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## **Cartographic heritage in the Zadar (Croatia) scientific and cultural institutions**

*Keywords:* map; cartography; cartographic heritage; Zadar, Croatia.

### *Summary*

In Zadar, one of the oldest and most important cultural and scientific centers in the Republic of Croatia there are numerous institutions which, among else also preserve valuable cartographic heritage. Since for centuries this city had been the administrative centre of Dalmatia, that is the whole South Croatia, which generated various needs of regional administration entities, courts, army, shipping companies, Church, schools and others, a part of important cartographic resources is preserved in Zadar. Due to the efforts of civilian and church authorities and more prominent individuals, it originated mostly from European cartographic centers, but some of the maps were also made in Zadar.

The biggest number of old maps, atlases and globes are preserved in the Zadar State Archive and in the Research Library Zadar. Part of the cartographic materials is also preserved in the Archbishopric Library, in the Monastery of St. Francis but also in other monastery collections in Zadar and in Zadar region. Cartographic heritage encompasses cartographic representations of several hundreds units dating back to the 16th century. Most of the cartographic representations show Zadar, certain parts of Dalmatia, the whole Croatian coast and the Adriatic, and there are also comprehensive cartographic works representing the entire – at the moment of their creation known – world (Molleti's edition of Ptolemy's Geography, Coronelli's Atlases, Sanson's Atlases, Homann's and Seutter's atlases and others). Some editions are rare even in the European context, for instance Bordon's *isolario*, atlas of sea charts *Carta di cabottaggio del Mare Adriatico* and others.

Since the cartographic heritage preserved in Zadar is an inevitable source for research of experts from various scientific disciplines (geography, cartography, history, art history, toponymy and others) dealing with the examination of the Croatian Adriatic region, it is of extreme importance to systemize cartographic heritage and enable accessibility of quality digital records. From the technical standpoint, research is facilitated for users, and from the archival standpoint, fragile resources are preserved from wear and tear and various forms of damages.

### **Introduction**

Zadar is one of the oldest and most important cultural and scientific centers in Croatia. Its tradition dates back to the beginnings of urbanization on eastern Adriatic coast, in mid-1<sup>st</sup> millennium B.C. at the latest, when Zadar had the leading administrative, economic, and particularly maritime geographic role in Liburnia. Articulation of all relevant urban functions was achieved at the turn of the first century A.D., when Zadar reached the status of Roman colony (Suić 1981). Simultaneously, Zadar experienced the development of cultural life, which was particularly enriched by the

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foundation of Zadar bishopric in 4<sup>th</sup> century (Peričić 2005). Foundation of bishopric, which was a part of universal Church, enabled the continuity of ancient administrative, organizational, cultural and artistic achievements in turbulent political circumstances during the dissolution of the Roman Empire. The position of Zadar in the system of eastern Adriatic cities was strengthened significantly at the beginning of the 7<sup>th</sup> century, i.e. after the collapse of Salona, the administrative center of Roman Dalmatia (Klaić & Petricioli 1976). Despite numerous political changes, Zadar remained the main administrative center of Dalmatia up to 1918, and from the 12<sup>th</sup> century on it has been the see of archbishopric (from 12<sup>th</sup> to 20<sup>th</sup> century it was also the see of metropolis). After the arrival of the Croats, Zadar was the place of multiple communications between the new Croatian state and the Byzantine theme, and from the 10<sup>th</sup> century on it was integrated into Croatia as well as the whole Dalmatia and Liburnia (Klaić & Petricioli 1976). However, in some periods Zadar was a part of the Venetian Republic. After the dissolution of Austro-Hungarian Monarchy, in 1918, the town was *de facto* a part of Italy, which was later confirmed by the Treaty of Rapallo in 1920 (Marjanović 1964). Zadar remained under Italian administration until Italy's capitulation in 1943, when it again became a part of Croatia, but only after the Second World War and ratification of the Treaty of Paris in 1947 Zadar was *de iure* incorporated into Croatia, i.e. Yugoslavia (Batović 2009). Although in such circumstances the position of Zadar among other Croatian Adriatic towns was weakened, it still retained a large number of urban functions, and in the second half of the 20<sup>th</sup> century it developed into an important regional center of northern Dalmatia and southern Lika, and into one of the largest Croatian towns (Magaš 1988, 2009). Despite suffering horrific war damages during the Serbian aggression on Croatia and Bosnia at the beginning of 1990s, the reconstructed Zadar became the fifth largest town in Croatia at the beginning of the 21<sup>st</sup> century. Additionally, the town experienced propulsive economic development; it became the center with prominent cultural institutions (Archaeological Museum, National Museum, Museum of Antique Glass, State Archives, Research Library, City Library, Archbishopric Archive, Archbishopric Library, Center for Underwater Archaeology) and the center of the renewed university since 2003.

Although the town was exhausted by centennial conflicts between the leading Adriatic and Central European powers for the domination over Zadar and Dalmatia, it still recorded significant economic development and intensive cultural, scientific and artistic activities. Therefore, it is not unusual that the first university on Croatian territory was founded in Zadar in 1396 (Krašić 1996). Apart from the university, the important cultural institutions in the town were also Archbishopric Chapter, numerous monasteries (including the sees of certain monastic orders in Croatian littoral, such as center of Benedictines, center of Franciscan province of St. Jerome, center of the province of Third Order Franciscans, etc.), but the town was also the center of Zadar and Dalmatian administration. Other prominent buildings in the town were palaces, owned by well-known noble families from Zadar that had among them a great number of prominent scientists, writers and artists (e.g. Federik Grisogono Bartolačić, Petar Zoranić, Šimun Stratico, etc.).

The above-mentioned institutions and private libraries collected an immense library fund from all over Europe, and among different literary and scientific works were numerous maps, atlases and globes. Rich cartographic fund was deposited in Zadar because it was used by certain individuals and by different provincial administrative bodies, courts, army, shipping companies, the Church, educational institutions, etc. The maps were brought to Zadar from different cartographic centers, mostly from Venice, but many of the maps were made in Zadar. Zadar cartographic workshops were mostly engaged in resolving land registry issues, in building fortification, traffic and water-supply systems. As a result, there were numerous maps and plans that depicted delimitation of

land, forts, roads and water-supply system in Dalmatia and neighboring regions. Therefore, for centuries Zadar was the town where maps were made and, more importantly, used for different purposes. Consequently, the town became the center of a rich cartographic tradition. Historical cartographic heritage in Zadar is mostly deposited in the State Archives and the Research Library, and in some other institutions, such as the Franciscan monastery of St. Francis, and in private collections.

### **Cartographic heritage deposited in Zadar State Archives**

Zadar State Archives is one of the largest archives in Zadar, and according to the deposited fund it is the second largest after Zagreb State Archives. Following the tradition of older archives, Zadar State Archives was founded in 1624 when governor-general Francesco Molin was commissioned by the Venetian Senate to found the Governor-General Archives (Grgić 1964, Vidaković 2002). That Archives (*Archivio generalizio*) became the foundation for the archives (*Archivio di stato*) that possessed different archival materials related to Zadar and Dalmatia, and to some neighboring regions that were administratively a part of Dalmatia, e.g. Kvarner Islands in Croatia, and Boka Kotorska and Budva littoral (up to Bar area) in Montenegro. According to contemporary archival service system, territorial jurisdiction of Zadar State Archives encompasses the area of Zadar and Lika-Senj Counties, and until 2006 it also included Šibenik Archival Center, which then became independent state archives.

Zadar State Archives owns several dozen collections of archival materials. The oldest documents date back to the 10<sup>th</sup> century. The number of documents was increasing constantly since the 14<sup>th</sup> century. Along with that, the diversity of the documents also increased, and in the following centuries the archival collections became more comprehensive (Kolanović 2006).

Archival collections deposited in Zadar State Archives have invaluable importance for analyzing historical and geographic development of Croatia, particularly for analyzing the history of southern Croatia, i.e. Dalmatia. The Archives also owns valuable sources for analyzing the history of Bosnia and Herzegovina, Montenegro and Albania. Already in 1883, the documents from the period of Venetian Administration in Dalmatia (from 1409 to 1797) were inventoried. At the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century, several inventories were made that included the documents from the first Austrian Administration in Dalmatia (1797-1805), from the short-termed French Administration (1806-1813) and from the second Austrian Administration (1813-1918). Unfortunately, the documents from the period of Italian Administration (1918-1943) were scarce, because most of the incriminating documents were destroyed, and the other part was taken during the Italian retreat after the capitulation in 1943 (Kolanović 2006).

According to the *Preview of archival funds and collections of the Republic of Croatia* (Kolanović 2006) all the documents in Zadar State Archives were sorted as follows:

- A. Administrative and public services
- B. Justice department
- C. Military troops, institutions and organizations
- D. Education
- E. Culture, science and information
- F. Health care system and social institutions
- G. Economy and finances
- H. Political parties, socio-political organizations and unions
- I. Societies, organizations and associations

- J. Religious institutions
- K. Manorial, family and personal archival funds
- L. Collections of original archival documents
- M. Collections of secondary copies of archival documents

Although it can be subdivided according to historical periods (administrations in Dalmatia), the above-mentioned systematization refers only to basic division of archival materials, so it is not possible to analyze the content of certain funds and the accompanying cadastral plans or other maps. Somewhat more detailed systematization can be found in internal archival documents (notebooks, papers), but unfortunately, that type of systematization also contains only information about the volume (number of boxes, volumes) of a fund, and possibly a short description. However, there are no such internal descriptions for the whole archival fund, because a part of the fund has not been inventoried, so it is only partly accessible or completely inaccessible.

Unfortunately, the contents of internal lists that originated in the first half of the 20<sup>th</sup> century often do not correspond to the present state of archival materials, because a part of the documents disappeared in suspicious circumstances (among them was the extremely valuable Camocio's Isolaro). It is important to mention that cartographic funds were not adequately catalogued, which makes the researchers' efforts much harder. The only significant effort in cataloguing cartographic heritage was done for the purpose of organizing the exhibition *Croatia on Geographic Maps from 16<sup>th</sup> to 19<sup>th</sup> century in Zadar State Archives*, which was accompanied by a comprehensive exhibition catalogue (Magaš et al. 1997).

Most of the old maps are kept in the collection *Geographic and Topographic Maps of Dalmatia and Neighboring Countries*. The title of the collection is not adequate, because geographically, it covers a much wider area. Namely, the collection includes numerous maps of the whole Croatia, some parts of Europe, the whole Europe, and the whole world. In the inventory of the collection there is a list of 397 archival cartographic units, but there are several dozen maps listed under one unit. Some of the most prominent maps among them are:

- Nicolas Sanson: *Coste de Dalmacie ou sont remarques les Places qui appartiennent a la Republ(i)que de Venise, a la Republ(i)que de Raguse, et au Grand Seign(e)r des Turqs tirée de divers Autheurs*, Paris, 1664
- Reiner i Joshua Ottens: *Nouvelle Carte Du Royaume de Dalmacie Divise en ses Comtes, Territoires, etc la Morlaquie, la Bosnie, et la Servie, Partie de la Hongrie, Croatie, Albanie, Istrie, & Roy.e de Naples*, Amsterdam, cca 1720
- Anonim: *Dissegno corografico della provincia di Dalmazia*, Zadar, cca 1718
- Anonim: *Corografia dell' Inferior Provincia della Dalmazia, o sia Guida Itineraria indicando tutte le strade di comunicazione, e loro rispettive distanze dall' uno all' altro de principali luochi, e specialmente di quelli, che più possono comprendersi nella Visita Generale, si di terra, che di mare, della Provincia medesima, con alcune altre coerenti nozioni etc*, Zadar, cca 1758.
- Antonio Grandis: *Dissegno o' carta topografica della Dalmazia*, Zadar, 1781.
- Pietro Santini: *Nouvelle Carte de la Partie Occidentale de Dalmatie, dressée sur les lieux*, Venezia, 1780.
- Ludovico Furlanetto: *Nuova Carta Marittima del Golfo di Venezia con tutte le Isole e Scogli di Dalmazia, e delle Isole di Corfù, Ceffalonia S. Maura, Zante Capo di Chiarenza, e Capo S. Maria, sino il Capo delle Colonne*, Venezia, 1784.
- Melchiori, Francesco Zavoreo i Ludovico Furlanetto: *Nuova carta Topografica della Provincia di Dalmazia divisa ne suoi territori*, Venezia, 1787.
- Franz Johann von Reilly: *Der Noerdliche Theil Des Koenigreichs Dalmatien*, Wien, cca 1790.

- Francesco Zavoreo: *Carta della Dalmazia, Stato di Ragusa e Bocche di Cataro nella quale sono disegnate tutte le strade fabricate. le incominciate, e le progettate per l'esercizio del 1811*, Zadar, 1811.
- Ignaz Heyman: *General Charte der Illyrischen Provinz*, Wien, 1810.
- Maximilian de Traux: *Carte von Dalmatien und dem Gebieth von Ragusa* Wien, 1810
- Gaetano Palma: *Carte des Provinces Illyriennes Comprenant La Bosnie L' Herzegovine Le Monténero et quelques pays adjacens*, Trieste, 1812.
- Istituto Geografico Militare: *Carta di Cabottaggio del Mare Adriatico disegnata ed incisa sotto la direzione dell' I. R. Stato Maggiore*, foglio I-XX, Milano 1822-1824.

The above-mentioned collection of nautical charts of the Military and Geographic Institute from Milan is a rare edition, and the only institution in Croatia that has it is the Zadar State Archives.

Apart from the above-mentioned maps, the same collection also includes topographic maps of certain parts of Croatian littoral area, which were made in the second half of the 19<sup>th</sup> century by the Military and Geographic Institute from Vienna, and topographic maps of the same area made by the Military and Geographic Institute of Italy in interwar period. Additionally, the collection of geographic and topographic maps includes many other maps of the world, Europe, Croatia, and some other smaller parts of the Croatian coast and islands.

*Mape Grimani* is a collection with 535 catalogue units and several thousand individual plans and maps. That collection includes maps, mostly cadastral sketches and plans dating from early 17<sup>th</sup> century up to the end of Venetian administration in Dalmatia. It was inappropriately named after Francesco Grimani, governor-general (*proveditore general*) of Venetian Dalmatia and Albania from 1753 to 1756. In 1756, Grimani enacted the so-called agrarian bill, i.e. *Resolution on Administering Land in Dalmatia*, which regulated the estate delimitations in newly acquired lands of Venetian Republic in Dalmatian hinterland (after the wars with the Ottoman Empire).<sup>1</sup> Consequently, documents and the accompanying cadastral presentations were made, and after partial geodetic survey had been done, cartographic preview of delimitations among the estates was also made. The field survey was done by certified surveyors (*agrimensore perito* or *publico perito*) (Mirošević and Lapaine, 2008) with the purpose of collecting taxes and tying the immigrant population from Morlachia to the land and sedentary way of life (Slukan-Altić 2009). Public surveyors noted each survey in detail in the letters, 674 of them, and later the letters were used for making the cadastre. The letters were important because they referred to the border area between Venetian and Turkish land where the border between Dalmatia and Bosnia changed frequently.

Numerous cartographic representations were related to Grimani's law regulations that were approved by the Venetian Senate, but they were not the only plans, maps and sketches among thousands of them that were related to larger part of Dalmatia and which chronologically encompassed a longer period than the one related to Grimani's administration and application of his regulations. Besides survey representations, a separate unit in that archival fund was *Cartographic Collection of Korir (Corir) Family* with 239 survey plans and the collection *Cadastrs of Imotski Area* with 69 survey plans. Both of the collections were the result of cartographic activities of several members of Corir family, who worked at cadastral surveys in Dalmatinska zagora in 18<sup>th</sup> and 19<sup>th</sup> century. It is unknown why those two similar collections were not merged into one. The same over-

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<sup>1</sup> The Venetians called the newly acquired lands in Dalmatian hinterland *Aquisto nuovo* (that area encompassed most of Ravni kotari, Dalmatinska zagora, and Lower Neretvan area, and it was occupied between 1683 and 1699) and *Aquisto nuovissimo* (northeastern part of Dalmatinska zagora and Imotski area, which were occupied between 1715 and 1718). Cf. Raukar et al. 1987, Antoljak 1994.

sight was made in the latest systematization of archival funds that was done for ARHiNET, a network information system for the description, analysis and management of archival fund of the Republic of Croatia, so the main part of survey plans that were made by the members of Corir family were named *Cadastral Maps of Dalmatia 18<sup>th</sup>-19<sup>th</sup> Century*.

Apart from survey plans from *Grimani Collection*, *Cartographic Collection of Corir Family*, and collection *Cadastrres of Imotski Area*, certain survey plans can be found in other archival collections. Chronological continuation of the collections from the Venetian period was the collection *Cadastral Plans of Dalmatia* dating from the period of the second Austrian administration, when systematic cadastral survey of the whole Dalmatia was made (from 1823 to 1838). That collection contains the originals and copies of the plans (approximately 600 of them) of survey communities of the whole Austrian Province of Dalmatia. However, most of the originals and the accompanying documentation (studies, economic descriptions, records, etc.) were transferred to Split after Zadar had been formally annexed to Italy in accordance to the provisions of the Treaty of Rapallo from 1920. Those archival cartographic materials from Zadar, together with the ones from Istria, were compiled into the *Archive of Maps for Istria and Dalmatia*, which is kept in Split State Archives (Bajić-Žarko 2006). That act impoverished the original cadastral collection in Zadar, and its restoration was not made after Zadar had been incorporated into Croatian state territory after the Second World War or before Croatia gained its independence in 1991.

A large number of maps (the exact number is still not determined) are kept in numerous other collections of Zadar State Archives (Magaš et al. 1997). Among them are collections *Miscelanea* (it contains the collection of maps of military and sanitary cordon between Dalmatia and Bosnia and Herzegovina, which were made under the command of major Taborović), *Lantana Family Fund*, *Borelli Family Fund*, *Benja Posedarski Family Fund*, and many other family and monastery funds.

Several valuable atlases and maps that were published in different scientific and travel books of G. G. d'Herberstein, F. Farlati, A. Fortis, M. L. Ruić, J. Lalvallée and others are kept in the library of Zadar State Archives. The valuable atlases are:

- Claudius Ptolemy: *Geographia* (edition of Giuseppe Moleti), Venice, 1562
- Gerhard Mercator: *Atlas sive Cosmographicae Meditationes de Fabrica Mundi et Fabricati Figura*, Duisburg, 1595
- Vincenzo Maria Coronelli: *Corso Geografico Universale*, Venice, 1692
- Vincenzo Maria Coronelli: *Mari, Golfi, Isole, Spiaggie, Porti, Citta, ed altri Luoghi Dell'Istra, Quarner, Dalmazia, Albania, Epiro e Livadia*, Venice, 1696
- Jean Josph Allezard: *Recueil De 163 des principaux Plans des Ports et Rades de la Mediterranée*, Geneva, 1804.

### **Cartographic heritage in Zadar Research Library**

The Zadar Research Library is one of the largest libraries in Croatia. It has specific status, because it is the only research library in Croatia that is governed by local community, i.e. by the Town of Zadar. So, formally, it is not part of the university community as it has been the usual practice in Croatia in the last thirty years. One of the reasons for such status is the history of the library. Namely, the library was founded in 1855 thanks to the donation of Pietro Alessandro Paravia (1797-1857), so its original name was *Biblioteca Comunale Paravia* (Maštrović 1964, Galić 1969). After the Second World War, the library was renamed *Naučna biblioteka* (Research Li-

brary), and in 1992 it got its present name – Zadar Research Library. The library fund contains approximately 800,000 bibliographic units, and about 1,000 of them originated in the 16<sup>th</sup> century. Cartographic heritage is kept in the *Collection of Geographic Maps and Atlases*, which, according to official records of the library, contains 2,491 units. Among other things, that collection contains numerous maps and atlases (Goldner & Lukačević 1989, Faričić & Goldner 2005), and some of the prominent ones are:

- Benedetto Bordone: *Isolario di Benedetto Bordone Nel qual si ragiona di tutte l'Isole del Mondo*, Venice, 1547
- Ioannes Sambucus (Janos Zsdtnbok): *Illyricum*, Vienna 1572
- Wolfgang Lazio (Wolfgang Lazius): *Carinthiae Dukatus et Goritiae Palatines*, u: Abraham Ortelius (Abraham Oertl): *Theatrum Orbis Terrarum*, Antwerp, 1575
- Pietro Coppo: *Histriae tabula*, u: Abraham Ortelius (Abraham Oertl): *Theatrum Orbis Terrarum*, Antwerp, 1575
- Natale Bonifacio: *Zarae et Sebenici descriptio*, u: Abraham Ortelius (Abraham Oertl): *Theatrum Orbis Terrarum*, Antwerp, 1575
- Gerard Mercator (Gerhard Kremer): *Sclavonia, Croatia, Bosnia cum Dalmatiae Parte*, Amsterdam, 1630
- Giuseppe Rosaccio: *Zarra* (izvadak iz atlasa *Viaggio da Venetia a Constantinopoli per mare e per terra...*), Venice, 1598
- Vincenzo Maria Coronelli: *Contado di Zara. Parte delta Dalmatia*, Venice, 1688
- Nicolaes Visscher II: *Atlas minor sive geographia compendiosa qua orbis terrarum per paucas attamen novissimas tabulas ostenditur*, Amsterdam, 1683-1684
- Nicolas Sanson d'Abbeville: [Atlas without a cover], Amsterdam, 1730
- Guillaume De L'Isle: [Atlas without a cover], Amsterdam, 1739
- Johann Baptist Homann (1663-1724) & Georg Matthaus Seutter (1678-1756): [Atlas without a cover], Augsburg, mid-18<sup>th</sup> century
- Joseph Roux (1723-1793): *Receuil des Principaux Plans des Ports et Rades de la Mer Méditerranée*, Genoa, 1779
- Antonio Zatta: *Atlante novissimo Illustrato ed Accresciuto sulle Osservazioni e Scoperte fatte dai piu recenti Geografi*, I-IV, Venice, 1779-1785
- Giovanni Antonio Capellaris (1727-1807): *Carfa dell'Istria...*, Trieste, 1797
- Vicenzo De Lucio: *Nuova carta del Mare Adriatico o sia Golfo di Venezia disegnata secondo l'ultime osservazioni Astronomiche e rilevi fatti sopra luogo con li dettagli delle coste*, Trieste, 1809

Apart from the above-mentioned maps and atlases, the library has several old geographic works that contain numerous geographic maps, including:

- Filippo Ferrari: *Lexicon Geographicum*, Milan, 1627
- Jean Marie Bruyset: *Atlas des enfans ou nouvelle methode pour aprendre la Geographie*, Lyon, 1774
- Claudio Buffier: *Geografia universale*, Venice, 1767.

Additionally, numerous maps were published in travel books written by European scientists, writers, noblemen, and others, who travelled along the eastern Adriatic coast and recorded geographic, ethnographic and other observations (Bukvić 2009).

### Coronelli's globes in the Franciscan monastery of St. Francis

The Franciscan monastery of St. Francis is one of the oldest Franciscan monasteries in Croatia. The tradition related to the foundation of that monastery is connected to the travel of Francis of Assisi to Palestine in 1212. Namely, the future saint came to Zadar to find shelter from the storm. Regardless of the credibility of that tradition, according to available documents, the monastery was first mentioned in early 13<sup>th</sup> century (Škunca 2006). The monastery is the see of Franciscan province of St. Jerome in Dalmatia and Istria that has monasteries from Rovinj and Pazin in Istria to Kotor in Montenegro. For centuries, the Franciscan monastery in Zadar developed culture and science, and some of its members were esteemed theologians and scientists. Among them was Jeronim Masci, who was one of the first provincials (1272-1274) of the Franciscan province of St. Jerome, and was later elected Pope (named Nicholas IV) as the first Franciscan monk. Other famous monks were Benedikt Benković (15<sup>th</sup> century), professor at Sorbonne, and Atanazije Matanić (1922-2004), university professor at Antonianum Pontifical University in Rome. The large library of the monastery (Matijević 1964) contains over 60,000 bibliographic units including geographic works with maps. A particularly valuable asset of the library are Coronelli's globes located in the monastery's treasury. The collection includes terrestrial and celestial globes dating from 1696. Unfortunately, the globes are partly damaged, and the restoration was not conducted properly, so there is a problem in reconstructing the title notes. Despite that, the globes are a rarity and a valuable component of cartographic heritage in Zadar.

### Conclusion

The rich cartographic heritage of Zadar is a valuable source for scientific research, and indicator of cultural and scientific tradition of one of the most important Croatian towns. Since old maps, atlases and globes represent general and cultural heritage, it is necessary to take good care of their permanent protection that should be carried out along with their use for scientific, museological and educational purposes. Therefore, it is necessary to digitalize all cartographic units, or at least a part of them that are used most frequently and are subjected to different types of damages. Present digitalization procedures were partial and, considering the applied methodology, they were uneven, but they still had respectable results. The suggestion is to systematize and catalogue the cartographic heritage, and then to systematically digitalize it in order to provide availability of quality digital records. From technical aspect, digitalization should relieve the research for the users, and from archival aspect, delicate documents will be preserved from wearing out and from various types of damage.

### Note

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Figure 1. Garsagoni's topographic and cadastral sketch of Sutomišćica on Ugljan Island, Zadar, 1610 (Zadar State Archives, Grimani Maps Collection, Sign. 290).



Figure 2. Bonifačić's map of Zadar and Šibenik Regions, Amsterdam, 1575 (Zadar Research Library, Sign. 15497 C-79).





Figure 3. Coronelli's map of Zadar Region, Venice, 1688 (Zadar Research Library, Sign. 212162 S-2).



Figure 4. Lucio's nautical chart of the Adriatic, Trieste, 1809 (Zadar Research Library, Sign. 15188 D-20).



Figure 5. Segment of Zavoreo's map of Dalmatia, Zadar, 1811 (Zadar State Archives, Collection Geographic and Topographic Maps, Sign. 5).



Figure 6. Segment of the third sheet of nautical chart *Carta di cabottaggio del Mare Adriatico*, Milan, 1824 (Zadar State Archives, Collection Geographic and Topographic Maps, Sign. 76 A).





Figure 7. Coronelli's terrestrial globe, Venice, 1696 (Treasury of Franciscan monastery of St. Francis, Zadar).



Figure 8. Coronelli's celestial globe, Venice, 1696 (Treasury of Franciscan monastery of St. Francis, Zadar).

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