the Royal Society of Edinburgh. Section B. Biology* 72 (1), 123-131.
- Duboković-Nadalini, N., 1962: Nautička svojstva luke grada Hvara, *Prilozi povijesti otoka Hvara* 2 (1), 9-17.
- Dumotier-Sigwalt, E., 2002: Le Grand insulaire et pilotage d'André Thevet: une oeuvre iconographique du XVIe siècle, magistrale et "naufragée", u: Pelletier, M. (ur.): *Les îles, du mythe à la réalité*, CTHS, Paris, 101-121.
- Faričić, J., 2012: *Geografija sjevernodalmatinskih otoka*, Školska knjiga i Sveučilište u Zadru, Zagreb.
- Fisković, C., 1981: Ranosrednjovjekovne ruševine na Majsanu, *Starohrvatska prosvjeta* 3 (11), 137-162.
- Ghilani, C. D., Wolf, P. R., 2006: *Adjustment Computations: Spatial Data Analysis*, 4th Edition, John Wiley & Sons Inc., Hoboken, New Jersey.
- Hair, P. E. H., 1982: A Note on Thevet's Unpublished Maps of Overseas Islands, *Terra Incognitae* 14 (1), 105-116
- Hasluck, F. W., 1914: Thevet's Grand Insulaire and His Travels in the Levant, *The Annual of the British School at Athens* 20, 59-69.
- Hilje, E., 2011: Spomenici povijesnoga graditeljstva na otoku Pagu, u: Skračić, V. (ur.): *Toponomija otoka Paga*, Biblioteka Onomastica Adriatica, Centar za onomastička istraživanja, Sveučilište u Zadru, Zadar, 93-180.
- Jenny, B. i Hurni, L., 2011: Studying Cartographic Heritage: Analysis and Visualization of Geometric Distortions, *Computers & Graphics* 35 (2), 402-411.
- Kandido-Rožman, M., 1990: Francuski putopisi kroz Dalmaciju od prvog križarskog pohoda do kraja XVIII. stoljeća, *Mogućnosti* 37 (11), 1145-1178.
- Kisić, A., 2005: The origins of Camocio's and Rosaccio's isolario in Croatian Collections / O Camocijevu i Rosaccijevu izolaru iz hrvatskih zbirki, u: Novak, D., Lapaine, M. i Mlinarić, D. (ur.): *Five Centuries of Maps and Charts of Croatia / Pet stoljeća geografskih i pomorskih karata Hrvatske*, Školska knjiga, Zagreb, 293-330.
- Kljajić, I., Razum, M., 2015: The Isolarios by Antonio Millo with Maps of the Croatian Islands, *Cartography and Geo-information* 15 (25), 86-118.
- Kozličić, M., 1995: *Kartografski spomenici hrvatskog Jadran*, AGM, Zagreb.
- Lestringant, F., 1984: Catalogue des cartes du Grand Insulaire d' André Thevet, u: Pastoureau, M. (ur.): *Les Atlas français (XVIe-XVIIe siècles): Répertoire bibliographique et étude*, Bibliothèque Nationale, Paris, 481-495.
- Lestringant, F., 1991: André Thevet, cosmographe des derniers Valois, *Travaux d'Humanisme et Renaissance*, 251, Droz, Genève.
- Lestringant, F., 1994: *Mapping the Renaissance world: the geographical imagination in the age of discovery*, Polity Press, Cambridge.
- Lestringant, F., 2002: *Le Livre des îles: atlas et récits insulaires de la Genèse à Jules Verne*, Librairie Droz, Genève.
- Lestringant, F., 2003: *Sous la leçon des vents: Le monde d'André Thevet, cosmographe de la Renaissance*, Presses Universitaires de France, Paris.
- Marković, M., 1993: *Descriptio Croatiae – Hrvatske zemlje na geografskim kartama od najstarijih vremena do pojavе prвih topografskih karata*, Naprijed, Zagreb.
- Matković, P., 1882: Putovanja po balkanskom poluotoku XVI veka, III-V, *Rad Jugoslavenske akademije znanosti i umjetnosti* 62, 45-133.
- Millo, A., 1582. (2006): *Isolario*, Ad Venture Publications (faksimilno izdanje), Atena.
- Millo, A., 1582: *Isolario et portolano*, Venecija.
- Modenov, P. S., Parkhomenko, A. S., 1965: *Geometric transformations*, prijevod na engleski: Michael B. P. Slater, Academic Press, New York, London.
- Porcacchi, T., 1572: *L'isole più famose del mondo descritte da Thomaso Porcacchi da Castiglione arretino e intagliate da Girolamo Porro padovano con l'aggiunta di molte isole*, In Venetia appresso Simon Galignani & Girolamo Porro.
- Rosaccio, G., 1598: *Viaggio da Venetia, a Costantinopoli : per mare, e per terra & insieme quello di Terra Santa, da Giuseppe Rosaccio, con brevità descritto, nel quale, oltre à settantadui disegni, di geografia e*

- corografia si discorre, quanto in esso viaggio si ritroua, cioè : città, castelli, porti, golfi, isole, monti, fiumi e mari : opera utile à mercanti, marinari & à studiosi di geografia, Venecia.

Silveira Cardozo, M. da, 1944: Some remarks concerning André Thevet, *The Americas* 1 (1) 15–36.

Stouraiti, A., 2013: Talk, script and print: the making of island books in early modern Venice, *Historical Research* 86 (232), 207–229, DOI: <https://doi.org/10.1111/1468-2281.12014>.

Thevet, A., 1554 (1985): *Cosmographie de Levant*, kritičko izdanie izvornika, Lestringant, F. (ur.), Droz, Genève.

Thevet, A., 1575: *La cosmographie universelle d'André Thevet, cosmographe du roy : illustrée de diverses figures des choses plus remarquables vues par l'auteur, & inconnues de nos anciens & modernes*, A Paris : Chez Guillaume Chandiere.

Thevet, A., 1586: *Le grand Insulaire et pilotage d'André THEVET, Angoumoisin, cosmographe du Roy, dans lequel sont contenus plusieurs plants d'îles habitées et deshabitée et description d'icelles*, II, (Bibliothèque nationale de France. Département des manuscrits. Français 15453)

Tolias, G., 2007: Isolarii, Fifteenth to Seventeenth Century, u: Woodward, D. (ur.): *The History of Cartography, 3: Cartography in the European Renaissance*, University of Chicago Press, Chicago i London, 263–284.

Tolias, G., 2012: The Politics of the Isolation: Maritime Cosmography and Overseas Expansion During the Renaissance, *The Historical Review* 9, 27–52, DOI: <https://doi.org/10.12681/hr.287>.

Valčić-Bulić, T., 2006: Nekoliko nepoznatih stranica o Esklavoniji, *Godišnjak Filozofskog fakulteta u Novom Sadu* 31, 21–27.

Valčić-Bulić, T., 2007: Un cosmographe français au pays esclavon, u: Scianatico, G. (ur.): *Scrittura di viaggio: Le terre dell' Adriatico*, Palomar, Bari, 19–26.

Van den Abeele, G., 1992: Duplicity and Singularity in André Thevet's Cosmographie de Levant, *L'Esprit Créateur* 32 (3), 25–35.

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Hrvatski otoci na kartama u Velikom izolaru i piljaru Andreá Theveta

The Croatian Islands on maps in André Thevet's *Le Grand Insulaire et Pilotage*

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