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LAZARETTO IN DUBROVNIK  
Beginning of the Quarantine Regulation in Europe

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Project manager "Lazaretto - Creative Hub of Dubrovnik":  
IVA CAREVIĆ PEKOVIĆ

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ROBERTINA TOMIĆ

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# LAZARETTO IN DUBROVNIK

Beginning of the Quarantine  
Regulation in Europe

Editor:  
ANTE MILOŠEVIĆ



INSTITUTE FOR RESTORATION OF DUBROVNIK

Dubrovnik, 2018.

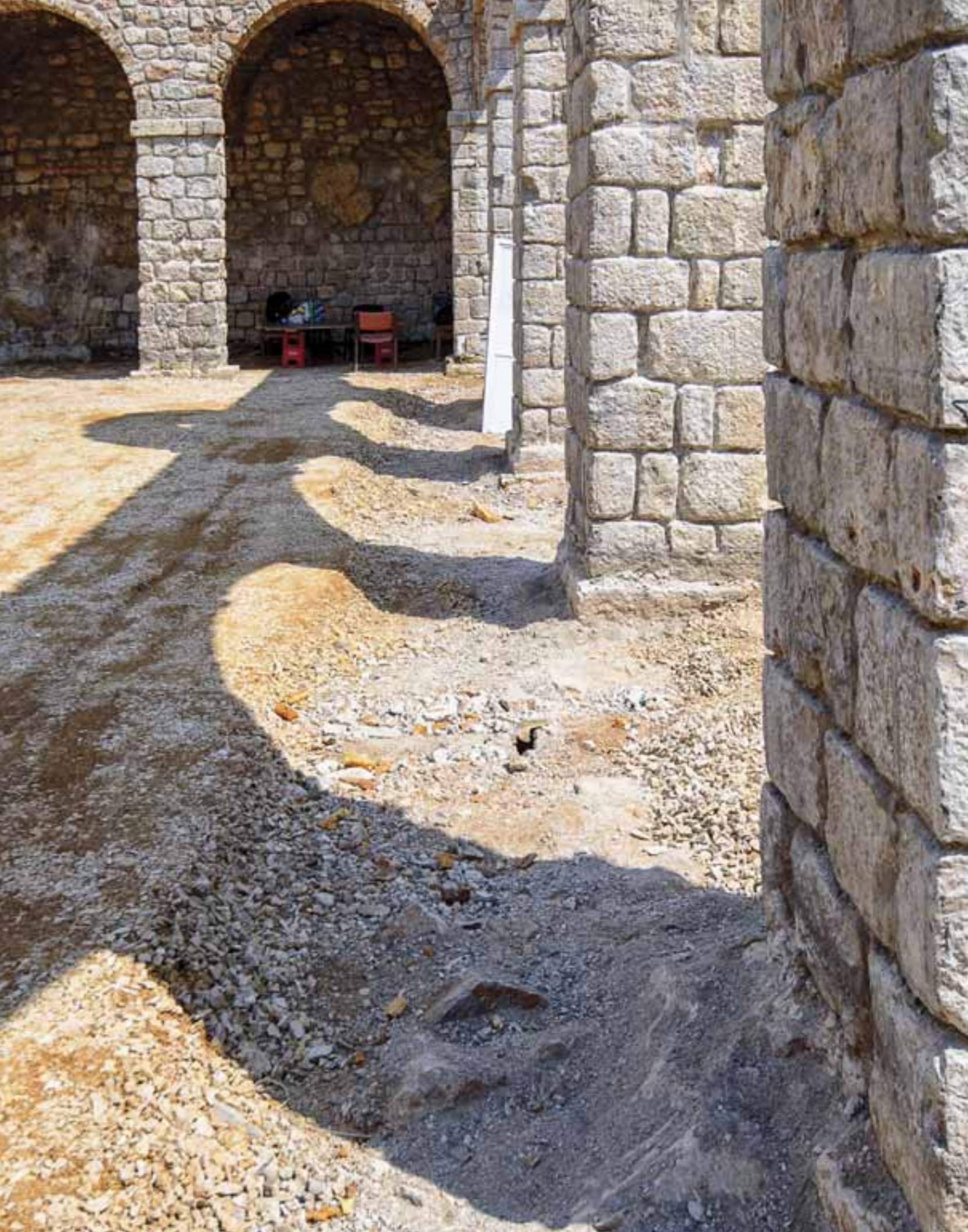


# Contents

Iva CAREVIĆ PEKOVIĆ	
Introduction	9
Vesna MIOVIĆ	
Life in the Quarantine: Lazaretto at Ploče During the Republic	13
The Dubrovnik Suburb of Ploče	13
<i>Birth of the Lazaretto at Ploče</i>	13
<i>Lazarettos, bagiafers, guardhouses</i>	15
<i>Tabor</i>	17
<i>Houses, gardens, vineyards, olive groves, vegetable gardens, orchards</i>	19
<i>Captain of the Lazaretto, sanitation soldiers, temporary officials</i>	20
Unofficial Ottoman Consul and the Tenth lazaretto	23
Books of Quarantine: People, Goods, Ships	27
<i>Travellers and goods</i>	27
<i>Quarantine: time and space</i>	30
<i>Ships</i>	31
Disease and Death	32
<i>La peste delle serve</i>	32
<i>Concealing the plague</i>	33
<i>Death of Hadjis</i>	35
<i>Death in the Old Zebić lazaretto</i>	36
<i>Plague in Konavle, repercussions at Ploče</i>	38
<i>Contaminated ships</i>	39
<i>1784 decision on the reconstruction of the Lazaretto</i>	40
Fragments of Daily Life	42
<i>I want to go home</i>	42
<i>Escape into the Lazaretto</i>	43
<i>Privileged Ottoman guests</i>	43
<i>In alcoholic fumes</i>	44
<i>The gallows in Tabor</i>	45
<i>“Move that rifle, even if empty it could be loaded by the devil”</i>	45

<i>Emin's fortunes and misfortunes</i>	46
<i>Abduction of a nobleman</i>	47
<i>"If you looked into my heart, you would find yourself inside"</i>	48
<i>Espionage centre in the Lazaretto</i>	48
Jesse HOWELL	
Balkan Caravans: Dubrovnik's Overland Networks in the Ottoman Era	51
Ana BAKIJA-KONSUO	
Lazarettos – From Isolation to Contemporary Scientific Medical Findings	65
<i>Diseases that Left a Deep Trace in the History of Dubrovnik</i>	66
<i>Leprosy – "Horror" of the Middle Ages</i>	67
<i>Mal de Meleda or the Leprosy of Mljet – Non-contagious Skin Disease</i>	68
<i>The Plague – Deadly Infectious Disease that Repeatedly Ravaged Humanity</i>	70
<i>From Isolation in the Open-Air to the Imposing Architectural Complex</i>	72
<i>Leprosaria – Shelters for Victims of Leprosy</i>	73
<i>Quarantine – Invention of the Ragusan Republic in 1377</i>	75
Lazaretto – Rich Medical History of Dubrovnik Written in Stone	77
<i>From "God's Wrath" to Contemporary Scientific Findings</i>	78
<i>From Stigmatization to the Creative District</i>	81
Mauro BONDIOLI	
The Invention of the Lazarets: Bulwarks Against the Plague in Venice and in the Western Mediterranean	83
<i>Plague Pandemics and Maritime Routes</i>	84
<i>Medical Findings and Measures Against the Epidemics</i>	87
<i>La Serenissima Health Policy and the Fight Against the Epidemics</i>	89
<i>Invention of the Lazarettos</i>	91
<i>Plague at the Door</i>	97
<i>Conclusion</i>	102
Darka BILIĆ	
Plague and Trade Control. Form and Function of the Dubrovnik Lazaretto	103
Antun BAĆE - Ivan VIDEN	
The Lazaretto at Ploče from the Fall of the Republic of Dubrovnik to Present-day	121
<i>Introduction</i>	121
<i>Lazaretto Complex in the 19<sup>th</sup> Century, from the French Occupation (1806) to the Abolishment (1874?)</i>	122
<i>Plans for Hotel Construction in the Lazaretto</i>	129
<i>Towards the Cultural-Historical and Architectural Valorisation</i>	135
<i>Post-World War II Period</i>	137
<i>Between Two Renovations (1969-2018)</i>	143
Željka BUŠKO	
Architectural and Construction Documentation of the Lazaretto in Dubrovnik	147
<i>Architectural Documentation</i>	150
<i>Description of the Existing Situation – Plan Layout</i>	151
<i>Urban Planning Documents</i>	158
<i>Conversion of Space</i>	158
<i>Reconstruction Projects</i>	162

Ante MILOŠEVIĆ	
Quarantine and Lazarettos in Dubrovnik: <i>Fortuna critica et historica</i>	167
<i>On the Establishment of Quarantine in 1377 for Those Arriving from Plague-infected Areas to Dubrovnik and its District</i>	168
<i>On the Cazamorti (Health Officials) in the 15<sup>th</sup> century</i>	172
<i>Part Three: Chapter Fourteen</i>	172
<i>On Ragusan Behaviour During the 1437 Plague Outbreak</i>	174
<i>On the Lazaretto in Dubrovnik in Evliya Çelebi's Travelogue</i>	176
<i>Lazaretto Bandiška-han</i>	176
<i>Lazaretto-han and its Form</i>	176
<i>On the Cazamorti, Gravediggers, Hygienic Measures and the 1526 Plague</i>	177
<i>Signori Cazamorti</i>	177
<i>Regulation on Gravediggers</i>	178
<i>Mistrust of the Recovered – Gravediggers, the So-Called Kopci (Male) and Kopice (Female)</i>	178
<i>On Quarantine in the District of Dubrovnik Before the Construction of the Lazaretto at Ploče</i>	181
<i>On the First Quarantine and Measures in Case of Epidemic</i>	186
<i>The First Quarantine in 1377</i>	186
<i>Measures and Severe Punishments</i>	187
<i>Tabor at Ploče</i>	187
<i>On Rules of Behaviour in the Lazaretto and its Extension in 1784</i>	189
<i>On the Quarantine at Danče and Lokrum and the Appeal for the Protection of the Lazaretto at Ploče</i>	191
<i>On Goods and Business Activities in the Lazaretto in the 18<sup>th</sup> century</i>	196
<i>On the Well in the Second Bagiafer in the Lazaretto at Ploče</i>	200
Abstracts	203
Life in the Quarantine: Lazaretto at Ploče During the Republic (Vesna Miović, PhD)	203
Balkan Caravans: Dubrovnik's Overland Networks in the Ottoman Era (Jesse Howell, PhD)	204
Lazarettos – From Isolation to Contemporary Scientific Medical Findings (Ana Bakija-Konsuo, MD-PhD)	204
The Invention of the Lazarets: Bulwarks Against the Plague in Venice and in the Western Mediterranean (Mauro Bondioli, PhD)	205
Plague and Trade Control. Form and Function of the Dubrovnik Lazaretto (Darka Bilić, PhD)	205
The Lazaretto at Ploče from the Fall of the Republic of Dubrovnik to Present-day (Antun Baće, PhD - Ivan Viđen, Professor of art history)	206
Architectural and Construction Documentation of the Lazaretto in Dubrovnik (Željka Buško, mag. ing. arch.)	206
Quarantine and Lazarettos in Dubrovnik: <i>Fortuna critica et historica</i> (Ante Milošević, PhD)	206
Literature	207





# Introduction

The Lazaretto complex is a protected cultural good that represents great value to Dubrovnik because of its architectural position, important history and immense development potential, primarily for cultural and tourism content, that would relieve some of the burden of the increasing number of visitors from the historical nucleus. Generations of young people grew up with numerous activities organized in the Lazaretto throughout the years, while the associations and companies active therein created an invaluable cultural scene and respect for the autochthonous and the original, thus contributing to the protection of intangible cultural heritage in the Dubrovnik region.

Having in mind such beneficial and high-quality user content that is compatible with the historical value of the architectural complex, it became necessary to finish the reconstruction and furnishing of the Lazaretto with the aim of improving existing activities, expanding the offer with new programmes and uniting all Lazaretto facilities into one integral unit. Therefore, during 2015, a project entitled *Lazaretto – Creative Hub of Dubrovnik* was created at the initiative of the *Institute for Restoration of Dubrovnik*. In March 2016, we submitted the project for funding within the *Integrated Development Program Based on the Restoration of Cultural Heritage*, and the contract with the *Central Finance and Contracting Agency* and the *Ministry of Regional Development and EU Funds of the Republic of Croatia* was signed in July 2017. Thus, the project entitled *Lazaretto – Creative Hub of Dubrovnik* became the first comprehensive restoration project of cultural heritage in Dubrovnik financed by the European Union.

The project is headed by the *City of Dubrovnik*, with ten participating partners: *Institute for Restoration of Dubrovnik*, *Dubrovnik Tourist Board*, *DURA City of Dubrovnik Development Agency*, *Deša Pro Ltd.*, *Deša Association – Dubrovnik*, *Art Workshop Lazareti*, *Lero Student Theatre*, *Lindo Folklore Ensemble*, *Dubrovnik Art Without Borders Association* and *Artur Sebastian Design*. The total cost of the project is 30,944,625.74 HRK, of which 25,995,571.00 HRK were co-financed by the European Union through the *European Fund for Regional Development*.

The *Institute for Restoration of Dubrovnik*, as an architect of the program, the project idea and the application, and one of the partners in the project that is implemented with about twenty activities, focused its attention on the restoration of Lazaretto's last three naves. Financially, this was the biggest project task, and technologically and logistically, the most



Lazaretto complex during restoration, 2018 (photographs: Institute for Restoration of Dubrovnik)

demanding. The goal was to reconstruct Lazaretto naves 8, 9 and 10 and courtyards in-between, so the finalisation of the second phase would also conclude the restoration of the entire complex. The valorisation of this important cultural heritage structure and the expansion of cultural and tourist content related to Dubrovnik's cultural heritage, will make a substantial contribution to the sustainable development at local and regional levels.

Work on the restoration of the last three naves started in May 2018. An intense and timely coordination, a positive and interested attitude of all parties involved in the process of project implementation contributed to the establishment of excellent cooperation. The second phase of restoration included construction and handicraft activities, as well as hydro-, thermo- and electric-installation interventions. During implementation, the initial project was slightly revised and amended, partly because of time concerns, partly because of real and objective demands of the conservation department, and the new needs that had arisen for the users of the Lazaretto facilities that were previously unknown.

Since the Lazaretto was insufficiently examined and since there was no publication that united previous findings about the complex, we had an idea during the project proposal phase to try and publish an adequate monograph, that was then included in the project *Lazaretto – Creative Hub of Dubrovnik*. The monograph tried to bring together authors who, in their previous professional work, studied lazarettos at the local and international level. The results we bring in this book provide the contextual framework of the Lazaretto history, many new and important details, but also an obligation for future archaeological and historical investigation. Specifically, during the recent archaeological excavations a historical pavement was discovered in the courtyard between naves 7 and 8, with a well underneath, but also small parts of older wall structures whose date and function were not determined because of insufficient examination. The discoveries made during the architectural reconstruction and new research results are consolidated in the monograph: *Lazaretto in Dubrovnik. Beginning of the Quarantine Regulation in Europe*, and undoubtedly represent an added value to the entire project.

I would like to thank the editor and the authors for their dedicated work and support in making this publication that represents a valuable basis for new exploration and knowledge exchange.

Iva Carević Peković

Project Manager: *Lazaretto – Creative Hub of Dubrovnik*

Coordinator of Monograph Publication:  
*Lazaretto in Dubrovnik. Beginning of the Quarantine Regulation in Europe*



# Life in the Quarantine: Lazaretto at Ploče During the Republic

## The Dubrovnik Suburb of Ploče

### *Birth of the Lazaretto at Ploče*

In 1377, the Dubrovnik Major Council promulgated the regulation on the suppression of plague. According to the regulation, travellers from pestiferous regions had to spend one month in Cavtat or on the island of Mrkan. This was Dubrovnik's first quarantine regulation, and many scientists confirm its primacy and conceptual originality when compared to other Mediterranean cities, and consider it to be the first quarantine regulation in the world. Dubrovnik authorities attempted to contain the spread of plague, and simultaneously allow the maritime and overland trade to run unobstructed, even if considerably decelerated. Sometime later, the government chose the islands of Bobara and Supetar, and then the island of Mljet as quarantine stations. The organization and construction of the Lazaretto at Danče started in the 1430s, and construction works were mentioned until the end of the 15<sup>th</sup> century. In 1534, Dubrovnik authorities decided to build a Lazaretto on the island of Lokrum as well. The construction was never finished, probably for strategic reasons, because of the potential danger that Venetians might use the Lazaretto as a fortress in the immediate vicinity of the City.<sup>1</sup>

At the same time, an increasing amount of goods from the Ottoman Empire was coming through the main caravan road<sup>2</sup> to the eastern suburb of Ploče. The Ragusans had a regulated

<sup>1</sup> G. GELCICH, *Delle istituzioni marittime e sanitarie della Repubblica di Ragusa*. Trieste, 1882, pp. 34-47. – V. BAZALA, Pomorski lazareti u starom Dubrovniku, in: *Dubrovačko pomorstvo*, (ed. J. Luetić), Dubrovnik, 1952, pp. 296-303. – V. BAZALA, *Pregled povijesti zdravstvene kulture Dubrovačke Republike*. Zagreb, 1972, pp. 32-35. – S. MOSHER STUARD, A Communal Program of Medical Care: Medieval Ragusa / Dubrovnik, *Journal of the History of Medicine and Allied Sciences* 2, New Haven, 1973, pp. 126-142. – M. D. GRMEK, Le concept d'infection dans l'Antiquité et au Moyen Age, les anciennes mesures sociales contre les maladies contagieuses et la fondation de la première quarantaine à Dubrovnik (1377), *Rad JAZU* 384, Zagreb, 1980, pp. 9-55. – S. FATOVIĆ-FERENČIĆ, Šestota obljetnica karantenskog lazareta na otoku Mljetu u ozračju odluke Velikog vijeća 1377. godine, in: *600. obljetnica karantenskog lazareta na otoku Mljetu s početkom djelatne uslužnosti dezinfekcije*, (ed. J. Bakić, R. Dujmović), Dubrovnik, 1997, p. 40. – Z. JANEKOVIĆ-RÖMER, I lazaretti di Dubrovnik (Ragusa), in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano, 2004, pp. 246, 247. – Z. BLAŽINA TOMIĆ. V. BLAŽINA, *Expelling the Plague; The Health Office and the Implementation of Quarantine in Dubrovnik 1377-1533*, Montreal, 2015, pp. 106-109.

<sup>2</sup> The road from the border village of Brgat, near Dubrovnik to Ploče is mentioned in archival sources as the Main or Great Road (*strada maestra*), and sometimes also as the Vlach road (*via Murlaccorum*) (V. MIOVIĆ-PERIĆ, *Na razmeđu; osmansko-dubrovačka granica (1667-1806)*, Dubrovnik, 1997, pp. 122, 327, 331. – H. HAJDARHODŽIĆ, Jedno suđenje pred ljubinjnskim kadijom iz 1714. godine, *Godišnjak Društva istoričara Bosne i Hercegovine* 18, Sarajevo, 1970, p. 271).

relationship with the Ottomans, whom they paid an annual tribute from 1458, and in return the Ottomans guaranteed protection to the Ragusan state. Ragusan merchants, who were paying the preferential tax rate of 2% on the European territory of the Empire, were also protected. The Republic of Dubrovnik maintained a high level of freedom, which allowed it to preserve its neutrality. The neutral port of Dubrovnik was attractive to merchants and trade was particularly busy during times of war. The fact that the Ottoman customs officer, *emin*, was mentioned at Ploče for the first time in 1477, speaks about the rise of commercial trade from the Empire. Written accounts about a salt warehouse at Ploče, where salt was purchased by Ottoman citizens, are dated somewhat later.<sup>3</sup> In 1504, the authorities forbade property owners at Ploče from receiving foreigners. At the same time, they allowed a Venetian merchant to have a quarantine in the house of the patrician Nikola Vidov Zamagna at Ploče. They permitted some other merchants to settle at the foot of the city walls at Ploče.<sup>4</sup> And indeed, there is a written account, dated in 1517, of a shed and a house that were used for decontamination of Ottoman goods in the area between the towers of Asimon and St. Jacob.<sup>5</sup> The quarantine space at that location was used long after the Lazaretto complex at Ploče was built. Archival sources point to the fact that this area was called the “Little lazaretto” or “Little lazaretto at the foot of the wall/walls”.<sup>6</sup>

In 1580, Ragusan ambassadors at the Porte said that houses for Ottoman merchants were built at Ploče.<sup>7</sup> Perhaps a building located near the city gate, at today’s Frano Supilo Street No. 2, was one of them. It was mentioned in the 1630s as the “Old lazaretto,” in order to distinguish it from the Lazaretto that was being constructed.<sup>8</sup>

At the beginning of 1590, the Senate rejected a proposal to decontaminate the goods coming into Ploče, at Danče in the western suburb of Dubrovnik. Instead, it was decided to adapt the salt warehouse at Ploče for that purpose. Despite the fact that several months later, the financial plan for building the new Lazaretto at Ploče<sup>9</sup> was adopted, the construction did not start. Two years later, the Senate decided to just build another house for Ottoman merchants who were released from quarantine. This long single-storey building was called Han.<sup>10</sup> “The House at Ploče where the Turks lived” was equipped with all “necessary items” in 1596.<sup>11</sup> In time, another two-storey building was constructed alongside the Han, known as Čardak.

Usage of the Little lazaretto and the salt warehouse for quarantine purposes, as well as the construction of houses for Ottoman merchants, clearly spoke of the need to build the new Lazaretto at Ploče, by the sea, where the caravan road ended. However, Ragusans protracted with making the decision, because they did not want to have a walled Lazaretto complex in the immediate vicinity of the City.

A new decision on building the Lazaretto at Ploče was made in 1622, the construction started in 1627, and was still ongoing in 1641. One year after the 1627 plan was finally realized, the Senate decided to expand the Lazaretto, i.e. to continue the construction.<sup>12</sup>

<sup>3</sup> I. BOŽIĆ, *Dubrovnik i Turska u XIV i XV veku*. Beograd, 1952, pp. 201, 264, 265.

<sup>4</sup> Z. BLAŽINA TOMIĆ, *Kacamorti i kuga; utemeljenje i razvoj zdravstvene službe u Dubrovniku*, Zagreb-Dubrovnik, 2007, pp. 132, 134.

<sup>5</sup> V. BAZALA, *Pomorski lazareti*, p. 301. – L. BERITIĆ, *Utvrdjenja grada Dubrovnika*. Zagreb, 1955, p. 176.

<sup>6</sup> *Lazzaretto piccolo, Lazzaretto piccolo sotto la mora, Lazzaretto piccolo sotto il moreo (Contumaciae)*, State Archive in Dubrovnik, hereafter: SAD, series 55.1, vol. 1, ff. 6, 11v, 12v, 22, 23; vol. 2, ff. 68, 143v, 165; vol. 4, ff. 1, 8, 53, 76; vol. 5, ff. 49, 18, 36; vol. 6, ff. 16, 37; vol. 7, ff. 1v, 17v). – L. BERITIĆ, *Ubikacija nestalih građevinskih spomenika u Dubrovniku, II, Prilozi povijesti umjetnosti u Dalmaciji 12/1*, Split, 1960, p. 64. – L. BERITIĆ, *Utvrdjenja grada Dubrovnika*, p. 176.

<sup>7</sup> *Lettere di Levante* (hereafter as: *Let. Lev.*), SAD, series 27.1, vol. 35, f. 178v.

<sup>8</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta na Pločama*, in: *Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 23, 24, 27. The form of this building, that was divided in three parts, changed over time (*Contumaciae*, vol. 5, ff. 19, 25v, 46v. – *Cons. Rog.* vol. 192, ff. 93v, 94).

<sup>9</sup> Z. ŠUNDRICA, *Arhivsko gradivo*, pp. 11-13.

<sup>10</sup> L. Beritić suggests that in 1617, Han was lengthened by approx. 6 metres in the westward direction (L. BERITIĆ, *Ubikacija nestalih građevinskih spomenika*, pp. 64.

<sup>11</sup> *Acta Minoris Consilii* (hereafter as: *Cons. Min.*), SAD, series 5, vol. 63, f. 244.

<sup>12</sup> Z. ŠUNDRICA, *Arhivsko gradivo*, pp. 14-29, 38-49, 51-77. – V. BAZALA, *Della peste e dei modi di preserversene nella Repubblica di Ragusa (Dubrovnik)*, *Comunicazione al XVI Congresso internazionale di storia della medicina a Roma*, Zagreb, 1954, p. 25.

Zdravko Šundrica concluded that the Lazaretto complex, as we know it today, was roofed in 1643. Šundrica also calculated that the 1627/43 building expenses amounted to approximately 17,300 gold ducats.<sup>13</sup>

The construction of the Lazaretto was finished around 1647. In 1724, the Senate proclaimed it to be an integral part of the City's fortifications.<sup>14</sup>

### *Lazarettos, bagiafers, guardhouses*

The Lazaretto complex at Ploče is consisted of ten lazarettos, 5 courtyards and two guardhouses. In the Books of quarantine, "lazaretto" is also called *camera*. Entrances from the plateau to the lazarettos, i.e. *camere*, were marked with roman numerals from one to ten, counting from east to west, some of which are visible today.<sup>15</sup> One lazaretto comprised a single floor with a roof above the courtyard portico, as well as part of the house (or the whole house) on the Lazaretto plateau. Six houses located on the Lazaretto plateau were also called "the upper lazaretto" (Fig. 1).<sup>16</sup>



Fig. 1. Lazaretto and Tabor, 1868, photograph (State Archive in Dubrovnik)

There is very little archival information about the lazarettos' interior and what they were used for. Since travellers were not allowed to have a quarantine anywhere near the merchandise, the goods were stored in the courtyard porticos.<sup>17</sup> The travellers were housed above the porticos, on the floor with a roof structure and barred windows,<sup>18</sup> and in the houses on the Lazaretto plateau. They had kitchens, i.e. hearths, that were mentioned in 1664 by the famous Ottoman travel writer Evliya Çelebi. He talked about "good rooms",<sup>19</sup> which is an indication that the lazarettos may have been subdivided into several rooms.

Each floor with the roof structure was connected to a room in the house on the Lazaretto plateau, through which the travellers were able to exit into the space with lateral high

<sup>13</sup> Z. ŠUNDRICA, Arhivsko gradivo, pp. 28, 51-54.

<sup>14</sup> Z. ŠUNDRICA, Arhivsko gradivo, pp. 28, 51. – *Acta Consilii Rogatorum* (hereafter as: *Cons. Rog.*), SAD, series 3, vol. 151, f. 153.

<sup>15</sup> *Contumaciae*, vol. 6, ff. 54, 60v.

<sup>16</sup> *Diplomata et Acta, 18. stoljeće* (hereafter as: DA 18), SAD, series 76, vol. 3185, no. 29. See also: *Contumaciae*, vol. 12, f. 32.

<sup>17</sup> I. MITIĆ, O poslovanju dubrovačkih lazareta na Pločama krajem 18. stoljeća, *Dubrovnik* 4, Dubrovnik, 1977, p. 100.

<sup>18</sup> DA 18, vol. 3185, no. 29.

<sup>19</sup> E. ČELEBI, *Putopis; odlomci o jugoslovenskim zemljama*. Sarajevo, 1979, p. 424.



Fig. 2. Terraces in front of the Lazarettos (photograph detail, 1868)

walls and a partition opposite the exit. There was a stone bench in that small open space.<sup>20</sup> These little terraces were envisaged as places where travellers who were quarantined (*di contumacia*) could have a breath of fresh air. However, they were still able to walk rather freely across the entire plateau of the Lazaretto, they were just not allowed to mix with passengers who had already been released from quarantine (*di libera pratica* or *di pratica*) and who lived outside the Lazaretto complex (fig. 2).<sup>21</sup>

Except with a key, the lazarettos could also be bolted with a latch, not just from the outside but also from within.<sup>22</sup>

Entrances from the Lazaretto plateau into the courtyards are today still marked with Roman numerals. There are five courtyards, each with two spacious porticoes.<sup>23</sup> The goods were decontaminated in the courtyard. In some, maybe all, of the courtyards, wool was stored on high wooden beams that could be accessed using wooden ladders.<sup>24</sup> The beams were perhaps parts of the canopy, so wool could be protected from wind and rain.<sup>25</sup>

Each courtyard had a single opening to the sea, in archival sources called the “window” or “door”.<sup>26</sup> The window/door probably had bars.<sup>27</sup> These openings provided airflow necessary for the decontamination of goods. There is no evidence that they were used to bring merchandise in or out.

Merchandise from ships was brought in by stairs, located immediately next to the west end of the Lazaretto, which were closed by wooden lattice doors. The stairs still exist today. In 1646, two cubits (approx. 1 metre) high wall was built to serve as a “seating area and a fence” between the lattice doors and the Old lazaretto (Fig. 3).<sup>28</sup>

Standard name used for the Lazaretto courtyard was *bagiafer*, and its variant *babagiafer*.<sup>29</sup>

<sup>20</sup> DA 18, vol. 3176, no. 104.

<sup>21</sup> DA 18, vol. 3175, no. 86, 453; vol. 3400, no. 28.

<sup>22</sup> DA 18, vol. 3185, no. 29, 36.

<sup>23</sup> A. BAČE - I. VIĐEN, Lazareti na Pločama od pada Dubrovačke Republike do danas (1808.-2013.), *Prostor* 21, Zagreb, 2013, pp. 327-328.

<sup>24</sup> DA 18, vol. 3188, no. 195, 198, 202; vol. 3189/2, no. 254. – R. KRALJ-BRASSARD, *Detta presvijetlog i preuzvišenog gospodina kneza: troškovi Dvora u Dubrovniku od 16. do 19. stoljeća*, *Anali HAZU Zavoda za povijesne znanosti u Dubrovniku* 52/1, Zagreb-Dubrovnik, 2014, p. 141.

<sup>25</sup> DA 18, vol. 3188, no. 194; vol. 3189/2, no. 253, 255.

<sup>26</sup> *Sanitas*, SAD, series 55, vol. 2, without pagination, 5.11.1782, 11.9.1792.

<sup>27</sup> In 1760, the repair of ironware (*ferramenti*) of one courtyard's seaside gate was mentioned, that was destroyed in the storm (DA 18, vol. 3188, no. 193).

<sup>28</sup> DA 18, vol. 3398, no. 16. – Z. ŠUNDRICA, *Arhivsko gradivo*, p. 27.

<sup>29</sup> *Contumaciae*, vol. 3, f. 29; vol. 10, f. 11v *a tergo*. – *Acta Turcarum* (hereafter as: *Acta Turc.*), SAD, series 75, vol. E 4, no. 2, 12. – DA 18, vol. 3175, no. 6; vol. 3187/2, no. 307; vol. 3188, no. 193, 195, 198. – *Sanitas*, vol. 2, without pagination, 11.9.1792. – *Lamenta del Criminale* (hereafter as: *Lam. Crim.*), SAD, series 50, vol. 135, f. 103.



The name is definitely derived from the notorious Istanbul prison *Baba Giafer* (Tur. Baba Cafer), which had a courtyard and was located by the sea. Only a person who saw the interior of *Baba Giafer* prison could have named the Lazaretto courtyards *bagiafers*.

The most difficult crisis between the Ragusan Republic and the Porte happened during the rule of the Grand Vizier Kara-Mustafa. Kara-Mustafa accused the Ragusans of charging an exorbitant tax rate to Ottoman merchants during the War of Candia (1645/1669). He demanded high restitution, and Ragusan ambassadors were opposing him in any way they could. In May 1679, the Vizier sent ambassadors Marojica Caboga, Đuro Buća and Sekundo Gozze to *Baba Giafer* prison. They experienced horrible things in the courtyard of that prison: “they took us out from the dark dungeon and led us to Pilate’s court, i.e. the prison’s courtyard, where we were immediately met by the executioner and more than a hundred Janissaries. As some kind of master of ceremony, he took us before the *subaşı* ..., who declared: ”I was given an order to beat and torture you”.<sup>30</sup> However, the ambassadors avoided torture. After spending 504 days<sup>31</sup> in *Baba Giafer* prison, they spent another month travelling back to Dubrovnik, and upon arrival they were immediately sent to the Lazaretto, again to prison, as it were. We could, therefore, presume that remembering their prison days and, joking bitterly, they named the Lazaretto courtyards *bagiafers*.<sup>32</sup>

All the *bagiafers*, except the first,<sup>33</sup> were named, i.e. nicknamed. The Second *bagiafer* was called “Above the well”,<sup>34</sup> because there was a well underneath, a source of drinking water for Lazaretto inhabitants.<sup>35</sup> The Third one was called “Above the fig”,<sup>36</sup> and the Fourth “Above the pomegranate”.<sup>37</sup> The Fifth was named “Under emins,” because Ottoman officials, the emins, lived in the adjacent Tenth lazaretto.<sup>38</sup> The name *bagiafer* was used after the fall of the Ragusan Republic, during French and Austrian rule.<sup>39</sup>

The Lazaretto complex also comprised two small two-storey guardhouses (*strascianize, guardiole, casucce*).<sup>40</sup> The guardhouse across from the First lazaretto was often mentioned to have housed local and foreign couriers.<sup>41</sup>

## Tabor

Caravans, passengers, merchandise and animals all arrived to Tabor via the caravan road that ended behind the Slanica (salthouse), where Ottoman citizens were buying salt.<sup>42</sup> A part of Tabor was located across the road from the Lazaretto, and it comprised the area between present-day Put od Bosanke and Ivo Račić Streets, that is today dominated by the High School building.<sup>43</sup> (fig. 1)

The Tabor’s *Rastello*, a lattice partition made of wood poles,<sup>44</sup> was located in the bottom west corner. Conducting trade there was allowed, but without buyer and seller touching each other.

<sup>30</sup> *Diplomata et acta, 17. stoljeće* (hereafter as: DA 17), SAD, series 76, vol. 1833, no. 14.

<sup>31</sup> V. MIOVIĆ, *Dubrovačka diplomacija u Istambulu*. Zagreb-Dubrovnik, 2003, p. 162.

<sup>32</sup> Indeed, the term *bagiafer* was not used before the arrival of ambassadors Buća, Caboga and Gozze to Dubrovnik. However, it should be pointed out that archival information about the Lazaretto at Ploče in the 17<sup>th</sup> c. is rather scarce.

<sup>33</sup> *Primo bagiafer (Contumaciae, vol. 10, f. 11v)*.

<sup>34</sup> *Contumaciae, vol. 10, ff. 9v, 12 a tergo; vol. 11, f. 16v; vol. 12, ff. 19, 21v*.

<sup>35</sup> DA 18, vol. 3176, no. 104.

<sup>36</sup> *Contumaciae, vol. 10, f. 25 a tergo; vol. 11, f. 2v*.

<sup>37</sup> *Contumaciae, vol. 10, f. 26 a tergo*.

<sup>38</sup> *Contumaciae, vol. 10, f. 10v; vol. 11, ff. 45v, 93; vol. 12, f. 140v*.

<sup>39</sup> *Contumaciae, vol. 14, f. 47v*. – S. ĐORĐEVIĆ - Z. ŠUNDRICA, Stanje zdravstvenih prilika u Dubrovniku i predlog Vlaha Stulija 1808. godine maršalu Marmonu za njihovo popravljnje, *Srpski arhiv za celokupno lekarstvo* 89, Beograd, 1961, p. 1230.

<sup>40</sup> It was very difficult to reconstruct the position of all guardhouses in the Lazaretto and outside. The archival sources sometimes say where they were located, and often only mention them as *strascianize, guardiole* or *casucce*.

<sup>41</sup> *Contumaciae, vol. 6, ff. 63v, 86, 87v*.

<sup>42</sup> DA 18, vol. 3188, no. 200. *Contumaciae, vol. 4, f. 50*.

<sup>43</sup> L. BERITIĆ, Ubikacija nestalih građevinskih spomenika, pp. 64.

<sup>44</sup> The captain of the Lazaretto regularly ordered wood poles, we believe to make lattice partitions (*Sanitas, vol. 10, without pagination, 31.5.1751: no. 5, 9; 3.6.1757: no. 6; 31.12.1762: no. 52, 60; 4.11.1766: no. 5, 16; 31.12.1772: no. 15; 13.12.1775: no. 21; 26.7.1778: no. 2)*.



Fig. 3. Photograph of Tabor, c. 1870  
(State Archive in Dubrovnik)

In the vicinity of the *Rastello* was the “Meded” fountain that still exists today, and adjacent to it were two large stone sinks for watering horses and other livestock.<sup>45</sup> “Meded” was the only source of drinking water for waggoneers and other Tabor customers.<sup>46</sup> It is presumed that a bathing area for animal disinfection, described in detail by the Austrian district engineer Lorenzo Vitelleschi, also existed during the time of the Republic.<sup>47</sup> The poultry was sprayed with vinegar.<sup>48</sup> Large amounts of livestock and poultry was coming to Tabor from Bosnia and Herzegovina, to meet the needs of the City and its suburbs. The area of *Mandarica* (*Mandarizza*)<sup>49</sup> is often mentioned in archival sources, obviously as part of the Tabor complex. It probably derives from the Latin word *mandra*, meaning closed pen or barn.<sup>50</sup> *Mandarica* was covered.<sup>51</sup>

Tabor had three guardhouses, one located right next to the *Rastello*, which contained the weighing scale for merchandise.<sup>52</sup> The second guardhouse, also used for weighing goods, was located at the lower edge of Tabor, across from *emin's* house.<sup>53</sup> The third was located above the Han.<sup>54</sup>

In the vicinity of Han and Čardak, and outside of Tabor, was the Church of St. Anthony,<sup>55</sup> also called “Antunić”.<sup>56</sup> There was a walled garden in front of it.<sup>57</sup> A small house was added

<sup>45</sup> V. BAZALA, *Pomorski lazareti*, p. 304.

<sup>46</sup> DA 18, vol. 3397, no. 11.

<sup>47</sup> *Povijesne i statističke bilješke o Dubrovačkom okrugu, prikupio okružni inženjer Lorenzo Vitelleschi*, Dubrovnik 1827, (ed. Vinicije Lupis), Dubrovnik, 2002, p. 95, tabla XXXI.

<sup>48</sup> N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte na razmeđu istoka i zapada u 18. stoljeću*. Split, 2004, p. 46. – *Sanitas*, vol. 10, without pagination, 22.12.1760: no. 5; 31.12.1762: no. 60; 27.4.1765: no. 63; 13.3.1765: no. 356; 31.12.1765: no. 83, 227; 25.6.1771: no. 7.

<sup>49</sup> *Contumaciae*, vol.1, f. 6v; vol. 2, f. 62v; vol. 4, f. 7; vol. 5, f. 42; vol. 6, f. 11; vol. 7, f. 3; vol. 8, f. 8; vol. 9, f. 20; vol. 10a, f. 4; vol. 11, f. 39v; vol. 12, f. 15v. DA 17, vol. 2051, no. 96.

<sup>50</sup> N. TOMMASEO, *Dizionario dei sinonimi della lingua italiana*. Milano, 1925, p. 126. See also: P. SKOK, *Etimologijski rječnik hrvatskoga ili srpskoga jezika*. Vol. 2, Zagreb, 1971, p. 368.

<sup>51</sup> DA 18, vol. 3188, no. 197.

<sup>52</sup> *Contumaciae*, vol. 4, ff. 60, 62v, 66v, 70, 74v, 77; vol. 5, ff. 46v, 63, 65v, 19v, 72, 68v.

<sup>53</sup> *Contumaciae*, vol. 2, f. 183; vol. 3, f. 34v; vol. 5, f. 9v; vol. 6, ff. 9, 40v.

<sup>54</sup> *Sanitas*, vol. 10, without pagination, 4.11.1766: no. 16.

<sup>55</sup> The church belonged to the confraternity of St. Anthony, and was located at today's Frano Supilo Street No. 5. For more see: L. BERITIĆ, *Ubikacija nestalih građevinskih spomenika*, pp. 64-67.

<sup>56</sup> *Contumaciae*, vol. 10b, f. 160; vol. 12, ff. 5, 15, 16, 34v, 132, 153.

<sup>57</sup> *Cons. Rog.* vol. 192, ff. 93v, 94.

to the church, which is mentioned in the records on the implementation of sanitation measures in the 1780s.<sup>58</sup>

Like the pomegranate, fig and mulberry trees<sup>59</sup> that grew in the Lazaretto, Tabor also had trees that were cultivated with great care. In the early 18<sup>th</sup> century, elm, beech and fir trees were planted next to Slanica. And, when the patrician Marin Sekundo Zamagna, pulled out a fir tree sapling, he was sentenced to ten days of isolation in the fortress of St. John.<sup>60</sup>

### *Houses, gardens, vineyards, olive groves, vegetable gardens, orchards*

Marin Sekundo Zamagna lived in a house with a garden, east of Tabor and in the vicinity of the Lazaretto.<sup>61</sup> The house of the Gradi patrician family was also located close to the Lazaretto, while the Cervas lived above the Han.<sup>62</sup>

Members of other social classes in Dubrovnik also owned houses at Ploče. Marin Martellini<sup>63</sup> was a member of the Lazarini confraternity, and was also mentioned as the Republic's chancellor and notary in the Customs Office.<sup>64</sup> On several occasions, he acted as an ambassador to the Bosnian-Herzegovinian dignitaries, and he also worked as a dragoman, an interpreter for the Ottoman Turkish language.<sup>65</sup> Dragoman Nikola Veseličić<sup>66</sup> also lived at Ploče. On several occasions, both Martellini and Veseličić assumed the duties of the Lazaretto captain.<sup>67</sup> Names of two physicians were also mentioned, Pavao Tedeschi<sup>68</sup> and Greco, whose house was located near St. Jacob.<sup>69</sup> Ragusan merchants Bettera,<sup>70</sup> Samuel Ambonetti<sup>71</sup> and Luka Drašković<sup>72</sup> also had houses at Ploče. The home of the merchant Matija Zebić was situated right next to the Lazaretto.<sup>73</sup>

Many Ragusans Jews wanted to have a storage space for their merchandise at Ploče, where some of them kept trunks or armoires that they used as storage. We do not know why the authorities, at some point, decided to prohibit Jewish people from renting houses in the area between the Han and the Jewish cemetery.<sup>74</sup>

The Pečarić family of porters (*facchini*), originally hailing from Konavle, owned a house in the area of Ploče, that is still called Zlatni Potok today.<sup>75</sup> Four generations of the Pečarić

<sup>58</sup> *Contumaciae*, vol. 11a, f. 137.

<sup>59</sup> DA 18, vol. 3400, no. 28, 36.

<sup>60</sup> N. LONZA, *Pod plaštem pravde. Kazneno-pravni sustav Dubrovačke Republike u XVIII. stoljeću*. Dubrovnik, 1997, p. 66. – DA 18, vol. 3402, no. 27.

<sup>61</sup> *Lam. Crim.* vol. 27, ff. 54-55v. – *Contumaciae*, vol. 11a, f. 147v; vol. 12, ff. 12, 25. The Zamagna family house at Ploče was mentioned as early as the beginning of the 16<sup>th</sup> c. (Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, p. 132). It is possible that the Zamagnas had two or more houses at Ploče (*Cons. Rog.* vol. 140, ff. 78, 78v).

<sup>62</sup> Z. ŠUNDRICA, Arhivsko gradivo, p. 27. – *Contumaciae*, vol. 11a, f. 156 (1785).

<sup>63</sup> *Lam. Crim.* vol. 123, f. 115 (1754).

<sup>64</sup> *Let. Lev.* vol. 73, f. 253. – *Cons. Rog.* vol. 159, f. 179v. – Š. CURIĆ LENERT - N. LONZA, *Bratovština Sv. Lazara u Dubrovniku (1531-1808): osnutak, ustroj, članstvo, Anali HAZU Zavoda za povijesne znanosti u Dubrovniku 54/1*, Dubrovnik, 2016, p. 88.

<sup>65</sup> *Let. Lev.* vol. 70, ff. 92-93v, 98-107; vol. 72, ff. 206-211, 247v; vol. 73, ff. 253-258v; vol. 74, f. 29v; vol. 75, ff. 41v, 46v-52, 64-67, 79v. – *Cons. Rog.* vol. 155, f. 24; vol. 159, f. 179v.

<sup>66</sup> *Lam. Crim.* vol. 161, ff. 210, 210v (1774). – V. MIOVIĆ, *Dubrovačka diplomacija*, pp. 222, 223.

<sup>67</sup> *Contumaciae*, vol. 2, *a tergo*, without pagination, 18.11.1735; vol. 3, *a tergo*, without pagination, 15.10.1738; vol. 10, ff. 11v, 25, 26 *a tergo*.

<sup>68</sup> *Detta*, SAD, series 6, vol. 83, ff. 31, 111v (1783/5).

<sup>69</sup> *Contumaciae*, vol. 11a, ff. 101, 117v, 119v, 140v (1782/92). – *Ceremoniale*, SAD, series 21/8, vol. 1, ff. 45, 45v.

<sup>70</sup> Most probably, Bartul Bettera (Š. CURIĆ LENERT - N. LONZA, *Bratovština Sv. Lazara*, pp. 63, 85).

<sup>71</sup> *Contumaciae*, vol. 10, f. 6. Initially, Samuel Ambonetti was a successful and wealthy merchant who also invested in maritime insurance and bought shares in ships. In the 1740s, he started sinking deeper into debt, which was discussed at the Porte in Istanbul. (V. MIOVIĆ, *Židovski rodovi u Dubrovniku (1546-1940)*. Zagreb-Dubrovnik, 2017, p. 44).

<sup>72</sup> *Contumaciae*, vol. 9, f. 34; vol. 10, f. 18v; vol. 11a, f. 50.

<sup>73</sup> *Contumaciae*, vol. 13, f. 156v; vol. 14, f. 49. In the 1720s and 1730s, Matija Zebić had trade relationships with Sarajevo, Novi Pazar and Plovdiv (*Contumaciae*, vol. 1, f. 175; vol. 2, ff. 120, 142v, 171. – V. VINAVER, *Dubrovnik i Turska u XVIII veku*. Beograd, 1960, pp. 59, 60, 63). The Zebić family was also recorded as owners of real-estate and orchards at Ploče in the 19<sup>th</sup> century. (*Katastarski operat 1837*).

<sup>74</sup> *Lam. Crim.* vol. 201, f. 124. – Z. ŠUNDRICA, Arhivsko gradivo, pp. 30, 41.

<sup>75</sup> From Nenad Vekarić genealogical database. *Criminalia*, SAD, series 16, vol. 8, ff. 136, 136v (1783). According to cadastral information of 1837, the Pečarić family owned pastures and vineyards there (*Katastarski operat 1837*).

family, Stjepan, his son Božo, grandsons Stjepan and Miho, and great-grandson Božo, all worked as *facchini* at the Lazaretto from 1723 to 1800.<sup>76</sup>

In 1711, Anica Miloševa lived in soldier Maroje's house, and "people who were treating hernias" lived in the neighbourhood.<sup>77</sup> Many other soldiers also had houses at Ploče, most of whom also worked there. Evliya Çelebi wrote: "A few more gypsy and military houses were located outside the Han".<sup>78</sup>

The analysis of the 1837 cadastre shows what type of complex was formed by all these fragments extracted from the archival records from the period of the Republic. Houses with large organized orchards and vegetable gardens behind high perimeter walls lined the slopes of Mount Srđ and the coastal strip of land. And vineyards and olive groves lined the edges of Ploče.<sup>79</sup>

The whole area of Ploče functioned as one body, one scene. All of its houses, even the churches of St. Anthony and St. Lazarus, as well as all of Ploče's permanent residents played different roles in Lazaretto's life and the implementation of quarantine measures.

### *Captain of the Lazaretto, sanitation soldiers, temporary officials*

The person responsible for the Lazaretto and the entire area of Ploče appears in archival sources as the "Ploče captain" or the "Lazaretto captain".<sup>80</sup> He was subordinated to the Health Office (*Officio della Sanità*), which was governed by, usually five, patrician senators.<sup>81</sup> The captain had to be present in the evening when the Lazaretto rooms were locked and, in the morning, when they were unlocked. He allocated travellers to the lazarettos and other quarantine spaces, and decided how long they were to spend there. The duration of the quarantine was proscribed by the Health Office, on the basis of the Senate decision and the practice of other Mediterranean Health Offices, primarily the one in Venice.<sup>82</sup>

If the level of danger from the plague was great, then the Lazaretto captain had to oversee the decontamination of merchandise.<sup>83</sup>

The Lazaretto captain was chosen by the Minor Council,<sup>84</sup> and he could serve for life. At first, this function was frequently performed by the Dubrovnik dragomans. Their knowledge of the Ottoman Turkish language, Ottoman culture, customs and experience in communication with Ottoman citizens, were undoubtedly reasons why the government entrusted them with the management of the Lazaretto. Archival materials mention Lovrijenac Goliebo (1640/4) as the first dragoman – captain of the Lazaretto, who was succeeded by his son Pavao. The archive also mentions as Lazaretto captains Lovrijenac's second son Petar, then Andrija Andriasci, Cvijeto Taljeran, Luka Lučić and his son Stjepan.<sup>85</sup> Normally, the Dubrovnik dragomans worked in the Turkish chancellery at the Rector's Palace, where they translated and archived Ottoman documents. They would also accompany the

<sup>76</sup> *Contumaciae*, vol. 1, f. 95; vol. 2, f. 115; vol. 3, f. 11v, vol. 5, f. 36v; vol. 9, f. 71v; vol. 10, f. 53; vol. 11a, ff. 15v, 19v, 25, 59, 86, 95v, 117, 119, 134, 145, 148v, 159, 171, 177v, 178v, 179, 188, 188v, 189; vol. 12, ff. 31, 46v, 91, 84v, 138v. – *Fedi et Attestati* (hereafter as *Fedi*), SAD, series 86, vol. 4, ff. 263v-264v.

<sup>77</sup> DA 18, vol. 3397, no. 11 (1711).

<sup>78</sup> E. ČELEBI, *Putopis*, p. 425.

<sup>79</sup> S. BUBLE, Analiza Katastra Dubrovnika 19. st. s transkripcijom upisnika građevinskih čestica te izradom baze podataka; Područje grada Dubrovnika u Franciskanskom katastru, *Baština: pokretač razvoja*, Split, 2014, p. 17.

<sup>80</sup> DA 17, vol. 2051, no. 96. – DA 18, vol. 3175, no. 212.

<sup>81</sup> I. MITIĆ, O poslovanju dubrovačkih lazareta, p. 101. For more on the creation, development and authority of the Health Office see: Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, pp. 81-147.

<sup>82</sup> DA 18, vol. 2908, no. 11. – *Cons. Rog.* vol. 188, ff. 209, 209v. – I. MITIĆ, O poslovanju dubrovačkih lazareta, p. 100.

<sup>83</sup> *Sanitas*, vol. 2, without pagination, 27.5.1772, 2.7.1775, 18.1.1791, 28.6.1792.

<sup>84</sup> *Cons. Rog.* vol. 184, ff. 134v, 135.

<sup>85</sup> *Sanitas*, vol. 7, ff. 40v-43, *Cons. Min.* vol. 78, f. 31; vol. 79, f. 212v. – *Cons. Rog.* vol. 103, ff. 170v-171v; 119, f. 34; vol. 123, f. 28; vol. 138, f. 23v; vol. 160, f. 173. DA 18, vol. 3400, no. 28, 36; vol. 3402, no. 27. – *Let. Lev.* vol. 63, ff. 246v-247v; vol. 64, f. 45. – Z. ŠUNDRICA, Arhivsko gradivo, p. 48.

ambassadors in their visits with Ottoman dignitaries from Herzegovina to Istanbul, in which case they were replaced at Ploče by deputy captains.<sup>86</sup>

By year 1740, the dragomans no longer served as Lazaretto captains. From that year on, Ivo Stella (1740-1759),<sup>87</sup> his son Vlaho (1759-1769),<sup>88</sup> and Vicko Volanti (1769-1789?),<sup>89</sup> the former consul of Dubrovnik in Alexandria and Livorno, were mentioned as captains.<sup>90</sup> Volanti was succeeded by Ivo, the son of Vlaho Stella<sup>91</sup> (1789?-1808), whom we encounter also as the “Lazaretto prior” at the beginning of the French rule.<sup>92</sup>

The captain lived in the Old lazaretto, which had three parts. The captain’s lazaretto was in one part and the other two accommodated merchants who were released from quarantine.<sup>93</sup> The Lazaretto captain lived there also during the French and Austrian rule (Fig. 4).

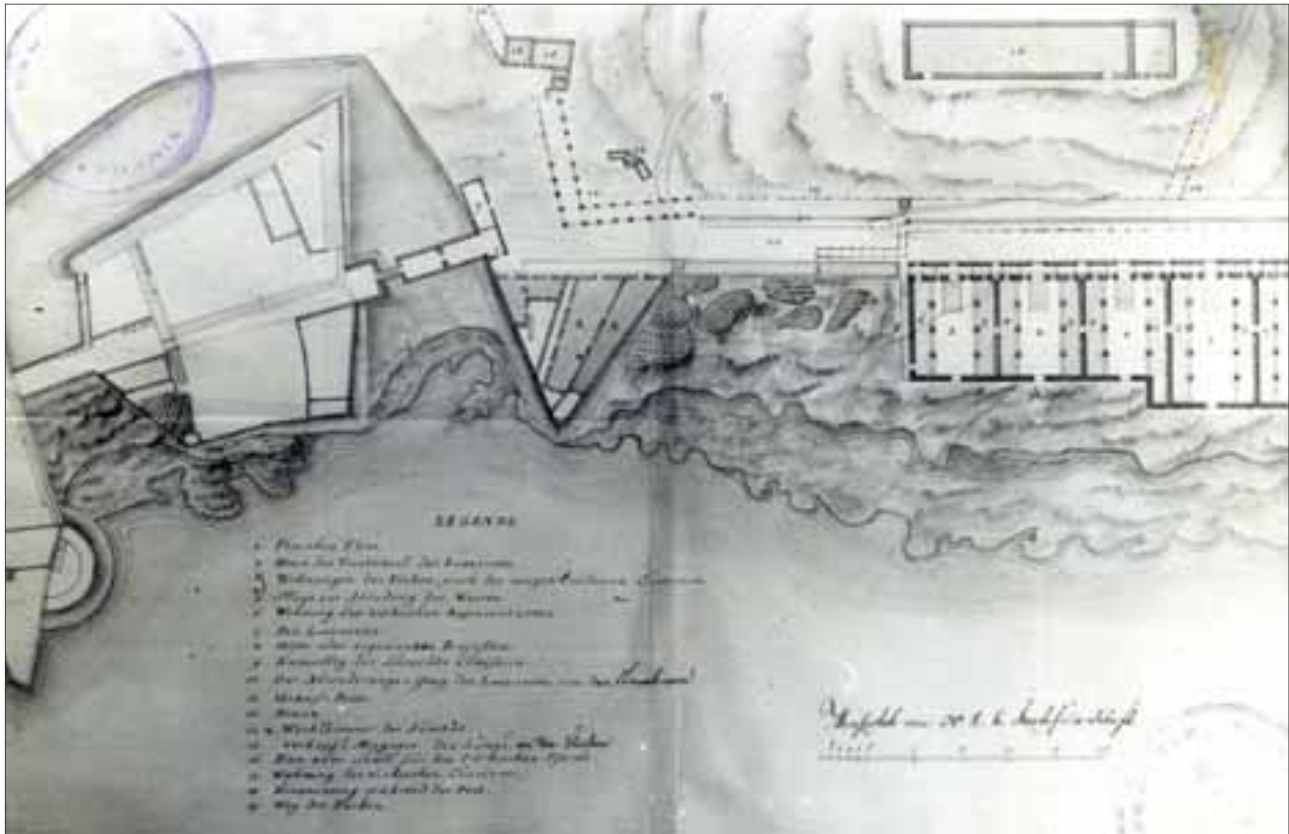


Fig. 4. Photograph of the plan, Lazaretto, Tabor, and a house called the Old lazaretto during the Republic of Dubrovnik. From the appearance of the Old lazaretto in the 1868 photograph, it seems that the plan was created at a later date. On the back of the photograph is the translation of the plan’s glossary: “1. Ploče Gate; 2. House of the Lazaretto manager; 3. and 4. Houses where the Turks lived after being released from quarantine; 5. Stairs for unloading of goods; 6. Lodging of the Turkish representative; 7. Lazaretto; 8. Courtyards, the so-called *bagiafers*; 9. Health Commission offices; 10. Corridor/road that separated the Lazaretto from the population; 11. Market (for selling goods); 12. Well; 13. and 14. Guardhouses for sanitation personnel; 15. Warehouse where salt was sold to the Turks; 16. ‘Han’ or barn for Turkish horses; 17. Lodging for Turkish couriers; 18. Fences erected during times of plague epidemic; 19. Turkish road.” (Dubrovnik Museums, Maritime Museum)

<sup>86</sup> *Cons. Rog.* vol. 138, f. 23v.

<sup>87</sup> *DA* 18, vol. 3175, no. 6, 7, 24. – *Sanitas*, vol. 10, without pagination, 31.3.1744: no. 49, 31.8.1749: no. 20, 28.2.1750: no. 26, 31.5.1751: no. 5, 30.5.1753: no. 7, 19.12.1756: no. 39, 25.12.1759: no. 6, 31.12.1759: no. 4.

<sup>88</sup> *DA* 18, vol. 3175, no. 37, 62, 89. – *Sanitas*, vol. 10, without pagination, 31.12.1762: no. 52; 31.12.1765: no. 101; 1.6.1767: no. 5.

<sup>89</sup> *DA* 18, vol. 3175, no. 212, 246, 337, 401; vol. 3176, no. 340, 380. – *Sanitas*, vol. 2, without pagination, 11.8.1781.

<sup>90</sup> I. MITIĆ, *Konzulati i konzularna služba starog Dubrovnika*. Dubrovnik-Zagreb, 1973, pp. 79, 80.

<sup>91</sup> From Nenad Vekarić genealogical database.

<sup>92</sup> *Acta Gallica*, SAD, 1808, F VII, 2853.

<sup>93</sup> *Contumaciae*, vol. 5, ff. 25v, 43v, 46v, 66, 70v; vol. 6, f. 12. – *DA* 18, vol. 3176, no. 104. – *DA* 18, vol. 3402, no. 27. – *DA* 18, vol. 3190/2, no. 245.

In 1647, the Senate decided that the Lazaretto captain should have fifteen soldiers in regular service at his disposal. According to the 1774 regulation, the military service at Ploče lasted for one month.<sup>94</sup> Regular soldiers often received reinforcements (*sopragionta*), usually of up to fifty soldiers.<sup>95</sup> During high risk situations, the number of soldiers at Ploče was known to rise to 150.<sup>96</sup> The soldiers oversaw the implementation of quarantine measures and everything else that went with it, from guard duty aboard the quarantined ship, weighing salt and goods to the disposal of dead bodies. Each additional job was paid separately.<sup>97</sup> With the usual weapons, they also carried a stick that they used to push, hold and keep quarantined persons under control.<sup>98</sup>

The *facchini* decontaminated the goods and they also carried it into the Lazaretto. They unfolded bales and sacks, ripped them open at the seams and emptied them, piled the goods, turned them over, moved and spread them out in the open air.<sup>99</sup> They conducted this work only in some of the *bagiafers*. In contrast, the other *bagiafers* were called by the Ragusans *magazzeni di libertà*,<sup>100</sup> i.e. warehouses for decontaminated goods. Several archival sources point to this fact. It wasn't until 1784 that the Health Office concluded that decontaminated goods did not belong in the Lazaretto.<sup>101</sup>

In the Lazaretto in Split, it was strictly defined which physician and chaplain were responsible for quarantined persons and who prepared their food.<sup>102</sup> The Dubrovnik Lazaretto did not have permanent physicians and chaplains, but they came when needed.<sup>103</sup> The travellers prepared food in the kitchen, but they could also get it from one of the taverns and food stores at Ploče. If they did not obtain permission from the Lazaretto captain to go themselves, accompanied by soldiers, then somebody would deliver food to them. The soldiers ran several taverns at Ploče and Posat.<sup>104</sup> This clearly represented a conflict of interest and the Senate put a stop to it in 1774. The soldier who ran a house at Ploče or Posat was not allowed to work in the sanitation service at Ploče. The following year, the Senate also prohibited trade to the Lazaretto captain, all subordinate officers and members of their families.<sup>105</sup>

If the level of danger from the plague was great, the leading role at Ploče was assumed by the sanitation assistant, a citizen of Dubrovnik (1751/3, 1765). During times of grave danger, the Health Office would send a patrician to Ploče, a principal sanitation assistant (1780s and 1790s). All sanitation assistants were widely known as *Cazamorti*.<sup>106</sup>

<sup>94</sup> *Sanitas*, vol. 2, without pagination, 16.4.1774. – Z. ŠUNDRICA, Arhivsko gradivo, p. 28.

<sup>95</sup> Z. ŠUNDRICA, Arhivsko gradivo, pp. 30, 79. – *Sanitas*, vol. 10, without pagination, 31.12.1759: no. 32; 6.3.1763: no. 213; 31.12.1763: 226; 3.3.1764: no. 354; 4.11.1766: no. 110.

<sup>96</sup> *Cons. Rog.* vol. 191, ff. 112v, 114, 114v. – *DA* 18, vol. 3176/1, 104.

<sup>97</sup> *Cons. Rog.* vol. 195, f. 71. – *Sanitas*, vol. 10, without pagination, 13.3.1765: no. 332; 27.4.1765, no. 48.

<sup>98</sup> *DA* 17, vol. 2051, no. 96; vol. 3176, no. 46. – N. LONZA, *Kazalište vlasti; ceremonijal i državni blagdani Dubrovačke Republike u 17. i 18. stoljeću*. Zagreb-Dubrovnik, 2009, p. 481. – N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte*, 2004, p. 46.

<sup>99</sup> *Contumaciae*, vol. 11a, ff. 107v, 110, 110v, 112. – *DA* 18, vol. 2908, no. 11. – *Sanitas*, vol. 7, f. 41. – *Fedi*, vol. 3, ff. 2v, 3, 48v, 49, 89, 227. For more on the decontamination of commercial wool, cotton, silk and other goods, see: N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte*, pp. 46, 47, 68-70. – N.-E. VANZAN MARCHINI, *Le pratiche di espurgo*, in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano, 2004, pp. 112, 113. – D. DAVANZO POLI, *Mercanzie forestiere per una moda veneziana*, in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano, 2004, pp. 115-129.

<sup>100</sup> *Lettere di Ponente* (hereafter as: *Let. Pon.*), SAD, series 27.6. vol. 111, no. 58.

<sup>101</sup> *Contumaciae*, vol. 4, a *tergo*, without pagination. – *Cons. Rog.* vol. 192, f. 93v.

<sup>102</sup> N. BAJIĆ-ŽARKO, *Zvanja i zanimanja u Lazaretu krajem XVI st. do tridesetih godina XVII st.*, *Kulturna baština* 14, Split, 1983, pp. 90, 91. – N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte*, pp. 67, 68.

<sup>103</sup> *Sanitas*, vol. 10, without pagination, 27.4.1763: no. 48. – *Detta*, vol. 82, f. 16v; vol. 84, f. 118v. – Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, p. 104. Z. ŠUNDRICA, *Osnivanje zdravstvene komisije u Dubrovniku u njezin rad 1808. godine*, *Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 129.

<sup>104</sup> *Sanitas*, vol. 2, without pagination, 16.4.1774. – *DA* 18, vol. 3175, no. 6. – *Lam Crim.* vol. 135, f. 116v. – Z. ŠUNDRICA, Arhivsko gradivo, p. 30.

<sup>105</sup> *Sanitas*, vol. 2, without pagination, 16.4.1774. – *Cons. Rog.* vol. 184, f. 135.

<sup>106</sup> *Contumaciae*, vol. 11a; vol. 12. – Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, p. 93. – V. MIOVIĆ-PERIĆ, *Na razmeđu*, pp. 120-122.

# Unofficial Ottoman Consul and the Tenth lazaretto

“Emin of the Dubrovnik *scala*” was the official title of the Ottoman official who collected taxes from Ottoman and other foreign merchants,<sup>107</sup> and from the sale of Ragusan salt to Ottoman citizens.<sup>108</sup> Emin was the trustee of the person or persons whom the income currently belonged. The income actually rarely went to the Ottoman state treasury.<sup>109</sup> At first, the Ottoman state leased it to different Ottoman dignitaries, for instance the Bosnian defterdar. From late 17<sup>th</sup> c. onwards, it mostly allocated it to Ottoman military companies as salaries.<sup>110</sup> Usually, it was the company of the Trebinje captaincy, and occasionally the companies of the Ljubuški, Počitelj, Krupa and Ključ captaincies. Sometimes, two or more companies shared the income, for which reason, and also because of the volume of work, it was possible to encounter four emins at Ploče concurrently (1698/9, 1714, 1716, 1779, 1782/3, 1784).<sup>111</sup>

All in all, by the end of the 17<sup>th</sup> century, one emin worked at Ploče, and after that there were mostly two. Their mandate lasted from six months to one year, and they always had a scribe and a servant.<sup>112</sup> They came to Dubrovnik with a letter of recommendation from the person or persons whom they represented.<sup>113</sup> The authorities would treat them to lunch, usually of lamb meat.<sup>114</sup> The emins were local people from Bosnia and Herzegovina, they knew Dubrovnik well and communicated easily with the Ragusans.

At the beginning of the 16<sup>th</sup> century, emin lived in Posat at Pile. Then he moved to the house at the crossroads of today's Žudioska and Prijeko Streets. It seems he lived at that address for a long time. After the Jewish ghetto was created in Žudioska Street in 1546, he moved to Prijeko.<sup>115</sup> When the construction of the Lazaretto at Ploče finished, the Tenth lazaretto became emin's home. Since only the emins lived in the Tenth lazaretto, it is no longer mentioned in the Books of quarantine after 1761.

The Ragusan authorities emphasized that the emins at Ploče were unofficial Ottoman consuls,<sup>116</sup> and that was indeed so.<sup>117</sup> The Tenth lazaretto was the unofficial Ottoman consulate, a world in itself in the full sense of the word.

The Customs Office bore the cost of maintenance and repairs in the Lazaretto, Čardak and Han. Statements of costs from 1760 to 1779 exist today, and show that special attention was paid to emin's lazaretto. They regularly painted it, fixed the roof, windows and floors,

<sup>107</sup> Ottoman merchants paid 3% of custom, and foreigners 5%. Ragusan merchants paid the preferential tax rate of 2% until 1521, when the Republic leased that custom. For more see: V. MIOVIĆ, *Dubrovačka diplomacija*, pp. 83, 84. – V. MIOVIĆ, *Dubrovačka Republika u spisima osmanskih sultana*, Dubrovnik, 2005, pp. 75, 76, 151, 152, 202.

<sup>108</sup> For more on the division of profits from the sale of salt in Dubrovnik to Ottoman citizens see: V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika Bosanskog ejaleta i Hercegovačkog sandžaka*, Dubrovnik, 2008, pp. 39, 41, 76, 77.

<sup>109</sup> *Acta Turc.* vol. B 143, no. 45; vol. E 4, no. 16, 23.

<sup>110</sup> V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, pp. 97-100. – V. MIOVIĆ-PERIĆ, *Na razmeđu*, pp. 34-37.

<sup>111</sup> *Acta Turc.* vol. B 85, no. 21; vol. B 104, no. 8; vol. E 4, no. 23, vol. E 23, no. 8; no. 2435; no. 3011.

<sup>112</sup> V. MIOVIĆ-PERIĆ, Emin na Pločama kao predstavnik Osmanlija na području Dubrovačke Republike, *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 37, Dubrovnik, 1999, pp. 206, 207. – VESNA MIOVIĆ, *Dubrovačka Republika u spisima*, p. 202. – *Acta Turc.* vol. B 85, no. 21; vol. B 104, no. 8; vol. E 4, no. 23; no. 2435; no. 3011.

<sup>113</sup> *Acta Turc.* vol. B 78, no. 5; vol. B 132, no. 277; vol. E 4, no. 10, 18; no. 2489; no. 2645.

<sup>114</sup> *Delta*, vol. 12, ff. 55, 96, 116, 124v, 138, 165; vol. 32, f. 14v; vol. 34, f. 20; vol. 35, f. 13; vol. 37, f. 14; vol. 70, f. 13v; vol. 71, f. 28; vol. 74, f. 40.

<sup>115</sup> *Cons. Rog.* vol. 34, f. 106v; vol. 60, f. 207b. – *Cons. Min.* vol. 33, f. 97a; vol. 50, f. 140v; vol. 75, f. 124; vol. 56, ff. 151v, 188v. – *Let. Lev.* vol. 35, f. 178v. – I. BENYOVSKY LATIN - D. ZELIĆ, *Knjige nekretnina dubrovačke općine (13-17. st.)*, *Monumenta historica Ragusina* VII/2, Zagreb-Dubrovnik, 2007, p. 246. On the earliest mention of emins in Dubrovnik, see: B. I. BOJOVIĆ, *Raguse et l'Empire Ottoman (1430-1520)*, Paris, 1996, pp. 146, 148, 151, 152.

<sup>116</sup> *Let. Lev.* vol. 104, f. 181. *Let. Pon.* vol. 83, no. 94.

<sup>117</sup> Emins in other cities in the Venetian Dalmatia, i.e. Split, Makarska, Zadar and others, also collected customs duties and had the role of unofficial Ottoman consuls (S. TRALJIĆ, *Trgovina Bosne i Hercegovine s lukama Dalmacije i Dubrovnika u XVII i XVIII stoljeću*, *Pomorski zbornik* 1, Zagreb, 1952, pp. 342, 343. – N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte*, p. 62).

cleaned the toilet and hearth. They once tiled the floor of the bathing area with new stone tiles.<sup>118</sup>

Ottoman citizens came to the region of Dubrovnik daily to conduct trade, they lived and worked there, established business contacts with the Ragusans, acted as debtors and creditors, asked for physicians. They required various documents, certificates, receipts, statements, reports that were written by the emin. Many such documents exist in the State Archive in Dubrovnik.<sup>119</sup>

As peacemakers between the feuding Ottoman and Ragusan citizens, the emins averted the danger of conflict escalation and revenge. In 1636, the Minor Council decided “that all feuds that arise at Ploče between merchants, porters and drivers of caravans, related to damages or deficits of their wool or other goods, must be resolved before the emin prior to the goods being imported into the City”.<sup>120</sup>

The emins were both investigators and witnesses against Ottoman criminals, violators and robbers of Ragusan property.<sup>121</sup> They were authorized to arrest and imprison the Ottoman perpetrator in their lazaretto, to question him and write a report, after which Ottoman soldiers would come to collect him and take him before the kadi (judge) for trial.<sup>122</sup> When a person like that fell into the hands of Ragusan citizens, they were supposed to turn him over to the emin.<sup>123</sup>

The most important thing, in Ragusans’ minds, was that the emin supervise all Ottoman travellers. They often claimed that the emins were prone to turning a blind eye.<sup>124</sup> From the mid-18<sup>th</sup> century, Dubrovnik authorities increasingly complained that Ottoman merchants and travellers disrespected quarantine rules by breaking the locked lazaretto door at night, attacking sanitation soldiers and escaping from Ploče.<sup>125</sup> Words used in the Books of quarantine to describe such cases were *Fuggi dal Lazaretto*, and emins also reported about them.<sup>126</sup>

Mahmud I (1730/54) was the first Sultan to issue a firman (official edict) to the governor of the Bosnian Eyalet instructing him to look after peace and security in the Dubrovnik Lazaretto. This firman was reissued by all future sultans. The Bosnian governors wrote to Dubrovnik emins and Ottoman officials near the Dubrovnik border, and asked that they act in accordance with sultan’s orders.<sup>127</sup>

According to Ragusan complaints, travellers from Bosnia-Herzegovina and Albania, who were returning from Alexandria where plague often raged, created the most serious problems. Many travellers from Alexandria were hadjis, Islamic pilgrims to Mecca.

The people from Ulcinj caused trouble constantly, even in the City itself. Which is why, on several occasions, the sultans issued orders to the emins asking them to prevent Ulcinj ships from entering the port and the City of Dubrovnik. However, the people from Ulcinj were impossible to contain.<sup>128</sup>

<sup>118</sup> DA 18, vol. 3188, 195, 197, 200, 201; vol. 3189/2, no. 251-258, 260.

<sup>119</sup> V. MIOVIĆ-PERIC, Emin na Pločama, pp. 205-214.

<sup>120</sup> Z. ŠUNDRICA, Arhivsko gradivo, p. 47.

<sup>121</sup> *Acta Turc.* vol. B 61, no. 134; vol. C 7, no. 42, 43, 79, 83.

<sup>122</sup> *Acta Turc.* vol. B 22, no. 86; vol. B 132, no. 5, 260, 286; vol. C 2, no. 21, 23; E 4, no. 6; no. 4804. DA 18, vol. 3176/2, no. 62.

<sup>123</sup> DA, 18. vol. 3401, no. 7. – *Acta Turc.* vol. E 3, no. 20. – *Cons. Rog.* vol. 199, f. 227.

<sup>124</sup> *Let. Lev.* vol. 77a, ff. 188-208; vol. 96, f. 66.

<sup>125</sup> V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, pp. 169, 171.

<sup>126</sup> *Contumaciae*, vol. 4, f. 7; vol. 10, f. 32v; vol. 11a, f. 12, 14. – *Acta Turc.* no. 3088.

<sup>127</sup> *Let. Lev.* vol. 79, ff. 224-240v. – *Acta Turc.* vol. B 9, no. 11. – V. MIOVIĆ, *Dubrovačka Republika u spisima osmanskih sultana*, Dubrovnik, 2005, pp. 383, 387. – V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, pp. 191, 192, 196.

<sup>128</sup> *Copia Lettere Diverse di Turchia*, SAD, series 27.2, vol. 5, f. 42. – *Let. Lev.* vol. 78, ff. 258, 258v. – V. MIOVIĆ, *Dubrovačka Republika u spisima osmanskih sultana*, pp. 357, 382, 402, 405. – V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, p. 178.



It seems that after spending long periods of time away from home, the Bosnian-Herzegovinian and Albanian hadjis, and other travellers from Alexandria found it hard to withstand the quarantine, because in their case it usually lasted 40 days. For this reason, the authorities introduced a practice of having them sign a statement to the emin, in which they agreed to respect quarantine regulations:

“... we arrived to the port of Dubrovnik from Alexandria, aboard a ship with a Ragusan captain. According to an old custom, called ‘contumacia’ in the port of Dubrovnik, our possessions and goods that came from the said location, would be taken to a place called the ‘Lazaretto.’ Based on the request of the Ragusan Beys and pursuant to the high order they were given, and with our agreement, our possessions and goods were removed from the ship and taken to the said Lazaretto. We personally vouched for each other and agreed, per the old custom and request of the Ragusans, to stay until the end of contumacia, and to pay the full amount of customs, taxes and expenses for the ship and other items, to the Beys of Ragusa. Thus, if any of us refused and started an argument, they were allowed to take our personal items and merchandise, half of it to be confiscated by the Ottoman state treasury and the other half by the Bosnian governor. This contract was written for this purpose and is attested by the official stamps. It was submitted to the Ragusan Beys who could act accordingly, if and when needed.” The emin added in the corner of the document: “We, the emins of the *scala*, attest that they said as it is written” (fig. 5).<sup>129</sup>

Despite Ragusan complaints, the emin at Ploče was very useful to them because he took care of Ottoman citizens in the territory of the Republic. As a witness, investigator and a judge, he had to resolve conflict situations as soon as they arose. If it were not for him, the Ragusans would have to run to kadi or some other Ottoman official, who would not have been as quick and successful as the emin living in the Lazaretto, in the immediate vicinity of the City.

Many emins passed through the Lazaretto at Ploče who each had different characters. For example, Süleyman Agha (1643) on the one hand and Mehmed Agha and Osman Agha (1752) on the other, were radically different.

The emin Süleyman Agha was known as a person prone to scandals who complicated lives of all merchants. He took things too far in 1643, when he provoked Herzegovinian Vlachs to throw stones at Ragusan soldiers at the City gate. The Ragusans claimed that Antun Kukuljević, captain of the city guards died in that attack. The soldiers fired back and wounded two of the attackers. The Ragusan authorities immediately requested from kadi of Herceg-Novi to investigate and write a report, which they then sent to the Bosnian governor and the Porte. Governor Deli Husein Pasha promptly reacted and in September 1643 he sent a letter of resignation to Süleyman Agha: “You, Süleyman, the former emin of the Dubrovnik *scala* are hereby fired because you were not collecting taxes as you were instructed, you abused merchants in different ways, constantly caused scandals, and refused to show due respect to Ragusan noblemen”.<sup>130</sup> Süleyman Agha left, but that was not enough for the Ragusans. They continued to demand at the Porte that he paid with his life for crimes committed at Ploče.<sup>131</sup>

At the end of 1751, the Tripoli corsairs sailed into the port of Dubrovnik with their loot, the Venetian trabaccolo ship. Dubrovnik waters were soon swarmed by the ships from Venice. The Venetians demanded that the Ragusans turn over the corsairs and accused them of working with those sea bandits. The Ragusan authorities could not meet their

<sup>129</sup> *Acta Turc.* no. 2898 (July 1798).

<sup>130</sup> V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, pp. 92, 93, 129.

<sup>131</sup> *Let. Lev.* vol. 48, ff. 185, 185v. – *Cons. Rog.* vol. 98, ff. 16v, 17, 20, 20v. – V. MIOVIĆ, *Dubrovačka Republika u spisima osmanskih sultana*, pp. 273, 274.



Fig. 5. Statement of fifteen passengers from Alexandria, dated July 1798, saying they will respect Dubrovnik quarantine measures. In the presence of the emin, they certified the statement with seals and fingerprints (State Archive in Dubrovnik, *Acta Turcarum*, no. 2898)

demands because they barely had friendly relationships with Tripoli, whose corsairs were a constant threat to Ragusan ships. In retaliation, the Venetians disembarked on the island of Lokrum, in the immediate vicinity of the City, as well as other nearby islands, where they ruthlessly cut down trees and abused the population, they even bombarded the City itself. Emins Osman Agha and Mehmed Agha were truly appalled. They not only wrote several reports about Venetian crimes, they also actively participated in the defence of Dubrovnik. On several occasions, Mehmed Agha tried to row his boat to the Venetian ships, and the island of Lokrum, but they fired at him and chased him away. Then he visited the Venetian captain of the Bay and asked that they stop the violence. And if they chose to continue, the emin would inform the Porte who would hold them responsible. The threat worked and the Venetians retreated from Lokrum.<sup>132</sup> The other emin, Osman

<sup>132</sup> V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, p. 58.

Agha, went to the island of Mljet with the Lazaretto captain Vlaho Stella, where the captain of the Bay was anchored with nine ships. Osman Agha spoke with the captain in private, while Stella eavesdropped and submitted a report to the Ragusan authorities. Osman Agha was very upset, he shouted that what Venetians were doing was leading straight into war, and he said that they cut down far too many trees than needed. The captain offered to pay for the wood, and Agha retorted that he would not trade with something that is not his. He, the emin, was appointed to Ploče only to help the Ragusans, defend them from such violence, and inform the Bosnian governor and the Porte about any damage inflicted upon Dubrovnik.<sup>133</sup>

The Tripoli corsairs left Ragusan waters in the spring of 1752, and the Venice-Dubrovnik conflict lasted until the summer of 1754. It ended favourably for the Ragusans, in large part thanks to the reports and actions of Mehmed Agha and Osman Agha.<sup>134</sup>

## Books of Quarantine: People, Goods, Ships

The State Archive in Dubrovnik holds fourteen Books of quarantine. Twelve volumes cover the time from 1716 to 1801, with several minor time gaps,<sup>135</sup> and two volumes are dated in the time of the Austrian rule (1814/6).<sup>136</sup> This archival material provides key information not only on the Lazaretto, Tabor and the entire area of Ploče, but also travellers, goods and duration of quarantine. However, we should bear in mind that the Books of quarantine did not record the total turnover of passengers, ships and goods (Fig. 6).

### *Travellers and goods*

According to the Books of quarantine, in the whole period between 1716 and 1801, merchants and travellers most frequently came from Sarajevo, Mostar, Trebinje, Novi Pazar, Ulcinj, Durrës, Shkodër and Izmir. However, they also came from many other places, mostly from today's Bosnia and Herzegovina, then Croatia, Montenegro, Kosovo, Albania, Turkey, Greece, Bulgaria, Malta, Macedonia, Hungary, Syria, Slovenia and North Africa (Alexandria, Algiers, Tunisia and Tripoli).

Merchants often brought raw materials such as the *cordovani* (kidskin) and other leather, various animal furs, different kinds of wool and cotton yarn. They transported a lot of iron, different fabrics, cotton, silk, linen and textile, often the so-called *schiavine*, blankets made of coarse wool that were also used as cloaks and to wrap their goods in.<sup>137</sup> Ready-to-wear shoes and garments were also mentioned. Among other things, there was a lot of coffee and tobacco, mostly from Albania, as well as chibouks and tobacco pouches.

Roe came from Shkodër, as well as olive oil and salted eels. There were salted fish, meat and tongue, cheese, beans, rice, barley, salted toast, plums, and dates. Here and there, books were also mentioned.<sup>138</sup>

<sup>133</sup> DA 18, vol. 3175, no. 37.

<sup>134</sup> *Acta Turc.* no. 2425, 2448, 2737, 2738, 2870, 4439. – V. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika*, pp. 57-63.

<sup>135</sup> *Contumaciae*, vol. 1 (15.7.1716-22.9.1727), vol. 2 (3.2.1730-1.1.1737); vol. 9 (1.1.1737-18.9.1741); vol. 4 (16.8.1745-11.4.1749); vol. 5 (13.5.1749-30.1.1753); vol. 6 (4.2.1753-26.4.1756); vol. 7 (1.7.1759-18.10.1761); vol. 8 (4.8.1763-7.3.1765); vol. 9 (10.5.1765-19.7.1769); vol. 10 (24.7.1769-29.9.1775); vol. 11a (16.10.1775-4.10.1788); vol. 12 (17.10.1788-18.8.1801).

<sup>136</sup> *Contumaciae*, vol. 13 (24.5.1814-31.12.1815); vol. 14 (10.2.1814-26.1.1816)

<sup>137</sup> Đ. PETROVIĆ, *Sklavina, Glasnik etnografskog muzeja u Beogradu* 50, Beograd, 1986, pp. 13-41.

<sup>138</sup> *Contumaciae*, vol. 1, f. 131v; vol. 2, ff. 65v, 116v.



Fig. 6. From the Book of quarantine, 1737 (State Archive in Dubrovnik, *Contumaciae*, vol. 3, ff. 17v, 18)

Some foreign and local merchants were coming to the Dubrovnik Lazaretto with their merchandise for decades, such as the Mostar merchant Hadji Ibrahim Mirica, who spent forty-odd years (1730/68) bringing leather and wax,<sup>139</sup> or the Ragusan merchant Lovro Budmani, who spent thirty-odd years (1718/48) bringing the *cordovani*, buffalo leather and other goods, from Novi Pazar and Vidin.<sup>140</sup>

<sup>139</sup> *Contumaciae*, vol. 2, ff. 72v, 91, 146, 175; vol. 3, ff. 49, 59v, 66, 1740; vol. 4, ff. 14, 33v; vol. 5, ff. 18v, 23v, 32, 36, 38, 40, 41, 44v, 55v, 61v, 65, 72, 78; vol. 6, ff. 5v, 9v, 19, 57v, 64, 70v, 77v, 98v; vol. 7, ff. 10, 15, 60v, 74; vol. 8, f. 26v; vol. 9, ff. 27v, 35v, 46, 65.

<sup>140</sup> Š. CURIĆ LENERT - N. LONZA, Bratovština Sv. Lazara, 2016, pp. 39-113 (65, 89). - *Contumaciae*, vol. 1, ff. 15, 67, 102v, 124, 172v, 191v; vol. 2, ff. 69, 110, 134v, 188; vol. 3, ff. 65v, 86; vol. 4, ff. 23, 62, 65.

Other Ragusan merchants brought mainly *cordovani*, buffalo leather and various furs, largely from Novi Pazar, Ruse and Vidin.<sup>141</sup> The Ragusan sea captains also regularly brought merchandise on their return home.<sup>142</sup>

Different merchandise would also arrive with the Ragusan ambassadors and their entourage, on their return back from Istanbul and Travnik. They usually stayed in lazarettos 7, 8 and 9,<sup>143</sup> which is why they were named after the ambassadors and members of their entourage.<sup>144</sup> Besides the emin's lazaretto, the Ragusan state also took great care of the ambassadors' lazaretto, which they regularly painted, repaired windows and doors.<sup>145</sup>

Women rarely transported goods, only twenty such cases were recorded throughout the entire 18<sup>th</sup> century. Some women came alone, some with daughters, sons or fellow travellers, mostly from Prčanj, Paštrović, Perast, Dobrota and Kotor.<sup>146</sup> Only Murta Hadjiagić came from afar, i.e. from Istanbul, and brought some silk and three veils (1765).<sup>147</sup> Simana, Milutin Krečar's wife, who came with two sons and two servants from Poljica brought with her some used good: sheets, towels, shirts, caps (1732).<sup>148</sup>

From 1754,<sup>149</sup> the Janissaries who worked as Austrian couriers and carried mail between Naples and Istanbul, were quarantined in the house opposite the First lazaretto.<sup>150</sup> The Ragusan couriers were quarantined in the same house. The urgent courier Đuro Goga worked for ten years on the route Istanbul-Dubrovnik, even though he only had one arm and was not in the best of health. He would come to the Lazaretto, stay for ten days, then go back to Istanbul. He died in 1788 on his way back to Dubrovnik. An Austrian courier – Janissary, who was travelling with him, buried him, for which he received financial reward.<sup>151</sup>

Slaves also passed through the Lazaretto, usually brought in by the people of Ulcinj and Shkodër.<sup>152</sup> In 1734, Anica, daughter of Bjelaš, was staying in the Lazaretto with another unnamed woman, and they were kidnapped by the Montenegrins. After the ransom was paid, the Montenegrins turned them over to the guards who took them to the Lazaretto, where they spend 28 days in quarantine.<sup>153</sup>

The ties between Ragusan and Sarajevo Jews were very strong, which is most eloquently articulated in the Books of quarantine.<sup>154</sup>

Both Orthodox and Catholic, usually Franciscan, priests came to Ploče.<sup>155</sup> Likewise, the Protestant priests from Albania (Shkodër, Durrës, Ism).<sup>156</sup> Several Islamic mystics, dervishes, were also registered.<sup>157</sup>

<sup>141</sup> *Contumaciae*, vol. 1, ff. 1v, 4v, 6v, 47v, 60v, 66, 104; vol. 2, ff. 90, 99, 142v, 161; vol. 3, ff. 4v, 13, 22, 71v, 83v, 85; vol. 4, f. 45; vol. 5, f. 25; vol. 6, f. 93v; vol. 7, f. 36v; vol. 8, f. 21v; vol. 9, f. 11; vol. 10, ff. 7, 31v, 34, 45; vol. 10, f. 33. – Š. CURIĆ LENERT - N. LONZA, *Bratovština Sv. Lazara*, pp. 65, 66, 88-90.

<sup>142</sup> *Contumaciae*, vol. 5, f. 49; vol. 8, f. 22; vol. 9, ff. 13v, 27, 41, 76.

<sup>143</sup> *Contumaciae*, vol. 4, f. 71; vol. 5, f. 14v; sv. 6, f. 22v; vol. 9, f. 71v.

<sup>144</sup> *Contumaciae*, vol. 12, ff. 135v, 136, 140, 143, 144v, 145v, 146, 147v, 164, 157; vol. 12, f. 146. *DA* 18, vol. 3188, no. 193, 196, 200.

<sup>145</sup> *DA* 18, vol. 3188, no. 194, 196, 199-201; vol. 3189/2, no. 255, 256, 258, 260.

<sup>146</sup> *Contumaciae*, vol. 1, ff. 37, 102v, 112v; vol. 2, ff. 92, 99v, 103, 103v, 109, 110, 122, 136, 136v; vol. 3, ff. 52v, 82v; vol. 5, f. 16.

<sup>147</sup> *Contumaciae*, vol. 5, f. 9.

<sup>148</sup> *Contumaciae*, vol. 2, f. 97v.

<sup>149</sup> *Cons. Rog.* vol. 192, f. 92. *DA* 18, vol. 3175, no. 453. – *Contumaciae*, vol. 11a, ff. 77v, 111v, 113; vol. 12, f. 119v.

<sup>150</sup> Austrian couriers on the Naples-Istanbul route first travelled via Durrës. However, since the 1743 plague outbreak there, the Austrians re-routed them to Dubrovnik. From then on, Ragusan regularly kept using their services, and local couriers only delivered urgent mail (Ž. MULJAČIĆ, *Pomorske i kopneno-pomorske poštanske veze staroga Dubrovnika*, in: *Iz dubrovačke prošlosti*, (ed. J. Hekman), Zagreb, 2006, pp. 163-180. – V. MIOVIĆ, *Dubrovačka diplomacija*, p. 134). In the Books of quarantine, Austrian couriers appear from 1754 onwards (*Contumaciae*, vol. 6, f. 47).

<sup>151</sup> *Contumaciae*, vol. 11a, ff. 22v, 48v, 51v, 54, 94v, 114v, 117, 143. – V. MIOVIĆ, *Dubrovačka diplomacija*, pp. 132, 218. – *Cons. Rog.* vol. 195, f. 143.

<sup>152</sup> V. MIOVIĆ, *Ulcinjani i Dubrovačka Republika u prvoj polovici XVIII. stoljeća*, *Analiza Zavoda za povijesne znanosti HAZU u Dubrovniku* 30, Dubrovnik, 1992, p. 107.

<sup>153</sup> *Contumaciae*, vol. 2, f. 144v.

<sup>154</sup> *Contumaciae*, vol. 1, ff. 41, 160v; vol. 4, ff. 2v, 76v; vol. 9, f. 63; vol. 10, ff. 4v, 5v, 9, 11v, 14, 34; vol. 11a, ff. 76, 80, 85, 149v.

<sup>155</sup> *Contumaciae*, vol. 5, f. 1; vol. 9, f. 6; vol. 11a, f. 11; vol. 12, f. 13.

<sup>156</sup> *Contumaciae*, vol. 1, ff. 22, 36, 57, 67, 84v, 92, 104, 122v, 139, 170, 181, 182v, 184; vol. 2, ff. 43v, 62, 71v, 78v, 109v, 128v, 133v, 157v, 159v, 185, 202; vol. 3, ff. 9v, 36, 47v, 79v, 83; vol. 4, ff. 17v, 38, 79v; vol. 5, ff. 9, 11, 53, 56, 67; vol. 6, ff. 3, 25, 34v, 46v, 88, 98; vol. 7, ff. 2v, 19v, 33; vol. 10, ff. 30v, 41v, 122v; vol. 11a, ff. 10v, 39, 39v, 41v, 48v, 59, 64, 74v, 76, 81, 82v, 85, 91v, 97, 101v, 102v, 103, 104, 109, 116v, 127, 186v; vol. 12, ff. 4, 24, 76, 91, 98v, 130.

<sup>157</sup> *Contumaciae*, vol. 11a, f. 25v; vol. 12, f. 35.

## Quarantine: time and space

The duration of quarantine did not only depend on the health situation in the location where the traveller came from, but also the direction he was going, whether he arrived only with personal items or also goods, of which wool was considered especially prone to contamination.<sup>158</sup> Since the Ottoman Empire had no system of protection from plague, European countries considered it a permanent source of infection. The Republic of Dubrovnik acted accordingly and quarantined travellers and goods coming from the Empire even during the so-called “healthy times”.<sup>159</sup> For example, in 1721, the quarantine lasted for ten days for travellers coming from Sarajevo and Mostar, and for those coming from Novi Pazar, Shkodër, Ulcinj and Istanbul it lasted between twenty to thirty days. Travellers from Trebinje, who were many and who normally arrived without any goods, were most frequently quarantined for three or four days.<sup>160</sup> During times of increased threat of plague, colloquially known as “contumacia”,<sup>161</sup> most travellers were quarantined for forty-odd days.<sup>162</sup>

From the 1720s to mid-1750s, the number of travellers in the Books of quarantine<sup>163</sup> gradually increased and ranged between 280 to 470 per year.<sup>164</sup> In 1754, there were around 760.<sup>165</sup> Starting as early as 1716, the Health Office was accommodating travellers in auxiliary spaces in Ploče, Mandarica, Čardak, the guardhouse opposite the First lazaretto, in the Little and the Old lazaretto.<sup>166</sup> From 1745, two guardhouses in Tabor also started to be used “because of lack of space in the Lazaretto”.<sup>167</sup> The travellers without goods were even kept quarantined in the open, watched by guards in front of Slanica, Mandarica and the guardhouses, as well as at the Lazaretto plateau. Passengers from ships, together with a guard, sat in boats for days waiting for free space to open up at Ploče.<sup>168</sup> In the 1780s, travellers were also quarantined in houses owned by Ivan Njire and Antun, the soldier.<sup>169</sup>

The so-called “Old Zebić lazaretto”,<sup>170</sup> “Old Ambonetti lazaretto”<sup>171</sup> and “Drašković lazaretto”<sup>172</sup> were all used as quarantine. Since prominent merchants Zebić, Ambonetti and Drašković rarely appeared in the Books of quarantine, it is obvious that they had the privilege of keeping goods and decontaminating it in their own houses, i.e. in a private “lazaretto.” The adjective “old” for Ambonetti and Zebić lazarettos speaks to the fact that their houses were used as quarantines even after they retired from the trade business.<sup>173</sup> The Zebić house was used as a lazaretto after the fall of the Republic.<sup>174</sup>

<sup>158</sup> B. KRIZMAN, Memoire Bara Bettere austrijskom generali T. Milutinoviću o Dubrovačkoj Republici iz 1815. godine, *Anali Historijskog instituta JAZU u Dubrovniku* 1, Dubrovnik, 1952, p. 440.

<sup>159</sup> *DA* 18, vol. 3187/2, no. 68.

<sup>160</sup> *Contumaciae*, vol. 1, ff. 48v-65v.

<sup>161</sup> *DA* 18, vol. 3185, no. 29. – V. MIOVIĆ-PERIC, *Na razmeđu*, pp. 117-136.

<sup>162</sup> *Contumaciae*, vol. 2, ff. 74v-96v; vol. 8, ff. 11-32v; vol. 11a, ff. 123-137v; vol. 12, ff. 85-99.

<sup>163</sup> *Analizirane su godine* 1721, 1731, 1746/8, 1754, 1764, 1770, 1784. i 1794.

<sup>164</sup> *Contumaciae*, vol. 1, ff. 48v-65v; vol. 2, ff. 74v-96v; vol. 4, ff. 5v-75v.

<sup>165</sup> *Contumaciae*, vol. 6, ff. 27v-63v.

<sup>166</sup> *Contumaciae*, vol. 1, ff. 5, 5v, 6v, 11v, 12v, 17, 17v, 18, 19-20v, 22, 23, 24, 45v, 77, 132; vol. 2, ff. 68v, 70v, 71, 72, 95, 95v, 113, 113v, 125, 132, 136v, 137, 139v, 146, 155v, 161, 173v, 179.

<sup>167</sup> *Contumaciae*, vol. 4, ff. 1v, 8, 59, 60, 60v, 62v, 66v, 70, 74v, 76, 77; vol. 5, ff. 5v, 18, 19v, 20, 24v, 43v, 65v, 68v, 72, 73; vol. 6, ff. 2, 9, 15, 37v, 40v; vol. 9, ff. 66v, 67, 68, 69.

<sup>168</sup> *Contumaciae*, vol. 4, ff. 1v, 2, 50; vol. 5, f. 50v; vol. 6, ff. 11, 41, 45, 89v, 92v, 96.

<sup>169</sup> *Contumaciae*, vol. 8, ff. 17v, 25; vol. 9, ff. 1, 3, 5v, 8, 9, 10, 10v, 11v, 13v, 14, 15, 19-20, 22, 35.

<sup>170</sup> *Contumaciae*, vol. 7, f. 19; vol. 9, f. 34; vol. 10, f. 18v.

<sup>171</sup> *Contumaciae*, vol. 7, f. 13v; vol. 10, ff. 6, 18v.

<sup>172</sup> *Lazaretto di Drascovich (Contumaciae)*, vol. 10, ff. 2, 6, 18v, 22v, 33v; vol. 11a, ff. 42v, 50, 52, 55, 56v, 58, 59, 61v, 65v, 67, 69v, 71v, 84v.

<sup>173</sup> Matija Zebić appeared in 1720s and 1730s (*Contumaciae*, vol. 1, f. 175; vol. 2, ff. 120, 142v, 171). Samuel Ambonetti went bankrupt in mid-18<sup>th</sup> century (V. MIOVIĆ, *Židovski rodovi*, p. 44).

<sup>174</sup> *Contumaciae*, vol. 13, f. 156v; vol. 14, f. 49.

Ship captains obtained health certificates (*fedi di sanità*) from European consulates in Ottoman ports. European consuls even tried to organize some kind of quarantine for contaminated ships. Christian countries also organized hospitals for the infected, for example in Izmir and Istanbul.<sup>175</sup>

In 1748, when the Ragusan captain Antun Pušić planned to sail from Izmir to Dubrovnik and Trieste, he obtained a certificate from the Dutch consulate saying that Izmir was free from infection. He stopped in Chania, where he picked up three passengers who obtained certificates from the office of the Ragusan consulate there, stating that the entire region of Crete was completely healthy. Pušić's tartane ship sailed into Dubrovnik waters and probably anchored in front of the Lazaretto. The captain submitted the certificate, which was burnt by accident during the usual smoke fumigation. The health officers, as usual, questioned the captain and the sailors in detail, to ascertain precisely when the certificate was issued, which ports the tartane sailed through, who boarded it and who disembarked from it.<sup>176</sup>

The example of the Ragusan captain Kristo Radimiri shows that days of sailing between safe ports counted towards quarantine days. Radimiri's tartane sailed from the pestiferous Athens into Trieste on 1 July 1747. There, it was immediately placed under guard and all other regular safety precautions were applied. Some goods were removed off the tartane, and sailors Martin Silovig and Vuko Supa disembarked as well. On 5 July, Radimiri sailed off to Venice, where he unloaded 9,000 wheels of cheese. Obviously, he spent time in quarantine in Venice, because he returned to Trieste on 7 August with an empty ship. In Trieste, he picked up the sailor Silovig, who did not complete the period of quarantine. They sailed off on 9 August and in seven days arrived to Dubrovnik. The Dubrovnik Secretary Office immediately issued Radimiri the certificate *di libera pratica*, because he already completed 42 days in quarantine, i.e. the duration of the journey and stopping in ports between Venice-Trieste-Dubrovnik.<sup>177</sup> Radimiri, of course, was not inscribed in the Books of quarantine, like the other captains who came with the certificate of good health condition in the area they came from and who were already quarantined.<sup>178</sup> According to the 1745 Regulations on navigation, Ragusan ships that sailed outside of the Adriatic had to undergo only one quarantine period in Christian ports.<sup>179</sup> For this reason, there were very few ships from the West that were recorded in the Books of quarantine.<sup>180</sup>

The ships that the Health Office deemed had to go through quarantine, i.e. those which acquiesced, were sent to the waters near the Lazaretto, to Gruž and the island of Lokrum. Srebreno and Tiha cove near Cavtat were also mentioned.<sup>181</sup> Occasionally, the captain, crew and passengers would be quarantined aboard the ship, and sometimes they would disembark and go to the Lazaretto. The goods that did not require decontamination remained on the ship, and the ones that did were transported to the Lazaretto. A guard from the Health Office (*guardiano a vista*) was always stationed on the ship and he accompanied the passengers and the goods from ship to land and vice versa.<sup>182</sup>

<sup>175</sup> D. PANZAC, La peste in Levante. Epidemiologia, diffusione e sparizione, in: *Rotte mediterranee e baluardi di sanità*, (ed. Nelli-Elena Vanzan Marchini), Milano, 2004, p. 171. – D. PANZAC, *Quarantaines et Lazarets; L'Europe et la peste d'Orient (XVII<sup>e</sup>-XX<sup>e</sup> siècles)*, Aix-en-Provence, 1986, p. 25. – V. MIOVIĆ, *Dubrovačka diplomacija*, pp. 227, 228. – M. P. PEDANI, *The Ottoman-Venetian Border (15<sup>th</sup>-18<sup>th</sup> Centuries)*, Venezia, 2017, p. 127.

<sup>176</sup> *Fedi*, vol. 3, ff. 118v, 119. – DA 18, vol. 2908, no. 23.

<sup>177</sup> *Fedi*, vol. 3, ff. 113v-114v.

<sup>178</sup> *Fedi*, vol. 3, ff. 46v, 89.

<sup>179</sup> J. LUETIĆ, Pravilnik Dubrovačke Republike o nacionalnoj plovidbi, *Grada za pomorsku povijest Dubrovnika* 5, Dubrovnik, 1972, p. 89.

<sup>180</sup> For comparison sake, a good overview on ship traffic in the Adriatic is provided by N. ČOLAK, *Regesti marittimi Croati*. I, Padova, 1985. – N. ČOLAK, *Regesti marittimi Croati*. II, Padova, 1993. – N. ČOLAK, *Regesti marittimi Croati*. III, Split, 2017.

<sup>181</sup> *Fedi*, vol. 3, ff. 44v, 45, 57-58. DA 18, vol. 3177, no. 109.

<sup>182</sup> *Fedi*, vol. 4, f. 85. – *Contumaciae*, vol. 12, f. 68.

According to the 1670s and 1680s records, ships with certificates that warned of great danger from plague had to anchor at a distance of five miles from the City. So, in 1674, two Messina ships from Alexandria spent 80 days in quarantine. Guards were not sent to the ship because of severe danger, instead patricians and their assistants stood guard in boats in the vicinity of the ship. Cotton and other merchandise were transferred to the Lazaretto, under supervision of the Lazaretto captain, where they were subjected to the “rigorous” process of decontamination that lasted 80 days. “During all that time, praise God, no signs of infection were spotted,” said the conclusion of the health report that was issued to the captains of the Messina ships by the Secretariat of the Ragusan Republic.<sup>183</sup>

## Disease and Death

### *La peste delle serve*

A great deal was written about the 1691 “plague of the maidservants” that penetrated through the City walls, and recently an extensive scientific paper was written on the subject.<sup>184</sup>

In 1690, there was an outbreak of plague in the Dubrovnik hinterland. During the summer it spread to the village of Trnovica near Dubrovnik, however Ragusan authorities reacted in time and the infection did not spread. Nevertheless, the plague penetrated the Venetian Dalmatia as well. The Senate sent information on the health situation to all Mediterranean Health Offices, particularly the one in Venice. They also provided them with information of when the plague appeared in the City and its suburbs of Pile and Ploče.

The Health Office divided the City into six areas. The noblemen were responsible for the implementation of sanitation measures, two in each area of the City, one at Pile and one at Ploče outside Tabor. Movements of infected persons were carefully reconstructed and it was deduced whom they were in contact with. The Health Office was assisted by 108 persons from different social classes of the Ragusan society, most of whom were noblemen.

The first victim was a young novice who died in the *Hospital misericordiae* on 9 January 1691. The plague spread among the maidservants, so the houses that they served in, mostly belonging to noblemen, were promptly isolated. Besides the Lazaretto, farm buildings, family houses and palaces, the monastery of St. Peter and the Benedictine monastery on Lokrum were all used as quarantines. Camps were built at Pile, Ploče and Peskarija. Between 9 January and 20 April 1691, approximately 90 people died of plague. In the period from 10 January and 19 March, the Ragusan state spent around 10,000 ducats on protection from the plague.<sup>185</sup>

The role of Ploče and the Lazaretto was changing with the circumstances. When the disease appeared, the area from Nikola Štruca's house to the house of Luka Vladislav Gozze was isolated. Since a large number of people died in the area between the caravansaray (Tabor) and Jela Zamagna's house, that area was placed under a particularly strict isolation, and soldiers were given orders to shoot at anyone who dared leave their property. The gates were erected at the entrance to the caravansaray. During that time, people and goods from the infected houses were accommodated throughout the Lazaretto complex.<sup>186</sup>

<sup>183</sup> *Fedi*, vol. 1, f. 115v. – *Sanitas*, vol. 2, without pagination, 26.5.1790. See also: *Fedi*, vol. 1, ff. 140, 140v.

<sup>184</sup> R. KRALJ-BRASSARD, Grad i kuga: Dubrovnik 1691. godine, *Anali HAZU Zavoda za povijesne znanosti u Dubrovniku* 54/1, Zagreb-Dubrovnik, 2016, pp. 115-170.

<sup>185</sup> R. KRALJ-BRASSARD, Grad i kuga, pp. 131, 133, 135, 141, 144, 147, 148, 151, 152, 154, 160.

<sup>186</sup> *Sanitas*, vol. 7, ff. 13v, 14. – R. KRALJ-BRASSARD, Grad i kuga, p. 60.



Towards the end of January, it was decided to allow the traffic of people and goods in parts of Ploče and the Lazaretto. All “suspicious” persons from the Lazaretto and the area at Ploče, between the houses of Nikola Štruca and Pero Gled, had to move to the island of Lokrum. All infected persons at Ploče and in the Lazaretto, as well as occupants of houses in the City who had someone die under suspicious circumstances were housed in the First *bagiafer* that was boarded up and isolated, and in the adjacent lazaretto.<sup>187</sup> The lazaretto and *bagiafer* were subdivided into several separate areas because, as was mentioned, people from three, four houses who had someone die of plague, were located in the eastern section of the “great lazaretto”.<sup>188</sup>

Conditions were slowly created that enabled the re-establishment of trade. According to the existing records of Cvijeto Taljeran, the Lazaretto captain, for the period between 18 May and 18 July 1691, a small number of travellers and merchants with goods were quarantined in the Lazaretto, in the Church of St. Anthony, Mandarica and the Old lazaretto. They came from Barletta, Dračevo and Sarajevo, and were quarantined for 40 to 80 days. The passenger who arrived on 18 July from Zaoštrog, spent 31 days in quarantine.<sup>189</sup>

### *Concealing the plague*

In September 1742, there was a plague outbreak in Bosnia, so the patricians acting as *Cazamorti* were sent to Dubrovnik border villages.<sup>190</sup> In spite of that, the plague spread to the area of Dubrovnik at the end of November. The disease was transmitted by a “local Orthodox Vlach” who lived in Dubrovnik. On 23 November 1742, the Senate considered the proposal to isolate three persons from an infected house into a *bagiafer*. The proposal was rejected, and it was decided to isolate the suburban area between the Chapel of the Holy Cross above Posat to Vicko Petrović’s house, inclusive of the house. The Petrović family house was located at Ploče.<sup>191</sup> The Senate ordered all Vlachs who lived outside the isolated area to move inside it, and in the absence of space, they were to be locked into their own houses and placed under guard. All Vlach shops were to be sealed off, and all Vlachs found in them sent to the isolated area. The expenses incurred by the Health Office for this operation, in the amount of 1,001 ducats, should, if possible, be reimbursed by those responsible for spreading the plague.<sup>192</sup> Two days later, the archbishop of Dubrovnik delivered a sermon in the Cathedral praying for salvation from plague. The regime remained in force for 40 days after the last person died of plague. On 14 January 1743, the Senate concluded that the danger passed and ordered that a procession of gratitude be held on the following day, as well as the *Te Deum* mass in the Cathedral.<sup>193</sup> The Ragusans contained the plague in the suburbs within fifteen days. However, instead of sending information about the plague<sup>194</sup> to other Mediterranean Health Offices they regularly cooperated and exchanged information with, they decided to conceal it. The Republic’s Secretary Office did not make a record of it in the health certificates issued to ship captains. Dubrovnik’s instinct for trade was stronger than its conscience. Besides the 1742 outbreak, they also concealed the plague of 1765.

In the early 1760s, the number of travellers registered in the Books of quarantine started to decrease. In 1764, the registered number was around 310.<sup>195</sup> People from Mostar and

<sup>187</sup> *Sanitas*, vol. 7, f. 25.

<sup>188</sup> *Sanitas*, vol. 7, f. 35.

<sup>189</sup> *Sanitas*, vol. 7, ff. 40v-41v.

<sup>190</sup> *Cons. Rog.* vol. 160, ff. 154v, 155v, 156, 160. – *DA* 18, vol. 3187/1, no. 40.

<sup>191</sup> Vicko Petrović’s house at Ploče, which Frano Zamagna, the ambassador from Travnik used as quarantine, was mentioned in 1793 (*Contumaciae*, vol. 12, f. 75v).

<sup>192</sup> *Cons. Rog.* vol. 160, ff. 166, 167, 167v, 170, 174v, 183v.

<sup>193</sup> *Detta*, vol. 49, f. 26. – *Cons. Rog.* vol. 160, ff. 186, 188. – NELLA LONZA, *Kazalište vlasti*, p. 294.

<sup>194</sup> N.-E. VANZAN MARCHINI, Venezia e l’invenzione del Lazzaretto, in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano, 2004, pp. 39, 42.

<sup>195</sup> *Contumaciae*, vol. 8, ff. 11-32v.

Sarajevo, who used to come regularly, were no longer mentioned. The reason was the plague epidemic that broke out in Sarajevo in 1762 and lasted for three years. The infection spread to Mostar and other Bosnia-Herzegovina towns, as well as to the Venetian Dalmatia, where the greatest number of fatalities was among the inhabitants of the suburbs of Split.<sup>196</sup> As soon as the epidemic erupted, Ragusan authorities sent the patrician *Cazamorti* to Dubrovnik border villages and, in prayers and sermons, asked for help from the Heavens. The Health Office was receiving information about the plague in Mostar and Split, and about Venetian safety measures implemented at the Venice-Ottoman border in the vicinity of the Republic. The Office was following the situation in Trebinje particularly closely.<sup>197</sup> In the spring of 1763, the number of sanitation soldiers at Ploče was increased, and during the summer they introduced 24-hour military patrols throughout the City.<sup>198</sup>

Nevertheless, in early 1765, the disease spread to Ploče. Except for the scant evidence found in the Health Office expense records,<sup>199</sup> the votive procession against the plague that was held on 9 January 1765 also talked about it.<sup>200</sup> According to the Office expense records, the “said Turk” died from plague in the Han, and health officers paid soldiers to remove his body; couriers; four *schivavine*; a case from Cyprus; rope; dragoman Nikola Veseličić for carrying away the body; Antun Hidža. They paid porters who transported the body in cash.<sup>201</sup> It is possible to conclude, from these items, that couriers were dispatched to the nearby Ottoman Carina to warn the Ottoman officials to prepare a grave. The soldiers removed the dead body from Han, they probably dragged it out with the *schivavine* or rope. They wrapped it in the *schivavine* and placed it into a case from Cyprus. Most money was spent on porters, who had to be coaxed, because they were afraid of contracting the plague, to transport the case secured with a rope on a horse to Carina. They were accompanied by dragoman Veseličić and Antun Hidža.

Soon after, the Office recorded the expense incurred for an Albanian man who died in the Čardak.<sup>202</sup> The record does not say that he died of plague, however, it suggests that this is exactly what happened: local men, Antun Smucalo and Hanza, transported the Albanian by boat to Ploče. The Albanian man died, and Hanza ran away. Smucalo was arrested, his clothes were confiscated and burnt. The dead body was transported to Carina in a case, which was expensive on this occasion as well. The body was accompanied by Hidža and Veseličić. The Čardak was cleaned, and new door and metal bars were fitted.<sup>203</sup> According to a regulation in the Senate minutes, we can conclude that the Albanian man died on 20 April 1765. Namely, on that day, the Senate decided that as soon as their quarantine was finished in the Lazaretto, a group of actors must take the first boat and leave the state. We presume that they were first staying in the Čardak, and after the Albanian man died, they were moved to the Lazaretto.<sup>204</sup>

The Ragusan state spent around 32,000 ducats (7,000 sequins) on plague protection between July 1762 and March 1786.<sup>205</sup> Part of the cost was born by the Jewish and the Orthodox community, whom the Ragusan authorities taxed with 500 ducats annually, beginning in 1764.<sup>206</sup> At the end of 1765, Vlaho Stella, the Lazaretto captain was rewarded for “extraordinary work” he did at Ploče.<sup>207</sup>

<sup>196</sup> K. FILAN, *Sarajevo u Bašeskijino doba*. Sarajevo, 2014, pp. 244-247. – N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte*, pp. 81, 82.

<sup>197</sup> DA 18, vol. 3188, no. 63-67, 72, 74. – *Cons. Rog.* vol. 174, f. 59v. – NELLA LONZA, *Kazalište vlasti*, p. 294.

<sup>198</sup> *Cons. Rog.* vol. 174, ff. 96v, 97, 212v, 213.

<sup>199</sup> Entry no. 332, out of the total of 451, that were recorded in the period between 31 December 1763 and 13 March 1765.

<sup>200</sup> N. LONZA, *Kazalište vlasti*, pp. 294, 295. – *Detta*, vol. 70, f. 1v. – *Cons. Rog.* vol. 176, f. 2.

<sup>201</sup> *Sanitas*, vol. 10, without pagination, 13.3.1766: no. 332.

<sup>202</sup> Entry no. 48, out of the total of 113, that were recorded in the period between 13 March and 27 April 1765.

<sup>203</sup> *Sanitas*, vol. 10, without pagination, 27.4.1766: no. 48.

<sup>204</sup> *Cons. Rog.* vol. 176, ff. 125, 125v.

<sup>205</sup> *Cons. Rog.* vol. 174, ff. 49v, 65, 71, 17v, 211v, 213v, 214; vol. 175, ff. 126v, 153v, 159v, 177v, 189v; vol. 176, ff. 2, 2v, 11v, 40v, 41, 52v, 126v, 216; vol. 177, ff. 64v, 86, 86v, 153; vol. 178, ff. 5v, 31, 91, 133v, 137, 184, 230.

<sup>206</sup> *Cons. Rog.* vol. 175, ff. 66, 66v.

<sup>207</sup> *Cons. Rog.* vol. 176, ff. 126v, 216; vol. 177, ff. 38, 64v, 86, 86v, 153.

## Death of Hadjis

The mid-1770s records show that only travellers from Izmir and Alexandria had to spend 40 days in quarantine. However, the passenger traffic was still in decline. Around 200 were registered in the 1774 Books of quarantine. People from Sarajevo and Mostar still seldomly travelled to Dubrovnik.<sup>208</sup>

Initially, goods were stored and decontaminated only in the *bagiafers*, but from 1770 onwards travellers were also housed there. People stayed there all year round, not just during warm months but also in winter,<sup>209</sup> which meant that *bagiafers* always had partitions.<sup>210</sup> Even though the quarantine space was expanded to the *bagiafers*, the Old Ambonetti and Old Zebić lazarettos, Drašković lazaretto, guardhouses, Mandarica, Čardak and Han<sup>211</sup> all remained in use, which means that despite the decline in travellers, the area for protection from infection was expanded.

Then a major scandal happened in the Lazaretto. On 21 July 1775, a French ship from Alexandria sailed into Dubrovnik waters. Forty passengers disembarked, of which 18 were hadjis, some of whom were sick. They were housed in the *bagiafer* 'Above the well' and in lazarettos 1 and 8. As soon as they set foot on dry land, they were instructed they had to sign a statement saying they would abide by the rules of quarantine. The 40-day quarantine started on 29 July, when all their goods were brought inside the Lazaretto.<sup>212</sup>

Immediately on the first day, the infected Hadji Redjep Skenderić from Mostar died. The emins sealed all of Hadji Redjep's possessions until the arrival of his heirs.<sup>213</sup> Then they started convincing the other hadjis to leave immediately, they even procured horses for them. Three of them escaped and encountered some caravan drivers, who were also leaving. The sanitation soldiers brought the caravan drivers back to the Lazaretto and made them go through quarantine again.<sup>214</sup>

Soon after, Hadji Abdurrahman also died in the Lazaretto. Then the emins and the scribe sent a servant who spread the news around Bosnia that said the Ragusans killed Abdurrahman and wounded several hadjis. The emins hid Abdurrahman's body in their lazaretto during three summer days and only when the body started to decompose, so that it "changed its human appearance," did they take it before the terrified passengers. The story reached the Bosnian governor, who sent his envoy and the kadi of Ljubinje to Ploče to verify the emins' accusations. For two months, the Ragusan ambassador Clement Menze went to great lengths to convince the governor of Dubrovnik's innocence, but it was all in vain. He said that the emins and scribes were members of Trebinje's lowest social class, as opposed to the prominent aghas who were there before them. Besides, emin Spahović was clamouring for revenge, because Dubrovnik authorities issued a life-long prohibition to his father, "a vulgarian and slanderer," from ever coming to Ploče. Menze was complaining that Christian travellers and merchants would lose confidence in the Dubrovnik Lazaretto and its quarantine measures, because of this event. They would no longer want to come, so the Customs office would no longer make a profit, and it was the money Dubrovnik used to pay tribute to the sultan.<sup>215</sup>

The hadjis who stayed in the Lazaretto signed a statement that said Ragusans had nothing to do with Hadji Abdurrahman's death. The kadi who came to Ploče ascertained the same fact. He blamed the emins and scribes for violating Dubrovnik quarantine measures, in

<sup>208</sup> *Contumaciae*, vol. 10, ff. 47-67; vol. 11a, ff. 1, 1v.

<sup>209</sup> *Contumaciae*, vol. 9, ff. 10v, 22; vol. 10, ff. 7v, 11v, 20v, 25, 25v, 26, 52, 59v, 35v, 38, 32v *a tergo*; vol. 11a, ff. 2, 2v, 5v, 16, 16v, 18v, 41, 44v, 45v, 52, 72v, 74v, 110v, 122; vol. 12, ff. 14, 17, 19, 21v, 23, 23v, 45, 49, 50.

<sup>210</sup> *Acta Turc.* vol. B 117, no. 6; *Contumaciae*, vol. 13, f. 1.

<sup>211</sup> *Contumacia*, vol. 10, ff. 1v, 2, 7, 17, 18, 19v, 28v, 30, 31, 39, 47v, 48, 64v; vol. 11a, ff. 14, 21v, 42v, 47, 69, 79, 82.

<sup>212</sup> *Let. Lev.* vol. 95, f. 78. – *Contumaciae*, vol. 10, ff. 62v, 63.

<sup>213</sup> *Acta Turc.* no. 4524.

<sup>214</sup> *Let. Lev.* vol. 95, ff. 81, 99v, 100v.

<sup>215</sup> *Let. Lev.* vol. 95, ff. 78-81, 98-103, 128, 128v, 142, 142v, 146, 146v. – *Acta Turc.* vol. B 9, no. 12, 43.

contravention of sultan's recommendations.<sup>216</sup> Spahović, Ćeho and Fetahagić were replaced, and the Ragusans attempted to convince the Bosnian governor to take them to Travnik in chains and sentence them to prison. Thus, all future emins would get a clear message, which was very important to the Ragusans. The fight to punish the emins was still going on in 1777. During these attempts, when the Ragusan ambassador Antun Brbora was offering money and bottles of rose liquor to the Bosnian governor, a new scandal erupted. Thirteen hadjis escaped from the Lazaretto, led by Hadji Husein Behmen from Stolac.<sup>217</sup>

There were frequent outbreaks of plague in Alexandria, which Ragusans often pointed out. However, it was not explicitly stated in the records that Skenderić and Abdurrahman died of plague. The First and Eighth lazaretto, where they stayed, were returned to their previous function 5-6 days after the hadjis, who came to Dubrovnik with Skenderić and Abdurrahman, left.<sup>218</sup>

### *Death in the Old Zebić lazaretto*

Between the end of 1782 and the end of 1783, a new plague epidemic was raging in Sarajevo. According to the estimate of the renowned Sarajevo chronicler Mula Mustafa Bašeski, in the summer of 1783, the plague was claiming one hundred lives per day. The total of 8,000 people died, i.e. the third of Sarajevo's inhabitants. This horrible epidemic was ravaging Bosnia and Herzegovina from 1781 to 1785, and it claimed around 130,000 lives.<sup>219</sup> In the Venetian Split and Dalmatia the epidemic was also recorded as extremely dangerous. It spread from Bosnia and Herzegovina and continued to rage in 1783/4. As a protective measure, the entire region of Dalmatia was divided, so that towns, regions, coast and hinterland were isolated from each other. Between 29 March and 30 June 1783, only in areas of Klis, Sinj and Knin, in Split and in Sumartin on the island of Brač, 3,267 people died.<sup>220</sup> In July that same year, the Ragusan Republic severed its connections with the Venetian Dalmatia and Boka Kotorska.<sup>221</sup> The 1780s plague also struck a large part of the Ottoman Empire, and equally horrendous were the epidemics of 1739/43 and 1759/65,<sup>222</sup> which spread all the way to the Dubrovnik suburbs.

At the end of September 1782, the Dubrovnik authorities closed the border and stopped cross-border traffic. As usual in such situations, they announced that all Ragusan citizens located in Ottoman territory had to return home within four days. If late, they had to report to the Lazaretto at Ploče. In the coming months, a series of new decisions were issued: Dubrovnik citizens who sets foot on the Ottoman territory would be punished by death; *bagiafers* had to have their walls raised, above the gate to the Lazaretto plateau and above the gate to the sea.<sup>223</sup>

The territory of the Republic of Dubrovnik was divided into eight districts with centres in Mrcine, Stravča, Brgat, Kliševo, Čepikuće/Slano, Ošlje, Ston and Ploče. One patrician *Cazamorto* was appointed into each of the centres. The sanitation soldiers supervised local roads and kept an eye on shepherds and their herds. Village guards were also organized.<sup>224</sup> The villagers who wanted to go to the City had to have a document stating when and where they were coming from. The Lazaretto captain would inspect the document and write down when they headed back.<sup>225</sup>

<sup>216</sup> V. MIOVIĆ-PERIĆ, *Na razmeđu*, pp. 325, 326.

<sup>217</sup> *Let. Lev.* vol. 95, ff. 144-147, 148-149v, 152, 152v, 158-159; vol. 96, ff. 77, 96, 138-140, 152, 152v, 154-155v, 158-159.

<sup>218</sup> *Let. Lev.* vol. 95, f. 99. – *Contumaciae*, vol. 10, f. 64.

<sup>219</sup> K. FILAN, *Sarajevo u Bašeskijino doba*, pp. 248-252. – R. KRALJ-BRASSARD, *Grad i kuga*, p. 125.

<sup>220</sup> N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte*, pp. 82-86.

<sup>221</sup> *Cons. Rog.* vol. 191, f. 111v.

<sup>222</sup> D. PANZAC, *Osmanli Imperatorluğu'nda veba, 1700-1850*. Istanbul, 1997, pp. 25-38, 50, 81, 101, 102.

<sup>223</sup> *Sanitas*, vol. 2, without pagination, 30.9.1782, 30.10.1782, 5.11.1782. – G. GELCICH, *Delle istituzioni marittime*, pp. 154, 156.

<sup>224</sup> B. KRIZMAN, *Memoire Bara Bettere*, pp. 438-443. – V. MIOVIĆ-PERIĆ, *Na razmeđu*, pp. 120-122.

<sup>225</sup> *DA* 18, vol. 3185, no. 29.

The Ragusans were primarily trying to be well-informed, in order to best protect themselves from the scourge. This is why the Health Office continued to receive information on the health situation, not only from the neighbouring, but also distant, countries. The information was provided by ambassadors, dragomans, merchants, couriers, parish priests of Trebinje-Mrkan Archdiocese, foreigners and Ragusan subjects. The news was also sent by neighbouring Ottoman dignitaries, who cooperated wholeheartedly because Dubrovnik sanitation measures also protected their territory. During times of great danger, the Health Office would send couriers to inspect the condition in the nearby Ottoman region.

In 1782, when the Dubrovnik border was closed, people who were staying in the Lazaretto were almost exclusively couriers, Ragusan merchants and an occasional Franciscan priest from Popovo Polje and Kreševo. There were also a few *facchini* who transported goods. Here and there, a few travellers from Sarajevo, without merchandise, were allowed across the border.<sup>226</sup>

On 8 November 1783, the Ragusan merchant Stjepan Konavljanin and four *facchini* came to Ploče. It does not say where he came from. They were housed in the Old Ambonetti lazaretto, with a married couple from Mostar. Stjepan must have been suspicious, because he and his *facchino* Andrija Kukuljica, with their load of ox leather, were first moved to Čardak and then to the Old Zebić lazaretto. The Sarajevo merchant Kristo Vasiljević, with his servant, were also housed there, soon to be joined by three travellers from Korčula and an unnamed person from the region of Dubrovačko primorje who came from Popovo Polje.

On 22 November, the travellers from Korčula were moved to the Third lazaretto. At 1:00 am the next day, Stjepan Konavljanin suddenly died. He was buried in the Zebić lazaretto in quicklime. During the night of 4 December, the mentioned person from Dubrovačko primorje fell ill. The health officer allowed his mother to nurse him. He died one day later. He was buried in quicklime next to Stjepan Konavljanin. The remaining people were the merchant Vasiljević, *facchino* Kukuljica, and the mother of the dead person from Dubrovačko primorje. Vasiljević was released from quarantine and taken to the border under guard. The mother of the person from Dubrovačko primorje was moved to the Eight, and *facchino* Kukuljica to the First lazaretto. Soon after, he also died. He was buried in quicklime, in the Church of St. Lazarus near the Lazaretto. Graves with quicklime indicate that it was the plague, even though it was not explicitly mentioned.<sup>227</sup> If these lives were indeed claimed by plague, then the Ragusans managed to hide it. The Old Zebić lazaretto, with graves of Stjepan Konavljanin and the man from Dubrovačko primorje, was not used until the summer 1785, and the First lazaretto where *facchino* Kukuljica died, also remained empty until February 1784.<sup>228</sup>

From April 1784, Dubrovnik waters were guarded by six armed felucca boats, instead of the usual two.<sup>229</sup> At the same time, the traffic of goods and passengers was proceeding normally. Passengers and cargoes of plums, walnuts, iron and chibouks continued to sail to Alexandria via Dubrovnik. During four years, between 1783 and 1786, in the summer months, the total of 360 passengers sailed through, most of whom came from pestiferous Bosnia.<sup>230</sup> In 1783/4, Ragusan authorities tried, in any way they could, to keep the trade route going through Dubrovnik. The merchants were provided with an opportunity to immediately remove the decontaminated wool from the Lazaretto and move it to Han, to a room in the theatre, the arsenal adjacent to the theatre, and private houses at Ploče and “other secure locations”.<sup>231</sup>

<sup>226</sup> V. MIOVIĆ-PERIĆ, *Na razmeđu*, p. 119. – Đ. ORLIĆ, Kuga u Herceg-Novom 1648 godina, *Srpski arhiv za celokupno lekarstvo* 118, Beograd, 1955, pp. 121, 122. – Đ. ORLIĆ, Dubrovačke vijesti o epidemijama u Bosni i Hercegovini u XVII vijeku, *Grada Naučnog društva NR Bosne i Hercegovine* 1, Sarajevo, 1956, p. 61. – G. Ž. KOMAR, *Pisma Miha Kuveljića dubrovačkoj vladi; Kandijski rat 1646-1662*, Herceg-Novi, 2010, pp. 45-51, 65-67, 72-79. – *Contumaciae*, vol. 11a, ff. 107v-120v.

<sup>227</sup> *Contumaciae*, vol. 11a, ff. 120v, 121.

<sup>228</sup> *Contumaciae*, vol. 11a, ff. 124, 148.

<sup>229</sup> *Sanitas*, vol. 2, without pagination, 14.4.1784.

<sup>230</sup> *Fedi*, vol. 4, ff. 240, 241v, 242-243, 256-257, 261, 261v, 268v, 269-270v; vol. 5, ff. 38, 39, 58.

<sup>231</sup> *Cons. Rog.* vol. 191, ff. 77v, 78, 191; vol. 192, f. 82.

## Plague in Konavle, repercussions at Ploče

At the end of 1784, the plague claimed three lives in a house in the village of Bani in Konavle. The house was immediately isolated, so the disease did not spread. In the spring of next year, the authorities concluded that the plague in the village of Bani was contained, so they organized a solemn *Te Deum* mass for the patricians in the Church of St. Blaise.<sup>232</sup>

However, at the beginning of July 1785, the infectious disease appeared in the village of Stravča in Konavle, and claimed seven lives in several days. Details of this case were written in the health certificate issued on 9 July 1785 to the Ragusan captain Miho Milković who was preparing to sail to Alexandria. Together with the usual text about crew size, number of passengers, type and quantity of goods, it was also added that the plague in Stravča was under control and the last death occurred on 5 July. It also described the implemented protection measures.<sup>233</sup> However, the disease soon appeared in Stravča again. In January 1786, Marko Redžo died and the physicians ascertained that the cause of death was plague.<sup>234</sup> It seems that the plague spread to Župa Dubrovačka at that time.<sup>235</sup>

In those years, Ploče acted as one large quarantine area, more so than ever. The travellers were accommodated so they remained as far away from one another as possible. Except in the Lazaretto, the quarantine was also located in the Old and Little lazarettos, the Old Ambonetti and Old Zebić lazarettos, guardhouses, Mandarica, Čardak, Han,<sup>236</sup> and also in the house near the Church of St. Anthony.<sup>237</sup> A married couple from Popovo Polje, Ragusan merchants, ambassadors from Istanbul and Travnik, a *cazamorto* from Stravča,<sup>238</sup> the Naples consul in Izmir, and comedians from Zadar were all isolated in a house near Revelin, in the houses of Vicko Petrović, the physician Greco, nobleman Zamagna and the noblewoman Cerva.<sup>239</sup>

The quarantine space was expanded towards the City and the suburb of Pile. Two men from Konavle spent the first part of their quarantine in the fortress of Bokar. The Dubrovnik consul in Istanbul Đuro Curić, who came by ship from Izmir, spent 20 days in quarantine in the house of Ivan Stulli in the City.<sup>240</sup>

It was not until May 1787 that the Ragusans were certain they were free of the plague, so they celebrated Holy Mass in the Church of St. Blaise as a sign of gratitude.<sup>241</sup> From August 1782 to May 1787, they spent around 36,000 ducats on plague protection.<sup>242</sup> Part of the expenses were born by Dubrovnik sea captains and the Jewish community.<sup>243</sup> The Lazaretto captain Vicko Volanti was rewarded with 50 ducats for his contribution to public health.<sup>244</sup>

<sup>232</sup> *Sanitas*, vol. 2, without pagination, 29.1.1785, 8.3.1785. – *Cons. Rog.* vol. 193, f. 18. – R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture starog Dubrovnika*. Vol. 1, Beograd, 1938, p. 102. – N. LONZA, *Kazalište vlasti*, p. 295.

<sup>233</sup> *Fedi*, vol. 4, ff. 269v-270v. See also: *Sanitas*, vol. 2, without pagination, 3.7.1785, 4.7.1785, 19.7.1785, 21.7.1785, 30.7.1785, 6.8.1785, 20.8.1785. – *Cons. Rog.* vol. 193, f. 155v.

<sup>234</sup> V. MIOVIĆ-PERIĆ, *Na razmeđu*, pp. 136, 336, 337.

<sup>235</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture* 1, p. 102.

<sup>236</sup> *Contumaciae*, vol. 11a, ff. 79, 101v, 114, 111v, 112v, 113, 119, 123, 138v, 154, 163v.

<sup>237</sup> *Contumaciae*, vol. 11a, ff. 137, 138v, 143, 144v, 145v, 147, 152, 154v, 157v, 158, 159, 160, 161v; vol. 12, ff. 2, 5, 23, 24v, 34v, 36v, 40, 41, 41v, 45v, 46, 50, 153.

<sup>238</sup> In 1732, the *Cazamorti* from the pestiferous peninsula of Pelješac also came to the quarantine in the Lazaretto (*Contumaciae*, vol. 2, ff. 112v-114v).

<sup>239</sup> *Contumaciae*, vol. 11a, ff. 117v, 119v, 147v, 156, 162; vol. 12, ff. 12, 25, 75v.

<sup>240</sup> *Contumaciae*, vol. 11a, ff. 140v, 178.

<sup>241</sup> N. LONZA, *Kazalište vlasti*, p. 295.

<sup>242</sup> *Cons. Rog.* vol. 190, ff. 208, 224; vol. 191, ff. 1v, 149v, 151v, 166v; vol. 192, ff. 34v, 35, 76, 113v, 142, 194, 217v; vol. 193, ff. 4v, 19v, 59v, 128, 142v, 158, 193v, 219v; vol. 194, ff. 61, 76v, 96v, 142, 169v, 209v; vol. 195, f. 57.

<sup>243</sup> *Cons. Rog.* vol. 190, ff. 233v, 234.

<sup>244</sup> Z. ŠUNDRICA, *Arhivsko gradivo*, pp. 37, 38.

## Contaminated ships

In early September 1792, the Ragusan polacca ship sailed into Dubrovnik from Alexandria, aboard which captain Ivan Bonfiol and several sailors died of plague. The ship was escorted by two Venetian war ships, and the authorities immediately nominated a senator who would stay at Ploče for fifty days and nights and monitor the implementation of quarantine measures. The health officers were supposed to house the goods in the *bagiafer*, board up its window, doors and openings that connected it to other *bagiafers*. The passengers were supposed to be housed in some other *bagiafer* or lazaretto, that would remain locked and its openings walled in.<sup>245</sup>

The contaminated ship sailed into Dubrovnik waters on 20 September 1792. Its passengers and goods were situated in three *bagiafers*. The sanitation assistant and two guards spent 45 days in quarantine with them. The cargo took ten days to unload. It was housed in the *bagiafer* “Above the well,” and with it another 11 passengers, who were guarded by an assistant and six guards. They were prescribed 80 days in quarantine. Finally, captain Bonfiol’s deputy and eight members of the crew disembarked with some goods. They entered the *bagiafer* “Above the fig” where they were also sequestered for 80 days.<sup>246</sup>

In August 1794, a new plague epidemic broke out in Sarajevo, but it was not as lethal as the previous.<sup>247</sup> First signs of danger in Bosnia and Herzegovina appeared even earlier, because on 25 October 1793, the Ragusans blocked the land border and activated regular protection measures throughout the Dubrovnik territory. Ten months later, the Health Office sent Antun, a Bosnian Franciscan, to investigate the situation in Sarajevo. The news was not good, because Ragusans asked the Venetian governor to activate protection measures in Dalmatia. If he failed to do so, Dubrovnik would sever ties with Dalmatia. The situation was becoming worse. In the spring of 1795, Dubrovnik authorities promised a 100 sequins reward to anyone who killed Ragusan citizens who did not retreat from Ottoman territory in time, except merchants from Novi Pazar. Family members of all people who did not retreat from Ottoman regions, had to report to the Lazaretto at Ploče. Shepherds’ huts in the Konavle hills were uncovered in order to force them to return home. Sea and land communication with Kotor, Budva, Neretva, Opuzen and Korčula was interrupted.<sup>248</sup>

In January 1795, the Senate and the Health Office gradually started to abolish the strict protection measures and a religious procession “for plague” was organized.<sup>249</sup>

However, in autumn, the strict anti-plague measures were again put into force.<sup>250</sup> Travellers were quarantined in the aforementioned spaces outside the Lazaretto. The little house near the Church of St. Anthony (1788-1800)<sup>251</sup> was used a lot, and also mentioned was the lazaretto of the so-called *giumrukci* (tur. gümrükçü) who collected duties on wax (1791/3). A woman with two small children from Barletta was housed on the ground floor of the Captain’s lazaretto.<sup>252</sup>

There is only one archival source indicating that the danger persisted and that an infectious disease appeared in Ploče. On 18 January 1797, two gravediggers were moved from the hospital to the courier’s house in the Lazaretto, where they remained quarantined for

<sup>245</sup> *Sanitas*, vol. 2, without pagination, 11.9.1792.

<sup>246</sup> *Contumaciae*, vol. 12, ff. 61v, 62v.

<sup>247</sup> K. FILAN, *Sarajevo u Bašeskijino doba*, pp. 252-254.

<sup>248</sup> *Sanitas*, vol. 2, without pagination, 25.10.1793, 11.8.1794, 26.8.1794, 6.9.1794, 10.12.1794, 23.3.1795, 22.4.1795, 25.4.1795.

<sup>249</sup> *Sanitas*, vol. 2, without pagination, 9.6.1795, 4.7.1795. – *Detta*, vol. 87, f. 53v.

<sup>250</sup> *Sanitas*, vol. 2, without pagination, 1.9.1795, 4.7.1796, 5.11.1796. – *Detta*, vol. 87, f. 53v.

<sup>251</sup> *Contumaciae*, vol. 12, ff. 2, 3v, 5, 8, 10v, 12, 13, 15, 16, 20, 20v, 23, 24v, 25, 30, 33, 34v, 36v, 40, 41, 41v, 45v, 46, 50, 52, 52v, 54v, 60v, 69, 75v, 86v, 101, 106, 116, 132, 134, 140, 149, 153, 156, 166v.

<sup>252</sup> *Contumaciae*, vol. 12, ff. 47, 57v, 73, 106.

thirty-odd days.<sup>253</sup> This is the only mention of the hospital at Ploče, which was definitely temporary and whose location is unknown.

In early November 1804, a Ragusan ship with the late captain Glavić, who passed away en-route to Dubrovnik, sailed into its waters. Based on measures of protection, he obviously died of plague. The Health Office ordered that the ship be anchored in Gruž, where it was sunk at deck height for eight days. The ship's equipment was sunk for four, and its sails for eight days, after which they were laid out in the open air. The crew members were housed in one *bagiafer*, where they spent 80 days. Their belongings, as well as the captain's, were sunk for 60 hours, then remained in the open air during the 80-day quarantine.<sup>254</sup> Glavić's ship perhaps arrived from Spain, because the Health Office was paying special attention to all Ragusan ships that were coming from there, and also from Livorno.<sup>255</sup> Furthermore, ships of Ragusan captains Radović, Ljubibratić and Kazilar were also mentioned. A general note also said that all Ragusan ships that arrived contaminated from the West, ought to be treated like Glavić's ship. In case of greater number of contaminated Ragusan ships in Dubrovnik waters than there were available *bagiafers*, or in case of accident with the decontamination of goods, the Office had to inform the Senate immediately.<sup>256</sup>

Foreign ships that were suspected of infection, were sent to Polače on the island of Mljet for a 40-day quarantine.<sup>257</sup>

### *1784 decision on the reconstruction of the Lazaretto*

In August 1781, the authorities requested the Health Office to make a plan that would impose greater order and security in the Lazaretto. They repeated the request in 1783, and in April 1784, they demanded, under threat of punishment, that the Lazaretto reconstruction plan be included in the Senate's agenda within few days.<sup>258</sup> It was only then that the Health Office finally presented a detailed plan. They proposed an approx. 80 cm (1.5 cubits) wall, which did not enclose the entire Lazaretto, but only the Janissary houses up to a point opposite the emin's house, be raised to the height of 2.30 metres (4.5 cubits), and that it then continues to the emin's house, which would thus be situated outside the Lazaretto complex. A completely enclosed and isolated Lazaretto would make any contact with quarantined people impossible, which was, to everybody's dismay, happening in the past. The wall would have a grill gate, high enough for horseman to ride through, that would always be locked at night, and in times of danger, also during the day. When the gate was open it would always be guarded (fig. 7).

Tabor was also supposed to be completely enclosed with walls. The wall, with adjacent benches looking towards the sea, which separated Tabor from the road,<sup>259</sup> would be raised to the height of 4.5 cubits. A wall of equal height would be added to it, all the way to St. Anthony's garden, and the gate was supposed to be situated opposite the Lazaretto gate.

The partially enclosed space in front of each of the lazaretto entrances, on the plateau of the Lazaretto complex, would be completely walled in and closed with the locked grill gate, the key to which would be kept by the Lazaretto captain. The gates would be unlocked only in exceptional cases, and only if permitted by the Health Office.

<sup>253</sup> *Contumaciae*, vol. 12, f. 129v.

<sup>254</sup> *Sanitas*, vol. 2, without pagination, 2.11.1804. – G. GELCICH, *Delle istituzioni marittime*, p. 158.

<sup>255</sup> In 1804, Malaga was infected by some fishermen who stole merchandise from a pestiferous French ship. With regards to Livorno, it was ravaged by an infectious disease, but it was not before late 1804 and early 1805, that the Ragusan consul in that city confirmed it was not the case of plague but yellow fever (V. IVANČEVIĆ, *Luka Livorno i dubrovački brodovi (1760-1808)*. Dubrovnik, 1968, p. 98).

<sup>256</sup> *Sanitas*, vol. 2, without pagination, 2.11.1804, 20.11.1804. – G. GELCICH, *Delle istituzioni marittime*, p. 159.

<sup>257</sup> *Sanitas*, vol. 2, without pagination, 2.11.1804, 20.11.1804, 22.12.1804. – G. GELCICH, *Delle istituzioni marittime*, pp. 159, 160.

<sup>258</sup> *Sanitas*, vol. 2, without pagination, 11.8.1781. – Z. ŠUNDRICA, *Arhivsko gradivo*, p. 33. – *Cons. Rog.* vol. 192, f. 82v.

<sup>259</sup> V. BAZALA, *Calendarium Pestis (II)*, *Acta historica medicinae, pharmaciae, veterinae* 2, Beograd, 1962, p. 83.



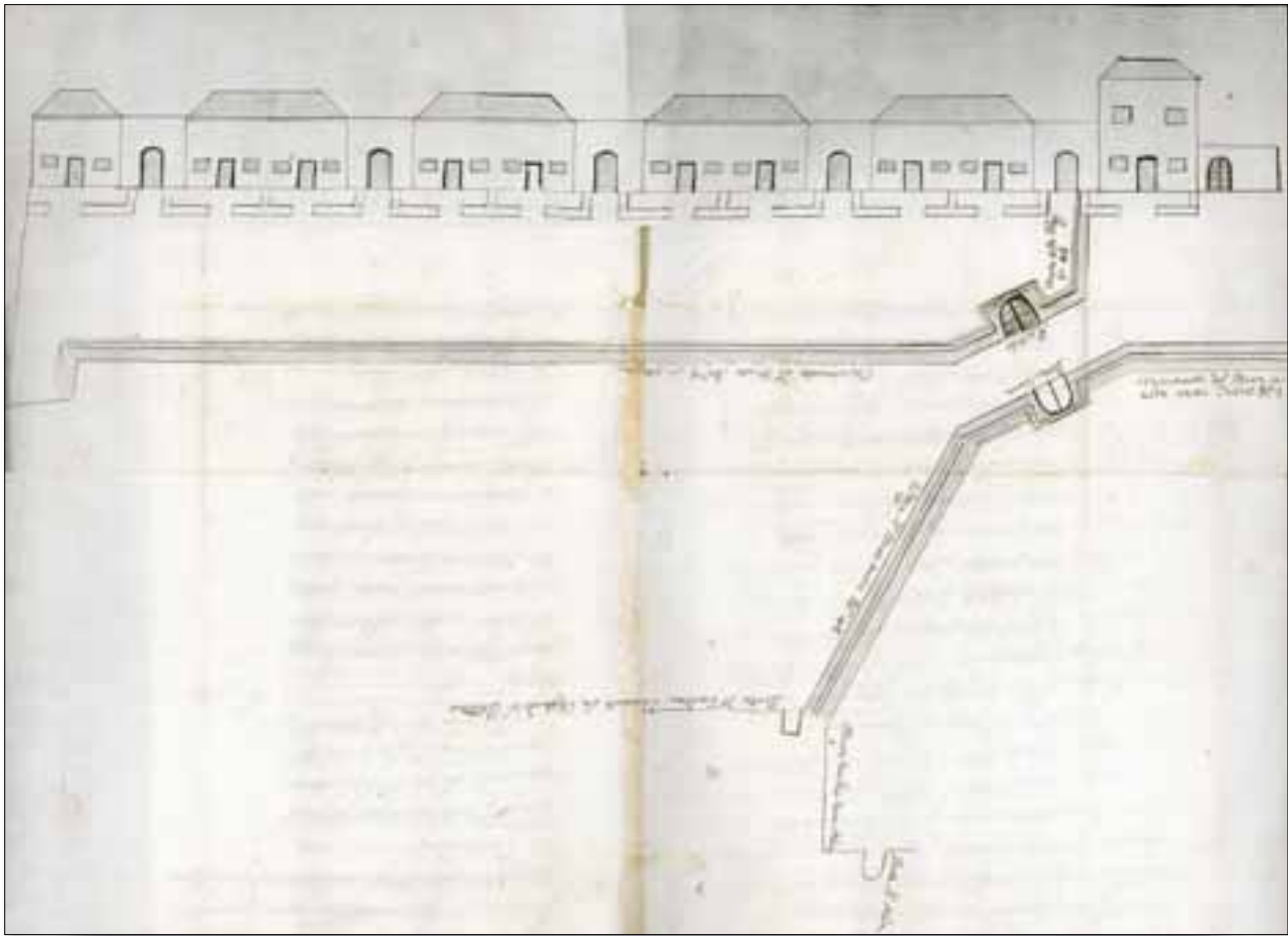


Fig. 7. Plan of the Lazaretto and Tabor, 1784 (State Archive in Dubrovnik, *Acta Consilii Rogatorum*, vol. 192, ff. 93v, 94)

The travellers released from quarantine were supposed to leave the Lazaretto with their goods.

Although it was built to accommodate Ottoman merchants who were released from quarantine, Čardak was constantly used as quarantine, which is why it was called *Lazzaretto detto Ciardak*.<sup>260</sup> Officers of the Health Office proposed a different solution for merchants, namely the construction of a two-storey building, similar to the Turkish Han, where the Captain's lazaretto (Old lazaretto) was located. The ground floor would have a warehouse for goods and a barn for horses, and the living quarters would be on the upper floor. The merchants would be able to sell their merchandise there, especially food. The upper floor would also have the Lazaretto captain's apartment. Merchants would live there, but also a *giumrukci*,<sup>261</sup> because he did not belong in the Lazaretto.<sup>262</sup>

In 1787, the Senate elected supervisors for the "construction of the Lazaretto at Ploče." One archival document, as well as plans and photographs of the Lazaretto from later date, show that the plan was only partially realized.<sup>263</sup> The walls were raised and built, and the Old lazaretto was reconstructed as a two-storey building (Fig. 8).

<sup>260</sup> *Sanitas*, vol. 2, without pagination, 5.11.1782, 18.8.1783.

<sup>261</sup> The Lazaretto also had an emin who collected duties on wax imported from Bosnia. The Ragusans called him *giumrukci*. It seems that he only came occasionally at first, but from 1760s onwards he came frequently. The name "lazaretto for wax" dates back to that time (*Contumaciae*, vol. 11a, f. 61; vol. 12, ff. 18v, 47, 57v, 73. – *DA* 18, vol. 3185, no. 29. – *Acta Turc.* vol. B 59, no. 97; vol. E 4, no. 5, 17; no. 2228; no. 2260; no. 2262).

<sup>262</sup> *Cons. Rog.* vol. 192, ff. 92-94. – I. LENTIĆ-KUGLI, Građevinske intervencije u Dubrovniku potkraj 18. i na početku 19. stoljeća, *Radovi Instituta za povijest umjetnosti* 12-13, Zagreb, 1988/1989, pp. 277-279. – Z. ŠUNDRICA, Arhivsko gradivo, pp. 33-36.

<sup>263</sup> *Cons. Rog.* vol. 195, f. 66. – *DA* 18, vol. 3190/2, no. 245. – L. BERITIĆ, Ubikacija nestalih građevinskih spomenika, p. 62.

3100  
245

Spese che occorrono nelle fabbriche  
che farò alle Ploče, secondo l'idea  
della S.<sup>a</sup> Ser. Illmo. et in circa  
sono le seguenti.

1.<sup>a</sup> Per la fabbrica del nuovo Hosp. e sua  
Andud e adogi di Dardi in  
praticy libere nel sito di fabbriche  
vecchie vicino alle porte di Città  
in circa a tanto. La loro idea — 3100

2.<sup>a</sup> Per fare il recinto overo ogni  
camera del Lazaretto nuovo secondo  
l'idea loro in circa — 1500

3.<sup>a</sup> Per murare le stajete dentro, e  
fuori, fare il recinto di lavatori  
in continuatione di altre muraglie  
conforme la loro idea in circa — 2100

6700

Fig. 8. Cost estimate of construction works according to the 1784 Lazaretto reconstruction plan (State Archive in Dubrovnik, *Diplomata et acta*, 18<sup>th</sup> century, vol. 3190/2, no. 245).

## Fragments of Daily Life

Archival records provide many information about different events in the Lazaretto complex and its surroundings. Mostly conflict and illegal situations, which is why they were recorded in minutes of the Criminal Court and the Senate, and in notifications to the Minor Council. These short stories are often full of violence, but they are the only source that can convey the atmosphere of daily life in the Lazaretto and at Ploče.

### *I want to go home*

In late 1671, noblemen Marojica Caboga and Đuro Buća, ambassadors who were with the sultan in Edirne, came to the Lazaretto. They were housed in the Čardak. One evening, Caboga ordered the sanitation soldier to buy some wine and candles for him in the City, gave him an empty bottle and sent him on his way. The soldier went to the Lazaretto captain Andriasci to ask for permission, but was refused. He was supposed to wait for other soldiers to come to Ploče, as there had only been two at the time. Then the other soldier came before the captain, also with an empty bottle and the same question. Known for his fiery temper and hot-headedness, Caboga became enraged. He flew barefoot out

of the Čardak, took the soldier's stick and threw himself at Andriasci. He grabbed him by the hair and started beating him. Andriasci escaped to his lazaretto, with Marojica throwing rocks at him. An official court investigation was initiated, which revealed that he was also angry because he was not allowed to go home every evening. By then, he had already gone home for three or four evenings, always in the company of two soldiers. He would stay for an hour and then return to Ploče. Being cooped up in the Lazaretto, after already being away from home for long periods of time, all ambassadors missed their families. Marojica Caboga was so insistent because his firstborn son, Bernard, was born on 18 November 1671.<sup>264</sup> Because of violent behaviour and violating quarantine measures, he was sentenced to pay a fine of 600 *hyperperi* and to two months in the Lovrijenac fortress.<sup>265</sup>

### *Escape into the Lazaretto*

Parents of Dominko, a 13 or 14-year-old boy, wanted him to help in the family workshop for sculpting corals. One day in October 1720, instead of going to the workshop, Dominko got carried away playing at Placa. His mother gave him a serious beating and threatened that his father would do the same, as soon as he came home. The boy was a true victim of abuse, because his mother constantly beat him, so on several occasions he went to the Lazaretto and begged emin Yusuf Agha to take him to Trebinje, find him a family to live with and work as a servant. Yusuf Agha was worried how the Ragusan authorities would react if he helped the boy, so he did nothing. On that October day in 1720, Dominko ran away from home in a terrified state, he ran into the Lazaretto undetected and snuck into the lazaretto where Omer from Trebinje was quarantined. Omer had business dealings with Dominko's father, so they knew each other well. He allowed the boy to stay and tried to hide him. However, the next morning the soldiers heard Omer talking to someone, and they knew he was staying in the lazaretto alone. Omer put up a good fight in order to save the little fugitive. He locked himself inside, and when he was forced to open the door, he said to the soldier: "do not come inside." The soldier responded: "I will enter because I want to see who is with you." Omer reached for the knife in his belt, but did not pull it out. The soldier and the Lazaretto captain came in and found Dominko huddled in the corner under a pile of tiles. They took him out and housed him in a different lazaretto. Then they moved him to prison.<sup>266</sup> We do not know what happened to him next.

Children were often hanging around the Lazaretto, especially during summer months when they went swimming to Banjine, today's local beach of Banje. They came into contact with strangers, who could have been infected or dangerous. So, in 1702, the boys Jero, Jozo and Pero were being stopped by the merchant Simon who gave them loose change. When the authorities found out, they forbade the children to come to Ploče. They sent soldiers to arrest the strange man as soon as he left the Lazaretto area, and told the health officers to release him if they saw he was planning to leave the territory of Dubrovnik.<sup>267</sup>

### *Privileged Ottoman guests*

Captains from neighbouring Ottoman captaincies, kadis, envoys, different aghas and pashas often visited from the Ottoman territory, both in private and official capacity. The Ragusans knew them well and gave them preferential treatment at Ploče for the sake of maintenance of friendly relations. They provided them with meat, rice, coffee, sugar,

<sup>264</sup> N. VEKARIĆ, *Vlastela grada Dubrovnika*. Vol. 7. Zagreb-Dubrovnik, 2016, p. 210.

<sup>265</sup> DA 17, vol. 2051, no. 96.

<sup>266</sup> DA 18, vol. 3400, no. 36.

<sup>267</sup> DA 18, vol. 3400, no. 28.

butter, honey, spices, seasonal fruit, candles, coal, wood for cooking and firewood, as well as snow from the nearby mount of Sniježnica for refrigeration in the summer months. The government knew who consumed alcohol, and would send them wine. Occasionally, they would also send pots, plates and small glass bottles to the distinguished guests. They fed hay and barley to the dignitaries' horses. On one occasion, for the benefit of a large group of guests, they had a *minder* made.<sup>268</sup> "According to ancient custom," the Ragusan Jewish community also had to be hospitable by providing guests with household items, beds and other furniture.<sup>269</sup>

Most guests who had special status were not registered in the Books of quarantine, so we do not know where they stayed. Perhaps some have stayed in emin's lazaretto. If it was indeed so, then emin's home was occasionally used as a medical clinic, because many needed doctors.<sup>270</sup>

A citizen of Elbasan, Hüdaverdi Bey came to Ploče in 1792 hoping that the Ragusan surgeon Lorenzo Giromella would be able to cure him of the illness he suffered for years. He signed a statement, witnessed by the emin, saying that "he surrendered his body and soul to Giromella, whom he handed a knife to cure him with." If, God willing, the operation was to succeed, the surgeon would be paid an agreed fee. If, God forbid, it did not and the Bey died, his heirs should not accuse or abuse the surgeon. Together with Hüdaverdi Bey, the statement was also signed by five Ottoman merchants as witnesses. Emin Mustafa Agha added that the statement was composed in his presence.<sup>271</sup>

Sometimes, high-ranked Ottoman dignitaries also came to Ploče, whom the Dubrovnik authorities greeted based on the precisely defined ceremony. They were mostly *kapıcıbaşı* who delivered sultan's orders and important notices from the Porte. In early 18<sup>th</sup> century, the authorities rented the houses of Miho Martellini, Petar Zamagna and Pero Gled for their accommodation.<sup>272</sup> *Kapıcıbaşı* Olić, who came in 1756, was given various delicacies and tobacco, and also eyeglasses. On the day of his audience with the Rector and the Minor Council, he was collected by the state secretary and four soldiers. The Lazaretto captain and several sanitation soldiers also escorted him into the City. They ensured that no one approached him on the street. Since he spent the majority of his time in a house at Ploče, he was given chess for entertainment, invited to a theatre performance in Orsan and was given a banquet in Gruž. Representatives of the Tripoli Bey and Moroccan Sultan were of the same importance, as well as the sancakbey of Shkodër Mahmud Pasha Buşatli.<sup>273</sup>

### *In alcoholic fumes*

Quite a lot of records exist on drunken disturbances, which leads us to conclude that the travellers were getting inebriated in order to cope with long days in the quarantine. One such undated document, talks about a true uprising of the Ragusans against a drunken ruffian.

An envoy of the Bosnian governor, and his entourage, were staying at the Lazaretto. One of his servants mounted a horse drunk and rode to Gruž, entered a shop and tried to rape a woman. She screamed for help and was rescued by passers-by. The servant headed back

<sup>268</sup> *Detta*, vol. 81, f. 94v; vol. 87, ff. 52, 63v, 76, 83.

<sup>269</sup> *Cons. Rog.* vol. 194, f. 174; vol. 195, f. 52v. – *Detta*, vol. 85, f. 230. – M. LEVY, *Sefardi u Bosni; Prilog historiji Jevreja na Balkanskom poluotoku*. Sarajevo, 1996, pp. 50-56.

<sup>270</sup> *Acta Turc.* vol. B 116, no. 5, 14, 18, 21, 22; vol. B 117, no. 7, 21, 25. – *Detta*, vol. 82, ff. 15v, 16v; vol. 84, ff. 84, 218.

<sup>271</sup> *Acta Turc.* vol. E 3, no. 2.

<sup>272</sup> *Cons. Rog.* vol. 138, ff. 127, 169; vol. 140, ff. 78-79, 102v; vol. 148, f. 161v. – *Ceremoniale*, vol. 1, ff. 43v, 44. – N. LONZA, *Kazalište vlasti*, pp. 177, 178, 477, 478.

<sup>273</sup> *Contumaciae*, vol. 11a, f. 44v. – *Detta*, vol. 84, f. 164. – N. LONZA, *Kazalište vlasti*, pp. 176-181, 477-481.

to Ploče and attacked another woman on the way, however she also managed to escape thanks to the people who were passing by. The drunken ruffian rode into the City and attacked, for the third time. He came galloping at full speed and grabbed a woman who stepped out of her house with a cousin, by the hair and cheek. The news spread rapidly and people came running with a clear intention of killing him. The ruffian escaped back to Ploče, and since he was afraid to face his master, he hid inside the Han. The enraged locals have had enough, because this was not the first shameful incident of a kind. The authorities sent soldiers to catch the ruffian and bring him alive to the Rector's Palace. They locked him in a courtroom they surrounded with a cordon of soldiers. As night fell, the rioters slowly dispersed and went home. The government tried to talk to the envoy of the Bosnian governor, but he already left the Lazaretto and returned to Bosnia. At day break, the authorities called the emins to come and collect the scoundrel and take him to their lazaretto. However, the emins declined because they feared another riot.<sup>274</sup>

### *The gallows in Tabor*

In January 1643, the Montenegrin bandit Omer Palikuća was hanged at Ploče. He was pillaging the villages in Konavle, but also in the Ottoman Herzegovina, which the Ragusans used as leverage when they asked that he be executed. He was arrested in Risan, where he was apprehended by the envoy of sancakbey of Herzegovina, who brought him to Ploče and executed him by hanging.<sup>275</sup>

Marauders from Montenegro and Herzegovina constantly raided the border villages in Konavle. The Ragusans paid the neighbouring Ottoman rulers to apprehend and execute the most notorious marauders, but they never asked them to be executed in the territory of Dubrovnik.<sup>276</sup> This is why it is not quite clear why Omer Palikuća, who was not that notorious, was hung at Ploče. But, one thing was sure. The authorities obviously wanted to execute him in public, so that news of it could spread far and wide. Full of Ottoman merchants and travellers, Ploče were ideal for that purpose. The gallows were probably located in Tabor.

The news had definitely spread everywhere, but it did not restrain the marauders. Ruthless pillaging continued near the Dubrovnik border. In the spring of 1645, Mahmud the porter started his journey to Dubrovnik with the goods owned by the Sarajevo merchant Sinan Bey. He was attacked by bandits in Popovo Polje and robbed, but he managed to escape to Tabor. In an attack of anxiety and fear from Sinan Bey, the desperate Mahmud slit his own throat.<sup>277</sup>

### *“Move that rifle, even if empty it could be loaded by the devil”*

At the beginning of the War of Candia, when the situation with marauders deteriorated, bandits from Herceg Novi were particularly bad. The Ragusans were complaining to the sultan for years about Omer Agha Begzadić of Herceg Novi, who went too far when he and his gang opened fire on Tabor in August 1655. The government immediately decided what they would do if more than ten armed “Turks” came to Ploče. They issued an instruction that they were to be warned not to fire their rifles, with or without rounds. As long as many people who were armed and dangerous remained at Ploče, the guards at city gates had to be reinforced, one or two cannons would be positioned in the Revelin fortress, and cannons in St. John's fortress had to be ready to fire. If Ottoman subjects dared to open fire, as Begzadić did recently, they will receive cannon fire from fortresses

<sup>274</sup> *Acta Turc.* vol. B 146, no. 7.

<sup>275</sup> *Let. Lev.* vol. 48, ff. 148v, 149, 176v-180v. – *Cons. Rog.* vol. 97, ff. 169v-173v.

<sup>276</sup> V. MIOVIĆ-PERIC, *Na razmeđu*, pp. 168, 206.

<sup>277</sup> *Acta Turc.* vol. E 3, no. 14.

in retaliation, but not to injure them, only as a warning. If Ottoman subjects were to continue shooting, then the gunners would shoot to kill.<sup>278</sup> Luckily, the regulation never needed to be implemented.

The Ragusan citizens also used firearms. In 1689, a group of villagers from Župa dubrovačka headed down towards Tabor firing from arquebus muskets. Forty-odd Bosnians and Herzegovinians, who were quarantined in the Lazaretto, fired back. They were immediately joined by the crew from Ragusan captain Antun Karabuća's ship, that was anchored under the Lazaretto. Surprisingly, only one person was injured in the shootout.<sup>279</sup> In 1760, a local man by the name of Ilija Puljizević was passing time in the quarantine by playing with his allegedly empty rifle. He was waving it around the Lazaretto plateau and a *bagiafer*, and was laughing and shouting: "I will kill somebody." People told him: "move that rifle, even if empty, it could be loaded by the devil, and do not point it at people." In that instant, the rifle discharged and killed Marin Kaluđer instantly.<sup>280</sup> The noblemen were also prone to armed conflict, so in 1777 the Senate prohibited them to carry pistols in the City, its suburbs of Pile and Ploče all the way to the Lazaretto, unless they were on horseback. They were not supposed to carry any other weapons, or to unsheathe their swords.<sup>281</sup> "Ours" and "theirs" were throwing rocks at each other, struck one another over the head with chibouks and sticks, and engaged in fistfights.<sup>282</sup> Everybody had a short fuse.

### *Emin's fortunes and misfortunes*

The emins and their people intervened in conflict situations in different ways. Sometimes, they decided to participate in the general melee,<sup>283</sup> and sometimes they risked their lives to stop it. In 1707, when a turkey escaped from Nikola Aligretti's garden and mixed in with turkeys that the people from Trebinje brought to Tabor for sale, the owner came to collect it but was refused. Emin's scribe happened to be on scene, he grabbed the turkey and threw it out of Tabor, at which point the people from Trebinje drew out their guns. Deputy captain Jakov Skapić advised the scribe to run to the Lazaretto, which he did at once.<sup>284</sup>

The emins were omnipresent in Ploče's daily life. They are mentioned in many documents, some of which they themselves composed. Let us examine two more documents that show what kind of situations they found themselves in.

In early June 1644, the Ragusans consigned the dead body of Mustafa Çelebi to emin Fazli Agha Šabanović. Mustafa was teaching young Ragusans studying to become dragomans, the basics of the Ottoman Turkish language. One of the documents says that he was a scribe, which could mean that he spent time in Dubrovnik before as emin's assistant.

Part of the funeral ceremony was conducted in emin's lazaretto at Ploče. They washed Mustafa Çelebi's body. The imam and muezzin came and said the usual prayers. Eight porters carried Mustafa's body to the Ottoman Carina, where his grave was prepared. The poor people were given money for his soul, the prayers were said and the *halva* divided. The entire ceremony was paid for by the Ragusan authorities, and emin Fazli Agha issued a certificate which said, among other things, that it was God's will that Mustafa died.<sup>285</sup>

<sup>278</sup> *Ostavština Lukše Beritića*, SAD, vol. 7, no. 3. – *Cons. Rog.* vol. 106, ff. 122, 122v.

<sup>279</sup> *Lam. Crim.* vol. 27, ff. 54-55v.

<sup>280</sup> *Lam. Crim.* vol. 135, ff. 103, 116v-117v, 127v, 129, 129v.

<sup>281</sup> *Cons. Rog.* vol. 186, f. 122v.

<sup>282</sup> DA 18, vol. 3175, no. 86, 453; vol. 3176, no. 46. – *Lam. Crim.* vol. 89, ff. 101-111v. – *Acta Turc.* no. 4610.

<sup>283</sup> DA 18, vol. 3175, no. 89.

<sup>284</sup> *Acta Turc.* vol. E 4, no. 22.

<sup>285</sup> *Acta Turc.* vol. 143, no. 4.

One would think that paying for funeral expenses was a kind and humane gesture by the Ragusans for the man they knew well. But, this was not the case. A dark story lay hidden behind this genteel behaviour that emin Fazli Agha could not even dream of. Mustafa Çelebi was poisoned in accordance with the decision made by the Senate at a secret session. It was not possible to ascertain why he was poisoned.<sup>286</sup>

One summer afternoon in 1709, noblemen Andrija Ghetaldi and brothers Dominik and Nikola Buća were sitting on the Ploče bridge. The emin Mehmed Agha Çelebi happened to pass by, so they invited him to join them. They were exchanging pleasantries until Ghetaldi said to the emin, using rude and coarse language, that he had stayed in Dubrovnik so long that his wife might cheat on him. Mehmed Agha responded in equal measure. Using equally coarse language, he said that he would show him the splendour of his sexual prowess, and we'll see how long he will feel satisfaction. An argument broke out that immediately turned into a fight. Agha complained to the Minor Council. A court investigation was initiated, during which he stated: "so when I said it, he jumped to his feet and started insulting me and my faith, he said he would grab me by the beard and beat me for as long as humanly possible. He struck me with his fist under the eye, I was spewing blood, and had it not been for the other two noblemen, he would have continued to beat me." Dominik Buća confirmed the emin's statement. Andrija Ghetaldi was reprimanded.<sup>287</sup>

### *Abduction of a nobleman*

In 1712, the slave merchant Jusuf Mezzi from Shkodër bought eight Ancona slaves who were kidnapped by the Ulcinj corsairs. It seems that their liberation was prompted by the Pope himself. Mezzi and the slaves came to Ploče in the summer of 1712. The following witnesses were present: emin Halil Agha, emin's son, Mustafa Çelebi the scribe, and Omer Reis from Ulcinj. As soon as Rafael Coen, a Ragusan Jew, paid the agreed purchase price of 640 ducats to Mezzi, the slaves were freed. The emin issued a certificate to Coen saying that the agreed amount was paid in full and there remained not even the slightest debt.<sup>288</sup>

However, two years later Jusuf Mezzi turned up with a claim that Coen still owed him 2,800 ducats. The Ragusans ignored his demands, so Jusuf thought of an idea to get his money back after all. In June 1714, he came to Ploče with his son and six people from Shkodër. They presented themselves as merchants. One night, when Marin Sekundo Zamagna was on his way home and he was passing by the Lazaretto, they jumped in front of him, grabbed him and dragged him to the felucca boat, arranged for departure, and they sailed away in haste. The emins and travellers tried to help Zamagna, but they failed to prevent the abduction. The Ragusan authorities alarmed the Bosnian governor and the sancakbey of Shkodër, and one month later Zamagna returned to Dubrovnik.<sup>289</sup>

The Ragusans advocated for Mezzi to be punished by death, because he dared to kidnap a patrician, in the middle of the suburban area, by the Lazaretto. But they did not succeed. Mezzi pleaded his case in the Porte and he continued to fight, to no avail, for the repayment of the alleged debt.<sup>290</sup>

<sup>286</sup> Z. ŠUNDRICA, *Otrovi u Dubrovačkoj Republici, Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 181, 182.

<sup>287</sup> *DA* 18, vol. 3401, no. 47.

<sup>288</sup> *Acta Turc.* vol. 61, no. 92; vol. E 3, no. 4; vol. E 4, no. 3. – *Traduzioni di Capitulazioni e Fermi*, SAD, series 20, vol. 2, ff. 864-867.

<sup>289</sup> *Acta Turc.* vol. B 61, no. 154; B 148, no. 92. – *Let. Lev.* vol. 69, ff. 120, 123v-124v, 135, 144-147v.

<sup>290</sup> *Let. Lev.* vol. 69, ff. 246-247v; vol. 70, ff. 174-177v. – *Traduzioni di Capitulazioni e Fermi*, vol. 2, ff. 859-861, 864-867, 871-873.

*“If you looked into my heart, you would find yourself inside”*

In July 1799, Pavo Suda, probably a sailor, came to the Lazaretto because he fell ill and had to disembark a Ragusan ship. He was housed in the Third lazaretto. The Health Office allowed his wife to care for him. They were quarantined together for 40 days.<sup>291</sup> The Office permitted such things, they were even known to hire a person who would nurse the sick in the Lazaretto.<sup>292</sup>

The Office also allowed family members to stay with travellers who were not ill. On 16 November 1799, captain Ivan Šodrnja sailed in, aboard his tartane ship, from Modena and disembarked in the Lazaretto, where he was housed in the Seventh lazaretto. That same day, he was joined by his wife Marija. One week later, their two daughters came with a maidservant. They were quarantined for 29 days and on 24 December released to go home.<sup>293</sup>

Ploče also saw a few forbidden loves. One night in 1774, a maidservant snuck into the house near the Tabor's *Rastello*, where Ottoman merchants were selling fruit. She came to meet in secret with the young Fetahagić. As quiet as they tried to be, the soldiers heard them closing the door in the dead of night. They sprang into action, broke into the house, and found the girl hidden beneath some fabrics and baskets. They took her to prison. Intimate relations with members of other religions were not permitted, but there seemed to also be a problem with the meeting location. The soldiers considered the house a health risk, so in their statements they named it as the “lazaretto”.<sup>294</sup>

It is unknown if Fetahagić's paramour was punished. Not even a month later, obviously motivated by the affair, the senators decided to vote on the proposal to punish any Christian woman who entered the Lazaretto with a “Turk” by tying her to a pillar of shame, however the proposal was not adopted.<sup>295</sup>

Four years later, another love affair ignited, between Pavla Kovač, who lived at Ploče and Bego Ćatović, a man from Trebinje. They were meeting in her house, although not alone, and at night they hid behind the Han. Prying persons heard them being affectionate. “My heart, if you looked into my heart, you would find yourself inside,” said Bego, and Pavla would respond: “I cannot believe it, but if you looked into my heart, you would find yourself there.” They were planning to run away to Trebinje.<sup>296</sup> As far as we know, the authorities did not react.

### *Espionage centre in the Lazaretto*

If they heard something that might be useful to the state, the Ragusan subjects would immediately inform the Rector's Palace. Between 1740 and 1799, 1,122 of such reports exist about different persons and events, from movements of foreigners around the city, conflicts and other violations of law in Dubrovnik to international political turmoil and the health situation in Bosnia, Albania and Montenegro. It was easy to find out all the news in the Lazaretto. The travellers passed their time telling each other news from

<sup>291</sup> *Contumaciae*, vol. 12, f. 152.

<sup>292</sup> *Contumaciae*, vol. 11a, f. 36; vol. 12, f. 48v.

<sup>293</sup> *Contumaciae*, vol. 7, f. 44. See also: *Contumaciae*, vol. 1, f. 79v; vol. 9, f. 88.

<sup>294</sup> DA 18, vol. 3175, no. 337. – S. STOJAN, *Vjerenice i nevjernice; žene u svakodnevnici Dubrovnika (1600-1815)*, Zagreb-Dubrovnik, 2003, pp. 243, 244. – G. CVJETINOVIĆ, *Karika obavještajne mreže Dubrovačke Republike: kultura samozaštite - denuncijacije Malom vijeću (1740-1799)*. Doktorski rad. Sveučilište u Zagrebu, 2015, p. 163.

<sup>295</sup> DA 18, vol. 3175, no. 337. – *Cons. Rog.* vol. 183, ff. 69, 69v. – S. STOJAN, *Vjerenice i nevjernice*, pp. 243, 244. – G. CVJETINOVIĆ, *Karika obavještajne mreže*, p. 163.

<sup>296</sup> DA 18, vol. 3175, no. 445. – G. CVJETINOVIĆ, *Karika obavještajne mreže*, p. 163.



different regions, and health officers always listened carefully. Among the notable denunciators were the Lazaretto captains, Ivo Stella, Vlaho Stella and Vicko Volanti, the Lazaretto deputy captain Antun Ljepopili and his assistant Ivo Stella. In 1740, Ivo Stella was spying on Nicolo Dandolo, who was trying, with the assistance of Ottoman Vlachs and Dubrovnik subjects, to recruit young men into the army of the Neapolitan viceroy.<sup>297</sup> Vicko Volanti secretly met with the Catholics from Spič to find out what was happening in Budva, and the Christians from Bijelo Polje told him everything they knew about movements of the Ottoman army.<sup>298</sup> Ljepopili's assistant Ivo Stella wrote down news that he heard from Sarajevo merchants.<sup>299</sup>

Of course, the Ottoman side was also gathering information. In 1737, the Ragusan authorities arrested the Sarajevo Jew Abram Abinun, who was suspected of spying on what the noblemen were saying around the City and informed the emin at Ploče about everything he heard. The Austro-Ottoman War was raging, intense battles were being fought in Bosnia, and Abinun said to the emin that the Ragusans were sultan's greatest enemies and had sided with Austria, which was actually true. Allegedly, he was openly saying in the Lazaretto that they were helping the Austrian army with manpower and food. The emins demanded that Ragusan authorities release Abinun, which they did, with the stipulation that he left the Republic immediately.<sup>300</sup>

“The officers of this Lazaretto-Han serve and accommodate travellers and learn many of their secrets and private affairs,” wrote Evliya Çelebi at the beginning of his description of the Lazaretto.<sup>301</sup>

He was right.

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<sup>297</sup> G. CVJETINOVIĆ, *Karika obavještajne mreže*, pp. 149-151.

<sup>298</sup> DA 18, vol. 3175, no. 401, 461.

<sup>299</sup> DA 18, vol. 3176/1, no. 350, 351.

<sup>300</sup> DA 18, vol. 3399, no. 21.

<sup>301</sup> E. ČELEBI, *Putopis*, p. 424.



Jesse Howell

# Balkan Caravans: Dubrovnik's Overland Networks in the Ottoman Era

The fortunes that sustained the Republic of Dubrovnik (Ragusa) were made in faraway places. The scale of the Ragusan fleet, the global reach of its sailors, and the skill of its merchants were renowned across the early modern Mediterranean world. The word 'argosy,' used by Shakespeare to describe a fleet of merchant ships, entered the English language as a corruption of 'Ragusa,' whose vessels were commonly seen in the ports of northern Europe. The disparity between the Republic's small territory and its great wealth led observers to assume a connection between the city's geographical position and its commercial success. Poor in land, Dubrovnik was forced to "orient itself to the sea, and to rely on maritime trade as a principal means of existence".<sup>1</sup> This interpretation, written in the middle of the twentieth century, was already commonplace by the sixteenth century. The chronicle of Serafino Razzi, published in 1595, observed that anything the city lacked was provided abundantly by "its many ships" and "the convenience of the sea".<sup>2</sup>

Ragusa may have been oriented to the sea, but the Balkan landmass it clung to was crucial to its ability to adapt and thrive over centuries of political transformation in the surrounding region. Despite a superb naval and merchant fleet, Dubrovnik would never attain the dominant maritime position of the Republic of Venice, which claimed the entire Adriatic Sea as its personal waterway. While Venice established an overseas empire – the *Stato da Mar* – on the ports, islands, and coastal areas of the Mediterranean, Ragusa enhanced its own standing by looking inland towards the products and markets of southeastern Europe. Dubrovnik's participation in both overseas and overland trade transformed what had been a small medieval port city into a vital regional hub of exchange. Just as the Ragusan fleet drove maritime commerce, the republic's caravan system was integral to the success of its overland trade. For this system to function, the skillful traders for which Dubrovnik was famous needed to be able to move freely and safely across the territories of its inland neighbors. Free movement was supported by multiple factors, including strong diplomatic

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<sup>1</sup> "Par la nature même de son emplacement, Raguse était obligée de s'orienter vers la mer et de recourir au commerce maritime comme moyen principal d'existence." B. KREKIĆ, *Dubrovnik (Raguse) et le Levant au Moyen Âge*. Paris, 1961, p. 21.

<sup>2</sup> "E se pure alcuna cosa le mancasse, la commodità del mare, e delle sue tante Navi, abbondantemente la provede." S. RAZZI, *La Storia di Raugia*. Ragusa, 1903, p. 10.

ties and favorable trade agreements with inland powers; the availability of pack horses and caravan guides in nearby areas; and the construction of road architecture and infrastructure along central routes of travel. It is not clear when Dubrovnik's caravan trade began, but it was well-established at the end of the twelfth century.<sup>3</sup> It would reach a high point in the sixteenth-century under an entirely new political system in the Balkan Peninsula.

Dubrovnik's commercial expansion took place against a backdrop of sweeping political change. Ragusan commercial activity in the Balkans was well established before the republic came under Venetian control (1205-1358). Even during the period of Venetian hegemony, commercial ties accelerated with neighboring areas such as the Kingdom of Bosnia.<sup>4</sup> After 1358, having freed itself from Venetian suzerainty (accepting a position of nominal fealty to the distant Kingdom of Hungary-Croatia), Dubrovnik continued efforts to establish itself as a pivotal entrepôt between the powers of the Balkan Peninsula and the markets of Italy, located on the opposite shore of the Adriatic Sea.

The high point of Dubrovnik's engagement in overland trade and communications in the Balkan Peninsula came after an event that many European observers of the time expected to usher in a catastrophe: the westward expansion of the Ottoman empire, which reached the boundaries of Ragusan territory in the second half of the fifteenth century.<sup>5</sup> Rather than being overrun by their powerful new neighbors, Dubrovnik managed to preserve its small coastal territories and hold on to a high degree of local autonomy. The process of becoming a tribute-paying vassal to the Ottoman empire began around 1430, and a mutually beneficial *modus vivendi* was soon established between the two. In addition to tribute, Dubrovnik offered invaluable services to the adjacent empire, while the Ottomans provided Dubrovnik with military protection and unequalled trade advantages. In addition, Ottoman officials made vast infrastructural investments along the trade routes of southeastern Europe.

By the end of the fifteenth century, nearly the entire Balkan Peninsula had been absorbed by the Ottoman state. The many rival kingdoms and principalities that had sprung up as the Byzantine Empire disintegrated were absorbed into the Ottoman province of Rumeli (Rumelia), becoming a unified political space for the first time in centuries. Much of the Adriatic coastline, however, remained under the control of two rival republics: Venice and Ragusa. Unlike Venice, the port city of Dubrovnik was able to position itself as a loyal ally to the Ottoman state, an arrangement that gave the city's merchants privileged access to the enormous inland market of Rumeli.<sup>6</sup> Combining their strengths in defiance of Venetian power, Dubrovnik's merchant-diplomats and Ottoman officials together contributed to a flourishing network of mobility across the Balkan Peninsula, a system centered on the caravan route between Ragusa and Istanbul (Fig. 1).

<sup>3</sup> F. W. CARTER, *Dubrovnik (Ragusa). A Classic City-State*. New York-London, 1972, p. 138.

<sup>4</sup> F. W. CARTER, Dubrovnik: The Early Development of a Pre-Industrial City, *The Slavonic and East European Review* 47/109, London, 1969, p. 361.

<sup>5</sup> Bosnia was conquered by the Ottomans under Sultan Mehmed II in 1463. The Ottoman victory of Herzegovina was not completed until 1482. The Venetian Lauro Quirini described the westward expansion of the Ottomans in a bombastic manner that was widespread in Italy after the Ottoman conquest of Constantinople in 1453: "A rude and barbarous race, living according to no fixed laws or customs, but unfettered, nomadic, willful – this race, filled with treachery and fraud, shamefully and ignominiously tramples underfoot a Christian people." J. HANKINS, *Renaissance Crusaders: Humanist Crusade Literature in the Age of Mehmed II*, *Dumbarton Oaks Papers* 49, Washington, 1995, p. 122.

<sup>6</sup> "Almost not a single document can be traced without the Ragusan envoys saying that the Dubrovnik Republic was the oldest and most loyal Ottoman tributary state, upon which they claimed privileges and protection." V. MIOVIĆ, *Dubrovačka Republika u spisima osmanskih sultana*. Dubrovnik, 2005, p. 442.



Fig. 1. “Ragusa, the Inner Gate,” ca. 1890-1900. The beginning of the caravan road can be seen ascending on a diagonal from image center to right. The Dubrovnik lazaretto is visible on the shoreline at extreme right. (Library of Congress LOT 13417, no. 220)

The ‘Via di Ragusa’ or Ragusa Road, as Dubrovnik’s primary caravan route was known to outsiders, headed inland across parts of what are now Croatia, Herzegovina, Montenegro, Serbia, Kosovo, Bulgaria, and Turkey.<sup>7</sup> From the middle of the fifteenth century, when the Ottoman empire consolidated control of southeastern Europe, until the end of the sixteenth century, when the road from Split began to draw traffic away from Dubrovnik, the Ragusa Road was the most important overland axis between the Ottoman capital and the Adriatic Coast.<sup>8</sup> Approximately 1,400 kilometers long, the road was divided into daily stages marked by settlements with hans and caravanserais – purpose-built stopping places where travelers and animals were fed and cargo secured.<sup>9</sup> Caravan travelers could complete the journey from Dubrovnik to Istanbul in as few as 30 days, although longer trips were more common, allowing time for rest and trade along the way.<sup>10</sup> In ideal conditions, the maritime route to Istanbul remained a faster and less taxing alternative than overland travel, but the sea was notoriously unpredictable. Once the caravan system became well established, the dependability of overland travel made it an appealing alternative for travelers who wished to avoid the storms and pirates that plagued the Mediterranean.

<sup>7</sup> Known as the ‘Via di Ragusa’ in Italian sources, the road is often referred to at the ‘Novi Pazar Road’ in Ragusan sources. See K. JIREČEK, *Die Handelsstrassen und Bergwerke von Serbien und Bosnien während des Mittelalters*. Prague, 1879, pp. 74-78.

<sup>8</sup> S. YERASIMOS, *Les voyageurs dans l’Empire Ottoman, XIV<sup>e</sup>-XVI<sup>e</sup> siècles: bibliographie, itinéraires et inventaire des lieux habités*. Ankara, 1991, p. 38.

<sup>9</sup> The terms are somewhat imprecise. Both institutions provided secure lodging for travelers, their animals, and their goods. Generally, they were built around a central courtyard that was locked overnight. Many caravanserais provided food free of charge to travelers for as many as three nights. “In the Ottoman period 232 inns, eighteen caravanserais, thirty-two hostels, ten bedestans and forty-two bridges were built in Bosnia and Herzegovina alone.” H. İNALCIK, *The Ottoman Empire: the Classical Age*. London-Phoenix, 1994, p. 148. See also H. KREŠEVLJAKOVIĆ, *Hanovi i karavansaraji u Bosni i Hercegovini*. Sarajevo, 1957.

<sup>10</sup> Jireček’s often repeated assertion that Ragusan caravans could reach Niš in 15 days and Istanbul in 30 represents a best-case scenario, not an average speed.

The Ragusan ambassadors who delivered the annual cash tribute to Istanbul – a journey that represented the cornerstone of the republic's diplomatic engagement with the Ottoman state – were not permitted to travel by sea until the late eighteenth century.<sup>11</sup> Until this point, despite Ragusa's superb naval fleet, the transfer of tribute was invariably made overland, using the caravan roads that crossed the mountains and rivers of the Balkan Peninsula.

The Dubrovnik-Istanbul road crossed two distinct climactic and topographical zones. The western section (from Dubrovnik to Niš, Serbia) was defined by mountains, waves of sharp limestone that culminated in the heights of the Dinaric Alps. East of Niš, the terrain was gentler. Caravans here followed broad river valleys across much of Bulgaria and Thrace. The western section was largely desolate, sparsely populated, and vulnerable to banditry. In the east, travelers passed through major regional centers (such as Sofia, Plovdiv, and Edirne), and stopped at the monumental Ottoman caravanserai complexes that signaled a grandiose approach to the imperial capital. Travel on the western reaches of the road was done almost entirely on horseback or on foot; the camels and wheeled vehicles used in other parts of the empire were notably absent from the western Balkans. Wheeled carts were, however, commonly used in the eastern section of the road.

Patterns of overland travel in the Balkans were shaped by environmental realities but were not defined by topography alone. Nor was mobility determined by historical precedent. The Ragusa Road was neither the shortest nor the most efficient route from the Dalmatian coast to the Bosphorus. Indeed, travelers complained about the “cruel and bitter” rocky slopes that they were forced to navigate almost immediately upon leaving the gates of Dubrovnik.<sup>12</sup> As an early sixteenth-century Venetian traveler noted, the roads that linked Ragusa to the outside world seemed to exist “in defiance of nature.”<sup>13</sup> The success of the physically demanding Ragusa Road is particularly striking when considering its proximity to one of the great highways of antiquity, a route that also crossed the Balkan Peninsula between Istanbul and the Adriatic Sea. The Via Egnatia, which had been part of the land and sea route that linked Rome to Constantinople, is several hundred kilometers shorter than the Ragusa Road. Terminating in the west at the port of Durrës, Albania, the Via Egnatia encompassed territory that was far less daunting than the ranges crossed by Dubrovnik's caravans. Nevertheless, the western reaches of the Via Egnatia remained relatively under-developed and little trafficked during the Ottoman era, while the longer, more challenging Ragusa Road flourished (Fig. 2).<sup>14</sup>

Caravan travelers were not like water; they did not always select the path of least physical resistance. A route's positive attributes – security, commercial opportunities, the availability of pack animals and fodder – could make up for the presence of formidable natural obstacles. The promise of a prosperous, well-connected destination like the port of Dubrovnik was highly attractive to merchants and diplomats alike. The effectiveness of the Ragusa Road in the early Ottoman era supports a claim made by the Mediterranean

<sup>11</sup> V. MIOVIĆ, *Dubrovačka diplomacija u Istanbulu*. Zagreb-Dubrovnik, 2002, p. 38.

<sup>12</sup> As the Venetian Paolo Contarini described the ascents of his first day inland from Dubrovnik: “We climbed a very high mountain, with a most cruel road, steep and entirely of stone, with excessive heat...” “...montammo un'alteissima montagna, con strada crudelissima, precipitosa e tutta di sasso, con caldo eccessivo...” M. P. CONTARINI, *Diario del Viaggio da Venezia a Costantinopoli*. Venice, 1856, p. 13.

<sup>13</sup> “si puo dire al dispetto di natura...” B. RAMBERTI, *Libri tre delle cose dei Turchi*. Venice, 1539, fol. 4v.

<sup>14</sup> Although the western section of the *Via Egnatia* was somewhat neglected, the eastern section from Thessaloniki to Istanbul was a well-travelled and important trade route. S. YERASIMOS, *Les voyageurs dans l'Empire Ottoman*, p. 36. See also E. ZACHARIADOU, *The Via Egnatia under Ottoman Rule*. in: Halcyon Days in Crete II: a symposium held in Rethymnon 9-11 January 1994, Rethymnon - Crete University Press, 1996.



Fig. 2. Trans-Balkan Routes: Ragusa Road and Via Egnatia

historians Peregrine Horden and Nicholas Purcell: “The main hindrance to the movements of people and goods by land has usually been social rather than physical”.<sup>15</sup> In the case of the Ragusa Road, political and economic considerations were also in play. A wealthy yet non-threatening port city like Dubrovnik gave the Ottomans an outlet for commercial and diplomatic exchange with the western Mediterranean. During times of conflict with the Republic of Venice, Dubrovnik offered the empire an open channel for the exchange of goods and information with the Christian powers of the Italian Peninsula and beyond. The Ottomans thus had strong incentives to ensure the republic’s prosperity and took active measures to support trade and travel to Dubrovnik. Ragusans diplomats encouraged Ottoman patronage by distributing lavish gifts, and by emphasizing their utility and loyalty to empire at every opportunity, well aware that their livelihood depended on the unique privileges they enjoyed in the Ottoman order (Fig. 3).

The caravans of the Ragusa Road were organized by brokers called *kramar* (pl. *kramari*, It. *cramaro*). They supervised the hiring of animals, drivers, and guards from their bases

<sup>15</sup> P. HORDEN - N. PURCELL, *The Corrupting Sea. A Study of Mediterranean History*. Oxford-Blackwell, 2000, p. 132.



Fig. 3. *Caravane Herzégovienne*,  
(from: *The Bosnia-Herzegovina  
exhibition at the Paris Exposition  
Universelle of 1900*)

in Dubrovnik and the major road towns of Ottoman Rumelia.<sup>16</sup> Although they did not typically travel with the caravans, *Kramars* were personally and materially responsible for the safety of caravan travelers and their merchandise.<sup>17</sup> These brokers worked in partnership with the semi-nomadic pastoralists of the nearby Ottoman hinterland, who provided horses, guidance, and logistical support. *Kramars* could organize long-distance overland trips for travelers and their goods in a very short amount of time. In September 1497, the Florentine travelers Bernardo Michelozzi and Bonsignore Bonsignori arrived in Dubrovnik by sea, via the Italian port of Pesaro. Within a week, local agents had arranged their transport overland to Istanbul, placing them in a caravan consisting of 114 pack animals.<sup>18</sup>

Out on the road, caravans were under the authority of the *kervān-başı* (from the Pr. root *ناورك*, *caravanbassi* in It.), known also as *kiridžije*. These ‘conductors’ provided and looked after the “small and hardy horses...called ‘roncini,’” that were bred for riding and for the carrying trade in the rolling country of Herzegovina and Montenegro.<sup>19</sup> From their inland pastures, animals could be brought swiftly to the caravanserai located on the outskirts of Dubrovnik in numbers appropriate for a designated caravan group and the volume of its cargo, as determined by the *kramar*. Most caravans were relatively small, with only 10-50 animals. Groups with over 100 horses were rare.<sup>20</sup>

The small pack horses of the western Balkans carried loads of approximately 100 *oka*, around 128 kilograms.<sup>21</sup> Camels, able to carry far greater loads, and consequently in use

<sup>16</sup> The total number of *kramari* active in Dubrovnik and the Ottoman Balkans is not known. Hrabak counts 17 in Novi Pazar, 13 in Sofia, and 9 in Prokuplje, without providing a date. B. HRABAK, *Kramari u karavanskom saobraćaju preko Sandaka (1470-1720)*, in: *Simpozijum: Seoski dani Sretna Vukosavljevića 10, Prijepolje*, 1983, p. 203.

<sup>17</sup> S. DIMITRIJEVIĆ, *Dubrovački karavani u južnoj Srbiji u XVII veku / Les Caravanes de Dubrovnik dans la Serbie du Sud au XVII<sup>e</sup> siècle*. Belgrade, 1958, pp. 185-186. On horses in the Ottoman world, see S. FAROQHI, *Horses owned by Ottoman officials and notables: means of transportation but also sources of pride and joy*, in: *Animals and People in the Ottoman Empire*, (Ed. S. Faroqhi), Istanbul, 2010, pp. 293-311.

<sup>18</sup> E. BORSOOK, *The Travels of Bernardo Michelozzi and Bonsignore Bonsignori in the Levant*, *Journal of the Warburg and Courtauld Institutes* 36, London, 1973, p. 155.

<sup>19</sup> B. HRABAK, *Kramari u karavanskom saobraćaju*, p. 206.

<sup>20</sup> M. DINIĆ, *Dubrovačka srednjeevokovna karavanska trgovina / Dubrovnik Medieval Caravan Trade*, *Jugoslavenski istorijski časopis* 5/3, Beograd, 1937, p. 145.

<sup>21</sup> V. MIOVIĆ, *Dubrovačka diplomacija u Istanbulu*, p. 37. Bogumil Hrabak gives the figure of 140 *oka*, or 180 kg. B. HRABAK, *Kramari u karavanskom saobraćaju*, p. 206.



in other parts of empire, were not used by Ragusa Road caravans.<sup>22</sup> Pack horses typically travelled no more than a few weeks at a time under load. They were exchanged at intervals, most often at one of the road towns in the Lim River basin (between Prijepolje and Novi Pazar, in southwestern Serbia).<sup>23</sup> *Kramars* were paid in cash, normally half in advance, half at the end of the trip, while the *kiridžije* would often receive part of their payment in the form of salt, a commodity Ragusans possessed in abundance.<sup>24</sup> Muslim *kervānbaşlar* (*kiridžije*) are also attested in Ragusan sources, adding to the demographic complexity of these mobile, ad hoc groups.<sup>25</sup>

The horses that carried passengers and their merchandise across the mountains of the western Balkans were bred by people known as Vlachs, an ethnographic category that remains elusive. Vlachs (called *eflāk* by Ottomans and *morlacchi* by Venetians) can be understood as the descendants of a “Romanised pre-slavic population,” akin to the Illyrian and Thracian groups found in the Balkan Peninsula.<sup>26</sup> According to this definition, Vlachs are the autochthonous inhabitants of the region, whose presence predates the arrival of both Turks and Slavs. But the term was also used to describe any semi-nomadic community of pastoralists in the area, no matter what their ethnic or religious identity may have been. The presence of the nearby Vlach population was a tremendous asset to Dubrovnik’s caravan trade. The republic’s small, semi-arid coastal territories could not support horses in sufficient numbers to meet the demands of the caravan trade. Without the cooperation of a neighboring population capable of providing abundant animal power and guiding ability, long-distance travel on the Ragusa Road could not have existed on a large scale.

In addition to Vlach horsemen, travel accounts often note the Ottoman dragomans (translators) and janissary guards who typically accompanied caravan groups of high importance, such as those of international diplomatic missions.<sup>27</sup> The caravans organized for Dubrovnik’s tribute ambassadors also included a physician-barber and a chaplain, along with servants and couriers.<sup>28</sup> In addition to the predominantly Catholic Ragusans, the Orthodox Christian and Muslim caravan leaders, and Ottoman Muslim guards, Jewish merchants from trading centers across Rumelia were also highly involved in the caravan trade of the Ragusa Road. The unproblematic religious and ethnic diversity found along the road was novel and noteworthy to European observers.

It is a marvel that in the same caravanserai are found all sorts of people and nations: Arabs, Turks, Greeks, Jews, Armenians, Franks, and others... all lodge together so peacefully that no one complains about the other.<sup>29</sup>

<sup>22</sup> The mountains of the west-central Balkans resisted both the camel and the wheel. Along the eastern section of the Via Egnatia (Thessaloniki to Istanbul), by contrast, camel caravans appear to have been in continual use, bringing woolen goods manufactured by Jewish weavers to the capital. See S. FAROQHI, *Camels, Wagons and the Ottoman State in the Sixteenth and Seventeenth Centuries*, *International Journal of Middle East Studies* 14/4, Cambridge University Press, 1982, p. 532. See also H. İNALCIK, ‘Arab’ Camel Drivers in Western Anatolia in the Fifteenth Century, *Revue d’Histoire Maghrébine* 10, Casablanca, 1983, pp. 256-270.

<sup>23</sup> M. DINIĆ, *Dubrovačka srednjevekovna karavanska trgovina*, p. 145.

<sup>24</sup> M. DINIĆ, *Dubrovačka srednjevekovna karavanska trgovina*, p. 145.

<sup>25</sup> S. DIMITRIJEVIĆ, *Dubrovački karavani u južnoj Srbiji*, p. 186.

<sup>26</sup> V. KURSAR, *Being an Ottoman Vlach: On Vlach Identity(ies), Role and Status in Western Parts of the Ottoman Balkans (15<sup>th</sup>-18<sup>th</sup> Centuries)*, *OTAM*, 34, Ankara, 2013, p. 117. See also N. BELDICEANU, *Les Valaques de Bosnie à la fin du XVe siècle et leurs institutions*, *Turcica* 7, Paris, 1975, pp. 122-134. More concerned with the use and understanding of Vlachs in the Venetian Enlightenment is L. WOLFF’s *Venice and the Slavs. The Discovery of Dalmatia in the Age of Enlightenment*. Stanford University Press, 2002. Wolff’s monograph is highly indebted to the observations of Abbé A. FORTIS, whose *Viaggio in Dalmazia* was published in 1774. Focusing on the ferocity of the ‘morlacchi,’ Fortis account was quite popular, being translated into German, French and English.

<sup>27</sup> Contarini describes gives the names of his Ottoman companions as “Pasquale dragomano,” and two Janissaries named “Cussein Brano” and “Musli.” M. P. CONTARINI, *Diario del Viaggio*, p. 11.

<sup>28</sup> V. MIOVIĆ, *Dubrovačka diplomacija u Istanbulu*, p. 29.

<sup>29</sup> “C’est merveille qu’en mesme caravacrat arrivent toutes sortes de gens et nations, Arabes, Turcs, Grecs, Juifz, Armeniens, Franks et autres...Touts logent si paisiblement que l’un ne se plaint de l’autre.” Quoted in E. CLERAY, *Le Voyage de Pierre Lescaplier, Parisien: de Venise à Constantinople, l’an 1574*, *Revue d’Histoire Diplomatique* 35, Paris, 1921, pp. 28.

In later centuries, as Dubrovnik's prominence in overland traffic began to wane, caravans were increasingly organized by (and limited to) members of individual religious or regional merchant communities (Jewish, Armenian, Greek, Bosnian, etc., Fig. 4).<sup>30</sup>

Dubrovnik's overland trade networks were well-developed prior to the arrival of the Ottomans in southeastern Europe (in the 14<sup>th</sup> century). Three commodities provided the foundation of the late medieval trade system routed through the Ragusan port: precious metals from the mines of Bosnia and Serbia, grain from Albania and Greece, and salt. Dubrovnik's merchants established trade colonies in all major cities of the Balkans, where they diversified their operations, "exporting leather, fats, wool, cheese, fish, honey, beeswax, furs, and slaves and importing from Italy woolen cloth and other textiles."<sup>31</sup> Located at the intersection of land and sea routes, the city's prosperity grew from goods moving in multiple directions – exports from the Balkan Peninsula exchanged for imports from the Italian Peninsula. Not content to serve as a passive transit port for other international traders, Dubrovnik developed its own caravan industry. By the fourteenth century, this transportation network connected an area that included the Sava region to the north, Bulgaria to the east, and reached as far as Walachia (now Romania).<sup>32</sup> Around this time, representatives of the Florentine banking houses of Bardi, Peruzzi, and Acciaiuoli had established themselves in Dubrovnik, an indication of the city's growing prominence in international financial networks.<sup>33</sup>

Ragusan diplomats cultivated political and economic ties with a shifting array of regional powers, from distant Mediterranean port cities to the adjoining Duchy of Herzegovina. Treaties were signed with Serbia in 1186 and Bosnia in 1189, guaranteeing free movement and trade for Dubrovnik's citizens. Such commercially-minded protections were consistently a high priority of the republic's diplomatic efforts.<sup>34</sup> Further east, the medieval Bulgarian kingdom granted commercial privileges to Ragusa, as did the Byzantine emperors after re-establishing their authority following the period of Latin control after the Fourth Crusade.<sup>35</sup>

By the time the Ottoman forces began their first incursions into the Balkan Peninsula, the Dubrovnik Republic had successfully negotiated with, travelled through, and lived for centuries among a succession of powers in southeastern Europe. On the other side, the Ottomans, for all their fearsome martial prowess, preferred to use a mixture of pragmatism and accommodation to appease the non-Muslim populations of conquered territories. A policy known as *istimālet* (reconciliation) helps to explain how the expanding empire was able to hold, and not just capture, such broad and diverse areas.<sup>36</sup> In the broader context of Mediterranean politics, the desire of Ottoman sultans like Mehmed II to avoid economic dependence on the Republic of Venice led to the cultivation of close ties with commercially-minded Christian powers that likewise distrusted Venetian power. Florence

<sup>30</sup> B. HRABAK, Kramari u karavanskom saobraćaju, p. 200.

<sup>31</sup> H. İNALCIK - D. QUATAERT, *An Economic and Social History of the Ottoman Empire, 1300-1914*. Vol. 1, Cambridge University Press, 1994, p. 256. It has recently been pointed out that textile manufacturing was a key industry in Dubrovnik itself, particularly in the fifteenth century. The city was not simply an intermediary but an active participant in this lucrative trade item. See J. BELAMARIĆ, Cloth and Geography: Town Planning and Architectural Aspects of the First Industry in Dubrovnik in the 15<sup>th</sup> Century, in: *Dalmatia and the Mediterranean*, (ed. A. Payne), Leiden, 2014, pp. 268-309.

<sup>32</sup> N. H. BIEGMAN, *The Turco-Ragusan Relationship According to the Firmāns of Murād III (1575-1595)*. Extant in the State Archives of Dubrovnik. Hague-Paris, 1967, p. 25.

<sup>33</sup> B. KREKIĆ, *Dubrovnik in the 14<sup>th</sup> and 15<sup>th</sup> Centuries; A City between East and West*. University of Oklahoma Press, 1972, p. 29.

<sup>34</sup> B. KREKIĆ, *Dubrovnik (Raguse)*, p. 21. – F.W. CARTER, Dubrovnik, p. 361.

<sup>35</sup> F. W. CARTER, Dubrovnik, pp. 364, 367.

<sup>36</sup> H. İNALCIK - D. QUATAERT, *An Economic and Social History*, p. 18.

and Dubrovnik are perhaps the two states that benefitted most from Mehmed's geostrategic vision.<sup>37</sup> In short, the combination of Dubrovnik's diplomatic and economic expertise and the Ottoman strategy of cultivating useful allies led to the remarkably effective and long-lasting partnership between the Islamic empire and the Catholic republic.

The extraordinary privileges granted to the Dubrovnik Republic by the Ottoman state are a clear indication of Dubrovnik's unique value. These were formally codified in charters called *'ahid-nâme* (sometimes translated as capitulations) which was renewed annually upon the delivery of tribute to the Ottoman sovereign. Dubrovnik's charter, like the treaties negotiated with earlier Christian powers, emphasized free movement, legal protection, and advantageous customs rates for Ragusan merchants in Ottoman lands.<sup>38</sup> It included concessions enjoyed by no other tribute-paying state at the time. Among other privileges, no high-ranking Ottoman officials were permitted to enter Dubrovnik's territory without an explicit invitation. Perhaps more importantly, Dubrovnik's merchants were permitted to trade freely across Ottoman lands and internationally, even with enemies of the Ottoman state during times of active warfare.<sup>39</sup> Such advantageous conditions more than made up for the losses suffered by Ragusan merchants due to shifts in certain sectors of the Balkan economy. Dubrovnik's central role in the metals trade, for example, had been sharply curtailed from the middle of the fifteenth century, when the Ottomans elected to forbid the export of silver from the Balkan mines to Italy.<sup>40</sup>

The details of Dubrovnik's charter should not be overlooked as an important factor supporting the boom in overland traffic along the Ragusa Road during the Ottoman era. Advantageous customs policies and legal protections could dictate flows of overland traffic just as surely as mountain ranges and mile markers. Since the city was able to function as a free port, Dubrovnik's caravans were especially active during times of conflict between the Ottomans and the powers of the western Mediterranean. International merchants and diplomats gratefully sought out an open, secure path to and from the Ottoman capital and the markets of Rumelia.

The Ragusa Road depended on Ragusan diplomacy, and the city's diplomatic travelers made use of the Ragusa Road. The delivery of the annual "gift" (as the Ottoman tribute was described), was entrusted to a pair of special ambassadors known as *poklisari*. These men, nobles selected from Dubrovnik's patrician families, used the occasion of the tribute delivery to engage in high-level negotiations with the Ottoman court on a range of issues, details of which were abundantly laid out in letters sent to them by Ragusan officials.<sup>41</sup> Dubrovnik's political and economic well-being depended on success of the tribute embassies, especially the many Ragusan citizens who lived and worked in Ottoman lands. Special care was taken to prepare the *poklisari* for a safe and effective journey. On the eve of their departure, tribute ambassadors, mounted Janissary guards and Ragusan soldiers rode through the city of Dubrovnik on horseback in an elaborate civic ritual. Their procession culminated at the interior of the city's Ploče Gate, where the ambassadors would pause to bow in reverence and commend themselves to the divine protection of

<sup>37</sup> H. İNALCIK, "An Outline of Ottoman-Venetian Relations," in: *Venezia Centro di Mediazione tra Oriente e Occidente*, (eds. H.-G. Beck, M. Manoussacas, A. Pertusi), Florence, 1977, pp. 87-88.

<sup>38</sup> See Chapter 3 ("The Charter") of N. H. BIEGMAN, *The Turco-Ragusan Relationship*.

<sup>39</sup> V. MIOVIĆ, "Diplomatic Relations Between the Ottoman Empire and the Republic of Dubrovnik," in: *The European Tributary States of the Ottoman Empire*, (eds. G. Kármán and L. Kunčević), Leiden, 2013, p. 189.

<sup>40</sup> H. İNALCIK - D. QUATAERT, *An Economic and Social History*, p. 257.

<sup>41</sup> Vesna Miović analyses the correspondence between Dubrovnik's officials and the tribute ambassadors in: V. MIOVIĆ, *Dubrovačka diplomacije u Istanbulu*.

St Blaise, the city's patron saint.<sup>42</sup> Once across the threshold of the city's southern gate, the envoys were considered to have begun their journey to the sultan. In fact, they would be housed in a small monastery just outside the city walls for several days of intense preparations before setting out to cross the Balkan Peninsula.

With Ragusan organizational expertise and Vlach logistical support combining to reduce the friction of overland travel, the Dubrovnik caravan trade flourished in the fifteenth and sixteenth centuries. Overland travel became a steady and secure alternative to the potentially faster, but far riskier sea route. The difficulties of distance and topography, however, were never fully overcome. The Ragusa Road only maintained its competitive advantage when supported by favorable Ottoman policies. This reliance created a state of constant anxiety for Ragusan merchants and officials. They understood that Ottoman trade embargoes (*yasaq*, tr., *jassacco*, it.) could be imposed at any time by order of the imperial council. Considering the extent of the republic's overland trade in Ottoman territory (and much of its maritime trade as well), such orders were devastating for Dubrovnik. A series of letters from the Ragusan Senate to its tribute ambassadors in 1646 (during the Ottoman-Venetian war in Crete) desperately pressed the envoys to have the *jassacco* revoked as soon as possible. "It is not in conformity with our charter," the letters insist.<sup>43</sup>

Spanning the Trebišnjica River at Trebinje, Herzegovina is the graceful Arslanagić Bridge (Fig. 5), built by the Ottoman grand vizier Sokollu Mehmed Pasha. The bridge, along with an adjacent caravanserai complex, was dedicated to the memory of the pasha's late son. Constructed in part by stonemasons from nearby Dubrovnik, the structures were completed in 1574.<sup>44</sup> At the opposite edge of the Balkan Peninsula, another monumental stone Ottoman bridge crosses a broad inlet of the Sea of Marmara. The Büyükçekmece bridge, located a day's journey from Istanbul, was built by Sinan, the chief royal architect, for Sultan Süleyman in 1565.<sup>45</sup> Like the Arslanagić Bridge, the span at Büyükçekmece was built as part of a complex that catered to the needs of caravan travelers, including a caravanserai and public fountain. These graceful and practical structures can be imagined as bookends of what was once a vast overland transportation network. Between these poles were dozens of *menzils* – daily stopping places – built to facilitate travel, communication, and trade. The bulk of the caravanserais, bridges, markets, public baths and fountains, and multi-functional mosque complexes found along the caravan routes of Rumeli were built by Ottoman patrons as public endowments, or *vakıfs*.

*Vakıf* was an exceptionally effective vehicle for the creation of Ottoman architecture and infrastructure. A pious endowment, generally held in perpetuity, *vakıf* investments were simultaneously a means of holding on to wealth, a way to extol the glory of the Ottoman Dynasty, and a charitable act for the betterment of the patron's soul.<sup>46</sup> The early Ottoman chronicler Âşıkpaşazâde took a keen interest in the charitable works constructed by Ottoman sultans and high officials. Âşıkpaşazâde's history of the Ottoman dynasty describes the building activities of Sultan Murad II in admiring terms. In a lengthy section, the

<sup>42</sup> V. MIOVIĆ, *Dubrovačka diplomacije u Istanbulu*, appendix II, pp. 259-260.

<sup>43</sup> State Archives of Dubrovnik, *Diplomata et Acta* (17<sup>th</sup> Century), box 33, folder 1759a, docs. 4, 7, 10 (1646). Letters to Secondo di Bucchia and Paolo di Gozze, tribute ambassadors to Istanbul.

<sup>44</sup> G. NECIPOĞLU, Connectivity, Mobility, and Mediterranean "Portable Archaeology: Pashas from the Dalmatian Hinterland as Cultural Mediators, in: *Dalmatia and the Mediterranean*, (ed. A. Payne), Leiden, 2014, p. 333.

<sup>45</sup> G. NECIPOĞLU, *The Age of Sinan: Architectural Culture in the Ottoman Empire*. Princeton University Press, 2005, p. 347.

<sup>46</sup> "Wakf", in: *Encyclopaedia of Islam, Second Edition*. (Ed. P. Bearman, Th. Bianquis, C. E. Bosworth, E. van Donzel, W. P. Heinrichs, (consulted online on 03 September 2018).



Fig. 4. Le caravansérail des Turcs, à Borgho Plocce (Outside the walls of Dubrovnik). Engraving by E. Grandsire, u: CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne*. Paris, 1878.

author summarizes the notable constructions of no fewer than 38 high officials. The ambiguities of *vakıf* (were these pious acts intended for the benefit of this world, or did they have a primarily religious function?) were apparent to the historian, who invented a dialogue in order to address the issue.

Question: O Dervish, these great medreses and great *'imârets* built by the Ottoman Dynasty, was their intention to create flourishing provinces or to create a flourishing afterlife?

Answer: To create a flourishing afterlife. And all the viziers' *'imârets* may be understood thus, that their pious intentions were linked to the pious intentions of the Padişah. With *'imârets*, the traces of intention are sometimes visible and sometimes invisible.<sup>47</sup>

Regardless of the intentions of the patrons who built bridges, caravanserais, public baths, fountains, and hospitals across the Ottoman domains, it is clear that they contributed directly to the 'flourishing' of the provinces of southeastern Europe. Indeed, the "combination of altruism and self-interest which can be observed in many Ottoman vakıfs" has been noted as an explanation of the centrality of the institution in the empire's building practices.<sup>48</sup>

The Arslanagić and Büyükçekmece bridges were constructed at the height of the Ottoman building boom of the sixteenth century, a period that was led by the extraordinarily prolific architect Sinan. Caravan travelers immediately took advantage of the splendid constructions of the chief royal architect, but even Sinan's phenomenal output could not adequately furnish every stop of an imperial transportation network that connected three continents. Local initiatives were needed to fill in huge gaps and to secure remote and exposed areas.

<sup>47</sup> *Āşıkpaşazāde, Tevarih-i Āl-i 'Osman*. (Ed. A. Bey), Istanbul, 1914, p. 194. English translation mine.

<sup>48</sup> M. KIEL, The Vakfname of Raḳkas Sinān Beg in Karnobat (Karīn-âbâd) and the Ottoman Colonization of Bulgarian Thrace (14<sup>th</sup>-15<sup>th</sup> century), *Osmanlı Araştırmaları / The Journal of Ottoman Studies* 1, Istanbul, 1980, p. 24.

Along the Ragusa Road, a myriad of patrons sponsored infrastructure projects that revived long-used stopping places and planted the seeds of new settlements. In Bosnia and Herzegovina alone, some 1500 hans and caravanserais were built in the Ottoman period, 50 of which were in the city of Sarajevo.<sup>49</sup>

The patronage of transportation architecture and infrastructure in underdeveloped areas was vital to the success of the caravan system. The area surrounding the deeply carved canyons of the Drina and Lim Rivers combines high elevations with wild, sparsely populated surroundings. Located across what is now Herzegovina, Montenegro, and southern Serbia, this was one of the most mountainous and remote sections of the Ragusa Road. Today the roads in this area are lightly traveled. Early modern caravan travelers, in contrast, encountered a series of vibrant small towns and cities here, all shaped by Ottoman patronage and enlivened by Ragusan trade.

Located on a ridge between steep valleys in southeastern Herzegovina, the town of Čajniče was lauded by Phillipe du Fresne-Canaye in 1573. Having approached the town across what he described as an isolated and dangerous area, the French traveler was relieved to find Čajniče to be “full of beautiful mosques and good caravanserais covered with lead”.<sup>50</sup> Approximately a century later, the Ottoman traveler and polymath Evliya Çelebi noted the prosperity of the Čajniče's three hans, each of which was filled with goods originating in distant lands, from Iran to the Land of the Franks (Western Europe).<sup>51</sup> Many of the monuments noted by Evliya had been constructed in the sixteenth century by a single patron: Sinan Bey Boljanić, three-time administrator of the Sancak of Herzegovina. Sinan Bey's endowment deed lists the mosque, medrese, *imāret* (hospice/soup kitchen), *konak* (mansion) and *türbe* (mausoleum) he had built in Čajniče.<sup>52</sup>

One day's travel to the east, Pljevlja (Montenegro) had been an important stopping place for Ragusan caravans in pre-Ottoman times. Sinan Bey's brother Bodur Hüseyin Pasha, who held important governorships across the empire, added an unmistakable Ottoman imprint to Pljevlja by building a large mosque – which still stands – in the city center.<sup>53</sup> Extensive, highly refined architectural projects built in seemingly remote areas like Čajniče and Pljevlja serve as reminders of importance of these inland places in larger networks of trade and travel. International communication and exchange did not only take place in cosmopolitan port cities of the Mediterranean coast – caravan routes like the Ragusa Road also brought connectivity to the hinterland of the Balkan Peninsula.

Ottoman officials did more than adorn existing settlements with soaring bridges and graceful mosques. Thriving new commercial cities were also created in strategic areas, encouraging movement and exchange along favored routes. Novi Pazar (Serbia), located near the confluence of the Deževka and Raška rivers, became a key caravan station in the late fifteenth century.<sup>54</sup> Formerly an unassuming place called Trgovište, Novi Pazar grew to become the largest city on the Ragusa Road between Dubrovnik and Niš (Serbia).<sup>55</sup> Rising exports of wool from around 1600 enhanced the commercial importance of this Ottoman trading center. It was also a transit hub where caravan horses and personnel could be exchanged by long-distance travelers. By the middle of the seventeenth century,

<sup>49</sup> H. KREŠEVLJAKOVIĆ, *Hanovi i karavansaraji*, p. 157.

<sup>50</sup> PH. DU FRESNE-CANAYE, *Le Voyage du Levant*. Paris, 1898, p. 26.

<sup>51</sup> “Her birinde Laristân ve Moltan ve Venedik ve Firengistân metâ'ları bulunur.” E. ÇELEBİ, *Seyahatnâmesi: Topkapı Sarayı Bağdat 304 Yazmasının Transkripsiyonu* 6, (eds. S. Ali Kahraman, Y. Dağlı), Istanbul, 1996, p. 253.

<sup>52</sup> E. H. AYVERDI, *Avrupa'da Osmanlı Mimari Eserleri*. Vol 2, book 3, Yugoslavija, Istanbul, 1977, pp. 98-99.

<sup>53</sup> S. TRAKO, Značajniji vakufi na području jugoistočne Bosne / The most noteworthy waqfs in the region of south-eastern Bosnia, *Anali Gazi Husrev-begove biblioteke* 9-10, Sarajevo, 1983, pp. 75-85.

<sup>54</sup> K. JIREČEK, *Die Handelsstrassen und Bergwerke*, p. 77. – B. HRABAK, Kramarsi u karavanskom saobraćaju, p. 194.



Fig. 5. Arslanagić Bridge, Trebinje, Bosnia and Herzegovina

Ragusan traders were exporting thousands of loads of leather and wool from Novi Pazar every year. In 1653, in the midst of the Ottoman-Venetian war in Crete, a temporary trade embargo leveled against Dubrovnik by the Ottomans caused a huge backup of goods, which helps give a sense of the scale of trade along the Ragusa Road. Some 15,000 to 20,000 loads of goods (between 2,700 and 3,500 tons of merchandise) piled up in Novi Pazar while Dubrovnik's diplomats frantically sought to resolve the crisis.<sup>56</sup>

Building projects were not the only Ottoman policies designed to encourage mobility. Providing security across vast territories was a perpetual problem for all land empires in pre-modern eras. A pragmatic and effective solution was a system that employed local mountain villagers to patrol remote areas. Coming from the word for mountain pass, the Ottoman *derbend* system exempted villages in vulnerable areas from tax obligations. In exchange, the local inhabitants took responsibility for the safety of caravan travelers, something they could do in addition to their pastoral or agricultural practices. The *derbend* system spared the empire the expense of maintaining fortified garrisons and patrols in distant areas, while giving the inhabitants of marginal areas an additional incentive to remain in their villages. Nearly 2,000 *derbend* families were appointed in the Ottoman Balkans in the mid-sixteenth century.<sup>57</sup> Benedetto Ramberti, who traveled the Ragusa Road in 1534, and Pierre Lescalopier, who made the journey in 1574, both described local *derbend* guards leading their caravans with a drum in hand. The beating of the drum was a reassuring signal to travelers, indicating that the road ahead was safe to cross.<sup>58</sup>

The centrality achieved by the Ragusa Road as a channel of trade, travel, and communication shows how multiple factors worked together to shape mobility in the early modern Mediterranean. The caravan roads of the Ottoman Balkans were not rigid, imposed structures but flexible systems built around constellations of stopping places that eased passage and provided protection for travelers, goods and animals. Officials at the peak of imperial power built bridges and caravanserais across the breadth of Ottoman territory. These works were supplemented by a vast number of projects constructed by local patrons.

<sup>55</sup> Previously, the primary caravan station was Prijopolje. Z. ZLATAR, *Dubrovnik's Merchants and Capital in the Ottoman Empire (1520-1620): A Quantitative Study*. Istanbul, 2011, pp. 175, 182.

<sup>56</sup> B. HRABAK, *Kramari u karavanskom saobraćaju*, p. 206. – S. DIMITRIJEVIĆ, *Dubrovački karavani u južnoj Srbiji*, p. 187.

<sup>57</sup> H. İNALCIK, *The Ottoman Empire*, p. 149. On the *derbend* system, see C. ORHONLU, *Osmanlı İmparatorluğu'nda Derbend Teşkilâtı*. Istanbul, 1990.

Infrastructure-building was the most visible of multiple Ottoman practices designed to boost transport and trade. Initiatives to provide security, such as the *derbend* system were also vital. In the case of the Ragusa Road, Vlach horsemen worked with Dubrovnik's brokers, merchants, and diplomats to develop a reliable mode of overland travel that was efficient enough to challenge the sea route from Istanbul to the Adriatic Sea. At the interface of sea routes and a newly vital road network, Dubrovnik boomed. This, in turn, led to increased traffic on the caravan road. This multi-faceted partnership benefitted both Ottomans and Ragusans, and also led to the development of important new inland trade centers, like Novi Pazar.

By the end of the sixteenth century, the dominance of Dubrovnik's caravan road network had been undercut by the rise of the road from Split. Venice, which had been studying the Ragusa Road in detail since Ramberti's voyage in 1539, accepted a proposal from a Jewish merchant named Daniel Rodriguez to develop the port of Split as a point of entry for overland traffic in the Ottoman Balkans. Given the long Ottoman-Venetian peace (from 1574 to 1645), and the increasing presence of Ottoman merchants in Venice, Dubrovnik's value as an alternative to the Serenissima had lessened considerably. After the 1590s, the Split-Sarajevo route took the place of the Ragusa Road as the primary east-west route across Rumelia.<sup>59</sup> The long Ottoman-Venetian war in Crete (1645-1669) gave Dubrovnik an opportunity to claw back its leading position, but a devastating earthquake of 1667 marked the beginning of the end for the Ragusa Road as a major international route. The caravan trade continued, but the increasing maritime power of northern European states would eventually render such long-distance overland routes obsolete. Having defied nature for so long, trans-Balkan road networks like the Ragusa Road slowly faded into obscurity.

<sup>58</sup> B. RAMBERTI, *Libri tre delle case*, 6r. – E. CLERAY, *Le Voyage de Pierre Lescalopier*, pp. 21-55.

<sup>59</sup> R. PACI, *La scala di Spalato e il commercio veneziano nei Balcani fra Cinque e Seicento*. Venice, Deputazione di storia patria per le Venezie, 1971. – H. İNALCIK, "Foundations of Ottoman-Jewish Cooperation" in: *Jews, Turks, Ottomans: a Shared History*, (ed. A. Levy), Syracuse University Press, 2002, p. 13.



## Lazarettos – From Isolation to Contemporary Scientific Medical Findings

The Dubrovnik Republic, lat. *Respublica Ragusina*, takes pride of place in our historical and medical heritage, and represents an unlimited source of scientific research. The state that was born out of the medieval Dubrovnik commune was located in the south of present-day Republic of Croatia, in the area of Dubrovnik and its surrounding land and islands. It was established in 1397, and abolished in 1808.

As a free state with developed maritime trade (that generated wealth and contributed to its cultural relationships and influence) it achieved extraordinary success in organizing and improving its health services. In 1296, one of the first medieval sewerage systems was created that is still in use today. The pharmacy in the Franciscan Monastery, one of the oldest in Europe, but definitely the oldest in continuous operation, was founded in 1317. The quarantine, i.e. isolation of those suffering from infectious diseases, an “invention” of the Ragusan Republic, was first established in 1377.<sup>1,2</sup>

The quarantine was first implemented in Cavtat (a town located east of Dubrovnik) and on its nearby islands (Supetar, Mrkan and Bobara), and in 1397 a decision was made to establish a quarantine in the Benedictine Monastery on the island of Mljet. The lazaretto at Danče was constructed in 1430 and subsequently, a larger and more modern lazaretto was built on the island of Lokrum. On 12 February 1590, the Dubrovnik Senate decreed that the last Lazaretto was to be built at Ploče.

The Lazaretto complex, located behind the eastern city gate, at the intersection of maritime and land routes, represents not only a unique architectural complex, but an institution that best articulates the rich medical heritage of the old Dubrovnik.<sup>3</sup> The history of Dubrovnik lazarettos illustrates the entire history of defence against infectious diseases in the Ragusan Republic.

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<sup>1</sup> In order to understand the value of this medieval decision to establish the first quarantine in the world, as an anti-epidemic measure, we should know that it was introduced on the same principle in the rest of Europe, in Marseille in 1383, Venice in 1403, Pisa in 1464, Genova in 1467, and Mallorca in 1471 (From: J. BAKIĆ, Dubrovnik – grad najvrjednije higijensko sanitarne hrvatske i svjetske baštine, *Hrvatski časopis za javno zdravstvo* 7/2, Zagreb, 2006. Available at: <http://www.hcjz.hr> (information accessed on 16 August 2014).

<sup>2</sup> M. D. GRMEK, Karantena. *Medicinska enciklopedija*, II edition, book III, Zagreb, 1968, pp. 591-594.

<sup>3</sup> A. BOROVEČKI - S. LANG, *Povijesno-medicinski vodič kroz medicinu starog Dubrovnika*. Available at: <http://www.snz.unizg.hr/~mmilosev/Povijest-medicine.pdf> (information accessed on 14 October 2014).



Fig. 1. Islands of Mrkan, Bobara and Supetar, located in front of Cavtat, first quarantine for isolation of victims of infectious diseases (photographs: A. Bakija-Konsuo)

### *Diseases that Left a Deep Trace in the History of Dubrovnik*

Throughout its history Dubrovnik was ravaged by numerous diseases. Leprosy and plague represented the gravest public health hazard in the Ragusan Republic.<sup>4</sup> Leprosy did not play such a destructive role locally as it did globally, but it was the reason behind the first mention of isolation of leprosy victims in the Statute of the City of Dubrovnik in 1272. It is worth mentioning that this legal document was written 220 years before Christopher Columbus discovered the New World, i.e. the North American continent.<sup>5</sup> The Statute, together with its amendments and other legal collections (*Liber viridis* and *Liber croceus*), remained in force until the fall of the Republic in 1808. It consisted of eight originally untitled books that regulated miscellaneous legal matters in all segments of life in the urban community. Frano Gondola (1539-1589), Dubrovnik lawyer and diplomat, was responsible for the legislative systematization of the Statute. He divided the legal provisions into paragraphs for practicality of use. The Statute was not published in the Republic period, but it circulated in manuscript form, copies of which were used in government offices, courts and legal circles. It is a well-known fact that when the Ragusan Republic became fully independent in 1358, there were 13 copies of the Statute in circulation, and in later centuries this number increased significantly because many copies could be found in private libraries. The first copy from 1272 was lost, and the oldest extant transcript of the Statute dates from the 1330s. It was written on parchment and is kept in the State Archive in Dubrovnik.

<sup>4</sup> Other epidemic diseases that existed were dysentery, typhoid and smallpox. Dysentery was quite common so it is interesting that Giuseppe Appuger, a 19<sup>th</sup> c. Dubrovnik doctor successfully treated this disease with a combination of cleansing agents and opiates. This combination is nothing else but a composition of mixed powders that was later used, and is sometimes still used, in dysentery therapy. (From: V. BAZALA, Bolesti i pošasti, in: V. Bazala, *Pregled povijesti zdravstvene kulture Dubrovačke Republike, Dubrovački horizonti* 1, Zagreb, 1972, pp. 27-41).

<sup>5</sup> A. BAKIJA-KONSUO - R. MULIĆ, The history of leprosy i Dubrovnik: An Overview, *International Journal of Dermatology* 50, Oxford, 2011, pp. 1428-1431.

Mirko Dražen Grmek (1924-2000), Croatian historian of biomedical sciences, noted that Dubrovnik's administration arrived at the idea of quarantine thanks to the experience it had with placing leprosy victims in isolation, which was, at that time, the only practical measure preventing the spread of the disease until the eventual death of the sick.<sup>6</sup> According to the Gospel, Lazarus who suffered from leprosy was proclaimed the patron saint of lepers, and the leprosaria (shelters for leprosy patients) were named after him and called lazarettos.

The Ragusans called all infectious diseases pestilence, and for all epidemics they introduced the term "plague" or pestilence, from Latin *pestis*, meaning plague. It was not until the 19<sup>th</sup> century that the term "black death" started to be used to describe all plague epidemics that occurred since 1347.<sup>7</sup> Both diseases were deeply ingrained in the European collective consciousness and they acquired a deeper metaphorical meaning.<sup>8</sup> Together with tuberculosis, they left their mark on periods in human history, so researchers tend to refer to them as the so-called "great diseases".<sup>9</sup> Leprosy and plague were diseases whose prevention and suppression made Dubrovnik famous, unlike any other city, in the history of medicine, which, to this day, continues to inspire researchers from different scientific fields and interests, and opens new possibilities of research.

### *Leprosy – "Horror" of the Middle Ages*

Leprosy is an infectious skin disease caused by *Mycobacterium leprae* (*M. Leprae*).<sup>10</sup> It affects the skin, peripheral nerves and the mucous membrane of the upper respiratory tract and oral cavity. Leprosy still represents a public health problem in some countries in the world, despite today's efficient antibiotics treatment.<sup>11</sup> Leprosy does not kill directly unlike tuberculosis. Still, it causes deformities and reduced work ability and has a significant social and economic influence on the infected person and his surroundings. Of the total number of cases worldwide, most of the infected live in India (around 70%) and Brazil.<sup>12</sup>

The disease was known in classical antiquity, whereby its Greek name *lepra* was derived. It is also known as Hansen's Disease, named after the Norwegian physician Gerhard Armauer Hansen (1841-1912) who discovered its causative agent in Bergen in 1871. This was the first causative agent linked to the disease in humans. However, although he discovered the agent, leprosy was still not understood as an infectious disease. Therefore, Hansen said: "...your opinions about leprosy are completely wrong. You believe that the disease is hereditary but not infectious. The truth is that it is infectious but not hereditary".<sup>13</sup>

<sup>6</sup> M. D. GRMEK, Karantena, p. 591-594.

<sup>7</sup> Z. BLAŽINA TOMIĆ, Utemeljenje i razvoj zdravstvene službe u Dubrovniku, in: Z. Blažina Tomić, *Kacamorti ili kuga*, Zagreb, 2007, p. 18.

<sup>8</sup> Hence, the expression "20<sup>th</sup> century plague" is often used to describe drug addiction, and especially the appearance of AIDS (Acquired Immunodeficiency Syndrome, Croatian *Kopnica*), a disease caused by a virus, that is characterised by clinical signs of damage to the immune system.

<sup>9</sup> Leprosy in the Middle Ages, the plague in the late Middle Ages and Early Modern Period, tuberculosis in the 19<sup>th</sup> and early 20<sup>th</sup> century.

<sup>10</sup> Only the infected person in the active phase of the disease is the source of infection. An infectious agent most often enters through the nasal mucous membrane, although it could penetrate through the skin, and be transmitted sexually. It seems that the clinical picture of the disease can only be developed after the long-term and close contact with the patient. Incubation could last from 6 months to 40 years, in some cases even longer. Today, we still do not have a skin or serological test that can uncover the carrier of *M. leprae*. (From: J. FITNESS - K. TOSH - A. V. S. HILL, Genetics of susceptibility to leprosy, *Genes and Immunity* 3, London, 2002, pp. 441-453).

<sup>11</sup> Treatment of lepromatous patients includes drug therapy, but also physical, psychological and social rehabilitation of the diseased. In 1943, sulfone (dapson) was introduced into leprosy therapy as the first efficient agent in the treatment of the same, and since 1981, the WHO (World Health Organization) recommends the so-called multi-drug therapy – MDT, that is available and free for all patients. It is a combination of diaminodiphenylsulfone-Dapsone, rifampicin-Rimactan and klofazimin-Lampren, it lasts 6 or 12 months, with minimal development of resistant strains. After 1 to 2 weeks of treatment (i.e. after the first dose) the patient is no longer infectious. Drugs come in practical packages as monthly blisters for easier application. (From: A. BAKIJA-KONSUO, *Istraživanje povijesnog utjecaja lepree na prevalenciju varijanti gena PARK2/PACRG kod stanovništva otoka Mljeta*. Doctoral dissertation. School of Medicine, University of Split, 2011).

<sup>12</sup> WHO. Global leprosy situation. *Weekly Epidemiological Record* 92, 2017, pp. 501-520.

<sup>13</sup> F. M. MARMOR, The ophthalmic trials of G. H. A. Hansen, *Survey of Ophthalmology* 47, 2002, pp. 275-287.

Leprosy was a synonym for stigmatization and discrimination because of large deformations on the body, and especially the faces of the diseased. Besides the physical effects, the victims also suffered terrible psychological and social ramifications, they were stigmatized in society, ostracized from their families, the social community, even health institutions, so leprosy was known from antiquity as “death before death”.<sup>14</sup>

*Lepra* or leprosy ravaged Europe for centuries, as it did Croatia. It was mentioned for the first time in 804 when Donatus, the Bishop of Zadar transported the body of St. Anastasia from Constantinople to Zadar. It is said that many leprosy patients in Zadar and its surroundings at the time were healed by the saint’s relics.<sup>15</sup>

Greek soldiers, returning from Asia in the 3<sup>rd</sup> century BC, brought this chronic granulomatous infection into Europe.<sup>16</sup> The number of infected patients increased in the 7<sup>th</sup> and 8<sup>th</sup> centuries, and especially during the Crusades in the 13<sup>th</sup> century when it assumed epidemic-pandemic proportions. In the 14<sup>th</sup> century, leprosy started to abate, exactly at the time of the most horrific plague pandemic (the Black Death), which was understandable, because leprosy sufferers were to first to succumb to the plague.<sup>17</sup>

However, leprosy once again took prominence in the 17<sup>th</sup> century during the Ottoman conquests of the Balkan peninsula, first in Bosnia and Herzegovina, and then it reached the borders of the former Ragusan Republic, i.e. the southern border of Croatia. There are relatively few surviving data that would help build a more complete picture of the presence of leprosy in our region. Most available information is about isolation measures contained in statutes of Croatian medieval cities and communes. Equally preserved are the testaments and bequests of wealthy individuals to the victims contained in old notary records, as well as written and other records of isolation of patients, related to Croatia, that we find until the mid-20<sup>th</sup> century.

Today in Europe, we only note cases imported from endemic countries.

### *Mal de Meleda or the Leprosy of Mljet – Non-contagious Skin Disease*

The leprosy of Mljet, Mediterranean leprosy, Mal de Meleda, *keratosis palmoplantaris transgrediens et progrediens*, *keratosis extremitatum hereditaria progrediens*, the disease of Mljet, are all historical synonyms of this dermatological disease.<sup>18,19</sup>

Mal de Meleda is classified as a hereditary palmoplantar keratoderma whose basic feature is the thickening of the outer layer of the palm skin and foot soles (hyperkeratosis). There are other anomalies, such as hyperkeratosis on the dorsum of hands and feet, elbows and knees, nail changes, teeth and auxiliary structures, as well as other organs.<sup>20</sup> It was known among the islanders that the disease was not directly passed from parents to children, and that the diseased gave birth to the healthy and the healthy gave birth to the diseased, so it occurred in the third and fourth generations<sup>21</sup>. Local people called the disease leprosy.<sup>22</sup>

<sup>14</sup> Ž. CVETNIĆ, *Lepra – “smrt prije smrti”*, zoonoza koja još uvijek prijetei, *Veterinarska stranica* 45, Zagreb, 2014, pp. 315-324.

<sup>15</sup> T. JEREN, *Povijest razvoja infektološke službe na tlu Hrvatske*, *Croatian Journal of Infection* 25/3, Zagreb, 2005, pp. 125-130.

<sup>16</sup> Ž. VRBICA - M. WOKAUNN - I. JURIC, *Posljednji leprozorij u Hrvatskoj*, *Dubrovački horizonti* 41, Zagreb, 2009, pp. 165-177.

<sup>17</sup> T. JEREN, *Povijest razvoja infektološke službe*, pp. 125-130.

<sup>18</sup> A. BAKIJA-KONSUO - A. BASTA-JUZBAŠIĆ - I. RUDAN et. al., *Mal de Meleda: Genetic Haplotype Analysis and Clinicopathological Findings in Cases Originating from the Island of Mljet (Meleda) - Croatia*, *Dermatology* 1, California University, 2002, pp. 32-39.

<sup>19</sup> A. BAKIJA-KONSUO, *Mal de Meleda – through the history and today*, *Acta Dermatovenerologica Croatica* 22/2, Zagreb, 2014, pp. 79-84.

<sup>20</sup> A. BAKIJA-KONSUO, *Keratosis palmoplantaris transgrediens – Mljetska bolest*. Master’s Thesis. School of Medicine, University of Zagreb, 2001.

<sup>21</sup> A. CAR - LJ. BETICA-RADIĆ - M. NARDELLI-KOVAČIĆ, *Mljetska bolest - povijesni prikaz*, in: *The symposium statement “Prirodne značajke i društvena valorizacija otoka Mljeta”*, *Pomena*, 1995, pp. 605-608.

<sup>22</sup> A. BAKIJA-KONSUO, *Mal de Meleda*, pp. 79-84.



The Old Testament exegesis said that leprosy was “God’s punishment” for sins connected to impure bodily fluids and breaking of sexual taboos, which probably contributed to Mljet disease being identified as leprosy, even more so because it often appeared in consanguineous families, which implied breaking sexual taboos.<sup>23,24</sup>

There are several interesting legends linked to the origin of the disease. According to first legend, the first case of the disease occurred in a respectable family on the island of Mljet when a family elder, because of some local feud, and before an entire procession, desecrated the eucharist sacrament. From that moment on, he and all of his descendants were permanently branded, and members of his family bore an indelible mark, visible to everyone, on their hands and feet, as a lasting symbol of God’s punishment.<sup>25,26</sup> The second legend is related to Mljet’s pirates. In 1850, Dominik Marocchia, a physician from Split mentioned the folktale about Mljet’s pirates whose hands were infected by leprosy four centuries ago when they attacked a Turkish vessel with an infected crew aboard, that a storm had washed ashore the island of Mljet. They allegedly killed the crew and divided the spoils, and from that moment on they bore God’s punishment on their hands and feet as an indelible symbol of shame.<sup>27</sup> The third legend says that upon return from the Crusades, the Crusaders left all the soldiers they suspected of suffering from leprosy on the islands of Mljet and Lastovo. Allegedly, the infected Crusaders on the island of Lastovo died quickly, while those on the island of Mljet survived.<sup>28</sup>

Fig. 2. Islet and Benedictine monastery of St. Mary on the island of Mljet, that started functioning as a lazaretto after the 1397 decision on quarantine (photograph: Ž. Bačić)

<sup>23</sup> T. BUKLIJAŠ, Bolest i stigma: tragom lepre u našim krajevima, *Hrvatska revija* 2, Zagreb, 2001, pp. 108-110.

<sup>24</sup> I. DABELIĆ, Mljetske crkvene župe, in: I. Dabelić, *Arhivska građa za povijest otoka Mljeta*, Dubrovnik, 2000, pp. 153-203.

<sup>25</sup> S. BOŠNJAKOVIĆ, Jedno endemično oboljenje u povijesno pučkoj predodžbi, *Liječnički vjesnik* 60, Zagreb, 1938, pp. 563-566.

<sup>26</sup> A. BAKIJA-KONSUO, Mljetska bolest – jučer, danas, sutra, *Dubrovački horizonti* 41, Zagreb, 2001, pp. 118-126.

<sup>27</sup> V. BAZALA, Bolesti i pošasti, in: V. Bazala, *Pregled povijesti zdravstvene kulture Dubrovačke Republike*, *Dubrovački horizonti* 1, Zagreb, 1972, pp. 27-41.

<sup>28</sup> A. BAKIJA-KONSUO - R. MULIĆ, The history of leprosy, pp. 1428-1431.

The island of Mljet was used by the Ragusan Republic as quarantine for leprosy victims, but also for many other unknown (dermatological, and other) diseases. In 1896, Oscar Hovorka von Zderas (1866-1930), a municipal doctor from Janjina created a confusion with his claim that he had discovered an endemic focal point of leprosy on Mljet.<sup>29</sup> This was the period when leprosy was discovered across Bosnia and Dalmatia, and Lovro Dojmi Delupis (1845-1927) announced similar findings on the remote island of Vis. One year later, Hovorka visited Mljet with Edward Ehlers, MD (1863-1937), a renowned leprologist from Copenhagen, and together they ascertained that they were not dealing with leprosy, but a special disease of palms and foot soles, which they correctly named “Mal de Meleda”.<sup>30</sup> Therefore in 1897, thanks to Hovorka and Ehlers, the disease became known by this name in world literature. Named after one of the most beautiful Croatian islands, the disease was and still is a burden for all its inhabitants even though the disease is described on five continents (Europe, North and South America, Africa, Asia, except Australia and uninhabited Antarctica) and in 27 different countries. Recent genetic research localised the gene mutation to chromosome 8qter<sup>31</sup> as cause of the disease.<sup>32,33</sup>

### *The Plague – Deadly Infectious Disease that Repeatedly Ravaged Humanity*

The plague is an acute infectious disease caused by bacteria *Yersinia pestis*, found primarily in rodents. Wild rodents are its natural reservoir (but also the domestic black rat *Rattus rattus*) and are sources of infection in fleas (rat fleas *Xenopsyle cheopis*), which then spread the infection to other animals and people. It was proven that plague can also be transmitted by the ordinary human flea *Pulex irritans*, but less effectively. After an incubation period of one to seven days, the plague appears in three clinical forms: bubonic, pneumonic and septicemic.<sup>34</sup> Person suffering from pneumonic plague is contagious because they transmit causative agents in the form of respiratory droplets from person to person (so-called urban plague). Bubonic plague is transmitted more frequently during summer, while the pneumonic is spread more often in the winter. Mortality rate of untreated bubonic plague is 50-60%, while the mortality rate of untreated septicaemia and pneumonic plague is 100%. Effective treatment is conducted with appropriate antibiotics the causative agent is susceptible to, and infected patients should promptly be placed in isolation.

The first epidemic we can identify with reasonable certainty as the plague was the Black Death of 1348-1349. It eradicated between a quarter and two thirds of European population of the time, and caused significant changes in the economic and social structure. It spread into Europe from the East, probably from China.<sup>35</sup> Considering the development of science at the time (ignorance of what caused the disease, and consequently ignorance about

<sup>29</sup> O. HOVORKA, Über einen bisher unbekanntem endemischen Lepraheerd in Dalmatien, *Archives of Dermatology Syphilis* 34, Berlin, 1896, pp. 51-53.

<sup>30</sup> O. HOVORKA - E. EHLERS, Mal de Meleda, *Archives of Dermatology Syphilis* 40, Berlin, 1897, p. 251-256.

<sup>31</sup> Mutation, i.e. change, of the gene called *SLURP1* (*secreted LY6/PLAUR-related protein 1*). 18 mutations of this gene linked to the origin of the *Mljet disease* are known today, and with several exceptions, all mutations cause the same clinical picture, regardless of age difference and geographic origin. (For more see: A. BAKIJA-KONSUO, Mal de Meleda.)

<sup>32</sup> J. FISCHER JUDITH - B. BOUADJAR - R. HEILIG et. al., Genetic linkage of Meleda disease to chromosome 8qter, *European Journal of Human Genetics* 6, Basel, 1998, pp. 542-547.

<sup>33</sup> J. FISCHER - B. BOUADJAR - R. HEILIG - M. HUBER - C. LEFÈVRE - F. JOBARD - F. MACARI - A. BAKIJA-KONSUO - F. AIT-BELKACEM - J. WEISSENBACH - M. LATHROP - D. HOHL, Prud'homme Jeane-Françoise. Mutations in the gene encoding SLURP-1 in Mal de Meleda, *Human Molecular Genetics* 10/8, Oxford, 2001, pp. 875-880.

<sup>34</sup> The most common form is the bubonic plague, characterised by nonspecific symptoms such as high temperature, fatigue, nausea, headache, throat ache and painful and enlarged lymph nodes, the so-called buboes. The septicemic form does not present with buboes and occurs when causative agents enter the bloodstream directly and is similar to septicemic forms caused by numerous other infections of gram-negative bacteria. The pneumonic plague may occur when causative agents enter the respiratory system directly (primary pneumonic plague) or during septicaemia (secondary pneumonic plague). Clinical manifestations are high temperature, followed two days later by patients coughing serous and bloody sputum. (From: Z. BLAŽINA TOMIĆ, Utemeljenje i razvoj zdravstvene službe u Dubrovniku, in: Z. Blažina Tomić, *Kacamorti ili kuga*, Zagreb, 2007).

<sup>35</sup> G. RAVANČIĆ, Historiografija o epidemiji Crne smrti s polovice 14. stoljeća, *Povijesni prilozi* 33, Zagreb, 2007, pp. 195-214.



Fig. 3. Church of Our Lady and cemetery at Danče where a lazaretto was built in 1430 (photograph: A. Bakija-Konsuo)

prevention and therapy) the best advice, to avoid the disease, was “*Fuge cito, longe et tarde revertere.*” (Flee fast, as far as possible and return as late as possible).<sup>36</sup>

The disease mentioned in various sources as *peste*, *pestilenza*, *mortalitas*, *male contagiosa* or *malatia* appeared in Dubrovnik in the first half of 1348. According to some 15<sup>th</sup> century accounts, 2,500 people died in Dubrovnik from 1348 to 1374. It would perhaps be interesting to point out the influence this epidemic exerted on the social life and circumstances in Dubrovnik at the time. Specifically, in 1348, due to a great number of patrician deaths, the age of entry as member into the Major Council was lowered to 16 (from previous 18). In addition, it was decided that craftsmen would be free from paying taxes for five months, and many monetary fines were reduced or forgiven. Another interesting fact was the change in the inheritance custom which permitted that inheritance be passed over to women. Since many men died, many eminent Dubrovnik surnames were becoming extinct, so the authorities approved two surnames per family, the first, extinct, male lineage surname, and the second, new, female lineage surname.<sup>37</sup>

In 1377, the Major Council of Dubrovnik promulgated the regulation stipulating that “*Those who arrive from pestiferous regions shall not enter Dubrovnik or its districts (Veniens de locis pestiferis non intret Ragusium vel districtum)*,” according to which all newcomers from pestiferous regions had to spend one month in certain supervised locations before they were permitted to enter the city. In 1397, a new regulation was promulgated (*On regulations promulgated in 1397 against those arriving from pestiferous regions – De ordinibus contra eos qui veniunt de locis pestiferis anno 1397 factis*) which stipulated the duration and location of quarantine, determined punishment for violators and ordained that the

<sup>36</sup> V. BAZALA, “Calendarium pestis,” *Acta Historica medicinae, pharmaciae, veterinaire* 2/1, Zagreb, 1962, pp. 55-65.

<sup>37</sup> V. BAZALA, Bolesti i pošasti, in: V. Bazala, *Pregled povijesti zdravstvene kulture Dubrovačke Republike, Dubrovački horizonti* 1, Zagreb, 1972, pp. 27-41.

Minor Council was obliged to name three health officials from nobility ranks to implement these measures. In 15<sup>th</sup> century records, these officials were addressed by the Venetian name *Officiales Cazzamortuorum*, which was replaced in the 16<sup>th</sup> century by the title *officiali sopra la sanità* (health officials). However, popular parlance retained the name of *Cazamorti* (the person who expels the dead – anti-plague health officials).

In 1397, in order to improve the life of quarantined people, but also to strengthen epidemiological measures, it was decided to establish a quarantine in the Benedictine Monastery of St. Mary on the island of Mljet: “*Verutamen dicti venientes de loci pestiferis per dictum tempus unius mensis, quod debent stare extra Racusium et districtum, si voluerint, possint stare Mercanae, vel in Monasterio Melitae, non obstantibus confinibus superius contentis et expressis*”;<sup>38</sup> which was also the first comfortable Dubrovnik lazaretto, situated in a beautiful, natural environment with a secure anchorage area for boats.<sup>39</sup> According to Grmek this was probably the first lazaretto in the world.<sup>40</sup> The lazaretto on the island of Mljet was operational, with some interruptions, until 1527, i.e. for more than 130 years.

The plague in Europe started to abate in the 17<sup>th</sup> century, but the danger from the Ottoman Empire still persisted in Croatia, so lazarettos and sanitary cordons started to be moved from the coast to the Dalmatian hinterland, i.e. its continental area, along the Military Frontier. The gravest threat of plague to the Ragusan Republic came from Herzegovina and Albania. The special sanitation magistrate implemented exceptionally strict protection measure. Turkey was considered a permanently pestiferous country, so everything arriving from there was quarantined. Besides, the magistrate, through its commissioners, constantly provided information about the health situation in Turkey. If high mortality rates somewhere in the vicinity made them suspicious of plague, Dubrovnik would send special investigators, the lazaretto state officials, soldiers or barbers, capable of recognizing the disease from its main symptoms (headache, fever, vomiting, buboes), so that they could personally inform the government. The Government of Dubrovnik constantly corresponded with sanitation offices in other Adriatic states and in the Republic of Genoa.<sup>41</sup> After the fall of the Republic, the last plague (in Dubrovnik, and the Croatian territory in general) appeared one final time in 1815 in the vicinity of Dubrovnik (Čepikuće, a small village located west of the city, in Dubrovnik littoral region) and on the peninsula of Pelješac. A renowned Dubrovnik physician Luca Stulli (1772-1828) wrote about that epidemic in his work entitled *De peste quae in exitu anni 1815 in circulum Rhagusinum irrepserat*, published in Dubrovnik in 1818. At that time, it was already well-known that plague arose as a consequence of poor hygiene and that rats were its primary transmitters.<sup>42</sup>

### *From Isolation in the Open-Air to the Imposing Architectural Complex*

The idea to isolate the infected persons and goods arriving from infected areas, did not come from contemporary medical circles, it was not introduced by physicians, but by Dubrovnik patricians and merchants who feared losing trade profits. Quarantine was, therefore, the result of pragmatic thinking and direct observation by the Dubrovnik Government. Still, the concept of quarantine as an anti-epidemic measure (which is not

<sup>38</sup> *Liber Viridis, Cap. XCI, 1397*. Dubrovnik State Archives (DSA).

<sup>39</sup> According to legend, today's settlement on the island of Korita was named “Korota,” meaning mourning, following one such plague epidemic when the village was catastrophically decimated. (From: S. BOŠNJAKOVIĆ, Tzv. Mljetska bolest, *Liječnički vjesnik* 53, Zagreb, 1931, pp. 103-113).

<sup>40</sup> Z. BLAŽINA TOMIĆ, Utemeljenje i razvoj zdravstvene službe, p. 97.

<sup>41</sup> T. BUKLIJAŠ, Kuga: nastajanje identiteta bolesti, *Hrvatska revija* 2, Zagreb, 2002, pp. 90-94.

<sup>42</sup> V. BAZALA, Bolesti i pošasti, in: V. Bazala, *Pregled povijesti zdravstvene kulture Dubrovačke Republike, Dubrovački horizonti* 1, Zagreb, 1972, pp. 27-41.





alien even in today's concept of control of infectious diseases) was ineffective and it did not contribute to preventing the spread of disease, because of the lack of knowledge about the chain of infection and how infectious diseases were transmitted.<sup>43</sup>

Numerous regulations and rules passed by the Government were futile because of this ignorance, such as for example, the burning of various herbs to purify the putrid air, which was believed to cause the infection. Pine tree fires were most often used because pinewood was full of resin, which created formalin as disinfectant. This process was of little use because fires were burnt in the open, so the concentration of formalin vapours was too low to have an effect.<sup>44</sup> Relatively effective were the disinfection measures using known disinfectants (quick lime) or exposing clothes and furniture to sunlight. Some measures were excellent, such as burning everything that came into contact with the dead, so houses were often burned, also whole villages where people died of plague. Today we know that such fires dispelled rats that are primary transmitters of plague, even if rat fleas that actually transmitted the disease could not be destroyed.

### *Leprosaria – Shelters for Victims of Leprosy*

During the Crusades (in the period between the 11<sup>th</sup> and 13<sup>th</sup> centuries), whole of Europe was inundated with victims of leprosy. At the time, the highest concentration of the infected resided in Dalmatia, one of the maritime routes European Crusaders used to journey back from the Holy Land, which was especially important for the maritime City of Dubrovnik, in the sense of early prevention of the disease expansion. Therefore, it is unsurprising that the Statute of the City Dubrovnik, dated 1272, contains the first mention of the isolation of patients with leprosy: “*we decree that the houses that tanners have erected for themselves or will erect outside the City, at a place where lepers usually dwell, shall not be contested and that neither Township or any other person shall disturb them because of it. And let the lepers not tarry here, but let them go and reside far away from the City*”.<sup>45</sup>

Fig. 4. Construction of the lazaretto on the island of Lokrum started but it was never finished for fear it might be used as an enemy stronghold (photograph: A. Bakija-Konsuo)

<sup>43</sup> S. FATOVIĆ-FERENČIĆ, Konceptualizacija i istraživački potencijal kuge, in: M. Tomasović, *Kuga u Makarskoj i primorju 1815*, Makarska, 2017, pp. 499-514.

<sup>44</sup> J. BAČIĆ, Posebne odluke vezane za epidemije, in: J. Bačić, *Nekad u Dubrovniku*, ser.: *Dubrovnik zdravi grad*, Dubrovnik, 1990, pp. 72-79.

<sup>45</sup> *De domibus factis in loco leprosum - Zdravstveni propisi o leproznim bolesnicima. Liber Statutorum VI, cap. LVI, 1272*. Dubrovnik State Archives (DSA).

The 1214 Statute of the Town of Korčula, together with the 1272 Statute of the City of Dubrovnik, are among the oldest Croatian legal documents. Its importance lies not just in its legal basis but also the series of provisions related to healthcare that give us an insight into the quality of life in Dubrovnik of that time.<sup>46</sup> To improve the protection of its citizenry from leprosy infections, the Statute's amendments of 1335 "decreed that all lepers shall reside on the slopes above the Church of St. Michael on Krstac, and shall not dwell in any other place, the said lepers may not come to the City, nor to the roads leading to the house of the Friars Minor, nor to the heralds, nor to the passage, nor to the sea. And if the said lepers should be discovered in any other place than the said St. Michael's, they should be banished from the area of Dubrovnik".<sup>47</sup>

According to available data, it appears that there were a number of leprosaria, at different locations, always outside the city (to the east and west). Thus, leprosaria were situated near the Church of St. Andrew and Thomas at Pile in 1320, then in 1335 on the slopes of Brgat (Krstac), in 1430 in Konavle (the village of Pločice), in 1435 near St. Michael's (the Ploče Gate), and in 1532 near the Church of St. Lazarus by the sea.<sup>48</sup> No treatment was conducted in leprosaria, i.e. they were not hospitals but basically shelters that only served the purpose of isolation. The maintenance and construction of these institutions depended on public charity and philanthropy. The victims were stripped of all their civil rights, their marriages were annulled, and they were often declared dead. Leprosy victims were supported with state aid, bequests, or charity. For example, in 1508, Joannes Damian de Mence-Menčetić left his property to leprosy victims residing in front of the eastern gate of the City, at Ploče. These bequests offer proof that there were leprosy victims in Dubrovnik at that time.

With regard to other leprosaria on the Adriatic coast, one should note that the next one was established no less than 60 years later in Split (1332), then in Trogir (1372), Zadar (1417), Ston (1449), and Šibenik (1467).<sup>49</sup> We know that a leprosarium once existed on the island of Korčula because of names of small islands, *Gubeša* and *Gubavac* (Croatian variations of leprosy victims) in Korčula's vicinity.<sup>50</sup>

The last leprosarium, or as the elder locals called them *Gubave kuće* (i.e., 'leprous houses') was built in 1905, in the town of Metković, on high ground in the area of Pavlovača. Leprosy most probably spread from neighbouring Bosnia and Herzegovina, transmitted there by the Ottoman soldiers. Local authorities ordered the construction of the leprosarium with the aim of accommodating all patients with leprosy from Dalmatia and to prevent further spread of the disease. In addition to patient rooms, it also had a doctor's office and a chapel. The Parish Office of Metković preserved the tweezers that the priest used to administer the sacrament of Holy Communion to patients in order to avoid direct contact with the diseased. The records show that there were eight patients, from three families, isolated in this leprosarium. After the majority of patients died in 1925, the leprosarium was closed.<sup>51,52</sup> At the beginning of the 20<sup>th</sup> century, i.e. when the leprosarium was built in Metković, there were 317 registered cases of leprosy in Bosnia and Herzegovina, while in the whole of Croatia, in the 20<sup>th</sup> c., there were only 17 registered cases.<sup>53</sup>

<sup>46</sup> M. KAPOVIĆ, Statut Grada Dubrovnika 1272, in: M. Kapović, *Statut Grada Dubrovnika 1272*, Dubrovnik, 1990, pp. 263-493.

<sup>47</sup> *De Leprosi, Liber reformationum, pag III. Cap. XIII, 1335*. Dubrovnik State Archives (DSA).

<sup>48</sup> J. BAKIĆ, Dubrovnik – grad najvrjednije higijensko-sanitarne hrvatske i svjetske baštine, *Hrvatski časopis za javno zdravstvo* 7/2, Zagreb, 2006. Available at: <http://www.hcjz.hr> (information accessed on 16 August 2014).

<sup>49</sup> A. BAKIJA-KONSUO, *Istraživanje povijesnog utjecaja lepre na prevalenciju varijanti gena PARK2/PACRG kod stanovništva otoka Mljeta*. Doctoral dissertation. School of Medicine, University of Split, 2011.

<sup>50</sup> N. BAČIĆ, Epidemije kuge na otoku Korčuli, *Hrvatski časopis za javno zdravstvo* 3/10, Zagreb, 2007. Available at: <http://www.hcjz.hr/index.php/hcjz/article/view/2146/2118> (information accessed on 20 August 2018).

<sup>51</sup> Ž. VRBICA - M. WOKAUNN - I. JURIC, Posljednji leprozorij u Hrvatskoj, *Dubrovački horizonti* 41, Zagreb, 2009, pp. 165-177.

<sup>52</sup> M. WOKAUNN - I. JURIC - Ž. VRBICA, Between stigma and dawn of medicine: the last leprosarium in Croatia, *Croatian Medical Journal* 47, Zagreb, 2006, pp. 759-766.

<sup>53</sup> A. STANIMIROVIĆ - M. SKERLEV - P. GAČINA - T. BECK - T. STIPIĆ - A. BASTA-JUZBAŠIĆ, Leprosy in Croatia in the twentieth century, *Leprosy Review* 66, 1995, pp. 318-323.

It is a well-known fact that quarantine<sup>54</sup> was “invented” in the Ragusan Republic in 1377.

The Government of Dubrovnik decreed that the crew and cargo of any ship arriving from “pestilential locations” (*locis pestiferis*) should spend one month (later extended to 40 days, from which the name was derived: Italian *quaranta* = 40) in Cavtat and on the nearby islands of Supetar, Mrkan and Bobara. The quarantine slowed down maritime trade, but it did not stop it, and it came about as a reflection of empirical knowledge of Dubrovnik’s merchant-patricians, not its physicians.<sup>55</sup> Since its outbreak in 1347 until the beginning of the 16<sup>th</sup> century, contemporary physicians were powerless to treat and prevent the plague epidemic and were unable to make even the smallest of progress.<sup>56</sup> Their task was to examine the victim and determine if it was the case of plague or some other disease. They wore special protective suits, and were known to leave patients because they did not know how to help them without being exposed to contracting the disease.<sup>57</sup> Physicians did not know the causative agent of infectious diseases until the 19<sup>th</sup> century.<sup>58</sup> Initially, quarantine accommodation was poor, improvised, in huts, tents, and sometimes in the open air. The benefit of huts was that they could easily be burnt down as a disinfection measure.<sup>59</sup> It is assumed that the authorities in Dubrovnik did not want to build large architectural objects on the aforementioned small islands, because of their strategic disadvantage, i.e. their distance from the city, which meant they would not be easy to defend from potential enemy attacks and could be used by the enemy as fortresses, i.e. bases of attack on Dubrovnik.

In 1457 began the construction of lazaretto at Danče and adjacent to it, the Church of Our Lady, with a cemetery near the sea. This lazaretto was enlarged in 1456 and within a year it comprised a large two-story house and several smaller ones. It was built by Mihoč Radišić, who was famous for building the cloister in the Dominican Monastery and the Rector’s Palace façade, which clearly showed that the authorities considered the construction of the lazaretto extremely important for defence against the plague. The lazaretto had its own cistern, and the government provided a priest, a doctor, a barber-surgeon and a sufficient number of servants. The regulations were very strict and had to be obeyed because punishment was rigorous. The servants were forbidden to leave the lazaretto and mix with healthy people, and they were not allowed to take goods outside. Gravediggers Mihoč Mirković and Živan Pupak violated the regulations and took some goods out, so on 13 January 1483 they were sentenced to death by hanging on the gallows at Gradac, across from Lovrijenac. Vladimir Bazala (1901-1987)<sup>60</sup> wrote that it was interesting that “a short time after Živan Pupak was executed, his wife died on Supetar, where she was confined for plague, so it had to be concluded that he really did spread plague from the lazaretto at Danče”.<sup>61</sup>

<sup>54</sup> Definition of quarantine entails an international anti-infectious measure that includes separation and monitoring of people, goods and means of transportation, suspected of coming from infected regions or which have already been infected with a disease. Such measure is usually implemented in ports, and sometimes in places of international entry of people and goods into a city or state. Today, such measures are rarely taken, except in exceptional cases.

<sup>55</sup> J. BAČIĆ, Posebne odluke vezane za epidemije, pp. 72-79.

<sup>56</sup> Physicians who treated plague victims were called plague doctors, they were surgeons who studied for several years with a more experienced surgeon: main treatment methods were application of laxatives and various healing ointments, bloodletting, incision of purulent buboes and proscribing theriac, a universal panacea against all diseases. Theriac was composed of 20 to 30 animal ingredients (which included flesh of vipers), substances of plant and mineral origin, with an addition of opium. Most frequent folk medicine for plague was toasted bread and sour milk, or red wine. (From: Z. BLAŽINA TOMIĆ, Utemeljenje i razvoj zdravstvene službe, p. 66).

<sup>57</sup> M. ŠMUNKOVIĆ, Dubrovnik osniva prvu karantenu. *Naše more* 3-4, Dubrovnik, 1965, pp. 143-144.

<sup>58</sup> Before the 19<sup>th</sup> c., educated physicians (*physicusi*) who studied medicine in various, mostly Italian, universities believed that the disease occurred because of contaminated air (miasmatic theory of disease) or because of an imbalance of 4 distinct bodily fluids: blood, lymph, black and yellow bile (humoral theory of disease).

<sup>59</sup> S. FATOVIĆ-FERENČIĆ, The Island of Mljet: History, Heritage and Health, *Croatian Medical Journal* 44/6, Zagreb, 2003, pp. 661-662.

<sup>60</sup> Croatian gynaecologist, medical and cultural historian, studied folk medicine and quackery, and particularly the healthcare culture in old Dubrovnik.

<sup>61</sup> V. BAZALA, Bolesti i pošasti, in: V. Bazala, *Pregled povijesti zdravstvene kulture Dubrovačke Republike, Dubrovački horizonti* 1, Zagreb, 1972, pp. 27-41.

Violations of quarantine in Dubrovnik were sanctioned with a stringent monetary fine of one hundred ducats, that could also be converted to imprisonment or severe corporal punishment (like cutting off one's ear).<sup>62</sup> Both foreigners and citizens of Dubrovnik, who were suspected of being infected or coming into contact with a proven source of infection, had to be quarantined. In 1416 for example, Obrad Deich, a porter from the city port, allowed entrance to the city to "many newcomers from plague-contaminated locations and poor people from parts of Sclavonija." He was punished by being tied to a pillar of shame (*ad carum*) and his hair and beard were burned. However, the patricians were exempted from serious punishment. In 1431, the Minor Council adopted the regulation that revoked the *Cazamorti* authority to banish the patricians suspected of being infected with plague from the city. The government entrusted this authority to its members, worried about abuse of the regulation and the banishment of political opponents from the city under the guise of public health hazard. The regulation of 1397 forbade importation of goods from pestiferous regions for the entire duration of the epidemic.

As already mentioned, the quarantine slowed the flow of people and goods and negatively affected trade, as the source of city's livelihood, however, it was economically and morally justified as a humane defensive measure against the epidemic, especially if we compare it to the protection measures in Venice and Milan. During plague epidemics, Venice simply refused entry into the lagoon to all ships. In 1347, the Venetian authorities issued a proclamation that all ships and passengers had to be stationed on the island of St. Lazarus until the special Health Council gave them permission to enter the city. This led to the discrimination of ships and passengers from certain countries. The authorities in Milan were even more cruel because they implemented strict measures of house arrest and they literally walled in plague victims. In 1570 they passed a law that proscribed penalty of death for each person without a health certificate.<sup>63</sup>

One of the most disastrous epidemics in the history of Dubrovnik, that halted life in the city for six months, happened between 1526-1527. Namely, trade ground to a halt, the government moved to Gruž, food was dispensed to people free of charge, numerous processions were held, especially honouring St. Roch and St. Sebastian (patron saints of plague victims), and the dead had to be buried by the *Cazamorti* because there were no relatives or gravediggers left. In the Držić family, Marin's uncle Andrija and his cousin Petar died, while Marin's father and brother Vicko continued to trade, they borrowed money to purchase English textile that was sent to Dubrovnik after the epidemic abated. After the epidemic, not enough patricians were left to serve as Major Council members, so some respectable citizens became Council members. This also happened after the 1691 plague, so since that time Dubrovnik had two types of noble families, the old and the young, who did not get along. This dispute lasted until the fall of the Republic and it was especially pronounced during the fall, because the young had modern ideas (and most of them were Francophiles) while the old were conservative.<sup>64</sup>

<sup>62</sup> M. ŠIMUNKOVIĆ, Dubrovnik osniva prvu karantenu, pp. 143-144.

<sup>63</sup> H. GJANKOVIĆ, Epidemijske bolesti, lazareti, karantene u prošlosti, *Naše more* 2, Dubrovnik, 1970, pp. 83-91.

<sup>64</sup> V. BAZALA, Bolesti i pošasti, pp. 27-41.

# Lazaretto – Rich Medical History of Dubrovnik Written in Stone

In 1642, the Lazaretto complex was built by the sea near the Ploče gate, in the area of Tabor (the area was surrounded by walls, located at the end of the road used by caravans from Bosnia and Herzegovina, with lodging houses and the Church of St. Anthony of the Antunini merchants, members of the confraternity of St Anthony). The Lazaretto had five areas for storage of goods that were accessible by stairs and five buildings for lodging of passengers who had to be quarantined. Towers for Lazaretto guards were located at each side of the area with residential buildings. The complex was enclosed within high walls and had sea and land gates. Many visitors and witnesses described the Lazaretto, most interestingly, Evliya Çelebi (1611-1682)<sup>65</sup> who came to Dubrovnik two years before the catastrophic earthquake of 1667. Like all other passengers, officials and caravans arriving from Istanbul and Bosnia and Herzegovina, he also had to pass through the Lazaretto.

In 1784, the entire Tabor and Lazaretto complex was separated by a road that led from the gate of Ploče to the area of St. Jacob. Tabor remained on the north side of the road and continued to be used as marketplace, and the Lazaretto was to the left. Lazarettos were governed by the Health Magistrate composed of five patricians (*Officiali alla Sanità*) who proscribed practical measures against the spread of infectious diseases. The management of the Lazaretto was entrusted to the captain and his deputy, who, together with assistants, had to live on the premises during their mandate. Because of Lazaretto's exceptional economic and strategic importance for Dubrovnik, the complex was regularly maintained in excellent condition at the expense of the state, during the entire duration of the Ragusan Republic. The greatest attention was paid to merchandise that was aired, fumigated, soaked, however, no attention was paid to fleas and rats. Only brand new, unused goods could be imported into the city, while used goods, as well as clothes, had to spend the proscribed time in the Lazaretto together with their owners.

The Lazaretto preserved its original use, with lesser or greater intensity, long after the fall of the Republic, which is evident from registration books of goods and passengers, as well as other public records kept in the special archival series in the State Archive in Dubrovnik. The year that Lazaretto was abolished as a healthcare institution is not known, however according to archival records, it seems that it was around 1872. This date is confirmed by the fact that during the Herzegovina uprising of 1875-1876, the Lazaretto buildings were used to house a large number of refugees from the hinterland, and this would not be possible if the buildings were still used as quarantine.<sup>66</sup>

The Ragusans were proud of the fact that after opening the Lazaretto at Ploče, which rapidly built a great reputation, instances of plague were significantly reduced. However, Venice kept claiming at the time that Dubrovnik was plagued by the disease that was imported from Turkey, because it wanted to weaken Ragusan trade. The Dubrovnik authorities were very strict, so Bazala wrote that spreading of such rumours proved deadly for the town physician Caspar Crivellari who was accused in 1675 of sending false information to Venetian authorities in Dalmatia about two merchants dying of plague in Dubrovnik. At a secret session, the Senate adjudicated that there were no instances of

<sup>65</sup> Evliya Çelebi, Ottoman traveller and diplomat, who travelled across the Ottoman Empire territory for more than 40 years and recorded his commentary in the *Travelogue (Seyahatnâme)*, composed of 10 books in which he described his experiences, anecdotes and stories, but also provided unique testimony of cultural history. In this interesting work he described Bosnian and Croatian regions he travelled through. "Servants of this lazaretto-han, serve and accommodate passengers and discover many of their secrets and private affairs. Local guardians looked after poor old me as well," wrote Çelebi about his stay in the lazaretto at Ploče. On the 400<sup>th</sup> anniversary of his birth, UNESCO in 2011 proclaimed it the year of Evliya Çelebi.

<sup>66</sup> A. BAČE - I. VIĐEN, Lazareti na Pločama od pada Dubrovačke Republike do danas (1808-2013), *Prostor* 21/2(46), Zagreb, 2013, pp. 326-39.

plague in the Republic at the time and the person in question was guilty, so they sentenced him to death by drowning, which was carried out that same evening in prison.<sup>67</sup>

It is interesting to mention that in 1808 the French established a health commission (commissione di sanita) that would continue to function during Austrian rule until 1918. The commission was popularly called *sanitat*.<sup>68</sup>

Blažina Tomić,<sup>69</sup> on the basis of her extensive research, concluded that the Ragusan Republic, with its Councils, was not only the first to promulgate quarantine legislation in 1377, but it was also the first to establish, in 1390, a permanent anti-epidemic service, which was regularly conducted by patricians, who were elected in the Senate, authorized by the Major Council and confirmed in the Minor Council.<sup>70</sup> Italian cities that were considered precursors of global public health measures, established their health offices half a century later: Milan in 1448, Pavia in 1485, Venice in 1486, and Florence in 1527.<sup>71</sup> Blažina Tomić points out that the Ragusan Republic thus became the precursor and role-model of public health measures in Europe.<sup>72</sup>

### *From “God’s Wrath” to Contemporary Scientific Findings*

The prevalence of plague in the Middle Ages was explained as “God’s wrath” against those who committed sins. Therefore, if pestilence was inflicted on people because of their sins, then it was sent by the Almighty, in which case there was nothing left to do but repent for one’s sins and beg for forgiveness. The conviction that plague was the reflection of “God’s wrath” against human misdeeds was also firmly rooted in the medieval understanding of the contagion in the West.

During the epidemic outbreaks, it was observed that there were people who did not get sick, but also people who survived the infection. In that context, there is an interesting decision of the Senate, dated 1462, to employ twenty women who survived the plague in the Lazaretto (the recovered or *resanatae*, because they were not in danger of contracting the infection), which at least indicated the comprehension of acquired immunity.<sup>73</sup>

However, 1894 was the watershed year for identifying the disease because its causative agent, that we today call *Yersinia pestis*, was isolated, but antibiotic treatment that resulted in a cure did not start before the 20<sup>th</sup> century. Nevertheless, the mortality rate can be as high as 50% even today. Buklijaš stated that “from an invisible danger, the plague became an illness like any other”.<sup>74</sup> It became extinct in Europe a long time ago, but it still festers in focal points around the world and cannot be rooted out completely, so the Croatian Institute of Public Health issued a warning in 2017 about the plague epidemic in Madagascar and warned all those travelling to that region.<sup>75</sup> Today, the plague, with cholera and yellow fever, is one of three diseases for which international quarantine measures are proscribed.<sup>76</sup>

<sup>67</sup> V. BAZALA, *Bolesti i pošasti*, pp. 27-41.

<sup>68</sup> In 1966, Dubrovnik Municipal Assembly decided to establish a company for disinfection, fumigation, and pest and rodent control, called SANITAT, that still exists today under that name and that was, until 2013, located in the Lazaretto at Ploče. Retrieved from: <http://www.sanitat.hr/hr/o-nama-povijest-sanitata>

<sup>69</sup> Croatian historian of medicine, who spent her working life in Montreal, and devoted special attention to research of the history of medicine in Dubrovnik.

<sup>70</sup> Z. BLAŽINA TOMIĆ, *Kacamorti i kuga: Utemeljenje i razvoj zdravstvene službe u Dubrovniku*. Zagreb, 2007, p. 93.

<sup>71</sup> A. G. CARMICHAEL, *Plague and the poor in renaissance Florence*. Cambridge University Press, 1986, p. 122.

<sup>72</sup> Z. BLAŽINA TOMIĆ ZLATA - V. BLAŽINA, Dubrovnik, preteča javnih zdravstvenih mjera u Europi, *Hrvatska revija* 3, Zagreb, 2016. Available at: <http://www.matica.hr/hr/492/dubrovnik-preteca-javnih-zdravstvenih-mjera-u-europi-26077/> (information accessed on: 14. August 2018).

<sup>73</sup> J. BAKIĆ, Dubrovnik – grad najvrjednije higijensko-sanitarne.

<sup>74</sup> T. BUKLIJAŠ, *Kuga: nastajanje identiteta bolesti*, pp. 90-94.

<sup>75</sup> *Epidemija kuge na Madagaskaru*. Croatian Institute of Public Health. Available at: <https://www.hzjz.hr/sluzba-epidemiologija-zarazne-bolesti/epidemija-kuge-na-madagaskaru/> (information accessed on 25 August 2018).

<sup>76</sup> S. FATOVIĆ-FERENČIĆ, *Konceptualizacija i istraživački potencijal*, pp. 499-514.



Fig. 5. Lazareto before the 2018 restoration (photograph: Institute for Restoration of Dubrovnik)

Contemporary research started 50 years ago, when it was noted that human defence system was important in fighting the infection. Host genetic factors play a key role in determining differential susceptibility to major infectious diseases, such as malaria, AIDS, tuberculosis. Each causative agent of infectious disease, when it attacks a human being, has its entry point and it attaches to target tissues in a specific way. If that changes, the causative agent becomes disabled and cannot cause an infection. Therefore, accidental changes in human genes that control development, build and function of those entry points and target tissues have the potential to disable the causative agent when it attacks a person.<sup>77</sup>

Throughout human history, infectious diseases were conclusively the leading cause of death in humans. During childhood it was diseases like pneumonia, diarrhoea, malaria, while in adulthood it was tuberculosis, plague and cholera. It is absolutely clear that they had the greatest influence in the human genome formation. Infectious diseases systematically killed all people who did not have the “protective mutation” that somehow protected them from contracting the disease.<sup>78</sup> Since the above-mentioned findings, leprosy, plague and the disease of Mljet, which left a powerful mark in history, again became the focal point of scientific interest of numerous scientists who were studying the human genome.

<sup>77</sup> A. V. S. HILL, Aspects of genetic susceptibility to human infectious diseases, *Annual review of genetics* 40, 2006, pp. 469-486.

<sup>78</sup> M. SMOLJANOVIĆ, *Utjecaj srednjovjekovnih epidemija kuge na učestalost mutacije CCR5del32 u izoliranim populacijama hrvatskih otoka*. Doctoral dissertation. School of Medicine, University of Split 2007.

The study of “the 20<sup>th</sup> century plague” (AIDS) proved that gene mutation was responsible for the development of resistance to the HIV<sup>79</sup> virus infection, but also the development of bacterial infection that causes plague. It was found in persons who come from regions where plague was prevalent in the past, i.e. in Europeans. A person can be heterozygous (possessing only one mutation inherited from one parent, and such a person can probably get infected, but only with a milder form of the disease) or homozygous (possessing both alleles of this gene mutation, so they would not get infected). Croatian scientists got involved in proving this thesis by studying local island populations. The island population was suitable for genetic research because they are characterized by a high degree of genetic isolation and consanguinity. Smoljanović et. al. studied the frequency of the above-mentioned mutation in Komiža on the island of Vis, on the islands of Lastovo, Susak and Rab, but they did not succeed in proving the linkage between plague and the said mutation.<sup>80</sup> It should be pointed out that this thesis is still being researched and it is not completely rejected.

Research conducted by Croatian scientists in 2011 analysed parts of gene mutations linked to the risk of contracting leprosy (polymorphism) in order to scientifically prove the claim that Mljet was really used as quarantine for leprosy patients. This was the first study of genetic sensitivity for leprosy in European population, as well as the first research based on the historic fact of the existence of a leprosarium in an isolated population. Results of this study found that exposure to leprosy, i.e. being afflicted or dying from leprosy on the island of Mljet during a longer period of time,<sup>81</sup> resulted in the selection of “protective” allele in the said gene, while in the population in both controlled groups (where the leprosarium did not exist in the past) this selection was not detected. The scientific thesis that host genetic factors play a key role in different clinical response to infections was confirmed, i.e. that infectious diseases systematically kill all persons who did not have the “protective” mutation that somehow protected them from contracting the disease, or made them less susceptible to the disease. Only people who had this “protective” mutation survived.<sup>82</sup> Therefore, it wasn't until the 21<sup>st</sup> century that the legend about the island of Mljet as the quarantine for leprosy victims was scientifically confirmed.

Contemporary development of science, technology and laboratory methods facilitates new findings about causative agents, but also consequences of their effect on human genetic makeover. In order to acquire new knowledge, we need an intense cooperation between scientists who have different scientific interests. It can be said that scientific and scholarly activity of all global scientists has one common goal, which is to help as much as possible in early detection of causes and clinical symptoms of certain diseases, as well as an effective therapy with as little negative consequences as possible. They contribute to the humanization of diagnostic and therapeutic procedures, understanding of victims and protection of their human rights.

<sup>79</sup> CCR5del32 gene mutation on chromosome 3, prevents the HIV virus from entering the leucocyte cell, and because of it the leucocyte cell does not excrete the so-called chemokine receptors and the virus does not have a place to enter, i.e. such persons are resistant to infection and do not contract the disease. (From: T. R. O'BRIEN - CH. WINKLER - M. DEAN - J. A. E. NELSON - M. CARRINGTON - M. NELSON - G. C. WHITE, *HIV-1 infection in man homozygous for CCR5del32*. Lancet, 1997, pp. 349, 1219).

<sup>80</sup> M. SMOLJANOVIĆ - S. RISTIĆ - C. HAYWARD, Historic exposure to plague and present-day frequency of CCR5del32 in two isolated island communities of Dalmatia, Croatia. *Croatian Medical Journal* 47, Zagreb, 2006, pp. 579-584.

<sup>81</sup> Considering the long reproductive cycle, humans need a protracted period of time for adjustment, unlike other species that reproduce rapidly, such as bacteria, viruses and insects. They are able to change their inter-species genetic material in just a few dozen generations for which they do not require a lot of time. Humans, on the other hand, do not possess such a potential, so a period of several centuries represents enough time for natural selection to affect the gene frequency in human population. (From: M. SMOLJANOVIĆ, *Utjecaj srednjovjekovnih epidemija*).



Stigmatization<sup>83</sup> was often associated with the disease, which is evident from the way leprosy victims were treated. In that sense, stigmatization was based on the concept of sin and sinfulness, and excommunication was justified by the danger posed to the entire community, however it created an added sense of guilt and feeling of shame in the victims. This was an early example of separating victims from healthy communities, and at the same time an example of early strategies of protection against infectious diseases.<sup>84</sup> Stigma associated with leprosy left a powerful imprint in collective memory, so other diseases that appeared in latter periods which could not rationally be explained, were often equated with that disease. The disease of Mljet is one such example that the population called the plague, and some late 19<sup>th</sup> c. researchers also qualified it as such. In historiography, the first excellent description of this disease was provided in 1826 by Luko Stulli, a physician from Dubrovnik who clearly differentiated it from infectious diseases, emphasizing its hereditary component and epidemiological prevalence on the island.<sup>85</sup> But, despite that fact, the population continued to believe it to be connected to sin. Hence, a popular belief persisted that the disease could only be prevented by forbidding marriage i.e. *by destroying the seed that the curse was hanging over*.<sup>86,87</sup>

Today, it would be difficult to imagine how leprosy victims felt, condemned to “death before dying,” as well as their families.<sup>88</sup> All scholarly and scientific papers written about the study of leprosy, the plague and all other diseases are often stark, they discuss numbers and scientific facts and neglect the infected person, their feelings, fears and the emotional aspect of their family. However, art was always connected to human destinies (and diseases) from which it drew inspiration for its works. Art and artists are able to intimately relate to human beings, and make their suffering and fears more familiar to the community at large.

Throughout history, the existence of numerous epidemics, human suffering and constant struggle for life and against death, were expressed in all forms of art. The best literary example is Boccaccio's Decameron, which, according to literary historians, was inspired precisely by events surrounding the plague epidemic from the mid-14<sup>th</sup> century.<sup>89</sup> The epidemic of 1550 in Dubrovnik was recorded by Marin Držić, nicknamed Vidra, the Dubrovnik playwright, in his work entitled *Dundo Maroje*, whose plot takes place that year: “*This past year there was great infirmity; we are old and decrepit, but still alive*”.<sup>90</sup>

The plague also left a powerful imprint in the visual arts. The best-known example is the depiction of a dance called the *dance macabre* (the dance of death). It is thought that the

<sup>82</sup> A. BAKIJA-KONSUO - R. MULIĆ - V. BORASKA et. al., Leprosy epidemics during history increased protective allele frequency of PARK2/PACRG genes in the population of Mljet Island, Croatia. *European Journal of Medical Genetics* 54, Paris, 2011, pp. 548-552.

<sup>83</sup> The term stigma is mostly used to warn about individuals being excommunicated, i.e. forced into isolation from the community for a misdeed or an attribute that the society condemned. In ancient Greek, the word stigma (plural: stigmata) signified a puncture, tattoo, mark on the forehead or hands of the fugitive slave (“visible stigmata,” as opposed to “invisible” stigmata that implied suffering, but the wounds are invisible), and then, metaphorically, every personal mark. (From: A. MUZUR, Stigme svetog Franje i drugih svetaca i karizmatika: između čuda i znanstvenog odgovora, *Acta medico-historica Adriatica* 9/2, Rijeka, 2011, p. 293-306).

<sup>84</sup> A. BAKIJA-KONSUO - M. ŽITINSKI - S. FATOVIĆ-FERENČIĆ, A new entity or leprosy imitator - Ethical strongholds in studies on the Mal de Meleda, *Clinics in Dermatology* (ready for publishing), New York, USA.

<sup>85</sup> L. STULLI, *Di una varietà cutanea*. Antologia di Firenze, 1826, fasc. 71-72.

<sup>86</sup> S. BOŠNJAKOVIĆ, Tzv. Mljetska bolest, *Liječnički vjesnik* 53, Zagreb, 1931, pp. 103-113.

<sup>87</sup> A. BAKIJA-KONSUO - M. ŽITINSKI - S. FATOVIĆ-FERENČIĆ, A new entity or leprosy imitator.

<sup>88</sup> In some places, requiem mass was held for leprosy victims, and after the ceremony was over people threw shovels full of dirt on their feet, in order to signal that they were indeed buried. The infected were permitted to leave their shelters only on certain days, and when they went out they had to wear special clothes, a black mantle with two white hands on their chest and a black hat with a white ribbon, to be seen from a distance. They had to announce their arrival with a trumpet or a rattle. They were forbidden to enter taverns and churches, and when they wanted to buy items in shops they had to point at them with a stick. They were also forbidden to talk to all healthy people. (From: H. GJANKOVIĆ, Epidemijske bolesti, pp. 83-91)

<sup>89</sup> G. RAVANČIĆ, Historiografija o epidemiji Crne smrti s polovice 14. stoljeća, *Povijesni prilozi* 33, Zagreb, 2007, pp. 195-214.

<sup>90</sup> M. DRŽIĆ, Dundo Maroje, in: M. Muhoberac, *Marin Držić: Dundo Maroje i druga djela*, Vinkovci, 1998, p. 126.

first *dance macabre* was painted in 1424 in Paris, and in mid-15<sup>th</sup> century the genre spread across Europe. These frescoes of skeletons dancing were painted on church, cloister or familial tomb walls. The number of participants was always different, but what is interesting is that it always showed kings and noblemen, priests and peasants together, i.e. representatives of different social classes, emphasizing that death did not care for wealth, social status, gender or age, death afflicts everyone.<sup>91</sup> Ivan Gundulić, the great Croatian baroque poet from Dubrovnik, described it in his poem *The Tears of the Prodigal Son*, pointing out, in the spirit of Catholic restoration, the transience of life and the inevitability of death.

*“Death looks at no one’s face, / It equally oppresses / Poor houses / And royal palaces;/It places side by side and revolves / Old and young, slave and king / Fair crowns, heavy ploughs / Cuts down with one scythe / Beauty, wealth, strength and praise / All break down before its flame/Deaf and blind, indifferent, / Destroys everything in its wake.”*

Even today, artists often inspire the community and sensitize it about certain problems, and diseases.<sup>92</sup> Ten years ago, Victoria Hislop described the life of leprosy victims in her novel *The Island* that was awarded the Newcomer of the Year at the 2007 British Book Awards. She describes the Spinalonga island, off the northern coast of Crete in Greece. This island was a leprosarium from 1903 to 1957. It is a tale of family, love and misfortune, war and desire to survive that leaves a powerful impression on the reader who can almost feel their cry:

*“She knew, even before she visited the doctor, that she had somehow contracted that most dreaded of diseases. The words from Leviticus,<sup>93</sup> read out with more frequency than strictly necessary by the local priest, had resounded inside her head:*

*As the leprosy appeareth in the skin of the flesh, he is a leprous man, he is unclean and the priest shall pronounce him utterly unclean. And the leper in whom the plague is, his clothes shall be rent and his head bared and he shall put a covering upon his upper lip and shall cry ‘Unclean, Unclean!’”*

In contemporary society, art creates not only what we see, hear, read, touch and perceive as an art object, but also an entire “invisible” spiritual world, of inner wealth, knowledge about art, its history, language, rapid and current movements, new ideas and discoveries. It has already been pointed out that leprosy, plague and other diseases that require isolation are extinct in Europe (therefore, there is no need for quarantine), hence the idea about the reconstruction of the Lazaretto to have a cultural-historical function would promote Dubrovnik at the local, regional, national and global level. Art is a creation, a constant need and attempt by man to overcome transience, adversity, illness and death, and to leave a trace of his existence in the inexorable passage of time. Albert Einstein (1879-1955) said a long time ago “creativity is contagious, pass it on.” In the past, infectious diseases represented great danger, they brought misery and a terrible spectre of death, but today, after centuries gone by, a different kind of infection occupies that same space in the Lazaretto, the contagion of creative ideas and projects. In that context, this text discusses the link between the past and the present, and closes the circle between the reason the Lazarettos were built, i.e. stigma and isolation, to the birth of the creative quarter.

<sup>91</sup> T. BUKLIJAŠ, *Kuga: nastajanje identiteta bolesti*, pp. 90-94.

<sup>92</sup> Certain diseases were frequently depicted in one of the newer art forms – film, so autism was the theme of the film *Rain Man* from 1998, directed by Barry Levinson, and Alzheimer’s disease is the subject of *Still Alice* from 2014, directed by Richard Glatzer.

<sup>93</sup> Leviticus is the third book of the *Old Testament* and the Jewish *Tora*, and it contains instructions to Aaron and his sons, members of the Tribe of Levi, who were serving as priests in the desert, and later in the Temple of Jerusalem.

Mauro Bondioli

# The Invention of the Lazarets: Bulwarks Against the Plague in Venice and in the Western Mediterranean

According to a prophetic vision of John the Apostle contained in the Book of Apocalypse, Thanatos will be the last of the four horsemen to herald the impending end of the world and opening of the gates of hell (Fig. 1). When he appears riding a pale green horse – the colour of a corpse – dreadful pestilence will be unleashed and will forever exterminate those few who survived the passage of the other riders: famine and war.<sup>1</sup>

It was not a coincidence that John mentioned Thanatos as the last among those who bring death. Actually, it was a well-known fact that plague did not discriminate between men or women, the rich or the poor, nobility or common folk, Christians, Jews or Muslims. As narrated by the chronicles of that period, and superbly recounted in Boccaccio's *Decameron*, those who could, escaped as far as possible from the infected areas in order to avoid a horrid and sudden death.<sup>2</sup> The only thing left to do for those who were forced to stay in the city, was to remove and bury the bodies of the infected and hope for god's mercy, remedies offered by charlatans or arcane marvels of occult sciences. In those days, appealing to conventional medicine did not help because of its inability to understand a true cause of plague and how it spread.

However, measures implemented by the authorities proved more effective. In that sense, the decision adopted by the Major Council of the Republic of Dubrovnik (1377) to isolate for one-month people, animals and goods that arrive from pestiferous regions, in abandoned locations on the outskirts of the city, represented a first attempt at creating a maritime sanitary cordon and protection from epidemics. With regards to the invention of the lazarettos, as quarantine compounds equipped with public hospitals for treatment of infectious diseases, whose main characteristic was that they were managed by lay organizations and funded by the state, the credit belongs to the Venetian Senate (1423 and 1468). In any case, a new idea about public health based on the culture of health prevention emerged out of these two important historical events. To this day, it still remains the basic principle in the fight against infectious diseases.

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<sup>1</sup> E. SCHICK, *L'Apocalisse. Commenti spirituali del Nuovo Testamento*. Rome, 1984, pp. 86-87. Literature on the argument that is here succinctly discussed is extensive. For a deeper understanding the reader is recommended to study bibliographies related to the titles quoted herein.

<sup>2</sup> R. C. MUELER, Aspetti sociali ed economici della peste a Venezia nel Medioevo, in: *Venezia e la peste*, Venice, 1979, pp. 71-72.



Fig. 1. Four Horsemen of the Apocalypse, woodcut, Albrecht Dürer (c.1496. - 1498.)

### *Plague Pandemics and Maritime Routes*

Despite efforts of historians, we still do not exactly know how many and what kind of epidemics ravaged mankind before the Christian era. This is complicated by the fact that it is not simple, on the basis of the Scriptures, the ancient Chinese, Indian, Hittite, and Egyptian texts or the great poems of Greek literature, to translate different terms used to define infectious diseases with high mortality rates into the contemporary classification of diseases.<sup>3</sup> Also, these documentary sources do not always contain detailed descriptions

<sup>3</sup> W. H. MCNEIL, *La peste nella storia. Epidemie, morbi e contagio dall'antichità all'età contemporanea*. Turin, 1981, p. 74.

of the symptoms, at least until the testimonies of Dionysius the Lamie in the 3<sup>rd</sup> century BC or Dioscorides and Posidonius at the end of the 1<sup>st</sup> century.<sup>4</sup> It is therefore almost impossible to distinguish, among the great epidemics that ravaged mankind for thousands of years, the epidemic that was truly caused by the bacteria *Yersinia pestis*.<sup>5</sup> This uncertainty was also evident in conflicting opinions of 17<sup>th</sup> century physicians. As a matter of fact, they still did not know that three forms of plague – bubonic, septicemic and pneumonic – were actually caused by the same causative agent that could spread and attack the human body in different ways, from the lymphatic to the cardiovascular or the respiratory system.<sup>6</sup>

The first great plague pandemic in the Early Middle Ages, known as the Plague of Justinian, appeared around 541 AD. The disease spread

from the Nile riverbank to the coasts of the Middle East and, in the spring of 542 AD, it struck Constantinople. From the capital of the Byzantine Empire, the centre of international maritime trade, the refugee ships brought with them the transmitter of plague, i.e. the flea of the species *Xenopsylla cheopis*<sup>7</sup> that proliferates in the fur of black rats (Fig. 2).<sup>8</sup> In a relatively short time, the scourge spread throughout the Mediterranean, from the Byzantine provinces in Africa – Tunisia and East Algiers – to Spain; from Italy to the Roman province *Germania prima*.<sup>9</sup> Finally it stopped in France, at the gates of Rheims, thanks to the relic-habit of St. Remigius, that was carried in a procession around the city walls and, as Gregory of Tours relates, it succeeded in creating an insurmountable bulwark.<sup>10</sup> In the next two centuries, the plague continued to ravage the entire coast of the Mediterranean, travelling from port to port, however it did not succeed in penetrating deeper into hinterland. Then the pandemic finally subsided and did not appear in Europe in the following centuries.



Fig. 2. Rat Catcher, Giovanni Grevembroch, *Gli abiti de' Veneziani di quasi ogni età raccolti e dipinti nel secolo XVIII* (BMCVe, Gradenigo Dolfin, 49, vol. IV)

<sup>4</sup> H. H. MOLLARET, Presentazione della peste, in: *Venezia e la peste*, Venice, 1979, p. 11.

<sup>5</sup> The plague bacteria was officially named in 1954, in honour of the Swiss-French bacteriologist Alexandre Yersin who isolated it in Hong Kong in 1894, almost simultaneously with the Japanese bacteriologist Shibasaburō Kitasato.

<sup>6</sup> BMCVe, *Cicogna* 3055.

<sup>7</sup> In 1898, Paul-Louis Simond provided experimental evidence that the oriental rat flea *Xenopsylla cheopis* (it was named by Nathaniel Charles Rothschild and Karl Jordan in 1911), is the transmitter of bubonic plague from rat to rat and from rat to human. However, his discovery was accepted by the scientific community only in 1903. After that, in 1914, A. W. Bacot and C. D. Martin from the Lister Institute in London published a study on the mechanism of the transmission of plague by fleas.

<sup>8</sup> A. W. BACOT - C. J. MARTIN, Observations on the mechanism of the transmission of plague by fleas, in: *Journal of Hygiene, Plague Supplement* 3, Cambridge University press, 1914, pp. 423-439. – D. PANZAC, La peste in Levante. Epidemiologia, diffusione e sparizione, in: *Rotte mediterranee e baluardi di sanità: Venezia e i lazzaretti mediterranei*, (ed. N.-E. Vanzan-Marchini), Milan, 2004, p. 165. – G. COSMACINI, *Storia della medicina e della sanità in Italia: dalla peste nera ai giorni nostri*. Rome-Bari, 2005, p. 8.

<sup>9</sup> J.-N. BIRABEN, *Les hommes et la peste en France et dans les pays européens et méditerranéens*. I, *La peste dans l'histoire*. Paris, 1975, pp. 25-27.

<sup>10</sup> P. BROWN, *Il sacro e l'autorità. La cristianizzazione del mondo romano antico*. Rome, 1996, pp. 80-81.

The plague, however, reappeared around the 1340s. It spread from centres of infection probably located in central Asia along the river Don, and it arrived to the important port of Tana (Rostov-na-Donu) in the Sea of Azov, the destination of convoys of Venetian and Genoese trade galleys. Soon after, following the siege of Caffa in Crimea by the Tartar army, who catapulted over the city walls corpses of soldiers who died of plague, the epidemic spread from the Black Sea to Constantinople.<sup>11</sup>

Of all the possible ways that human beings presented for transmission of the plague bacillus, from camel caravans to armies that war moved from one region to the next, what contributed the most to its transmission was the ship. In that sense, we should point out that to this day historians did not show great interest in clarifying the effective movement of expansion of pandemics in relation to the maritime routes that the galleys and trade ships travelled. Actually, as a rule, the historical analysis was limited to only confirming in general terms the key role that maritime transport played in the spread of plague, and to provide very succinct and unconvincing guidelines.<sup>12</sup> In any case, it is obvious that in the Early Middle Ages the international navigation lines were limited to a small number of major routes that survived after the fall of the Roman Empire and were localized in the Mediterranean. On the other hand, although it still mostly followed coastal lines that were used in Late Antiquity and crossed vast expanses of sea only in small segments, the commercial traffic in the Late Middle Ages greatly intensified and extended to the other side of the Strait of Gibraltar. Only if we take this considerable difference into consideration, can we understand how, from the autumn of 1347 to the first months of 1348, the plague – known as the “black death” – was able to spread so rapidly from Constantinople to the whole of Europe, first through convoys of the Genoese trade galleys and then other international merchant ships. It suffices to say that by 1350, despite the reduction in traffic during winter periods, the plague already spread to the Baltics and the Scandinavian countries.<sup>13</sup>

Unlike the first plague pandemic (6<sup>th</sup> - 8<sup>th</sup> century), the second percolated through Europe for almost four centuries, appearing and disappearing on several occasions, until the 18<sup>th</sup> century. Notoriously bad were the infections that occurred in Venice (1575 - 1577 and 1630 - 1631), Lyon (1628), Montpellier (1629), Milan (1576 and 1630), Nijmegen (1635), London (1665). After the last great epidemic in Marseille in 1720, its virulence gradually abated, but not before, in 1743, it decimated 70% of the Messina population and claimed more than forty-seven thousand victims.<sup>14</sup> Nevertheless, in the first half of the 19<sup>th</sup> century, there were still some infected areas in the Levant countries, the Maghreb, the Balkans, Balearic Islands, Malta and southern Italy.<sup>15</sup>

The third pandemic, unfortunately, assumed even greater proportions than the previous two, because of a broad expansion of maritime trade and the still narrow intercontinental relationships. At first, the plague spread slowly to the Asian hinterland, from the Chinese province of Yunnan (1855) towards Hong Kong (1894), but once it reached the shore it moved with great speed reaching major naval ports throughout the world.<sup>16</sup> The rapid expansion of plague occurred especially because of the progress in naval technology that enabled ships to complete long crossings in shorter periods of time. The old system of propulsion that used rows and sails changed to the mechanical propeller propulsion, using

<sup>11</sup> J.-N. BIRABEN, *Les hommes et la peste*, I, pp. 52-55.

<sup>12</sup> J.-N. BIRABEN, *Les hommes et la peste*, pp. 34-41.

<sup>13</sup> H. H. MOLLARET, *Presentazione della peste*, pp. 12, 14.

<sup>14</sup> G. CARBONARO, *La peste orientale relativamente al sistema delle quarantene*, Naples, 1845, p. 13. – G. MARTINO, *Preserve salutevoli contro il contagioso morbo. Deputazione di Sanità e Lazzaretto di Messina in epoca borbonica*, Rome, 2014.

<sup>15</sup> J.-N. BIRABEN, *Les hommes et la peste*, I, pp. 394, 400, 438-439, 448-449.

<sup>16</sup> A. YERSIN, *La peste bubonique à Hong Kong*, in: *Annales de l'Institut Pasteur* 8, Paris, 1894, p. 662.

steam, gas and diesel ship engines. Penetrating into Europe through Portugal, the disease spread to Hamburg and Marseille, then to Paris in 1920. Luckily, without the slaughter that characterized the previous centuries.<sup>17</sup>

### *Medical Findings and Measures Against the Epidemics*

For centuries, the plague was considered god's punishment for human sins, a supernatural and unavoidable occurrence. As told by the Iliad, the god Apollo sent pestiferous arrows into the camp of impious Achaeans to punish Agamemnon.<sup>18</sup> Yahweh himself, armed the angel's hand with plague and exterminated seventy thousand men of Israel in Jerusalem as punishment for David's insult.<sup>19</sup> The Florentine chronicler Matteo Villani, describing the 1348 plague pandemic, whose victim he would become, considered plague the greatest and deadly punishment from God, more devastating than the flood.<sup>20</sup> That same year, Pope Clement VI, explaining the official position of the Church, and in an attempt to defend the Jews from accusations of spreading the plague by poisoning wells and fountains, said: the plague was not caused by human activity but by natural causes, such as astral influence and God's will.<sup>21</sup> Nevertheless, it was believed for a long time that it was caused deliberately and was related to secret concoctions and deadly ointments that were sprinkled over the clothes of the victims or upon their door jambs. This was the reason behind persecution of witches and alleged perpetrators, who were surely incited by demons, or motivated by abominable personal reasons, or who were paid by some foreigner.<sup>22</sup>

Unlike the magical arts that were prohibited by Scholasticism, the 14<sup>th</sup> century physicians acknowledged rational elements of the Arabic astral science that could provide explanation for the appearance of epidemics.<sup>23</sup> Guy de Chauliac, a physician in the papal residence in Avignon, told Clement VI that the plague appeared in 1348 because there was a grand conjunction of three superior planets (Saturn, Jupiter and Mars), in the sign of Aquarius, which took place on 24 March 1345. Identical interpretation was given by professors at the Sorbonne in Paris who were consulted by Philip IV.<sup>24</sup> Still, the outbreak of the disease might have been caused by the appearance of comets, eclipses, fall of meteors or earthquakes and other natural phenomena. At the end of the 18<sup>th</sup> century, some maudlin person said that an unusual fog that occurred in the summer of 1783 was the cause of plague in Dalmatia.<sup>25</sup>

These causes were considered able to create noxious miasma of bodily humours in the air, i.e. of four fluids found in the human organism (black bile, yellow bile, phlegm and blood). Depending on atmospheric and climate changes, the fumes were transmitted by wind and the human body absorbed them through lungs and skin pores. This idea was the result of dictates of ancient people and their pagan doctrines. According to the rational concepts of the School founded by Hippocrates (c. 460 – c. 370 BC), besides social and environmental factors that could determine the appearance of the disease, it was noticed that “while several persons were inflicted with the same disease at the same time, its cause could be attributed to that which is most common and what we most use: the air that we

<sup>17</sup> R. DELORT, La peste ovvero il topo, in: *Per una storia delle malattie*, (ed. J. Le Goff, J. C. Sournia), Bari, 1986, p. 170.

<sup>18</sup> T. KATINIS, *Medicina e filosofia in Marsilio Ficino: il consiglio contra la pestilentia*. Rome, 2007, p. 8.

<sup>19</sup> G. AGAMBEN - E. COCCIA, *Angeli: ebraismo, cristianesimo, islam*. Vicenza, 2009, p. 129.

<sup>20</sup> M. BRUNETTI, Venezia durante la peste del 1348, u: *L'Ateneo Veneto* 32, vol. II, fasc. 1, Venice 1909, p. 28-29.

<sup>21</sup> A. FOA, *Ebrei in Europa: dalla peste nera all'emancipazione XIV-XIX secolo*. Rome-Bari, 1999, p. 10.

<sup>22</sup> S. CANTÙ, *Storie minori*. II. *Storia di Milano. La Lombardia nel secolo XVII. Parini e il suo secolo*. Turin, 1864, pp. 362-402.

<sup>23</sup> N. WEILL-PAROT, La rationalité médicale à l'épreuve de la peste: médecine, astrologie et magie (1348-1500), in: *Médiévales*, 46/2004, pp. 74.-75.

<sup>24</sup> G. COSMACINI, *Storia della medicina*, p. 19.

<sup>25</sup> G. BAIAMONTI, *Storia della peste che regnò in Dalmazia negli anni 1783-1784*. Venice, 1786, p. 65.

breathe.” In the Roman era, Galen (c. 130 – c. 200 AD) developed an additional theory on causes of corrupt air, indicating general conditions such as warm and humid climate as the source of plague, and those more particular, like unburied dead bodies, outpouring of stagnant waters and any other conditions that might lead to putrefaction and corrupt the air. But, even more importantly, Galen thought that nutritional regimen and sanitary-hygienic discipline were the correct ways of preventing the disease. That was how he explained the reasons why some who were weak, unclean and malnourished were getting sick, while others who were healthy, clean and strong, were not. Galen actually created the foundation of our knowledge of the way our immune system functions as a natural defence mechanism.

Following the miasmatic theory, the physicians of that time advised air purification by burning incense sticks indoors; carrying bags with fragrant substances; closing the windows and covering them in wax canvas and opening them only when cold northern winds were blowing. Also praised were benefits derived from blood-letting and purging in order to prevent putrefaction and corruption of bodily fluids, and abstinence from any form of physical exercise was urged, including sexual activity because it increased the amount of air breathed in through the lungs and it opened the skin pores.<sup>26</sup> In November 1630, while Florence was ravaged by the plague, health officials literally ordered the streets through which the procession organized to invoke divine benevolence passed, be sprinkled with “fragrant herbs.”<sup>27</sup>

In terms of the 1348 plague, the scholastic medicine, that was taught at universities from the beginning of the 13<sup>th</sup> century when medieval medicine started to be configured in the theoretical-practical form that enabled it to aspire to assume the role of a cognitive and operative *scientiae*, still demonstrated its utter inability to confront urgent cases of epidemics and to propose effective practical remedies. Although the scientific theory of the Hippocrates-Galen era was not questioned until the mid-15<sup>th</sup> century, it slowly started to give way to the more pragmatic and “wise measures” of preventive protection introduced by some governments.<sup>28</sup> As we would later see, Dubrovnik and Venice would become the first port cities to adopt more suitable protection measures, such as isolation of the victims in quarantine. Therefore, they introduced measures that tried to avoid contact with foreigners suspected of spreading the disease, as well as with their possessions, from clothes to goods. Contact with victims also had to be avoided because, as Boccaccio writes, even a conversation with the victims or touch of their hands or items, could lead to death.

Only after the end of the 15<sup>th</sup> century, could this new “contagion model” find theoretical justification and rely on scientifically accepted medical literature. New medical opinions adjusted old theories to directly acquired practical experiences and overturned the role of corrupt air: as the causative agent of the disease and the vehicle of transmission. Fundamental, in that sense, was the work of Fracastoro, a physician from Verona who added his original thinking to the previously acquired knowledge, and in 1546 defined the disease as an infection that is transmitted from one object to the other, and determined the causative agents as tiny living particles capable of reproduction. Despite his brilliant intuition, a precursor of the germ theory, these ideas were still influenced by the miasmatic theory. Actually, according to Fracastoro, these particles evaporated from the victim’s body because of the process of putrefaction and, spreading through the air, they infected the healthy person by “sticking” to inanimate objects and were then transmitted to the person through contact.<sup>29</sup>

<sup>26</sup> A. ZITELLI - R. J. PALMER, *Le teorie mediche sulla peste e il contesto veneziano*, u *Venezia e la peste*. Venice, 1979, pp. 21-24.

<sup>27</sup> C. CIPOLLA, *Contro un nemico invisibile. Epidemie e strutture sanitarie nell'Italia del Rinascimento*. Bologna, 1986, pp. 190-191.

<sup>28</sup> G. COSMACINI - M. MENGHI, *Galenò e il galenismo. Scienza e idee della salute*. Milan, 2012, pp. 123-130.

<sup>29</sup> A. ZITELLI - R. J. PALMER, *Le teorie mediche sulla peste*, p. 24.



Although the enemy continued to be invisible and still did not have a name, it was possible to confront it thanks to these new ideas. The “sticky” particles could be removed, not just from objects but from houses of plague victims and from ships anchored in the port, by using vinegar disinfectant. Victims’ clothes and possessions would be burned following the example of Hippocrates who, the story goes, saved Athens from plague using fire. Moreover, after the end of the 15<sup>th</sup> century, it became customary to put letters through scented vapours before opening them.<sup>30</sup> With regards to other types of goods that the health officials recorded in long lists, such as, for example, any type of fabric made of vegetable fibres, leather, carpets and books, they would have to be removed from packaging and disinfected, then the lazaretto porters would turn them over using bare hands, move several times and leave in the open for a few days.<sup>31</sup>

### *La Serenissima Health Policy and the Fight Against the Epidemics*

In the 12<sup>th</sup> and 13<sup>th</sup> centuries in the West, places for accommodation and refreshment of travellers were emerging near monasteries and along transit pilgrimage routes. This hospitality concept was also extended to the poor, the infirm and the most destitute in general, offering spiritual and material assistance to pilgrims travelling to holy Christian sites.<sup>32</sup> Even though the Church emphasized on several occasions, in the councils held between 1212 and 1312, the religious nature of hospitals and its prerogative to provide care, the process of secularization of this sector had already started. This was especially happening in urban centres where the society was articulated in a more complex manner and where, at the initiative of various organized groups, the number of hospitals and small private hospices was on the rise.<sup>33</sup>

In that sense, there were many religious orders and lay confraternities in Venice, founded with the aim of providing care and mutual assistance, who managed hospices and hospitals. However, in 1347, these structures became so numerous in urban settlements that the Great Council prohibited the foundation of new monasteries and hospitals in cities, and relegated them to peripheral areas in the lagoon.<sup>34</sup> Reasons for passing this measure were not only connected to the fact that they would have taken vital space from the city, but also because of the increased danger they might become perilous breeding grounds for infectious diseases inside the populated urban centre.<sup>35</sup> Next year, the Serenissima tried to deal with the state of emergency caused by the contagion by creating a temporary magistracy composed of three wise men. Unfortunately, the initiative proved impotent in protecting public health and it concluded its activity by removing and burying dead bodies, afraid of the miasma that emanated from them.<sup>36</sup> After the epidemic subsided the magistracy was disbanded.

Sometime in the middle of the next century, different project were trying to establish permanent institutions that could act preventively, not only during plague outbreaks. However, after the immediate crisis was averted each similar decision would always be rejected in order to avoid unnecessary expenditure. After the horrendous plague in 1485, the Senate again decided to establish a health magistracy composed of three noblemen.

<sup>30</sup> C. RAVASINI, *Documenti sanitari, bolli e suggelli di disinfezione nel passato*. Turin, 1958, pp. 13-20.

<sup>31</sup> N.-E. VANZAN MARCHINI, *Le pratiche di espurgo*, u: *Venezia e la peste*, Venice, 1979, pp. 112.-113.

<sup>32</sup> B. GEREMEK, *La piet  e la forca. Storia della miseria e della carit  in Europa*. Rome-Bari, 1986, p. 13.

<sup>33</sup> J. AGRIMI - C. CRISCIANI, *Carit  e assistenza nella civilt  cristiana medievale*, in: *Storia del pensiero medico occidentale*, I, *Antichit  e Medioevo*, (ed: M. D. Grmek), Rome -Bari, 1993, p. 242.

<sup>34</sup> ASVe, *Maggior Consiglio*, reg. 17, c. 152r.

<sup>35</sup> N.-E. VANZAN MARCHINI, *Venezia e l’invenzione del Lazzaretto*, in: *Rotte mediterranee e baluardi di sanit : Venezia e i lazaretti mediterranei*, Milan, 2004, p. 22.

<sup>36</sup> ASVe, *Maggior Consiglio*, reg. 17 c. 154v.



Fig. 3. Cleaning the Sewers at Night, Giovanni Grevenbroch, *Gli abiti de' Veneziani di quasi ogni età raccolti e dipinti nel secolo XVIII* (BMCVe, Gradenigo Dolfin, 49, vol. IV)

However, again this magistracy was disbanded after the epidemic subsided. In 1490, the authorities finally reached a decision about preventive measures and the Health Office started operating as a permanent body. If we compare it with the situation in northern Europe, this was an early decision, however it still lagged behind the measures taken by the Duchy of Milan, where the Health Office existed since the mid-century.<sup>37</sup>

As we learned, it was still believed even in the late 15<sup>th</sup> century that the plague could be spread spontaneously, not only because of the decomposition of dead bodies, but from stagnant waters, accumulations of foul-smelling rubbish and rotten food. This is why the Venetian health officials (*Provveditori alla Sanità*) worked with the Magistracy of the Waters and municipal officials to prevent

the obstruction of the lagoon and the canals, and ensuring the regular influx of water to prevent its stagnation; to maintain urban cleanliness and removal of rubbish; provide protection measures against pollution of urban wells; regulate hygienic-sanitary rules related to the freshness and quality of foodstuffs; supervise the homeless and the beggars (Fig. 3). The health officials also started issuing health certificates (*fedi di sanità*) that verified conducted examinations and registered each death that occurred in the city.<sup>38</sup> In 1556, because of the expansion of responsibilities of the Health Office related to social affairs and public health, another two noblemen were added in the capacity of overseers (*Sopraprovveditori*).<sup>39</sup>

Over time, health officials tried to strengthen preventive measures and suppression of epidemics. They were no longer limited to removal and burial of dead bodies. In cases of suspicious death, they would conduct detailed investigations, evacuate houses of the victims and disinfect them with sulphur, myrrh and resin, then whitewash them in lime or wash them with water and vinegar.<sup>40</sup> Therefore, the Health Office was getting more authority and it could, among other things, accuse and convict transgressors of the health rules, and in case of an epidemic, it could even confiscate houses owned by the nobles and turn them into warehouses for storage of goods that was supposed to be disinfected or for hosting the “*pizzigamorti*” who handled bodies and possessions of plague victims (Fig. 4). The latter were often criminals released from prison or ordinary, desperate people

<sup>37</sup> R. J. PALMER, *L'azione della Repubblica di Venezia nel controllo della peste*, in: *Venezia e la peste*, Venice, 1979, p. 105.

<sup>38</sup> R. J. PALMER, *L'azione della Repubblica di Venezia*, p. 106.

<sup>39</sup> R. C. MUELLER, *Aspetti sociali ed economici*, p. 92.

<sup>40</sup> R. J. PALMER, *L'azione della Repubblica di Venezia*, p. 106.

who would not hesitate to throw themselves on piles of dead, or still living, bodies or burn furniture, doors and windows of houses given them for lodging, in order to have firewood to warm themselves.<sup>41</sup>

From the first half of the 16<sup>th</sup> century, one official was permanently employed in the castles on the Lido looking after maritime protection, he had to keep records of all pestiferous areas and could interrogate passengers aboard ships that were coming into the port. The vessels that arrived from infected areas were carefully inspected and their logbooks controlled. After people and goods were sent to the lazaretto for quarantine, guards stayed aboard the ships in order to prevent possible theft or to prevent someone from becoming infected by boarding the ship.<sup>42</sup>



Fig. 4. Pizzigamorto, Giovanni Grevembroch, *Gli abiti de' Veneziani di quasi ogni età raccolti e dipinti nel secolo XVIII* (BMCVe, Gradenigo Dolfin, 49, vol. II)

The Health Office also established a system of information gathering in the city, based on secret reports, signed or anonymous, that were usually rewarded with a percentage of the monetary fine imposed upon the perpetrator. They also constantly monitored the sanitary conditions in locations on the mainland or overseas that were frequented by Venetian merchants. Ambassadors and Rectors on the mainland and overseas gradually assumed a more important role, so that after 1528, they had to send daily reports to Venice when epidemics appeared in their jurisdiction or when they learned of epidemics in other locations. From the 16<sup>th</sup> century, the cooperation between Health Offices in different states became normal, they exchanged information about the development and movement of epidemics. Health officials could finally count on international intelligence that excelled in Europe for its effectiveness and total absence of moral or religious obstacles. Identities of secret agents, called “health investigators” in documents, were sometimes hidden.<sup>43</sup>

### *Invention of the Lazarettos*

A little over a month after the death of the 80-year-old Tommaso Mocenigo, who died on 4 April 1423, the new Venetian Doge Francesco Foscari was confronted with another plague epidemic. All the wealth and maritime power of the Republic, proudly expressed in the so-called political testament of his predecessor, were, in fact, seriously imperilled

<sup>41</sup> BMCVe, PD C 941, doc. 106

<sup>42</sup> R. J. PALMER, *L'azione della Repubblica di Venezia*, p. 106.

<sup>43</sup> P. PRETO, *Lo spionaggio sanitario*, in: *Rotte mediterranee e baluardi di sanità: Venezia e i lazaretti mediterranei*, (ed. N.-E. Vanzan Marchini), Milan, 2004, pp. 69-73.

by the waves of plague that appeared at the city gates almost every year.<sup>44</sup> Besides, with the final defeat of Genoa after the end of the War of Chioggia and Tanedo (1378-1381), Venice now assumed almost total control of commercial exchange with the Levant. Locations that the Venetians drew greatest profits from by importing spices, silk and other valuable goods, simultaneously selling and trading western products, were constantly in contact with the epidemic focal points. This is why Venice was the port most exposed to the danger of contagion in the Christian Mediterranean.<sup>45</sup>

Despite strong internal opposition, probably because of worry of negative repercussions for the Republic's economy, the Venetian Senate succeeded, on 28 August 1423, to promulgate a regulation that was ratified by the Great Council on 10 October, by which it prohibited access to the city to foreigners coming from pestiferous regions and decided to build a new hospital on the outskirts of the lagoon, with at least 20 rooms, intended to receive infected persons coming from Venice and the nearby islands, and as quarantine for equipment, travellers and goods (Fig. 5).<sup>46</sup>

These precautionary measures related to isolation were arrived at gradually. At first, in 1348, Genoa refused landing to the survivors<sup>47</sup> who came aboard galleys from the Black Sea where, as far as they knew, an unknown disease of unprecedented virulence raged.<sup>48</sup> It seems that in 1374, Venice made a similar decision to that of Genoa.<sup>49</sup> That same year Bernabò Visconti tried to find an intermediate solution, and he imposed a period of ten days in quarantine for those who arrived from locations that were suspected of infection and who intended to enter the city of Reggio Emilia. The obligation to spend some time in isolation in secure locations on the periphery of the city seemed a good compromise between governments of cities struck by epidemics who were always reluctant to officially declare the epidemic, uncertain about what to do: protect their own financial and trade interests or public health.<sup>50</sup> In any event, any measure would inevitably have negative effects that would be compounded by the damage caused by noblemen, merchants, dignitaries, physicians, even ordinary public administration officials fleeing to rural regions. A depopulation that actually restricted economic activities and impeded the authorities from managing a difficult and urgent situation.<sup>51</sup>

So, in accordance with the policy of great caution, that nevertheless still clearly indicates a change from the policy of reaction to the policy of prevention, the Major Council of the Republic of Dubrovnik was the first Mediterranean port to establish, on 27 July 1377, an obligation to sequester persons, merchandise and animals coming from infected areas by sea or land, in quarantine for one month. At first, this time was spent on the island of Mrkan, in wooden barracks that were supposed to be burned after the epidemic subsided,

<sup>44</sup> U. TUCCI, *L'economia veneziana*, in: *Storia della civiltà veneziana*, 2, (ed. V. Branca), Florence, 1979, p. 159. – G. GULLINO, *Il patriziato*, in: *Storia di Venezia. Dalle origini alla caduta della Serenissima*, IV, *Il Rinascimento: politica e cultura*, (ed. A. Tenenti, U. Tucci), Rome, 1996, p. 396.

<sup>45</sup> P. SELMI, *Il magistrato alla sanità*, in: *Difesa della sanità a Venezia, secoli XIII-XIX*, Venice, 1979, p. 32. – N.-E. VANZAN MARCHINI, *Venezia e l'invenzione del Lazzaretto*, p. 17.

<sup>46</sup> ASVe, *Senato, deliberazioni, misti*, reg. 54, c. 140v. – ASVe, *Maggior Consiglio*, reg. 22, c. 54r. With this regulation the Senate assigned lay persons who would manage the hospital at the Republic's expense: a male or female prior, three female assistants and one or two physicians (N.-E. VANZAN MARCHINI, *Venezia e l'invenzione del Lazzaretto*, p. 19). At the end of the 15<sup>th</sup> century, the function of the lazaretto prior was given, as a privilege, only to the person who could prove the *status* of a native citizen. (A. ZANNINI, *L'impiego pubblico*, p. 449.)

<sup>47</sup> Despite high mortality rate of the plague and the speed with which it attacked, some managed to survive, probably thanks to their genetic characteristics that made them immune (J. KELLY, *La peste nera*. Casale Monferrato, 2005, p. 39).

<sup>48</sup> J.-N. BIRABEN, *Les hommes et la peste*, I, p. 56.

<sup>49</sup> J.-N. BIRABEN, *Les hommes et la peste en France et dans les pays européens et méditerranéens*. II, *Les hommes face à la peste*, Paris, 1976, p.174.

<sup>50</sup> G. CARBONARO, *La peste orientale*, p. 5.

<sup>51</sup> R. C. MUELLER, *Aspetti sociali ed economici*, p. 72, 79. Faced with the constant flight of officials, physicians and notaries who abandoned public offices, the Great Council of Venice ordered their immediate return in 1348, threatening to strip them of their duties (M. BRUNETTI, *Venezia durante la peste*, pp. 18-19).



Fig. 5. Lazzaretto Vecchio, drawing, 1813, acquired from the 1597 relief (ASVe, Magistrato di Sanità Marittima, Lazzaretti, Disegni, b. 60)

or in the town of Cavtat for those who arrived from the Balkan hinterland by caravan.<sup>52</sup> With the same measure, the government also prohibited everyone from accessing isolated areas, in order to avoid any contact with the healthy population. Therefore, those who intended to take supplies and other necessities to quarantined persons had to previously request permission from the competent authority to avoid the risk of punishment by imprisonment in the same location for one month.<sup>53</sup>

The quarantine, as a precautionary measure for ships was well known to the Venetian Senate, so it not only adopted the measure that same year but, following the advice of its physicians, it even decided to extend the isolation from 30 to 40 days. The Hippocratic doctrine considered 40 days the final period for the manifestation of acute illnesses such as the plague.<sup>54</sup>

The decision by the Major Council of Dubrovnik, by which the ships were required to be isolated on an island for a certain period, definitely has primacy because it paved the way for prevention in maritime health with the aim of countering the plague. However, the Venetian Senate is owed primacy for the decision of 28 August 1423, on the foundation of the first public hospital managed by a lay organization at the expense of the state,<sup>55</sup> located at the outskirts of the capital city. In that sense we should remember, as was previously stated, that on 21 May 1347, Venice already adopted the “policy of *isolating*

<sup>52</sup> Z. JANEKOVIĆ RÖMER, I lazaretti di Dubrovnik, in: *Rotte mediterranee e baluardi di sanità: Venezia e i lazaretti mediterranei*, (ed. N.-E. Vanzan Marchini), Milan, 2004, p. 246.

<sup>53</sup> J. GELČIĆ, *Delle istituzioni marittime e sanitarie della Repubblica di Ragusa*. Trieste, 1882, p. 139.

<sup>54</sup> J.-N. BIRABEN, *Les hommes et la peste*, II, p. 174.

<sup>55</sup> In that sense, the 1397 decision by the Major Council of the Republic of Dubrovnik to turn the old monastery on the island of Mljet into accommodation for those who had to be isolated for thirty days before entering the city, cannot be interpreted as “the first (anti-plague) lazaretto in the world” (S. F. FABIJANEC, Hygiene and Commerce: The Example of Dalmatian Lazarettos, in: *Ekonomska i ekohistorija* 4, Zagreb, 2008, p. 125. – M. D. GRMEK, Le concept d’infection dans l’Antiquité et au Moyen Age, les anciennes mesures sociales contre les maladies contagieuses et la fondation de la première quarantaine à Dubrovnik - 1377, in: *Rad JAZU* 384, Zagreb, 1980, p. 39. Dubrovnik authorities actually did not establish a hospital on the island, but only temporary shelter that was not very different from that previously mentioned in 1377: “*verumtamen dicti venientes de locis pestiferis per dictum tempus unius mensis, quod debent stare extra Racusium et districtum, si voluerint, possint stare Mercanae, vel in Monasterio Melitae*” (J. GELČIĆ, *Delle istituzioni marittime e sanitarie della Repubblica di Ragusa*. Trieste, 1882, p. 140).

the sick and the poor, giving permission to build new hospitals only on the islands.<sup>56</sup> Moreover, next year, when the epidemic was in full swing, the Great Council of Venice ordered the excavation of mass graves on the islands of San Marco in Boccalama and San Leonardo in Fossamala,<sup>57</sup> designated for plague victims who died in city hospitals and for bodies of beggars who had no permanent residence and lived off charity.<sup>58</sup>

However, such decisions were not part of a clearly defined urban planning strategy whose full development will occur much later.<sup>59</sup> Rather, these urban planning policies were based on completely pragmatic reasons, and were consolidated by the practice of using all available space and moving towards the lagoon all activities that were considered unhealthy, dangerous or even damaging and invasive for the city, with the aim of promoting its demographic, property and production growth.<sup>60</sup> In that sense, decisions adopted by Venice were not that different from those implemented in other medieval continental cities which tended to relegate leprosy victims and bury dead bodies of plague victims outside the city walls.<sup>61</sup> On the other hand, the Augustine monastery of Santa Maria di Nazareth was already being built on the island that was chosen for the new hospital, it was previously used as a sanctuary for pilgrims who travelled to or were coming back from the Holy Land, and was located near the leprosarium on the island of San Lazzaro.<sup>62</sup> Still, logistically this position was not ideal, because shallow surrounding waters prevented large ships from directly accessing the island and crew and passengers were unable to disembark and unload the merchandise.<sup>63</sup> This disadvantage was resolved by using small transit boats as shuttles that connected ships anchored in city ports and the lazaretto.

Soon after, following new epidemic outbreaks, it became evident that one hospital was insufficient for a city the size of Venice, despite the fact that it was decided to add 80 rooms in 1429, so a bequest of the benefactor who wanted to build another hospital in the district of Cannaregio was redirected to a different part of the city.<sup>64</sup> In particular, they had to confront the problem of accommodating those persons who, because of their contacts with the infected were only suspected of plague and were later shown to be healthy, or persons who, during their stay in the hospital of Santa Maria di Nazareth recovered from plague and could surely not remain in close contact with the sick and risk getting the disease again.<sup>65</sup> Besides, they needed to find a more spacious location for large quantities of goods that had to be disinfected, possibly far away from the sick who were located in the old lazaretto. This is why on 18 July 1468, the Great Council decided to build another hospital.<sup>66</sup>

<sup>56</sup> R. C. MUELLER, *Aspetti sociali ed economici*, p. 84.

<sup>57</sup> Other islands were designated as burial grounds, such as the island of San Giorgio in Alega e Sant'Erasmo (S. ROMANIN, *Storia documentata di Venezia*. III, Venezia, 1855, p. 155). Osteological remains of a countless number of bodies that were buried during the black plague of 1348 were discovered in the summer of 2001, during archaeological excavations conducted in the Venetian lagoon near the submerged island of San Marco in Boccalama, that the author of this text participated in as a historical-technical consultant for the study of the wreck of a galley found near the island. (G. CANIATO, *L'isola e la galea*. I documenti d'archivio, in: *La galea ritrovata. Origine delle cose di Venezia*, Venice, 2002, p. 97).

<sup>58</sup> ASVe, *Maggior Consiglio*, reg. 17, c. 154v.

<sup>59</sup> A. TENENTI, The sense of space and time in the Venetian world of the fifteenth and sixteenth centuries, in: *Renaissance Venice*, (ed. J. R. Hale), London, 1973, p. 19. – D. CALABI, Città ed edilizia pubblica nel dominio veneziano da mare: modelli, significato civile, linguaggio architettonico, in: *D'une ville à l'autre. Atti del Colloquio Internazionale della École Française di Roma*, 1.-4. dicembre 1986., Rome, 1989, pp. 813-843.

<sup>60</sup> E. CROUZET-PAVAN, La maturazione dello spazio urbano, in: *Storia di Venezia. Dalle origini alla caduta della Serenissima*, V, *Il Rinascimento: società ed economia*, (ed. A. Tenenti, U. Tucci), Rome, 1996, p. 74. – N.-E. VANZAN MARCHINI, Venezia e l'invenzione del Lazaretto, p. 22.

<sup>61</sup> Because of the strong psychological impact caused by looking at victims of leprosy, a disease that is not very contagious but it disfigures the body, around 1262 Venice decided to move the leprosarium that was located in the city since 1196, to the island of San Lazzaro. (N.-E. VANZAN MARCHINI, *L'Ospedale di S. Lazzaro e Mendicanti*, in *La memoria della salute. Venezia e il suo ospedale dal XVI al XX secolo*, (ed. N.-E. Vanzan Marchini), Venice, 1985, pp. 138-142).

<sup>62</sup> Several years later, on 23 September 1431, after the initial allocation of 1,000 to 2,000 ducats for setting up the lazaretto, the Great Council tried to secure financial continuity for the hospital's management, so that it did not only burden the state treasury. So, documents of Venetian public notaries included the obligation to ask the testator, when making a testament, if he wanted to donate his bequest to the charitable work of the lazaretto of Santa Maria di Nazareth (ASVe, *Maggior Consiglio*, reg. 22, c. 88v).

<sup>63</sup> Initially, the Great Council proposed building the hospital in San Nicolò in Lido, a place that was closest to the port and its facilities.

<sup>64</sup> ASVe, *Maggior Consiglio*, reg. 22, c. 78r.

<sup>65</sup> R. J. PALMER, *Lazione della Repubblica di Venezia*, p. 104.

<sup>66</sup> ASVe, *Senato, deliberazioni, terra*, reg. 6, c. 29r.



They chose an island called Vigna murata, overlooking the Sant’Erasmo canal. It was an agricultural property that was used as a vineyard, to which some salt houses were added, as early as the mid-10<sup>th</sup> century. In the next century, the ownership was transferred to Benedictine monks of the island of San Giorgio Maggiore. After its conversion into a plague hospital, the island was given a new name of the *Lazzaretto Nuovo*, in order to distinguish it from the previously built hospital on the island of Santa Maria di Nazareth or the *Lazzaretto Vecchio* (Fig. 6).<sup>67</sup> As conveyed by the long treatise on the government and Venetian administration that was written by an unknown French author around 1500, plague victims stayed confined in the *Lazzaretto Vecchio* until they were cured or they died. Those who were lucky enough to recover were moved to the *Lazzaretto Nuovo* and would remain there for observation for several months before they were allowed to return to the city.<sup>68</sup>

After centuries of activity, the *Lazzaretto Nuovo* became dilapidated and unhealthy and, after various attempts to organize quarantine on other islands, it was replaced in 1793 by a completely new lazaretto on the island of Poveglia (Fig. 7). After the Republic fell into French hands in 1797, the *Lazzaretto Nuovo* came under military supervision and was transformed into housing for the poor. Its exterior was later fortified with embankments and bulwarks. After being used during World War I, it stopped being operational and was abandoned for a long time.<sup>69</sup>

Fig. 6. *Lazzaretto Nuovo*, drawing, Domenico Gallo, 1552 (ASVe, *Savi ed Esecutori alle Acque*, serie Lidi, n. 3-82)

<sup>67</sup> G. MAZZUCCO, Una grangia del monastero di San Giorgio Maggiore di Venezia: l’isola della Vigna Murata poi Lazzaretto Nuovo, in: *Venezia, isola del Lazzaretto Nuovo*, (ed. G. Fazzini), *ArcheoVenezia* 14/1-4, supplement, Venice, 2004, pp. 15-22. In the list of household items and other materials sent to a certain Angelo, physician and prior of the hospital, dated 12 January 1424, we are able to read “lazareto over nazareto,” which means that these two expressions were already synonymous (ASVe, *Provveditori al sal*, atti, b. 6, c. 48r).

<sup>68</sup> *Description ou traicté du gouvernement et régime de la cité et Seigneurie de Venise. Venezia vista dalla Francia ai primi del Cinquecento*. (Ed. Ph. Braunstein, R. C. Mueller), Venice-Paris, 2015, pp. 92-93.

<sup>69</sup> G. CANIATO, Il Lazzaretto Nuovo, in: *Venezia e la peste*, Venezia, 1979, p. 345.

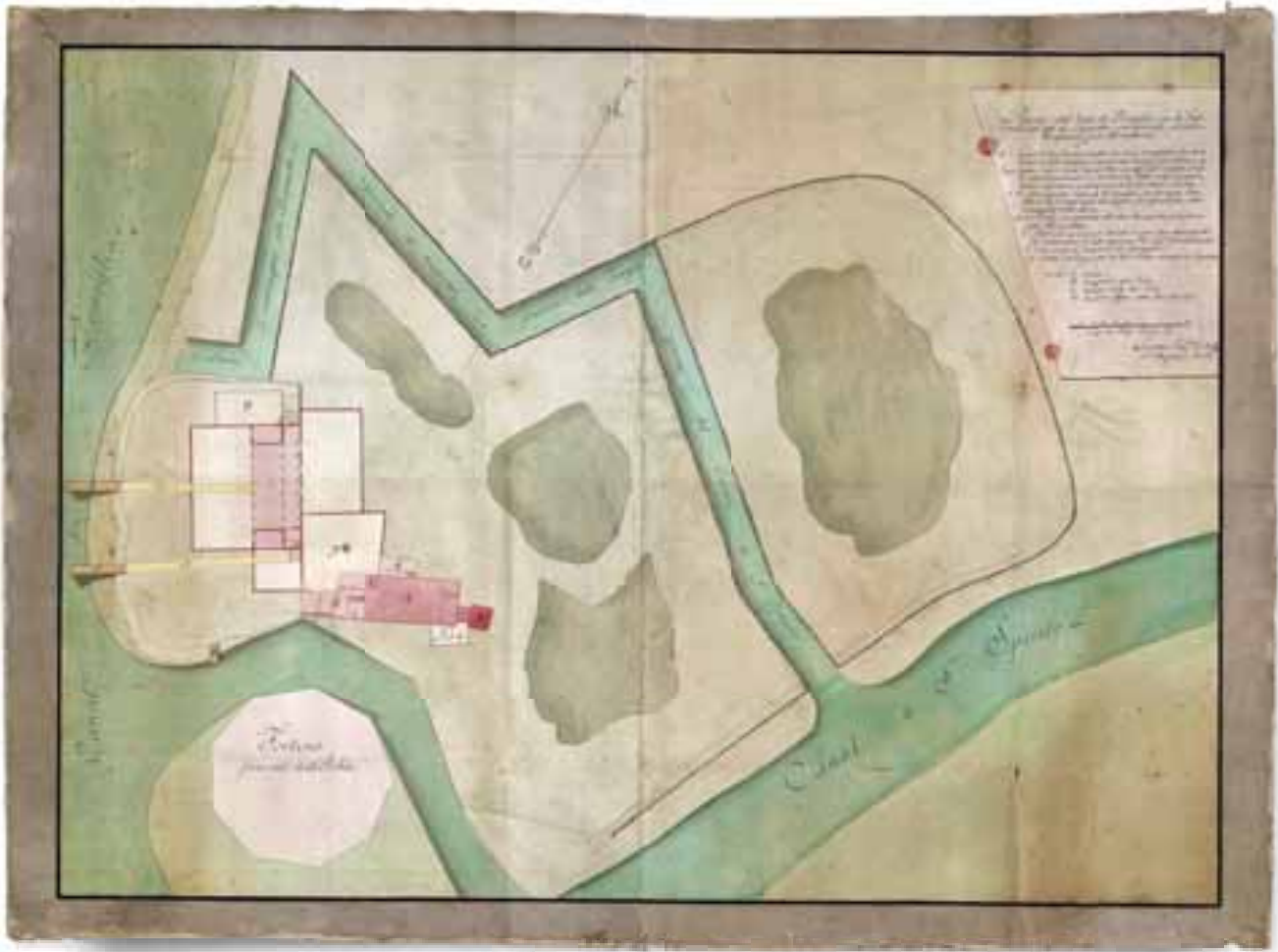


Fig. 7. Plan of the newest lazaretto on the island of Poveglia (ASVe, *Provveditori alla Sanità, Disegni*, b. 60, n. 78)

To conclude, what distinguished the Venetian lazarettos from all previous structures was the fact they were founded in isolated locations as permanent hospitals that were managed by lay organizations and financed by the state, and were intended for treatment of infectious diseases and quarantine of people and goods. It was an unusual fact, even for Venice, because all of its previous hospitals were founded by monastic orders or were built by benefactors, and were always managed by volunteers or the church. Therefore, the difference between monastic-religious care, for centuries the epitome of hospitality and Christian charity, and the type of accommodation and forced isolation that was conducted in the two lazarettos, points to an absolute innovation in the Venetian concept of welfare.<sup>70</sup> Despite the fact that this was unusual, it would not be unreasonable to assume that it was based on the same pragmatic logic connected to the desire to protect the Republic's trade. The same principle that the State, many years ago, based its decision to build an arsenal that would be able to provide permanent protection of its maritime borders and, at the same time, guarantee consistency of the international traffic and commercial galleys that were contracted to private individuals. Significantly different, in that sense, were choices made by the government of Genoa to leave its fate in the hands of private initiative of the maritime trade, limiting its scope of action to passing regulations, but reserving the right to requisition any ship for wartime needs.

<sup>70</sup> N.-E. VANZAN MARCHINI, *Venezia e l'invenzione del Lazzaretto*, p. 19.



From 16<sup>th</sup> century onward, the Serenissima expanded its lazaretto system to areas under its dominion in Dalmatia and Greece, thus moving from the concept of epidemic defence limited to Venice to the concept of protection of all of its territory (Fig. 8).<sup>71</sup>

In time, Venetian lazarettos acquired a certain reputation internationally, primarily thanks to the information about its work conveyed by those who stayed there and experienced it directly or from stories of ambassadors, travellers and merchants.<sup>72</sup> Following the example of Venice similar structures were built in the West (Fig. 9).<sup>73</sup> Likewise, the example of the Venetian health organization that was developed from 15<sup>th</sup> century onwards, became a model for many European states (Fig. 10).<sup>74</sup>



Despite that, we should remind that the mid-18<sup>th</sup> century analysis of the plague epidemic that broke out in Marseille in 1720 cast doubt on the validity of the “model of contagion.” This criticism again proposed old miasmatic theories of air corruption, endangering principles on which the lazaretto and quarantine institutions were founded.<sup>75</sup> On the other hand, the debate about whether plague was really contagious started again during the plague in Malta in 1813.<sup>76</sup> Nevertheless, this kind of thinking did not succeed in influencing public opinion or bodies responsible for public healthcare.

Fig. 8. Lazaretto in Split, 1770 (ASVe, *Provveditori alla Sanità, Disegni*, b. 10, n. 17)

### *Plague at the Door*

In the Venetian sanitary policy, the two lazarettos represented most important bulwarks in the fight against epidemics. Yet, they were only one of the elements of a more complex sanitary strategy that was developed over time thanks to the decisive factor of the permanent character of the Health Office.<sup>77</sup> Only through continuous long-term activity was this magistracy able to develop effective hygienic-sanitary rules, expand the sphere of its competence and acquire the authority needed to establish necessary procedures of control and prevention. However, this progress was still marked by obstacles and failures.

<sup>71</sup> R. D'ALBERTON VITALE, *Tra sanità e commercio: il difficile ruolo del lazaretto veneziano alla scala di Spalato*, in: *Studi Veneziani*, n. s., 39, Venice, 2000, pp. 253-288. – K. KONSTANTINIDOU, *Lazaretti veneziani in Grecia*. Padua, 2015.

<sup>72</sup> R. C. MUELLER, *Aspetti sociali ed economici*, p. 91.

<sup>73</sup> J. HOWARD, *An account of the principal lazarettos in Europe, with various papers relative to the plague, together with further observations on some foreign prisons and hospitals and additional remarks on the present state of those in Great Britain and Ireland*. London, 1789. – N.-E. VANZAN MARCHINI, *Venezia e l'invenzione del Lazaretto*, p. 19.

<sup>74</sup> P. PRETO, *Lo spionaggio sanitario*, p. 69.

<sup>75</sup> R. MANNINGHAM, *The Plague no Contagious Disease*. London, 1744.

<sup>76</sup> J. BOOKER, *Maritime Quarantine: The British Experience, c. 1650-1900*. Pub. Ashgate, 2007, p. 367.

<sup>77</sup> D. PANZAC, *Quarantaines et lazarets: l'Europe et la peste d'Orient XVIIe-XXe siècles*. Aix-en-Provence, 1986, p. 89.

Fig. 9. Lazaretto in Genoa (J. HOWARD, *An account of the principal lazarettos in Europe, with various papers relative to the plague, together with further observations on some foreign prisons and hospitals and additional remarks on the present state of those in Great Britain and Ireland*. London, 1789, pl. 3)



The plague of 1555/1556, the first that broke out on the Venetian territory in a quarter-century, claimed only a few thousand victims and it seemed that the measures implemented by the sanitary bodies were able to resist the epidemic outbreak (Fig. 11).<sup>78</sup> But, the plague again appeared at the end of June 1575 and, coming from the mainland, it struck Venice in a particularly delicate moment. Several years before, after the War of Cyprus (1570 – 1573), the Serenissima concluded a peace treaty with the Ottomans, separate from the allies in the Holy League. The state treasury was exhausted by the enormous war effort and its economy had not yet fully recovered. Additionally, the state of readiness was still in force because of the possibility of new Ottoman invasions in its properties of Crete and Corfu. In that context, we can understand, but not justify the reasons why the Republic still persisted in minimizing what was happening in the city. Had the epidemic been declared, all maritime and overland traffic would have inevitably been stopped and had incalculable negative consequences that would have prevented any attempt of economic recovery.

On the other hand, “national interest” that dictated such action by the government to the detriment of public health, was supported by unanimous opinions of two eminent professors of medicine at the University of Padua. Although contrary to opinions of other physicians of more modest reputation, the two were absolutely convinced that what struck Venice was actually not plague but one of the normal putrid fevers that usually attacked lower classes of society, the dirty and malnourished.<sup>79</sup> However, when the infection became too obvious to hide, the Republic finally decided to react aggressively. In the meantime, the nobility and the rich escaped to rural areas, the factories and shops closed, judges, lawyers and prosecutors abandoned the courtrooms and there was no movement on the streets and squares. Instead of songs and the usual daily sounds on the streets, all that could be heard was groans, sobs and howls of people who were desperate because of their own suffering or deaths of their loved ones. Health officials sealed off thousands of doors in

<sup>78</sup> A. ZITELLI - R. J. PALMER, *Le teorie mediche sulla peste*, p. 26.

<sup>79</sup> P. PRETO, *Le grandi pesti dell'età moderna: 1575-77 e 1630-31*, in: *Venezia e la peste*, Venice, 1979, p. 123.

order to sequester the infected persons in their houses and isolate entire city districts (Fig. 12). Processions of ships, full of corpses, the sick and those who were not yet infected, were constantly departing the city towards the lazarettos.

Soon, the *Lazzaretto Vecchio* turned into Dante's hell for the seven to eight thousand people who were, on average, located on the island, literally piled on top of each other because one bed was known to have three or four victims (Fig. 13). Somewhat better, perhaps, was the situation with the almost ten thousand healthy persons who were, as if in purgatory, located in the *Lazzaretto Nuovo*, or aboard a hundred-odd boats around the island. When it became obvious that the two lazarettos were no longer capable of receiving the multitude of people who continued to arrive, two additional hospitals were organized for the victims on the islands of San Lazzaro and San Clemente, while five hundred wooden barracks were constructed for the healthy on the island of Vignole.<sup>80</sup>

Because of the obviously delayed decision by the government to intervene, it is obvious that the health magistrates were faced with a seriously compromised situation. On the other hand, what extraordinary preventive measures could the health officials have undertaken if no one officially informed their office about the suspicion of plague being the cause of death? This is confirmed by a few death registers that survived the neglect of time, in which all possible causes of death are listed next to names of the deceased, from worms to fevers to headache, but none that could explicitly be linked to the plague.<sup>81</sup> Of course, it was obvious to everyone that the number of registered deaths was much more excessive than usual. Still, medical opinions were not in agreement, the authorities tried to convince that there was no danger and no one was interested or authorized to create unnecessary panic. After the plague epidemic was declared, the health officials

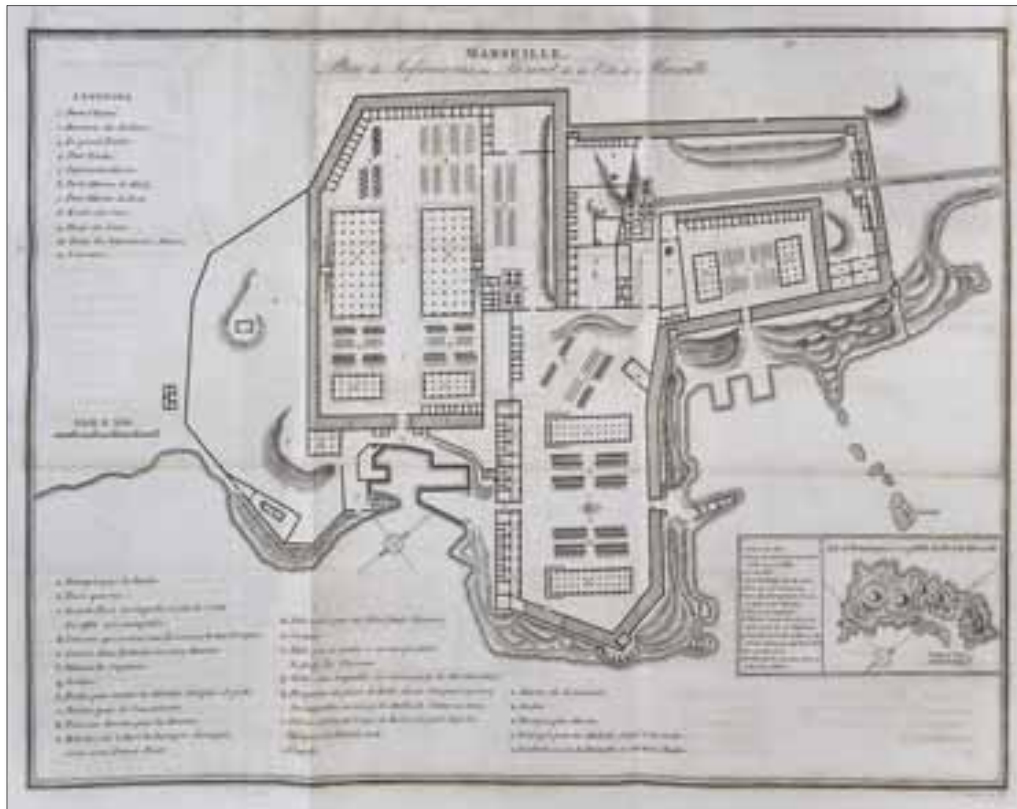


Fig. 10. Lazaretto in Marseille (J. HOWARD, *An account of the principal lazarettos in Europe, with various papers relative to the plague, together with further observations on some foreign prisons and hospitals and additional remarks on the present state of those in Great Britain and Ireland*. London, 1789, pl. 1)

<sup>80</sup> BMCVe, Cicogna 3682.

<sup>81</sup> ASVe, *Provveditori e Sopraprovveditori alla Sanità, necrologi*, b. 808, 809.

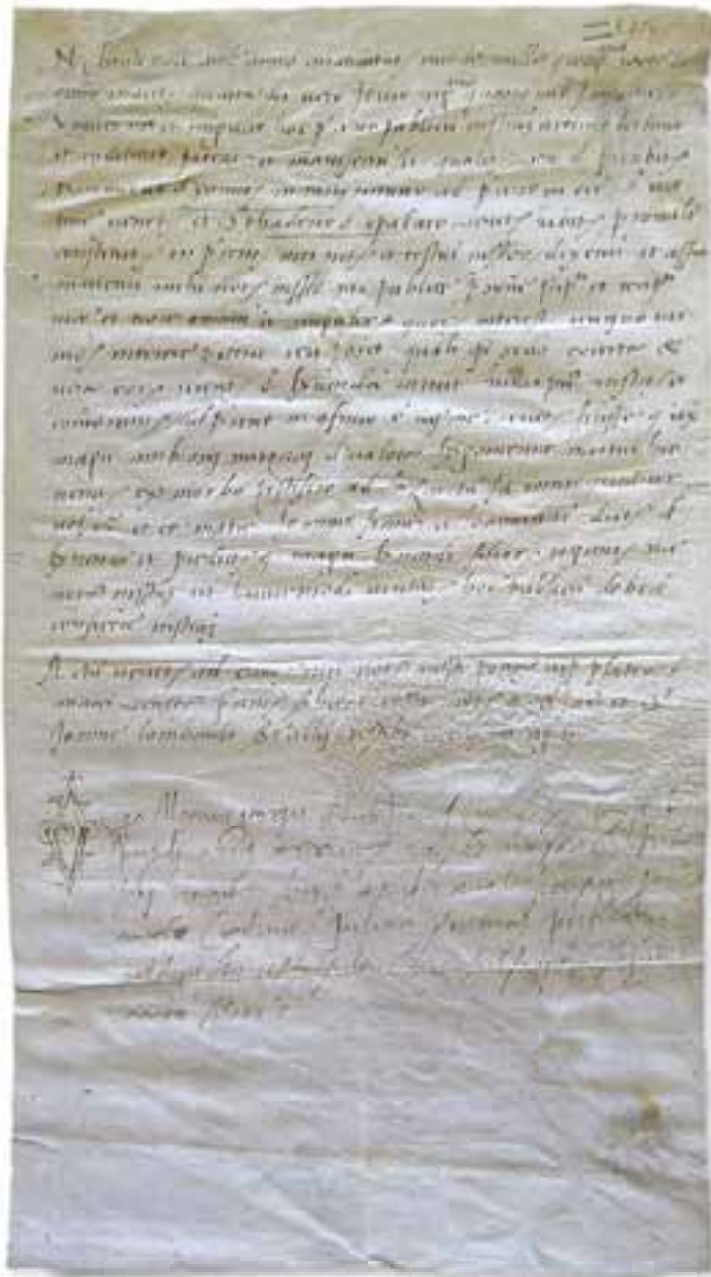


Fig. 11. Venice, 24 July 1516. Public notary act certifying the death of maestro Ambrogio from Bergamo, which occurred in the Lazaretto because of plague (BMCVe, PD C 670, 100)

his entourage, who came from infected areas, were sequestered in quarantine on the island of San Clemente before being allowed to enter the city.<sup>86</sup> After the diplomate fell ill, a physician was called to examine him and he immediately assumed it was plague. He informed the magistrates who sent other physicians who confirmed the diagnosis. The Marquis died several days later, as did those in his entourage, but not before they infected two carpenters, father and son who lived in the quarter of Sant'Agnese, and who built two fences and other quarantine protections.<sup>87</sup> The plague slowly insinuated itself into the city in the summer all the way through autumn 1630, and exploded in the ensuing months.

could do nothing else but fight the epidemic that had already spread throughout the city with all available means.

In the confusion that prevailed at the time, it was difficult to learn the precise number of those who died between 1575 and 1577. It was still less likely to distinguish between deaths that occurred as a result of the epidemic or that were provoked by some other cause, natural or violent – not only murder but also euthanasia and suicide that no historian ever mentioned – because of starvation and other diseases. Nevertheless, it was calculated that the mortality rate could have been around 25-26% of the total population of the time, whose number was estimated at 180,000, i.e. 45-47,000 persons.<sup>82</sup> The Health Office registers confirm the number of approx. 49,700 deaths, of which a little of 19,000 died in the lazarettos between August 1575 and July 1577.<sup>83</sup> According to a recent study, the mortality rate of those who were hospitalized in the lazarettos was, however, much higher than the previously stated average, and it amounted to around 73%.<sup>84</sup>

The last plague epidemic that struck Venice occurred in 1630 – 1631 and was described by Manzoni in his novel *The Betrothed*, which, just to clarify, was much worse than the previous one in 1575 – 1577, and it had a mortality rate of 30%.<sup>85</sup> In this case too, the disease arrived from the mainland and succeeded in penetrating the defence measures imposed by the health magistrates who were already at attention because of epidemics that were spreading inland. According to the most credible account, on 8 June 1630, the Marquis de Strigis and

<sup>82</sup> P. PRETO, *Peste e società a Venezia nel 1576*. Vicenza, 1978, p. 112.

<sup>83</sup> BMCVe, *Gradenigo Dolfin* 43, vol. I, c. 285v

<sup>84</sup> J. L. STEVENS CRAWSHAW, *Plague Hospitals: Public Health for the City in Early Modern Venice*. Pub. Ashgate, 2012, p. 187.

<sup>85</sup> P. PRETO, *Peste e demografia. Letà moderna: le due pesti del 1575-77 e 1630-31*, in: *Venezia e la peste*, Venice, 1979, p. 98.

<sup>86</sup> G. CASONI, *La peste di Venezia nel MDCXXX. Origine della erezione del tempio a S. Maria della Salute*. Venice, 1830, p. 10.

<sup>87</sup> A. A. FRARI, *Cenni storici sopra la peste di Venezia del 1630-31 per la quale si celebra in questi giorni la festa del secolo votiva*. Venice, 1830, pp. 6-7.



Fig. 12. Sealing of doors of houses infected by plague in Gorizia in 1682, Giovanni Maria Marusig, *Relazione del contagio di Gorizia* (BMCVe, PD B, 440, I, c. 51r)



Fig. 13. Lazzaretto Vecchio (Francesco Zucchi, *Teatro delle fabbriche più cospicue in prospettiva della città di Venezia*, I. – Venezia: nella stamperia di Giambattista Albrizzi 1760)



Fig. 14. Physician in the Time of Plague, G. Grevembroch, *Gli abiti de' Veneziani di quasi ogni età raccolti e dipinti nel secolo XVIII* (BMCVe, Gradenigo Dolfin, 49, vol. II)

What happened in 1575 – 1577 was repeated, physicians contradicted each other and health magistrates were trying to contain the epidemic that was already impossible to control. The previously described scenario of death and desperation, with lazarettos overflowing with victims, played out as before.

These were two dramatic experiences that would enable health officials to improve the system of prevention, in the magistracy that would become a model for the most powerful European states.<sup>88</sup>

### Conclusion

Thanks to procedures of rodent control and disinfestation of ships, silos and port warehouses used to store goods, which were conducted from the early 20<sup>th</sup> century, as well as the improvement in hygienic conditions and progress

achieved in the medical sciences, the plague is today no longer present in the European territory. Nevertheless, it is far from eradicated and there are still many focal points that are still active in Asia, Latin America and Africa (Madagascar 2017 – 2018), which are constantly monitored by the World Health Organization.

#### Historical sources:

- Archivio di Stato - Venezia (ASVe)  
 Maggior Consiglio, reg. 17; 22.  
 Provveditori al sal, atti, b. 6.  
 Provveditori e Sopraprovveditori alla Sanità, necrologi, b. 808; 809.  
 Senato, deliberazioni, misti, reg. 45; 54.  
 Senato, deliberazioni, terra, reg. 6.
- Biblioteca Museo Correr - Venezia (BMCVe)  
 Cicogna 3055.  
 Gradenigo Dolfin 43, vol. I.  
 PD C 941.

Modern medicine has certainly come far from the ancient miasmatic-humour theories of Hippocrates and Galen. Still, in some way, principles that even today represent basic measures used to fight infectious diseases come from those that were used in the Late Middle Ages. New bulwarks of health protection whereby those who are infected are no longer isolated for the duration of quarantine in lazarettos but in well-equipped laboratories, special hospital wards and temporary camps erected in all corners of the globe near focal points of the disease. State-of-the-art protective suits with filters that are today worn to avoid any contact with viruses also originate from the strange costumes worn by the physicians of the past, with their long beaks full of aromatic herbs that were supposed to purify the infected air (Fig. 14).

Nevertheless, there is one element that remains unchanged through the centuries: our fear of the invisible and deadly enemy of infectious disease. The anguish that still provokes psychosis in the contemporary man and causes behaviour that is not that different from the one described in ancient chronicles. From that point of view, and despite the time gone by, man is still unable to build suitable care facilities, similar to the medieval lazarettos, where one could hope, not so much to cure infectious diseases, but to free oneself of fearful germs that poison the mind.

<sup>88</sup> P. PRETO, *Le grandi pesti*, p. 126.

## Plague and Trade Control. Form and Function of the Dubrovnik Lazaretto

Today's structure of the Lazaretto complex, situated in front of the eastern city gate in the suburb of Ploče, was built in the 17<sup>th</sup> century as part of the system of effective measures for the suppression and control of plague epidemics. It was designed to maintain the fragile balance between economic profit and the high risk of fatal consequences of plague epidemics for the local population, which was necessary to ensure the wealth and prosperity of the Republic of Dubrovnik and its citizens. The Lazaretto at Ploče was one of many lazarettos built by the Republic of Dubrovnik throughout its history, and it is preserved almost in its integral, original state. Located at the end of the overland trade route that connected Dubrovnik, across the Balkans, to the gates of the Orient, the Lazaretto at Ploče had a dual role: it played the key role in the control of movement of merchants, travellers and their goods throughout a developed network of trade infrastructure on the territory of the Republic, and a sanitary role as a specialized quarantine structure for the infected and potentially contagious persons, as well as for the disinfection of goods during outbreaks of plague epidemics in the city and its surroundings (Fig. 1).

Trade routes that passed through Dubrovnik in the early modern period were an important segment of larger overland and maritime trade networks used by merchants to transport their goods from the Levant to Central Europe. Located at the strategically important position in terms of safe maritime travel, Dubrovnik was, after Zadar, Hvar and Korčula, the last port where ships sailing from Venice to the Levant, could get resupplied before reaching the open sea, as well as the first port upon their return.<sup>1</sup> Thus, Dubrovnik was an indispensable stage on the maritime route that connected Central Europe, northern Italy and the eastern Mediterranean. However, in terms of the construction history of the Lazaretto at Ploče, Dubrovnik's geographical position at the foot of the mountainous Balkan hinterland is even more significant. Dubrovnik, as if emerging from the sea at the foot of Mount Srđ, was situated at the beginning of the medieval trade route that was established and named by the Ragusan merchants during the 13<sup>th</sup> and 14<sup>th</sup> centuries, and which connected via the port of Dubrovnik, central Italy, Rome and Florence, through Ancona, with mining centres in the Balkan hinterland.<sup>2</sup>

<sup>1</sup> J. TADIĆ, *Promet putnika u starom Dubrovniku*. Dubrovnik 1939, p. 8-10. – L. KUNČEVIĆ, The Maritime Trading Network of Ragusa (Dubrovnik) from the Fourteenth to the Sixteenth Century, in: *Maritime Trade around Europe, 1300-1600: Commercial Networks and Urban Autonomy*, (ed. W. Blockmans, M. Krom, Wubs-J. Mrozewicz), Routledge: New York 2017, p. 142.

<sup>2</sup> I. MITIĆ, Utjecaj kopnene trgovine na osnivanje dubrovačke karantene u XIV. stoljeću, *Rad JAZU, Razred za medicinske znanosti* 16, Zagreb, 1980, pp. 85-86.



Fig. 1. Dubrovnik, by the German knight, Konrad von Grünemberg in the travelogue of his pilgrimage to Jerusalem, 1486

After the Ottoman arrival at the border of the Republic, “Dubrovnik caravan road” was used as a longer, but safer communication to the Porte than the maritime route, and for trading of leather, wool, fur, wax to the West and fabrics, paper, ceramics, weapons and tools to the East.<sup>3</sup> The goods that previously travelled by sea from Syria, Persia and India, would now, after an extraordinary overland journey, arrive in Dubrovnik, and then continue across the Adriatic and other Mediterranean ports towards the rest of Europe. Even though the Lazaretto in Dubrovnik *de facto* slowed the transit of goods and travellers by implementing the quarantine, which sometimes lasted 14 and other times 30 days, it was an indispensable instrument of commercial infrastructure in every Mediterranean port in the modern time.

The Republic of Dubrovnik introduced the practice of quarantine as early as 27 July 1377, when it promulgated the regulation which stipulated that those travellers who come from plague infested areas shall not enter Dubrovnik or its districts unless they previously spend a month in Cavtat or the island of Mrkan, for the purpose of “disinfection.”<sup>4</sup> In order to protect itself, and to earn an added reputation as a reliable distributor of valuable

<sup>3</sup> B. STULLI, *Studije iz povijesti Dubrovnika*. Zagreb, 2001, pp. 63-68. – M. MORONI, L'impero di San Biagio. Ragusa e i commerci balcanici dopo la conquista turca (1521-1620). Bologna, 2011, *Analiz Zavoda za povijesne znanosti ZAZU u Dubrovniku* 54/2, 2016, pp. 476-479, (review: D. Dell'Osa).

<sup>4</sup> M. D. GRMEK, Le concept d'infection dans l'antiquité et au Moyen-Age, les anciennes mesures sociales contre les maladies contagieuses et la fondation de la première quarantaine à Dubrovnik (1377), *Rad JAZU, Razred za medicinske znanosti* 16, Zagreb, 1980, pp. 9-54. – Z. BLAŽINA TOMIĆ, *Kacamorti i kuga: utemeljenje i razvoj zdravstvene službe u Dubrovniku*, Zagreb-Dubrovnik, 2007, pp. 81-81.





goods in the eyes of its trading partners, the Republic of Dubrovnik decided in the 1397 regulations, that all persons who come to the territory of the Republic must remain in quarantine, either on the island of Mrkan, south of Dubrovnik or in the Benedictine Monastery of St. Mary on the island of Mljet. They could also spend one-month in quarantine outside of the Ragusan territory, and if they did not obey they had to pay a monetary fine of one hundred ducats.<sup>5</sup> According to Filip de Diversis, travellers and merchants who came to the city by land at the beginning of the 15<sup>th</sup> century “...spent two or three days, separated from any company, under a hut where archers used to stay during festival competitions, in order to be able to talk to their families. After that, they and all the others were banished for one month to uninhabited islands removed from the city by six thousand steps. These islands were called Supetar, where two houses were built for this purpose, then Bobara and Mrkan, where some of them now live, however, they did not send anyone there unless the Bishop of Trebinje, a pastor of the region, approved of it. When all the islands become full of exiles, then some are sent to Epidaurus, also called Old Dubrovnik.”<sup>6</sup> In the period between 1500 and 1530, ship crews and passengers who arrived to the territory of the Republic by sea, were sent to quarantine on the islands of Lokrum, Supetar or to Polače on the island of Mljet (Fig. 2).<sup>7</sup>

Fig. 2. Caravan through the Balkan hinterland, 1810, from: (from: L. MAYER, *Views in the Ottoman Dominions, in Europe in Asia, and some of the Mediterranean Islands, from the Original Drawings taken for Sir Robert Ainslie*. (The New York Public Library Digital Collections)

<sup>5</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague. The Health Office and the Implementation of Quarantine in Dubrovnik, 1377-1533*. Montreal 2015, p. 113.

<sup>6</sup> F. DE DIVERSIS, *Opis slavnoga grada Dubrovnika*. Zagreb, 2004, p. 83.

<sup>7</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, pp. 149-150, 198.

In cases when preventive measures were inefficient and when the plague managed to cross the borders of the Republic and ravage its territory, the infected persons and those who were in contact with them, and thus deemed suspicious, were closed in their own residences or were separated, and according to a series of regulations, isolated in remote locations, outside settlements and the city, always close to the sea. In the early 15<sup>th</sup> century, the quarantine was held in Molunat and the islands of Mrkan and Bobara, if permitted by the Bishop of Trebinje who had jurisdiction over these islands.<sup>8</sup>

As early as 1428, we have information that suspicious cases of plague, mostly poor people, were isolated at Danče in the houses built for that purpose and covered with wood planks.<sup>9</sup>

In 1457, the votive Church of Our Lady was erected at Danče, in the middle of yet another in a series of epidemics that frequently appeared in the territory of the Republic.<sup>10</sup> The simple Late Gothic church is preserved to this day. During the epidemic that ravaged the city and its territory between 1464 and 1468, the quarantine compound was built next to the church at Danče. It was composed of a single-storey building with two doors, which had another storey added in 1496, as well as a large water well and a long wall, 2 metres high and 150 metres long, with one gate supervised by guards, who prevented free movement and communication with the city.<sup>11</sup> The complex also included a cemetery located next to the church. The establishment of the permanent quarantine at Danče, that was still functioning in the second half of the 16<sup>th</sup> century, was part of the effort by the Ragusan authorities to defend the city from plague. During the 1466 epidemic, the cost of these efforts, which amounted to six thousand ducats, far exceeded the resources that the city allocated for the care of victims, i.e. the amount of four hundred ducats, as it was justifiably trying to prevent the spread of the disease and potentially an even higher number of victims. This illustrates the attitude of the Ragusan authorities, who were aware of greater effectiveness of suppressing the spread of the disease than in treating the already infected citizens. The efforts by the Government of Dubrovnik to suppress the plague were praised by Filip de Diversis who escaped to Venice when Dubrovnik was ravaged by plague in 1437. In his *laudes civitatum, Description of the Glorious City of Dubrovnik*,<sup>12</sup> he mentioned the existence of the Health Office and its officers, the *Cazamorti*, who managed the implementation of all regulations for preservation of health in the city.<sup>13</sup> De Diversis praised Dubrovnik's geographical position, abundance of drinking water and healthy air, as important factors in the fight against the plague, however he also listed the efforts of the Health Office and provisions on the protection and preservation of health in its territory.<sup>14</sup>

However, while the epidemics were raging during the 15<sup>th</sup> century and the first half of the 16<sup>th</sup> century, the infected persons and suspicious cases continued to be isolated at Danče and the islands of Bobara, Mrkan, Supetar, Olip and Ruda, near Šipan, but they also used other smaller islands in, for example, the archipelago of Lastovo, whose natural, geographic characteristics were excellent for isolation purposes. An example of this was the case of fifty soldiers whom the Pope sent to Dubrovnik from Ancona in 1464 and "...on 9 August, the government sent their representatives to negotiate, because it was unsure if the soldiers were completely healthy, and to talk them into spending a few days in an isolated location

<sup>8</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture starog Dubrovnika*. Beograd, 1938, p. 73.

<sup>9</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture*, p. 74. – S. BENIĆ, *Konzervatorsko-urbanistički problemi Dubrovnika - Dubrovački Lazareti, Zbornik zaštite spomenika kulture 12*, Zagreb, 1961, p. 107. – In 1440, Filip de Diversis wrote that infected and suspicious persons from the city were isolated in this place. F. DE DIVERSIS, *Opis slavnoga grada*, p. 84.

<sup>10</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, p. 54.

<sup>11</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture*, pp. 86-87, 106.

<sup>12</sup> F. DE DIVERSIS, *Opis slavnoga grada*.

<sup>13</sup> F. DE DIVERSIS, *Opis slavnoga grada*, pp. 82-83, 116-117.

<sup>14</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, p. 119-120.

on one of Dubrovnik's islands, where a priest and a barber-physician would live with them, and they would have everything else they required. If they did not except this proposal by the government, they would be allowed to immediately return to Italy, which, it seems, they did, because we found no further information about them."<sup>15</sup>

One of the islands that was also used as quarantine during the outbreak of the epidemic between 1464 and 1468, and between 1526 and 1528, was Lokrum, in front of the city port.<sup>16</sup> In 1534, the Government of Dubrovnik decided to erect a lazaretto for plague victims on the island and they commissioned a project for that purpose.<sup>17</sup> In 1553, the decision on the construction was confirmed, as was the project of the structure that was supposed to be square in form and have double walls. However, the construction started but the lazaretto remained incomplete until 1584, when it was decided to finish it. In 1635, the Senate approved the construction of a small house next to the lazaretto gate, the exact purpose of which is unknown, and it allocated 55 ducats for it.<sup>18</sup> The lazaretto was still functional in 1691, during the last plague epidemic that succeeded in penetrating through the city walls.<sup>19</sup> At that time, the Benedictine Monastery on the island was also used as quarantine together with the lazaretto, and temporary wooden shelters were built as well. We do not know how the lazaretto interior was organized. To this day, in the northern part of the island, facing the city, there exists a high perimeter wall that enclosed a regular rectangle. A common assumption in literature is that the lazaretto was never finished for strategic reasons.<sup>20</sup> Namely, the large and strong lazaretto on the island of Lokrum could have been used by the Venetians or the Ottomans as a fortress they could easily attack the city from.

During epidemic outbreaks, the city was often left without a government, and the leading administrative role would be assumed by the *Cazamorti*. Decisions made in these difficult, crisis situations were often improvised and depended on the given circumstances, as well as the number of victims, the affected territory, availability of work force and materials.<sup>21</sup> The rules of conduct could be changed *ad hoc*, from day to day, i.e. it was not possible to find repeated models of behaviour when they were constantly changing and often becoming more rigorous after every new epidemic, in the hope that new decisions would lessen the catastrophic consequences for the society in the future.<sup>22</sup>

The process of decontamination and disinfection of suspicious goods was conducted concurrently with the quarantine of infected and suspicious persons. In 1440, de Diversis mentioned that the imported textile could not be sold and distributed in the territory of the Republic until it spent one month deposited "underneath the tower," but in 1504, the *Cazamorti* stored the goods from an infected ship at the fish market.<sup>23</sup> However, when the French diplomat Philippe de La Canaye du Fresne stopped in Dubrovnik between 1 November 1572 and 14 January 1573, on his way from Venice to Istanbul, he described Dubrovnik and the Ragusans and emphasised their diplomatic and trade skills and their ability to use political circumstances for economic gain, especially during the Ottoman-Venetian Wars when all trade going to Europe was flowing through the port of Dubrovnik.

<sup>15</sup> J. TADIĆ, *Promet putnika*, p. 176.

<sup>16</sup> S. BENIĆ, Konzervatorsko-urbanistički problemi Dubrovnika - Dubrovački Lazareti, *Zbornik zaštite spomenika kulture* 12, Zagreb, 1961, p. 108.

<sup>17</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture*, pp. 98-99.

<sup>18</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta na Pločama, in: *Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, p. 46.

<sup>19</sup> R. KRALJ-BRASSARD, A City Facing the Plague: Dubrovnik, 1691, *Dubrovnik Annals* 20 Dubrovnik, 2016, pp. 134-135, 147.

<sup>20</sup> V. BAZALA, Pomorski lazareti u starom Dubrovniku, *Dubrovačko pomorstvo*, (ed. J. Luetić), Dubrovnik 1952, p. 297. - Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, p. 127.

<sup>21</sup> I. MITIĆ, Prilog proučavanju običajnog prava, p. 417. - Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, pp. 90-91.

<sup>22</sup> Slavomir BeniĆ names regulations from 1397, 1401, 1416, 1422, 1456, 1459, 1481 and 1483. Cf. S. BENIĆ, Konzervatorsko-urbanistički problemi Dubrovnika - Dubrovački Lazareti, *Zbornik zaštite spomenika kulture* 12, Zagreb, 1961, pp. 106, 107

<sup>23</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, p. 147

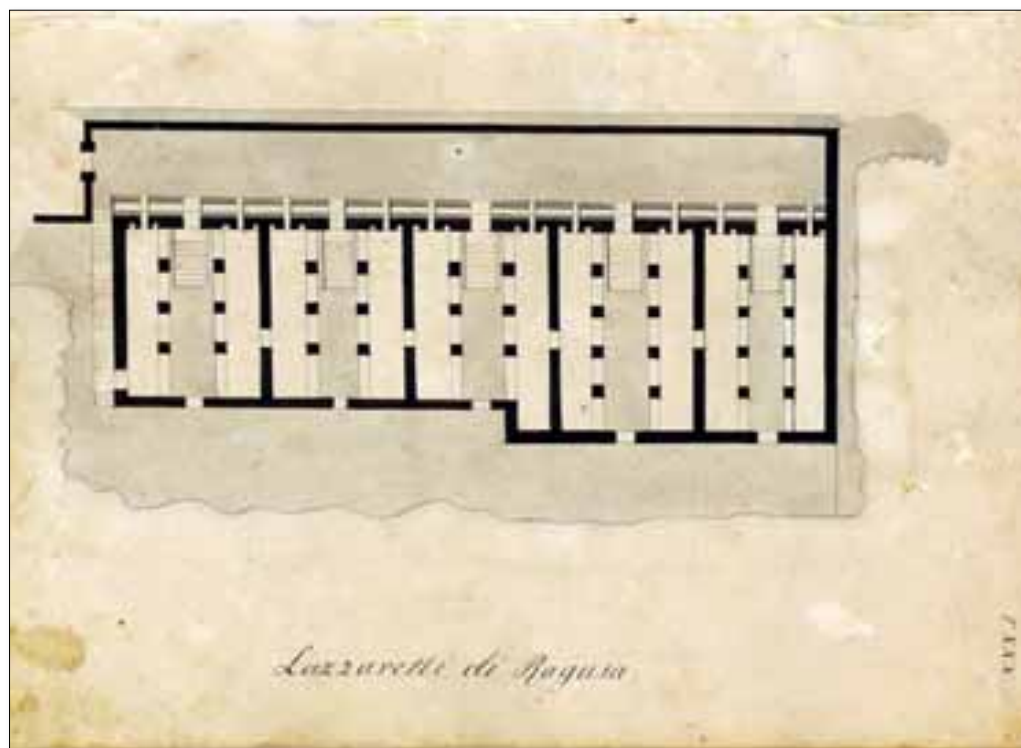


Fig. 3. The plan of the Lazaretto at Ploče, the Vitelleschi Collection, State Archive in Dubrovnik

But, he also pointed out that the Ragusans spent a lot of money on sanitation measures and that they forced all caravans to stop in the lazaretto outside the city. According to him, the French ambassador had also been quarantined in a beautiful palace in Gruž, spacious, secure and very comfortable because it was enveloped in an orchard.<sup>24</sup>

The first information on the selection of the area of Ploče (Fig. 3), in front of the eastern city gate, for disinfection of imported goods, dates back to 1590.<sup>25</sup> This is when the Senate decided that from this time forward the goods, imported from the East, had to be disinfected in the warehouse for salt (*Slanizam*) at Ploče, which had to be adapted for that purpose. Three months later, the Senate proposed the financing of “... *nel far novo Lazzaretto alle Plocce...*” with the taxation of goods (silk, leather, cotton, wool, blankets...) that was going to be stored at the lazaretto, and named three noblemen who had to implement the order. It seems that the warehouse adaptation was not realized or the space was found to be inadequate, because in 1621, then again in 1627, there was a renewed search for a location to build a covered lazaretto for the decontamination of wool and other goods that had to be quarantined. Besides Ploče, Danče was also proposed as the location for the construction of the new lazaretto, because quarantine was conducted there since the beginning of the 15<sup>th</sup> century. On 20 February 1627, Danče was confirmed as the location for the new lazaretto. Three construction overseers were nominated. They were tasked with presenting the lazaretto model and the cost estimate of construction to the Senate. In March that same year, the lazaretto model at Danče was approved. The model was probably made by Vuko, the carpenter, who was paid the amount of 1 *hyperperus* in May of that year.<sup>26</sup> Master Frane Nikolov, the stonemason and Đuro, the son of late Vincenzo with his friends

<sup>24</sup> PH. DU FRESNE-CANAYE, *Le voyage du Levant*. (Ed. H. Hauser, E. Leroux), Paris, 1897, p. 16. – S. GRACIOTTI, *La Dalmazia e l'iter gerosolimitano da Venezia tra affari, devozione e scoperte*, in: *La Dalmazia nelle relazioni di viaggiatori e pellegrini da Venezia tra Quattro e Seicento*, (ed. S. Graciotti), Rome, 2009, p. 108

<sup>25</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta na Pločama*, pp. 11, 13-15

<sup>26</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta*, pp. 56-57.

from the nearby Župa Dubrovačka started to transport the cut stone to Danče, however in May there was a change of location in favour of Ploče, and the overseers were invited to present a new model for construction and to suggest the precise location of the new Lazaretto at Ploče.<sup>27</sup> After the plan of the new Lazaretto was accepted, it was decided to begin the construction “...*ad Plocias subtus murum, versus mare, ...*” underneath the wall at Ploče, facing the sea, and in December a loan of two thousand ducats from the treasury of the Customs Office was approved for the Lazaretto construction.

In the course of 1627, Frane the stonemason, Petar Turco and Petar Marinov and their friends from Župa Dubrovačka were hired at the construction site to dig the ground where the stones were cut, Krile and his fellow stonemasons were employed to transport the stone needed for construction, Petar Ivanov from Župa Dubrovačka to dig the hole for quicklime, and many other local craftsmen. In September 1627, Pavo who worked as a master stonemason was paid, and Vincenzo the carpenter with his assistants was paid two *hyperperi* for making the lazaretto model.<sup>28</sup> Marchetto, the son of late Vincenzo was paid to supervise the construction of the Lazaretto. Also, in September, roof tiles were delivered and stored in the Revelin fortress, and in April 1628, Vuko the carpenter was paid again for building another lazaretto model.<sup>29</sup> In September 1628, Pavo Sinkov was also paid again for working as the master stonemason, and Vukašin Marinov, the carpenter was paid for making the model of the staircase, as instructed by Mihovil Restić.

In September 1628, 300 ducats were borrowed from the Mint, and the same amount again in April 1629. Eight men from the village of Donja Vitaljina in Konavle worked as forced labourers on the lazaretto construction, as punishment for not participating in the festivity of St. Blaise.<sup>30</sup> In November 1630, the newly constructed Lazaretto at Ploče was already operational, however the Senate issued an order that persons and goods from Venice that were located in the Lazaretto, be moved to the new location, excluding the old lazaretto at Ploče, perhaps the previously adapted old salt warehouse, and the city walls.<sup>31</sup> In 1633, the Senate decided to expand the existing capacity of the new Lazaretto and clear the land to the east, demolish all the buildings there and expand the Lazaretto to have a rectangular form once it was finished. The expansion works probably started as late as 1642, when the construction overseers were ordered to “... *begin executing the Senate’s conclusion voted on 26 July (fo. 150) in relation to building the new Lazaretto.*”<sup>32</sup> The works continued through May 1645, insisting that new additions respect the previously built form (Fig. 4).

During a brief suspension of works on the new additions to the Lazaretto, they dealt with security and access control, by recruiting guards and erecting walls by the sea, and another wall inland ... underneath the Gradić garden at Ploče...<sup>33</sup> In 1646, it was decided to position a wooden *rastello* door on top of the stairs leading from the newly constructed part of the Lazaretto to the sea, which would prevent free passage. In addition, from these doors to the old part of the Lazaretto, another wall almost two metres high, was to be erected and function as a parapet upon which it would be possible to sit. In April 1647, Ivan Marinov Gundulić and Matej Ivanov Rastić were nominated as overseers and tasked to speed up the process of completion of the Lazaretto, using funds allocated for that purpose in the

<sup>27</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 19-22.

<sup>28</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 65-66.

<sup>29</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 73, 76.

<sup>30</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, p. 42.

<sup>31</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 23-25.

<sup>32</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, p. 49.

<sup>33</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 27-30.



Fig. 4. Lazaretto before the 2018 restoration (photograph: Institute for Restoration of Dubrovnik)

Customs Office. At the session of the Senate held 5 days later, it was decided that the stone allotted for the construction of the Lazaretto at Ploče will be used for the construction of city walls, probably because it was thought it would no longer be needed.

After the construction was completed in 1647, the Lazaretto complex at Ploče was composed, and still is today, of five identical sections, situated on two different levels. Literature sources confirm that the first three sections in the western part of today's complex were finished in 1630, while the last two sections to the east were built subsequently,<sup>34</sup> even though the last three sections to the east were longer than those in the west. Along the centre of their façade, facing the sea, there is a horizontal cordon cornice, as opposed to the first two, western sections. These differences could possibly indicate the place of an interruption in continuity of the construction of the complex that we know happened after 1630.<sup>35</sup>

The sections lean against each other and comprise the total of ten warehouse spaces, five courtyards and ten rooms for quarantine. Each section has three different elements, warehouses for goods grouped around the courtyard, and rooms for sequestering persons in quarantine. At the lower level there are two rectangular warehouses, one on each side of the elongated courtyard. Each warehouse is opened with a series of arcades to the courtyard, which enabled a more dexterous and easier handling of merchandise when it was brought in and out of the warehouse, where the disinfection was conducted. In their interior the warehouses had wooden shelves, leaning against the lateral walls, for storage of goods.<sup>36</sup> Each warehouse was covered by a three-pitch roof, with two skylights facing the courtyard. The skylights illuminated the warehouse attic where travellers and merchants stayed for the duration of the quarantine.<sup>37</sup>

<sup>34</sup> S. BENIĆ, Konzervatorsko-urbanistički problemi Dubrovnika, p. 109.

<sup>35</sup> It is possible that the difference in length between these two sections happened because of the adaptation to the terrain, which is somewhat lower at that segment, while the coast is somewhat wider.

<sup>36</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture*, p. 115.

<sup>37</sup> In archival sources, these warehouses are called the *lazzaretti* (Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 80, 85, 89), therefore, throughout the 17<sup>th</sup> century historical documentation, the complex at Ploče continued to be called the Lazarettos, plural, as opposed to the other early examples of lazarettos on the Adriatic coast and elsewhere, for example, the one in Split which also had several separate courtyards, or both of the Venetian lazarettos, the Old and the New, that were called *lazzaretto*, singular.

The central courtyard, called *bagiafer*,<sup>38</sup> was enclosed by a southern wall, which had a semi-circular door facing the cliffs that provided better air circulation in the courtyards and the warehouses, and a possible access to sea water that was used to conduct the process of disinfection of particular merchandise.

It was possible to access the upper level from each central courtyard using the northern stone staircase, through a semi-circular opening framed by a simple carved stone frame with a keystone containing carved roman numerals that numbered each courtyard from one to five.<sup>39</sup> Single-storey buildings that people were quarantined in are located at this level, leaning against the northern lateral wall of each warehouse. Each building shares the hip roof with an adjacent structure, and is composed of only one room, as wide as the warehouse at the lower level. These rooms were often called *camere* or more often quarantine, and a door connected them to the quarantine space located in the warehouse attic.<sup>40</sup> Each room has a rectangular door and a symmetrically positioned small, rectangular window on each side of the door. All buildings have the same form, except the last one to the west, which is one storey higher to provide greater comfort to the *emin*, the unofficial Ottoman consul in Dubrovnik who was collecting taxes on trade of Ottoman goods, and who lived in this building after the Lazaretto construction was finished.<sup>41</sup> Openings of these buildings face the large plateau, enclosed on its northern side by a high wall, that the Senate ordered to be extended in 1784. This wall, that ran from the Janissaries' lazaretto to a point opposite the *emin's* lazaretto, was supposed to be extended to the corner of the aforementioned *emin's* lazaretto, according to a drawing approved at the session of the Senate, in order to prevent any communication with the quarantined persons, which was known to happen before.<sup>42</sup> The wall was supposed to have a door with a fence, as foreseen in the approved project, large enough for a horseman to ride through. This defined the borders of the longitudinal communication that connected all courtyard entrances with the warehouses. In the 18<sup>th</sup> century, this walled plateau called the *rastello* was a place where trading was conducted in such a way that a person, behind an iron door, would place the money in a bowl of boiling water or vinegar in order to prevent the spread of the infection.

After the Ottoman merchants and travellers were released from quarantine, they generally moved to the nearby Tabor (Fig. 5).<sup>43</sup> Tabor encompassed a large space north of the Lazaretto, it was enclosed in a high wall that was raised and extended to the garden next to the Church of St. Anthony, in accordance with the Senate's decision of 1784.<sup>44</sup> Besides a large empty space intended for grazing of cattle and draught animals, and a market that was mentioned as early as 1504 where it was possible to buy goods from the hinterland,<sup>45</sup> Tabor also contained the han where Ottoman merchants lived during their stay in Dubrovnik. As opposed to other merchants and travellers who lived in private accommodation in Dubrovnik, the Ottomans, because of great cultural and religious differences, lived separately, in the state organized housing. It is a well-known fact that the Ottoman han

<sup>38</sup> In this monograph, Vesna Miović puts forward a convincing claim that this term probably derives from the name of the Baba Gjafer prison in Istanbul.

<sup>39</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture*, p. 115.

<sup>40</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta*, pp. 80, 85, 89.

<sup>41</sup> Vesna Miović provided the information that the construction of the Lazaretto was finished in 1642, which is when the *emin* moved from the city to the Lazaretto at Ploče. Cf. M. MIOVIĆ-PERIĆ, *Emin na Pločama kao predstavnik Osmanlija na području Dubrovačke Republike*, *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 37, Dubrovnik, 1999, p. 214. – V. MIOVIĆ, *Mudrost na razmeđu. Zgode iz vremena Dubrovačke Republike i Osmanskog Carstva*. Dubrovnik 2011, pp. 65-67.

<sup>42</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta*, pp. 33-35.

<sup>43</sup> The word *tabor* is of Turkish origin and denotes an open space where the army would temporarily reside. V. ANIĆ - I. GOLDSTEIN, *Rječnik stranih riječi*. Zagreb, 2004, p. 1272. – L. BERITIĆ, *Ubikacija nestalih građevinskih spomenika u Dubrovniku*, II, *Prilozi povijesti umjetnosti u Dalmaciji* 12/1, Split, 1960, pp. 61-64.

<sup>44</sup> The Church of St. Anthony was a seat of the Antunini confraternity and was mentioned for the first time in 1363. It was destroyed at the end of the 19<sup>th</sup> century.

<sup>45</sup> Z. BLAŽINA TOMIĆ, *Kacamorti i kuća*, p. 134. – V. BAZALA, *Pomorski lazareti u starom Dubrovniku*, p. 304. – A. BAĆE - I. VIDEN, *Lazareti na Pločama od pada Dubrovačke Republike do danas (1808.-2013.)*, *Prostor* 21, Zagreb, 2013, p. 329.



Fig. 5. Meded fountain at Ploče with han and čardak in the background

existed as early as 1502, in an unknown location.<sup>46</sup> Prominent guests were housed in a building south of the Rector's Palace, the so-called "Herzegovina," while there were several locations in the city and at Pile that used to accommodate Ottoman travellers during the 16<sup>th</sup> century.

Lukša Beritić states that the han at Ploče was built pursuant to the Senate regulation dated 4 June 1592, and that it was extended by 12 cubits, vaulted and a stone staircase was added in 1617, using resources approved by the Senate.<sup>47</sup> From existing photographs and cadastral maps from the beginning of the 19<sup>th</sup> century, we can conclude that it had a shape of a long single-storey rectangular building covered by a gable roof. The southern longer façade was perforated with just two tall, arched entrances. Except for the entrances, there were no other visible window openings. The han's form leads us to conclude that, when they were constructing this building, the Ragusans were imitating the type of Ottoman han often found in the territory of the Ottoman Empire from the 15<sup>th</sup> century onwards. Based on different levels of plan development, we can distinguish two basic architectural types of han: one that was developed around a central, rectangular courtyard and the other, without a courtyard. The simplest architectural form of han, without a courtyard, predominated in the area of the Bosnian Eyalet. According to Hamdija Kreševljaković, the type of building that was prevalent in Bosnia had the form of a "large barn."<sup>48</sup> According to him, han had a rectangular plan with walls between 2 and 2,5 metres in height, made of wood or stone, a roof covered by shingles and a high enough entrance for a horseman to ride through. The main characteristic of this type of han was that the traveller and his horse shared the same sleeping quarters.

<sup>46</sup> J. TADIĆ, *Promet putnika u starom Dubrovniku*, pp. 26-28.

<sup>47</sup> L. BERITIĆ, *Ubikacija nestalih građevinskih spomenika*, p. 64.

<sup>48</sup> H. KREŠEVLJAKOVIĆ, *Hanovi i karavansaraji u Bosni i Hercegovini*. Sarajevo, 1957, p. 17.



These simpler types of hans could be found inside, or outside city centres. It was an extremely simple rectangular building that only had a ground floor and one room. The roof, with an open construction in wider hans, rested on the centrally positioned wooden columns, distributed in a regular rhythm along the entire length of the room. While horses and donkeys stayed in the same room as the merchants, there was a walled elevated platform along its lateral walls that surrounded the room, where merchants could sit and sleep next to their merchandise.<sup>49</sup> In the 400 m<sup>2</sup> Shishman Ibrahim Pasha's han in Počitelj, built in 1664, this platform was two metres wide. In order to provide comfort to the travellers the walls of this han had fireplaces and lamp niches (Fig. 6).<sup>50</sup>

The Dubrovnik han, unlike the han in Počitelj, did not have a pronounced architectural entrance portal, in the form of a porch, or a hip roof – a typical element in Ottoman architecture. There was a similar han in Mostar. It was almost of the same height as the Shishman Ibrahim Pasha's han in Počitelj, and was probably built in 1608/9.<sup>51</sup> In 1573, Philippe de La Canaye du Fresne encountered this type of han on his journey towards Istanbul, on the first night after he left Dubrovnik, probably in Trebinje.<sup>52</sup> He described it as a large uncomfortable barn that people and horses resided in together. Raised platforms with fireplaces surrounded the room. The merchants arranged their merchandise and laid their bed, if they had one, on the same platform.

In Tabor at Ploče, leaning against the eastern wall of the han was Čardak, another building used to accommodate Ottoman travellers. In 1719, certain Suleiman Pasha was quarantined there for 13 days, after he arrived from Constantinople.<sup>53</sup> In Ottoman residential architecture, in the regions of Anatolia and the Balkans, 'čardak' denotes the reception room for guests,

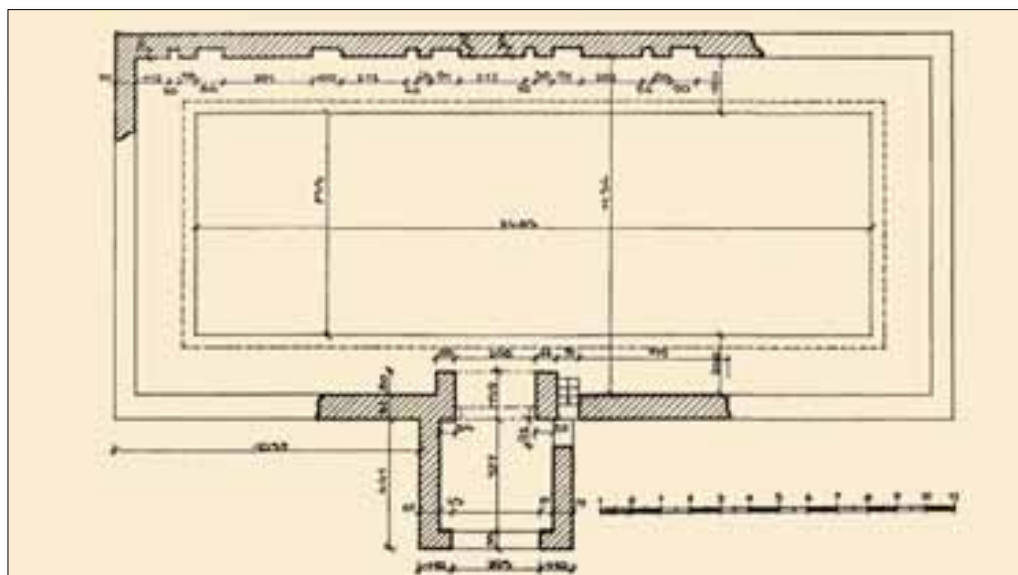


Fig. 6. Plan of the Shishman Ibrahim Pasha's han in Počitelj, from: Đ. ČEČIĆ, Počitelj na Neretvi. Urbanističko – arhitektonska studija s osvrtom na problematiku održavanja, Naše Starine VII / 1960.

<sup>49</sup> R. WIMMEL, *Architektur osmanischer Karawanseraien Stationen des Fernverkehrs im Osmanischen Reich*. PhD, Fakultät VI Planen Bauen Umwelt der Technischen Universität Berlin, Berlin, 2016, pp. 321-323.

<sup>50</sup> Đ. ČEČIĆ, Počitelj na Neretvi. Urbanističko – arhitektonska studija s osvrtom na problematiku održavanja, Naše Starine 7, Sarajevo, 1960, p. 34. – E. HAKKI AYVERDI, *Avrupada osmanlı mimârî eserleri*. Vol. 3, Istanbul, 1981, p. 279.

<sup>51</sup> Đ. ČEČIĆ - M. MUJIĆ, Jedna novootkrivena građevina starijeg doba u Mostaru, Naše starine 3, Sarajevo, 1956, pp. 261-264.

<sup>52</sup> Philippe de La Canaye describes the han in Trebinje, as follows: "... Et ce n'estrien qu'une grande écurie, car hommes et chevaux y restent tous ensemble. Mais les chevaux mangent à terre, et tout autour il y a des corridors d'un niveau un peu plus élevé, où sont des cheminées pour faire du feu; puis chacun déploie galamment son bagage, et qui a un lit s'en accomode; sinon l'on s'étend sur le pavé, car il ne faut pas penser à trouver aucune commodité dans ces caravansérails. Les plus beaux sont couverts en plomb comme les mosquées." (PH. DU FRESNE-CANAYE, *Le voyage du Levant*, p. 23.)

<sup>53</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, p. 108.

that was mostly used in warmer weather. It was located on the upper floor of the house and its volume protruded outside the flat plane of the façade. Its walls were mostly perforated with large cantilevered windows or balconies.<sup>54</sup> But ‘Čardak’ can also denote a two-storey house with a balcony, a porch or a veranda.<sup>55</sup> Existing 19<sup>th</sup> century illustrations show that the Čardak in Tabor at Ploče was a stone two-storey building with a hip roof. It is possible that at some point there was a large room on the upper floor, opened with several windows.

Besides the market space and han, Tabor also had a water fountain, preserved to this day, called “Međed,” with two large stone sinks for watering livestock and a pool that was filled with quicklime for animal disinfection.<sup>56</sup> There is an existing pool, intended for the same purpose, in Brgat Gornji, in front of the old Church of St. Anne, appropriately located next to the caravan road that led from Ottoman Trebinje, over Brgat and Bosanka, down the slopes of Mount Srđ to Ploče.

Functionally, the area of Tabor, north of the Lazaretto, was part of the Lazaretto complex and the trade infrastructure that was concentrated at Ploče in early modern times, at the beginning of the caravan road towards the hinterland (Fig. 7). The Lazaretto at Ploče was not the only example of such structure that was part of a larger complex which included buildings for the accommodation of merchants, after they were released from quarantine. The Lazaretto in Split, although at first glance it seems to be designed differently than the Dubrovnik Lazaretto, is in many ways similar. The Lazaretto in Split had, together with spaces intended for quarantine of merchants and travellers and the warehouse for disinfection of goods, an entire section built to accommodate the merchants and to store their goods, after they were released from quarantine.<sup>57</sup> That section was built between 1595 and 1600, immediately after the first Lazaretto complex was finished, due to the increase in trade there was a need for a separate space where merchants could live while they waited to board the galleon for Venice. This part of Lazaretto in Split, situated to the west, next to the first Lazaretto courtyard initiated by the Jewish merchant Daniel Rodriga, was built imitating a plan disposition of the initial structure that grouped buildings around a rectangular courtyard. Just like in “Rodrigo’s” courtyard, the buildings had a warehouse on the ground floor, while the upper floor contained a series of residential rooms. The first, original Lazaretto courtyard, that was built between 1582 and 1593, and the second that functioned as a *fondaco*, which the Rector of Split Leonardo Bollani referred to as the customs office, were modelled after the Ottoman han (Fig. 8).

In contrast to the han at Ploče, the architects here emulated a different type of the Ottoman han that was mostly built in large trade settlements in the area of the Bosnian Eyalet in the latter half of the 15<sup>th</sup> century and the first half of the 16<sup>th</sup> century.<sup>58</sup> This type of han had buildings arranged along the perimeter walls that enclosed the central rectangular courtyard. Warehouses and shops were located on the ground floor, and the upper floor had residential rooms for merchants. Most of the openings looked to the central courtyard, in the centre of which was usually a water fountain and the *masjid*, a space for prayer.<sup>59</sup>

<sup>54</sup> *Architecture of the Islamic world: its history and social meaning*. (Ed. G. Michell), New York, 1978, p. 199. – A. BEJTIC, Povijest i umjetnost Foče na Drini, *Naše starine* 3, Sarajevo, 1957, p. 71.

<sup>55</sup> L. MEZINI - D. POJANI, Defence, identity, and urban form: the extreme case of Gjirokastra, *Planning Perspectives* 30/3, London, 2014, pp. 400, 412.

<sup>56</sup> A. BAČE - I. VIDEN, Lazareti na Pločama, p. 329.

<sup>57</sup> S. PEROJEVIĆ, Izgradnja lazareta u Splitu, *Prostor* 10, 2(24), Zagreb, 2002, p. 126. – For more, see: C. FISKOVIĆ, *Splitski lazaret, Četiri priloga historiji grada Splita XVII i XVIII stoljeća*. Split, 1953, pp. 5-37. – D. KEČKEMET, Prilozi opisu i povijesti splitskog lazareta, *Pomorski zbornik društva za proučavanje i unapređenje pomorstva Jugoslavije* 13, Rijeka, 1975, pp. 377-400. – A. DUPLANČIĆ, Neobjavljeni nacrti i opisi splitskog lazareta, *Adrias* 4-5, Split, 1993-1994, pp. 167-190.

<sup>58</sup> D. BILLIĆ, Daniel Rodriga's Lazaretto in Split and Ottoman Caravanserais in Bosnia: Cultural transfer of architectural model, in: *From Riverbed to Seashore. Art on the Move in Eastern Europe and the Mediterranean in the Early Modern Period*, (ed. A. Payne), Brill, ready for publishing.

<sup>59</sup> B. ZLATAR, Sarajevo kao trgovački centar bosanskog sandžaka XVI vijeku, *Prilozi za orijentalnu filologiju* 38, Sarajevo, 1988, pp. 236, 237. – H. KREŠEVLJAKOVIĆ, *Hanovi i karavansaraji*, p. 22-24.



Fig. 7. Marketplace (Bazaar) at Ploče, Rudolf von Alt, watercolour, 1841.

Usually, the complex had two entrances, one opposite the other, large enough for loaded horses to pass through. The han courtyards in trade centres of the Bosnian Eyalet were often the focal points of social life, wherein news from distant locations was traded along with the goods, and where first coffeehouses were set up in the Bosnian territory in the 17<sup>th</sup> century.<sup>60</sup> In the second half of the 16<sup>th</sup> century, the Grand Vizier Mehmed Pasha Sokolović built a han in Višegrad,<sup>61</sup> in the south-eastern part of Bosnia, at the edge of the trading route that connected Dubrovnik and Istanbul, while Ferhad Pasha Sokolović built a great han, covered in lead, before 1587, in Banja Luka, the capital city of this province.<sup>62</sup> There were three examples of this type of building in Sarajevo: the Kolobara han built in 1462, the Tašlihan built in the mid-16<sup>th</sup> century, and the Morića han built in the late 16<sup>th</sup> and early 17<sup>th</sup> century.<sup>63</sup>

Generally speaking, the 16<sup>th</sup> century was the era of trade renaissance in the region of the Bosnian Eyalet. After conquering the Kingdom of Bosnia in 1463, the central authorities in Istanbul systematically encouraged the development of this border province that had high military importance for the Empire, as well as roads that connected the Adriatic Sea or the Slavonian plains with the Balkan hinterland and Istanbul. They encouraged the establishment of new cities, building and maintenance of roads, bridges, shops and hans, and the general infrastructure, thus enabling the development of trade and accomplishing key military functions in this border province. All this was provided through charitable

<sup>60</sup> H. KREŠEVLJAKOVIĆ, *Sarajevska čaršija, njeni esnafi i obrti za osmanlijske uprave*, *Narodna starina* 6-14, Sarajevo, 1927, pp. 18-20.

<sup>61</sup> H. KREŠEVLJAKOVIĆ, *Hanovi i karavansaraji*, p. 105.

<sup>62</sup> E. KORIĆ, *Životni put prvog beglerbega Bosne. Ferhad-paša Sokolović (1530-1590)*. Sarajevo, 2015, p. 216.

<sup>63</sup> H. KREŠEVLJAKOVIĆ, *Hanovi i karavansaraji*, pp. 12-13, 25-26.

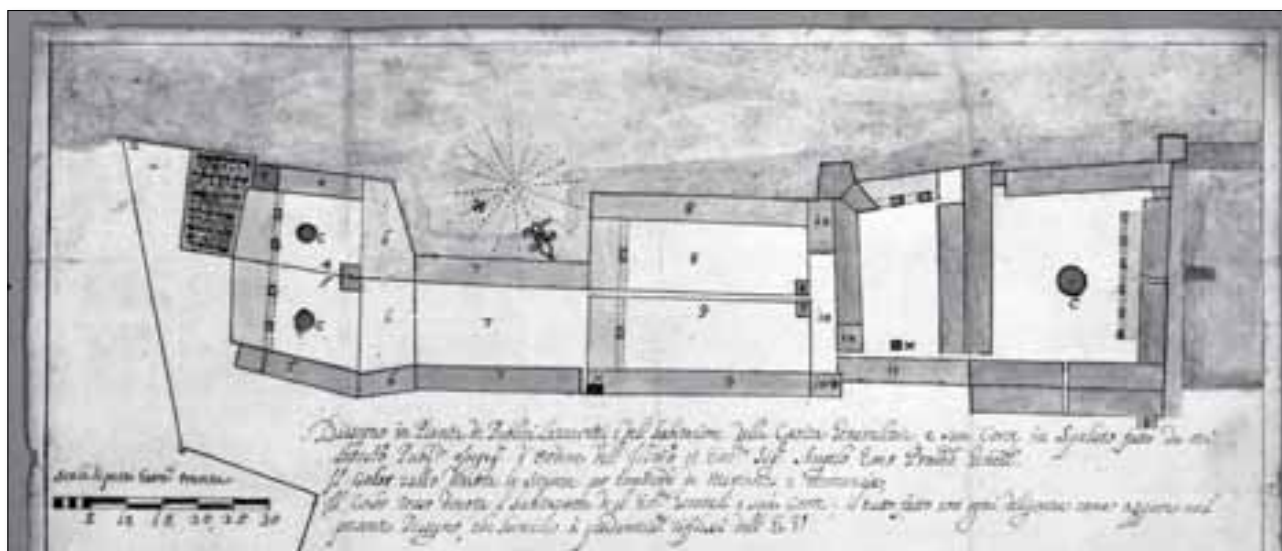


Fig. 8. Plan of the Lazaretto in Split, Giuseppe D'Andre, 1714 (Archivio di Stato di Venezia)

endowments (*waqf*) established by administrative officials, officers and wealthy merchants. Therefore, it was logical, in the context of the daily contact with Ottoman merchants and their culture, that an entire series of words from the Turkish language was used to denote parts of the trade infrastructure at Ploče, such as, *bagiafer*, tabor, han, bazaar or *čardak*. The Ragusans did not only adopt the terminology, but also the architectural forms. It is a fact that in 1784, because of the high number of Ottoman merchants who were coming to the Lazaretto at Ploče, mostly with foodstuff that they distributed after the required period of quarantine, the Senate promulgated a regulation on the construction of housing for the Ottomans, next to that of the Lazaretto captain, which had to emulate the Ottoman han, ...*a modo dei Hani Turchi*...<sup>64</sup> Rooms for the merchants were to be located on the upper floor while the ground floor contained warehouses for goods and horse stables. The same building would also house the Ottoman customs officer, not the lazaretto intended for quarantine, as was previously the case. The determination of the Ragusan noblemen to build a house emulating Ottoman forms, demonstrated the extent to which trade and trading infrastructure at Ploče was infused with Ottoman culture, unlike nearby representative buildings within the city walls. Also, the Ragusan intent to create “their” building in the territory of Dubrovnik, where foreign merchants would feel more at home, speaks to the fact that it was easier for architectural forms, at least in terms of trade infrastructure, to cross cultural borders.

Only small repairs in the Lazaretto were made during the 18<sup>th</sup> century, except for the large interventions in 1784 aimed at improving security through a more efficient isolation of goods and people.<sup>65</sup> In the late 18<sup>th</sup> century, Lazaretto warehouses in the form of porches, named as cellars at Ploče, were occasionally rented.<sup>66</sup>

The institution of the lazaretto in Renaissance Italy was established for the first time in Venice in 1423 and it had a binary role.<sup>67</sup> It was envisaged to protect the general population by isolating the infected persons, thus preventing the spread of the disease. At the same

<sup>64</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 33-35.

<sup>65</sup> In 1724, the Senate approved the expense of 300 ducats for renovation of the Lazaretto, i.e. to demolish part of the old Lazaretto and use the obtained material for Lazaretto reconstruction. The renovation started in 1728 when 100 ducats were paid towards that aim. Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, pp. 29-30.

<sup>66</sup> Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta, p. 50.

<sup>67</sup> N.-E. VANZAN MARCHINI, Venezia e l'invenzione del Lazaretto, u: *Rotte mediterranee e baluardi di Sanità*, (ed. N.-E. Vanzan Marchini), Milano 2004, p. 18

time, it protected the poor and the sick who were unable to escape the city during the epidemic, providing them with shelter and care, instead of abandoning them in infected houses and city streets. The ultimate goal of these measures was the preservation of vital state interests and maintenance of trade, that was at the core of Venetian economy.<sup>68</sup> This first plague hospital, i.e. the Old Lazaretto, *Lazzaretto Vecchio*, was supposed to accept and treat the infected Venetians, foreigners who became sick while travelling to Venice and those who were infected aboard ships that docked in Venice.<sup>69</sup> Soon after, in 1456, it became necessary to build a new Lazaretto to house the plague survivors while they recovered and persons suspected of infection, which was done in 1471.<sup>70</sup> The Lazaretto institution soon spread across northern Italy and beyond. The control was established by isolating the plague victims in certain areas limiting their freedom of movement. For centuries, such measures were implemented by administrative bodies when dealing with leprosy victims, those suffering from mental illness and other “dangerous” social groups.<sup>71</sup> During the 15<sup>th</sup> and 16<sup>th</sup> centuries, precisely in the area of Ploče in Dubrovnik, where today’s Hotel Excelsior is located, not too far from the future Lazaretto, was one of the locations that the state consigned for the leprosy victims.<sup>72</sup> However, during the 16<sup>th</sup> and beginning of the 17<sup>th</sup> century, the lazarettos on the Apennine peninsula were given a new function. From institutions that tried to clean the urban space of disease and chaos during the 15<sup>th</sup> century, such as in Milan for example, or attempted to manifest the counter-reformation spirit of charity and piety by helping the sick and the infirm, the lazarettos began to primarily fulfil the sanitary and economic function.<sup>73</sup>

The Lazaretto in Dubrovnik at Ploče (Fig. 9) also reflected these changes, however, its geographic position, between “East and West” did not only influence intercultural exchange in architectural forms of trade infrastructure, but also the form and function of the Lazaretto building itself. In Dubrovnik, the approach to the control of plague infection was deeply intertwined with its geographical position. The first regulations related to the implementation of quarantine measures were related to merchants and travellers coming from pestiferous regions.<sup>74</sup> Perhaps it was the debate that took place in the Senate in 1621, and again in 1627, about the location for the construction of the new Lazaretto,<sup>75</sup> that reflected the possible dilemma about the primary function of the new Lazaretto, as the hospital for local plague victims or as the quarantine station for merchants and for disinfection of merchandise. Unlike the Lazarettos at Danče and on the island of Lokrum, the Ploče Lazaretto, if we consider its position and spatial intent, was clearly built as part of the trade infrastructure with clear economic goals.

The position of the Lazaretto, in the immediate vicinity of the city, negates its primary function as a structure intended for isolation. The Dubrovnik Lazaretto is located dangerously close to the city, thus increasing the risk of faster and easier spread of the disease. The Lazaretto was located at the end of the caravan road that transported merchandise from the Balkan hinterland into the city. The vicinity of the port and the customs office contributed to the safe and efficient functioning of the process of import and export of goods through the Port of Dubrovnik.

<sup>68</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, p. 135. – J. L. STEVENS CRAWSHAW, *Plague Hospitals. Public Health for the City in Early Modern Venice*. Ashgate, 2012, p. 26, 233

<sup>69</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague*, pp. 135-136. – E. CONCINA - P. MORACHIELLO - G.-D. ROMANELLI - G. SCARABELLO, *Lazzaretti. L’Istituzione e la rifroma*, in: *Venezia e la Peste 1348/1797*, Venice, 1979, p. 165.

<sup>70</sup> J. L. STEVENS CRAWSHAW, *Plague Hospitals*, pp. 343-344.

<sup>71</sup> M. FOUCAULT, *Madness and civilization: a history of insanity in the Age of Reason*. New York, 1988, p. 4-10.

<sup>72</sup> R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture*, pp. 118-119.

<sup>73</sup> J. L. STEVENS CRAWSHAW, *Plague Hospitals*, pp. 233-234.

<sup>74</sup> Z. JANEKOVIĆ-RÖMER, *I lazaretti di Dubrovnik (Ragusa)*, in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milan, 2004, p. 246.

<sup>75</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta*, pp. 11, 13-15.



Fig. 9. Ploče in Dubrovnik in the 19<sup>th</sup> c. cadastral plan

The warehouse space in the Lazaretto that was used for disinfection of merchandise, which almost exceeded the space available for quarantine of persons, points to this functional characteristic of the Lazaretto at Ploče. The primary sanitary-trade role of the Lazaretto also influenced the design plan, which did not follow the usual lazaretto forms built in Italy during the 15<sup>th</sup> century – many adjacent rooms arranged along the perimeter walls that enclosed a central rectangular courtyard, with a chapel in the centre of the courtyard and a cemetery nearby.<sup>76</sup> Unlike the Lazaretto in Split, the Lazaretto at Ploče did not have a chapel in its complex, although both of them were mostly used to quarantine Muslim merchants.

The Lazaretto at Ploče was managed by a captain, instead of the prior-layman, as was customary in lazarettos in Venice and the Venetian Dalmatia, the island of Corfu and Zante in the Ionian Sea, thus evocating the pious aspect of the lazaretto institution. Likewise, there were no women among the staff in the Dubrovnik Lazaretto who could look after the victims and hygiene, or a permanently employed physician, but they engaged the services of the state surgeon, when the situation required.

Regardless of the characteristic function and the space of the Lazaretto, its buildings were still used during outbreaks of the plague epidemic in the city. During the last plague epidemic flare-up in Dubrovnik in 1691, the Lazaretto at Ploče was used as one of the locations where the potentially infected persons were quarantined, and for disinfection

<sup>76</sup> See, for example the lazaretto in Milan, in: L. PATETTA, *L'Architettura del Quattrocento a Milano*. Milano, 1991, pp. 314-328. – L. BELTRAMI, *Il Lazaretto di Milano*. Milano, 1899. Then the New Lazaretto in Venice, in: P. CATTANEO, *Indagini recenti - I dati archeologici a confronto con le fonti archivistiche*, in: *Venezia. Isola del Lazaretto Nuovo*, (ed. G. Fazzini), Venezia, 2004, pp. 100-102. – G. CANIATO, *Il Lazaretto Nuovo*, in: *Exhibition catalogue Venezia e la Peste 1348/1797*, Venezia, 1979, pp. 343-344. Then the lazaretto in Verona designed by Michele Sanmicheli, in: G. SANCASSANI, *Il lazaretto di Verona e' del Sanmicheli?*, *Atti e Memorie della Accademia di Agricoltura Scienze e Lettere di Verona*, ser. 6, vol.10/135, Verona, 1960, p. 365. – P. DAVIES - D. HEMSOLL, *Michele Sanmicheli*. Milano, 2004, pp. 117-118.

of goods from infected houses in the city.<sup>77</sup> According to extant reports of the 1691 plague outbreak in Dubrovnik, besides the Lazaretto on the island of Lokrum, other temporary wooden lazarettos were built in the suburb of Pile, in the port, at Ploče, even the Franciscan Monastery was used as a hospital for plague victims. However, despite that, the term plague hospital, that is used in recent literature to describe the lazarettos in northern Italy, can definitely not be applied to the Lazaretto at Ploče. As one of the rare preserved lazarettos in the Mediterranean, the Lazaretto at Ploče is part of the complex that was essential for the prosperity of the Republic of Dubrovnik and safety of all those regions that imported merchandise from Dubrovnik.

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<sup>77</sup> R. KRALJ-BRASSARD, Grad i kuga: Dubrovnik 1691. godine, *Anali Zavoda za povijesne znanosti HAZU* 54/1, Dubrovnik, 2016, p. 132.





# The Lazaretto at Ploče from the Fall of the Republic of Dubrovnik to Present-day

## Introduction

The former Lazaretto quarantine complex at Ploče, located east of Dubrovnik city centre, is undoubtedly one of the most significant architectural monuments of health culture in Croatia.<sup>1</sup> Although physically separate from the historic nucleus that is enclosed in a system of walls and fortresses, the Lazaretto, in the functional, design and visual sense represents its integral part. The old Ragusans surely felt this way because in 1724 the State Senate proclaimed it an integral part of the city's fortifications,<sup>2</sup> and this fact was also recognized in contemporary times when, on the occasion of expansion of the protection zone in 1994, the Lazaretto was formally included in the list of UNESCO's World Heritage Sites as part of the protected monumental complex of Dubrovnik.

Dubrovnik, as a city-state that based its exceptional economic and cultural prosperity on overland and maritime trade, and was, as such, the meeting point of numerous travellers and goods, was the first in the history of the European healthcare system to promulgate the regulation on the establishment of quarantine in 1377, probably motivated by the plague pandemic that ravaged the European continent in the mid-14<sup>th</sup> century.<sup>3</sup> Even though the travellers were initially isolated on a case by case basis in several locations in the vicinity of the city or further away, and despite the gradual construction of the quarantine complex at Danče in the middle of the 15<sup>th</sup> century (after 1430), the problem that quarantine presented to the growing trade and circulation of travellers remained unresolved for a long time. After the failed idea to construct the quarantine complex on the island of Lokrum in the mid-16<sup>th</sup> century (1534), of which only the remains of a high perimeter wall of the unfinished building exist today, and several occasional and temporary solutions for organizing the quarantine (mostly at Ploče), the construction of the Lazaretto at Ploče was given a serious consideration at the end of the 16<sup>th</sup> century (1590). After prolonged delay, the works on achieving this grandiose idea started in 1627 and finished in 1647.<sup>4</sup>

<sup>1</sup> On the eastern Adriatic coast, it is only comparable to the quarantine complex in Split, regrettably destroyed in World War II. For more, see: S. PEROJEVIĆ, *Izgradnja lazareta u Splitu*, *Prostor* 10, Zagreb, 2002, pp. 119-134.

<sup>2</sup> Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta na Pločama*, in: *Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, p. 29. *Prima pars est de declarando quod Lazaretiis ad Plocias inteligantur comprehendi in Fortificationibus* (15:11).

<sup>3</sup> Z. BLAŽINA-TOMIĆ, *Kacamorti i kuga: utemeljenje i razvoj zdravstvene službe u Dubrovniku*. Zagreb-Dubrovnik, 2007, pp. 17-39 (with older literature).

<sup>4</sup> The course of construction of the earlier Lazaretto quoted from: V. BAZALA, *Pomorski lazareti u starom Dubrovniku*, in: *Dubrovačko pomorstvo: zbornik u povodu sto godina nautičke škole u Dubrovniku*, Dubrovnik, 1952, pp. 293-303. – S. BENIĆ, *Konzervatorsko-urbanistički problemi Dubrovnika: Dubrovački Lazareti*, *Zbornik zaštite spomenika kulture* 12, Beograd, 1961, pp. 106-108. – R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture starog Dubrovnika*. Vol. 1, Beograd, 1938, pp. 112-114. – Z. ŠUNDRICA, *Arhivsko gradivo o izgradnji Lazareta*, pp. 11-20.



Fig. 1. Panorama of Dubrovnik, beginning of 19<sup>th</sup> century

We should bear in mind that the quarantine (lazaretto) in old Dubrovnik was primarily an institution, not a building, even though the complex of buildings at Ploče became a synonym for it today. Also, the functioning of this complex should always be examined in the context of the entire surrounding area of Ploče, because as we can see today, there was an entire assortment of buildings (guardhouses, horse stables, fountains, sinks for bathing livestock, houses called the Han and Čardak for accommodation of the merchants, etc.) around the Lazaretto complex, and without them the organization of quarantine and trade would be impossible. The most important among them was the walled area with adjoining small objects located north of the Lazaretto, called Tabor, where trade was conducted.<sup>5</sup> Because of the incredible economic and strategic importance of the Lazaretto for Dubrovnik, it is logical that the management and maintenance of it was conducted by the state;<sup>6</sup> for the entire duration of the Republic of Dubrovnik it was well-maintained on a regular basis, and the last major building intervention was done in 1784.<sup>7</sup>

### *Lazaretto Complex in the 19<sup>th</sup> Century, from the French Occupation (1806) to the Abolishment (1874?)*

The French occupation (1806) and the abolishment of the Republic of Dubrovnik (1808), presented a new set of circumstances for the Lazaretto complex. Because of turbulent events surrounding the occupation, the health service that for centuries was organized in an exemplary manner was unable to act as before, so threats to the health of citizens and soldiers started to appear. There were a number of reasons, one was definitely the fact that French military rule requisitioned part of the Lazaretto for the occupation troops and their needs: the artillery unit had horses in one area, there were also shops, warehouses, a slaughterhouse and a military pub.<sup>8</sup> In March 1808, in an attempt to (re)introduce order

<sup>5</sup> Most of the area of the former *Tabor* is today occupied by the high school building, and the memory of its former function is preserved only in the neighbouring street, named *Uz tabor*, and the *Meded* water fountain in front of Ploče gates.

<sup>6</sup> The Lazaretto was under the jurisdiction of the Health Office composed of 5 patricians (*Officiali alla Sanità*) who proscribed practical measures against the spread of infectious diseases. The management of the Lazaretto was entrusted to the Lazaretto captain and his deputy who, together with their support staff, had to live there for the duration of their mandate. V. BAZALA, *Pomorski lazareti u starom Dubrovniku*, p. 303-304.

<sup>7</sup> I. LENTIĆ-KUGLY, *Gradevinske intervencije u Dubrovniku potkraj 18. i na početku 19. stoljeća*, *Radovi Instituta za povijest umjetnosti* 12-13, Zagreb, 1989, pp. 277-279.

<sup>8</sup> G. VUKOVIĆ, *Preobrazba Dubrovnika početkom 19. stoljeća*, *Radovi Instituta za povijest umjetnosti* 24, Zagreb, 2000, p. 40.

to the sanitary situation, the French authorities formed a new body that would look after public health: the Health Commission (*Commissione sanitaria, Zdravstvena komisija*), composed of five members, four of whom were health experts, and were presided over by the local administrator of the French government Dominik Garagnin.<sup>9</sup> It is obvious that one of the main preoccupations of the Health Commission in 1808 was to restore the Lazaretto to its original function, because on 12 May 1808, the commission immediately created and published a detailed rulebook on quarantine sequestration and the functioning of the Lazaretto. The rulebook was composed of 19 paragraphs, and the organization of work essentially looked similar to that during the Republic. The institution was managed by an administrator (prior) who had to live in the Lazaretto and keep two record books (one for persons and the other for goods), take care of order and security, supervise the decontamination of goods, issue orders to guards who worked in the Lazaretto and those attached to them, send a weekly report to the commission about the situation in the institution, look after the couriers and the mail, etc.<sup>10</sup> It should be pointed out that an exceptional contribution, especially at the start of the Health Commission, was made by the Dubrovnik physician and writer Vlaho Stulli (1768-1843), who, among other things, was a fervent advocate of vaccination.

During the first two years of the Austrian rule, 1814-1815, the Lazaretto maintained its previous function. The lack of state independence during the Napoleonic Wars, which exhausted almost all European countries, resulted in a total economic collapse in Dubrovnik as well (of 277 ships in 1806, only 49 remained in 1811, and just 30 in 1823), so circumstances in Dubrovnik during the first three decades of the 19<sup>th</sup> century were extremely difficult. Nevertheless, by the 1830s, the trade gradually recovered, and the Lazaretto started to again receive an increasing number of merchants and goods.<sup>11</sup> As an important urban institution, it was visited in 1818 by the Emperor and King Francis I (1768-1835, ruled from 1792) when he came to Dubrovnik, as he described in his diary. Likewise, the estimable district engineer Lorenzo Vitelleschi described the Lazaretto in his book about the district of Dubrovnik, published in 1827, in which he also provided the complex's plan.<sup>12</sup> From their descriptions, it is possible to conclude that the Lazaretto management remained similar as before, even though the Austrian authorities formally reorganized, to an extent, the health office. The Emperor noted and described the buildings in the quarantine complex, as well as the area for trade in Tabor: "Turks and their subjects came to the market [Tabor] for trade proposes: it was located on the hillslope and was thus partly made of stone, and was enclosed in a high wall at the foot of the hill [towards the road, today's Frano Supilo Street, a/n]. The exterior door was used by the Turks as entrance, it was closed after everyone was inside. (...) The Turks stayed inside the twin walls, and health officers (die Fanti der Sanità) used large sticks to keep the local population at some distance from the Turks. A wide wooden groove was used to transport the bought or sold wheat from one part to the other. The local people came to the inner wall, which is how trade was conducted. (...) Among them, as I witnessed today, were real Turks, but also many Turkish subjects. They came with horses carrying goods covered with brown striped covers. Nobody is allowed, not even the military crew that accompanied them, to touch them. If someone did, they were immediately sent to the decontamination hospital [quarantine]. The trading lasts between eight to ten hours. When finished, the military comes and takes them to the border, paying attention that none of them deviates from

<sup>9</sup> Z. ŠUNDRICA, Osnivanje zdravstvene komisije u Dubrovniku i njezin rad 1808. godine, in: Z. Šundrica, *Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 127-130.

<sup>10</sup> The summary graphic image of the Lazaretto with inscribed functions of individual buildings within the complex and in its vicinity, originates from that period. L. BERITIĆ, Ubikacija nestalih građevinskih spomenika u Dubrovniku II, *Prilozi povijesti umjetnosti u Dalmaciji* 12, Split, 1960, p. 62.

<sup>11</sup> S. COSIĆ, *Dubrovnik nakon pada Republike (1808.-1848.)*, Dubrovnik, 1999, p. 186.

<sup>12</sup> L. VITELLESCHI, *Povijesne i statističke bilješke o dubrovačkome okrugu*, (ed. V. Lupis), Dubrovnik, 2002, pp. 93-94.

the road. During the trade fair, draught animals stay in the same place as the Turks where they roam free. I saw several hundred of them, and there are more and more coming, some are Turks, and some Turkish subjects. (...).<sup>13</sup> Just like the Emperor in his description, one decade later the engineer Vitelleschi described the road that lead from the Ploče gate towards St. Jacob, as an actual corridor between two high walls that prevented passers-by to come into contact with Tabor or the Lazaretto, and the two spaces were connected with a passageway under the road whose traces can partly be seen today in the extant northern perimeter wall of the Lazaretto.

Contrary to the common misconception of life dying down in Dubrovnik in the 19<sup>th</sup> century, the Lazaretto kept its original function, with lesser or greater intensity, long after the abolishment of the Republic, which is evident from the extant registration books of goods and travellers and other well-kept official documents stored in the special archival series in the State Archive in Dubrovnik. Unfortunately, the Lazaretto administration records for the period between 1814 and 1873 were not entirely preserved, so there are missing documents of entire years in the archival material stored in 35 boxes and 26 registration books, and we cannot precisely reconstruct many details about this quarantine institution and its activity during the 19<sup>th</sup> century.<sup>14</sup> It was headed by the director (*direttore dei Lazaretti*) who was usually assisted by the deputy (*vice-direttore*), and serving under them were guards (*guardiani*) who were under direct supervision of the head guard (*capo guardiano* or *primo guardiano*). The quarantine director was accountable to the District Magistrate Office (Cro. *Okružno/Kotarsko poglavarstvo*) in Dubrovnik whom he sent regular reports to, and he cooperated directly with the health office. When the Central Maritime Government (Ital. *Governo Centrale Marittimo*, Ger. *Central-Seebehörde*) was established in 1850, with a seat in Trieste, that dealt with everything related to maritime affairs and trade in the part of the Adriatic under Austrian rule, he would receive important decisions, either directly from that body in Trieste or by letter through the District Magistrate Office. Even though the principles and organization of work practically stayed the same as in previous centuries, which shows a strong continuity of this old institution, we should still point out several differences in relation to previous periods. Specifically, at the very beginning (1815), the new Austrian government introduced a sanitary cordon in the entire territory of the district of Dubrovnik that served to prevent the spread of any form of infection from neighbouring regions under Ottoman rule. Its foundation was probably motivated by the horrible plague epidemic that was ravaging Bosnia and Herzegovina at the time, but its activity continued even later (until the Austrian occupation of Bosnia and Herzegovina in 1878). There were health commissioners stationed in all large border villages near Herzegovina who had to monitor the flow of persons, livestock and goods, and inform their supervisors about their observations.<sup>15</sup> In addition, the director of the Lazaretto at Ploče directly supervised a health official at Brgat (village close to the border), who was in constant contact with the Lazaretto. We should also add that, unlike the period of the Republic, the 19<sup>th</sup> century quarantine had a permanently employed physician, although – it seems – there were brief periods when this position was not filled. Another difference was that during the Austrian rule, the land and maritime quarantine were separated, and the Lazaretto at Ploče was solely used for travellers and merchants

<sup>13</sup> LJ. KRMPOTIĆ, Car Franjo I. u Hrvatskoj 1818., vol. 1, Hannover-Čakovec, 2002, p. 308.

<sup>14</sup> Arhivska serija HR-DADU.

<sup>15</sup> M. MURVAR, Sanitarni kordon za vrijeme Dubrovačke Republike i poslije njena pada, *Naše more* 17/6, Dubrovnik, 1980, pp. 344-346. In 1820-1821, the special commission of the Austrian army, led by Major Taborović created four maps that are kept in the State Archive in Zadar. The map of military sanitary cordons shows the border region of Austrian property in Dalmatia towards the Ottoman Empire. The map of military-sanitary cordons that shows the area of the district of Dubrovnik, on the internal (Austrian) side of the border, has precisely drawn border stations of the sanitary cordon towards the area of the Ottoman Empire between Neum and Sutrina. S. OBAD - S. DOKOZA - S. MARTINOVIĆ, *Južne granice Dalmacije od XV. stoljeća do danas*. Zadar, 1999, p. 71-83.

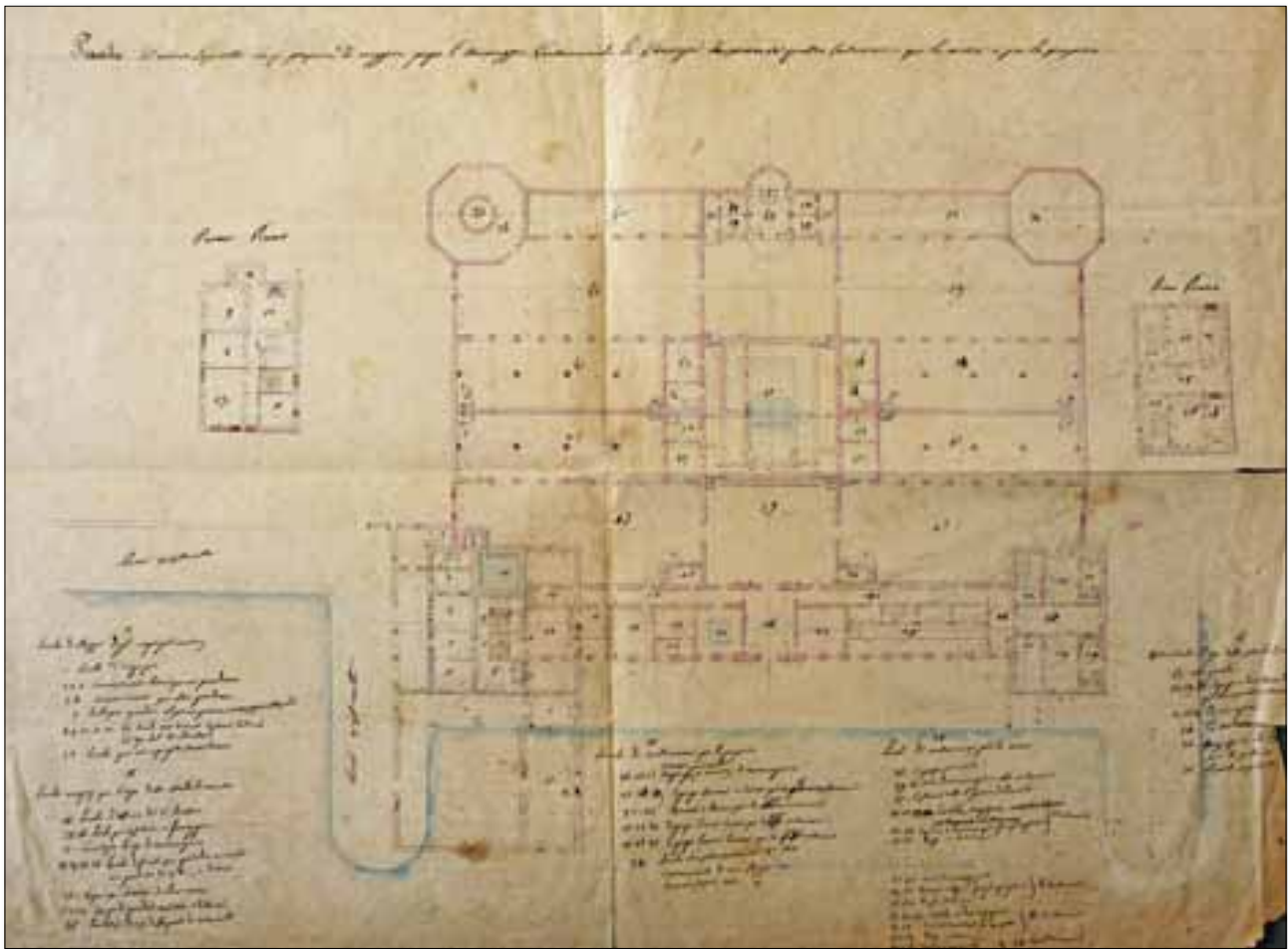


Fig. 2. A. Aporti, Project for lazaretto expansion in Gruž, plan, 1839.

who came to Dubrovnik by land (from this time on, it is sometimes referred to in Italian as the *lazzaretto terrestre*), while the Lazaretto in Gruž was established for the needs of maritime traffic (sometimes called *lazzaretto marittimo*). Even though in 1827, engineer Lorenzo Vitelleschi designed a project for the renovation of the lazaretto in the bay of Gruž, on its Lapad side, the construction was aborted due to high costs and this lazaretto was opened in 1832 after the adaptation of the Giorgi summer residence.<sup>16</sup> In all likelihood, the fact that the health office in the Kingdom of Dalmatia was reorganized in 1830-31 contributed to this; while the overland sanitary cordon remained unchanged, the novelty was the newly established maritime health office, probably necessitated by the increase in the maritime traffic. On this occasion, the Maritime Sanitation Magistrate Office (*Magistrato sanitario marittimo*) for the entire district was founded, with a seat in Zadar, that supervised the District Sanitation Offices (*Deputazione sanitaria circolare*) in 4 main centres (Zadar, Split, Dubrovnik, Kotor). The decision of the Dalmatian provincial government that all ships sailing in from the Levant had to dock in the Lazaretto in Dubrovnik, issued in 1830, was especially important for the port of Dubrovnik because it meant that Dubrovnik played a role of the transit port centre.<sup>17</sup> Although the economic recovery was slow, the incoming trajectory was constant, which is evident from the rising

<sup>16</sup> S. ĆOSIĆ, *Dubrovnik nakon pada Republike*, p. 251. – Š. PERIČIĆ, Prilog poznavanju pomorsko-trgovačkog prometa Dubrovačkog okružja od 1815. do 1850. godine, *Anali historijskog odjela centra za znanstveni rad JAZU u Dubrovniku* 15-16, Dubrovnik, 1978, p. 305. We should mention that in the State Archive in Dubrovnik there are two unrealized projects, from 1834 and 1839, for the remodelling of the Giorgi summer residence into a lazaretto, created by the district engineer Antonio Aporti. State Archive in Dubrovnik, Privremeni popis nacrtna dokumentacije i spisa Okružnog/Kotarskog građevnog ureda u Dubrovniku, box 1, documents 29, 30 and 36.

<sup>17</sup> S. ĆOSIĆ, *Dubrovnik nakon pada Republike*, p. 251, note 506.

maritime traffic in the 1830s and 1840s.<sup>18</sup> In order to get an impression of the amount of traffic that came in and passed through the Lazaretto at Ploče, we should indicate, on the basis of a monthly report, that between 21 August and 20 September 1848, 354 horses arrived in the Lazaretto, 221 travellers (218 men and 3 women) who brought with them merchandise valued at 12,332 florins, and between 21 July and 20 August 1850, 15 caravans came to the Lazaretto composed of 1,129 horses and 335 travellers who brought goods valued at 23,606 florins.

Based on the extant records, we can conclude that after the establishment of the maritime lazaretto in Gruž, the director of the Lazaretto at Ploče continued to head both institutions, but the lazaretto in Gruž was managed by the deputy director (*vice direttore*).<sup>19</sup> Also, as far as we are able to deduce from the extant materials, the number of employees and the flow of people and goods, the overland Lazaretto at Ploče continued to have primacy in quantity and it always employed twice as many personnel as the lazaretto in Gruž. Besides orders received from the District Magistrate Office, the health office, the provincial government in Zadar or the maritime government in Trieste, mostly informing the Lazaretto administration about new regulations (for the most part, on decontamination) or the health situation in individual Mediterranean ports, the internal business activity was regulated by various rulebooks and regulations. So, for example, in June 1816, the Dubrovnik District Magistrate Office promulgated a set of rules for the decontamination of timber used in construction, and in September 1829 it reminded that letters coming from the Ottoman territory have to be decontaminated (the provincial sanitation office repeated the order in January 1831), in July 1836 an order was issued on decontamination of books, in January 1838 rules on decontamination of coins were passed (the coins were to be submerged in salt water and/or vinegar), in February 1840 information was sent on methods of decontamination of waggons and carriages (their decontamination was especially complicated because they had many parts made from different materials that did not all have the same properties), etc.<sup>20</sup> The principal procedural document governing the work of the Lazaretto during the Austrian rule was the Book of regulations (*Istruzione dall' Imp. Reg. Magistrato di Sanità maritima della Dalmazia per le guardiani eventuali*) issued by the Provincial health office in Zadar in July 1832. The Book of regulations was divided into 4 sections (for guards who worked in the overland lazaretto and looked after persons, for those who worked in the maritime lazaretto, guards who had to stay aboard quarantined ships, and finally, it discussed the methods of decontamination) and it regulated, in great detail, not only the principles but also the operative details, such as the rights and responsibilities of guards, their daily wages, and similar. It is evident, from the Book of regulations, how much attention was paid to the guard service and stewards in the quarantine, because they were in constant contact with travellers and goods, and they had to be responsible and reliable people. They had to be adept at dealing with people, which can be concluded from the fragmentary extant documents about the Dubrovnik Lazaretto, because the promotion of guards and their salaries were decided on the basis of whether they knew how to read and write, and if they spoke foreign languages.<sup>21</sup> The number of guards and stewards constantly varied: in 1825 there were 9 (including the head guard), in 1831 there were the total of 21 (15 at Ploče and 6 in Gruž), in 1833 there were 7 at Ploče (including the head guard), in 1834 there were 12, in 1845 the number was 19 (even though that number did not refer only to the Ploče and the Gruž lazarettos

<sup>18</sup> Š. PERIČIĆ, Prilog poznavanju pomorsko-trgovačkog prometa, pp. 308-309.

<sup>19</sup> In a document issued by the health authorities in Zadar in 1850, it is stated as follows, *ora riunito Lazzaretto di Ragusa-Gravosa*. It is not possible, at least for now, to reconstruct the formal connection between these two lazarettos because the documents were sometimes filed together, and other times separately.

<sup>20</sup> HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 31.

<sup>21</sup> HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 33.



Fig. 3. Lazaretto around 1895

because the list of employees that year recorded also some border sanitary officers), and just before the suspension of activities in the quarantine in 1873, the personnel was composed only of the director, doctor Vlaho Šarić and two guards.<sup>22</sup> From several extant detailed lists of employees, for example those in 1834 and 1845, it can be seen that they were mostly younger persons (in their twenties and thirties), of which at least a third was literate, and a good number of them spoke Italian, while a few also did Albanian and Turkish languages. Although the number of guards varied, some of them spent their entire working lives in the quarantine service: for instance, the case of guard Niko Baletin, son of Đuro, was interesting insofar as the decision upon his retirement in November 1832 states that he was hired as a guard as far back as 1791, and in 41 years of service he worked under the Ragusan, French and Austrian administration of the Lazaretto. The solemn declaration about his exemplary behaviour and abilities was certified with a sign of the cross by seven of his colleagues, in the presence of the then Mayor Sigismund Ghetaldi-Gondola.<sup>23</sup> Crucial for our understanding of the functioning of the Lazaretto is the internal rulebook that was created on 31 August 1852 by the then director of the Lazaretto, Ragusan nobleman Antun Cerva (1791-1868) and the controller Ivo Valjalo. In 12 paragraphs, they introduced the “daily schedule” for Lazaretto guards, so for example, we know from this rulebook that the head guard had to have a daily break between 11:00 and 12:00 hrs, and all other guards in that shift had to be present in the institution and could have their break only after. Also, the guards that worked in the Lazaretto building and in Tabor worked in two-day shifts and would then rotate; the two guards in Tabor were free to leave after the close of business (at sunset), while the other two in the Lazaretto complex had to wait

<sup>22</sup> Besides employee reports from the archival fund HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 33, the number of guards is also based on the schematism of the Kingdom of Dalmatia for 1825 and 1873.

<sup>23</sup> HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 33. His example is interesting also because it shows at least some continuity of quarantine service in that turbulent period. The case of Ivo Stella is similar, his family served in the Lazaretto for almost a decade, and he was the Lazaretto captain before the fall of the Republic, during the French administration and is also mentioned as the director in 1825.

for the military to close the Ploče city gate, and only then would their shift end; still, one of the guards was permanently assigned to the night shift and had to patrol the Lazaretto at night and one last time in the morning before the arrival of the day shift. We also find out from this rulebook that the head guard (*capo guardiano*) and his deputy (*primo guardiano*) had an official uniform they had to wear constantly, under threat of suspension, and that the guards were forbidden to shelter and linger in shops at Ploče during rain and cold weather, but instead had to return to the Lazaretto.<sup>24</sup> It seems that the Lazaretto had its official flag designation with the inscription “Sanità” and four yellow flags that could be used by the guards, if needed (according to the international conventions of the time, the colour yellow designated the region or ship that had to be placed under quarantine).<sup>25</sup>

The year the Lazaretto was abolished as a health institution is not precisely determined, however, based on the extant archival records it seems it was in 1874. Specifically, the official yearbook of the Kingdom of Dalmatia in 1873 mentions the existence of the Lazaretto in Dubrovnik, although in reduced form (only the director and two guards), while the 1875 yearbook no longer mentions the Lazaretto.<sup>26</sup> This should not surprise, if we bear in mind the new medical knowledge about the role of quarantine that developed as a result of medical advancements, and that the European countries organized several international sanitary conferences on this subject (the first and second in Paris in 1851 and 1859, and in Istanbul in 1866). That Lazaretto lost most of its original function around that time is partly confirmed by the fact that during the 1875-76 Herzegovina Uprising its buildings were used to shelter a large number of refugees from the hinterland, which would not have been possible if they were functioning as quarantine.<sup>27</sup> The last director of the Lazaretto was the renowned medical doctor Vlaho Šarić (1818-1896) who worked in the quarantine health service for many years, and who, besides practical medical work, devoted his time to education and scientific work studying infectious diseases.<sup>28</sup> Thus far, we do not know if any construction work on the buildings was done in the first half of the 19<sup>th</sup> century, however if we compare older illustrations of the Lazaretto (primarily those from 1784 and 1808, and the 1827 plan by the engineer Lorenzo Vitelleschi) with one of the earliest photographic images of Dubrovnik, created around 1868, we can conclude that the exterior of the quarantine complex remained unchanged.<sup>29</sup> Of course, it would be logical to assume that smaller interventions and maintenance works were conducted in cooperation with the District engineering office; for example, in July 1834 there was a public auction to collect offers for carpentry works in the Lazaretto in the amount of 104 florins,<sup>30</sup> and in February 1865 the storm damaged the wooden partition (*rastello*) located on the upper plateau that enabled communication between quarantined persons and visitors, and it was immediately replaced by a new one.<sup>31</sup> Besides providing an insight into the condition of the Lazaretto in the latter half of the 19<sup>th</sup> century, the aforementioned photograph also attests to the original, functionally unbreakable relationship between the Lazaretto and Tabor, the spacious enclosed plateau in front of the Ploče Gate,

<sup>24</sup> HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 33.

<sup>25</sup> The existence of the flag designation can be assumed by analogy with the lazaretto in Gruž that had such flags, as we can see in the detailed inventory of the Gruž lazaretto compiled in August 1847 by its manager Mato Saraca (1780-1858) who, it seems, spent a sizeable part of his career in the health service, because he was mentioned as a health officer as early as 1817.

<sup>26</sup> In the official 1872 Annual manual of the Kingdom of Dalmatia (*Manuale del Regno di Dalmazia*), it is stated that the maritime health office was thoroughly reorganized in 1871, and it seems that the Lazaretto at Ploče is no longer mentioned in its original function. For more, see also the inventory of the archival fund HR-DADU-107.

<sup>27</sup> J. BERSA, *Dubrovačke slike i prilike (1800-1880)*. Dubrovnik, 2002, p. 273. – A. EVANS, *Kroz Bosnu i Hercegovinu pješke tokom ustanka augusta i septembra 1875*. Sarajevo, 1965, p. 330

<sup>28</sup> AUTHOR UNKNOWN, *dr. Biagio Sciarich, Decimoquinto programma dell'i.r. scuola nautica di Ragusa per anno scolastico 1895-96*. Dubrovnik, 1896, pp. 10-11. We find out from this obituary that Dr. Šarić was a long-term professor in the Dubrovnik Maritime School and that he wrote a book about the Dubrovnik Lazaretto, which was regrettably never published.

<sup>29</sup> HR-DADU-298.

<sup>30</sup> HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 31.

<sup>31</sup> HR-DADU-107, Uprava lazareta u Dubrovniku (1814-1873), box 30.



where the caravan road ended. As was previously mentioned, located inside the Tabor complex were the residential houses called Han and Čardak for foreign merchants, the Meded water fountain, and a decontamination pool the livestock had to walk through. Tabor and Lazaretto were connected with an arched passageway underneath the road that led from the city towards St. Jacob and Župa Dubrovačka. The Church of St. Anthony the Abbot, a seat of the Antunini confraternity, was located immediately next to Tabor. Unlike the Lazaretto, the area of Tabor was suddenly transformed in the second half of the 19<sup>th</sup> century; the state (state property office) sold the terrain and buildings to the Municipality of Dubrovnik at an auction in 1883, which in turn resold it to private individuals for house building.<sup>32</sup> The last remains of Tabor and the original spatial relationship between the Lazaretto and its immediate terrestrial surroundings finally disappeared after the high school building was finished, the construction of which started in 1913.<sup>33</sup> After the departure of refugees from Herzegovina, the quarantine complex in Ploče was mostly used as a warehouse under military rule, and at the beginning of this “post-quarantine” period there is a record of significant damage to the Lazaretto sustained in October 1878, when a large amount of stored hay caught fire, after which the building was repaired and returned to its warehouse function.<sup>34</sup> Despite some opinions that this great space in front of the city should be put to better use, the conditions remained unchanged for a long time.<sup>35</sup>

### *Plans for Hotel Construction in the Lazaretto*

The first known plan for the conversion and transformation of the Lazaretto dates back to 1911, when the complex was still managed by the Austrian military government, and it was created by the Viennese architect Alfred Keller. The plan to build the hotel with a kursalon at the Lazaretto was created as part of the tourism development project by the “Association for the promotion of national-economic interests of the Kingdom of Dalmatia.”<sup>36</sup> “Verein zur Förderung der volkswirtschaftlichen Interessen des Königreichs Dalmatien” was founded in Vienna in 1894, and among their activities aimed at improving the economy of Dalmatia was the development of tourism and the foundation or improvement of existing sanatoria and hotels. Count Johann Nepomuk von Harrach was the association’s president, and after his death in 1909, Prince Hugo Veriand Windischgrätz from Vienna. That same year, the Association commissioned the Viennese architect Alfred Keller to design five hotels, which he did between 1911 and 1913. The hotels were supposed to be built in Split, Trogir, Kotor, Trsteno and in Dubrovnik in the Lazaretto. As with most projects that he created for the Croatian coastal region, Keller based the concept of his Lazaretto hotel on a picturesque projection of Mediterranean architecture, trying to avoid stylistic reminiscences, as was the spirit of the times. Guided by the desire to incorporate

<sup>32</sup> L. BERITIĆ, Ubikacija nestalih građevinskih spomenika, pp. 61-66. – I. VIDEN, Preobrazba i razvoj pod dvoglavim orlom: crtica o dubrovačkoj gimnaziji tijekom dugog 19. stoljeća (1806-1914), in: *90 godina Dubrovačke gimnazije na Pločama*, (ed. K. Tolja, M. Giljača), Dubrovnik, 2017, pp. 31-37.

<sup>33</sup> On the construction of High School, see: A. BAĆE, Gimnazija na Pločama – izgradnja i arhitektonsko oblikovanje, in: *90 godina Dubrovačke gimnazije na Pločama*, (ed. K. Tolja, M. Giljača), Dubrovnik, 2017, pp. 51-66.

<sup>34</sup> “The bottom part of the building, called *bagiafer* (*shrana*), almost completely burned down. (...) At the beginning of Austrian rule, the Lazaretto fell into military hands even though, until recently, the Lazaretto captain was paid by the government. Now, one can only see but the pitiful burnt remains, however the government was quick to repair the damaged building, and stonemasons were already competing to be the one to reconstruct the Lazaretto. Thus, the large building will soon be erected again for the benefit of mankind as originally intended.” AUTHOR UNKNOWN, Oganj u Lazaretima, *Slovinac* 12, Dubrovnik, 1878, pp. 131-132.

<sup>35</sup> The historian and writer Lujo Vojnović, in his essay “Smrt dubrovačkih stijena,” one of the most important texts from that period that describes the appearance of monuments in Dubrovnik, does not refer directly to the Lazaretto, but he implies all architectural monuments that where then the property of the state (military), and not the city (municipality). For more, see: L. VOJNOVIĆ, Smrt dubrovačkih stijena in: L. Vojnović, *Književni časovi*. Zagreb, 1912, pp. 155-165.

<sup>36</sup> S. PIPOVIĆ, Dalmatinski opus arhitekta Alfreda Kellera, *Građa i prilozii za povijest Dalmacije* 15, Split, 1999, pp. 272-274. – I. PERIĆ, *Razvoj turizma u Dubrovniku i okolici, od pojave parobrodarstva do 1941. godine*. Dubrovnik, 1983, pp. 72-74. – J. ČULIĆ, Način za rješanje problema naših pasivnih krajeva! (Historijat akcija za podizanje hotela u Dalmaciji), *Jugoslavenski turizam* 2, Split, 1928, p. 5-7.



Fig. 4. A. Keller, Hotel and kursalon in Lazaretto, south façade, drawing, 1911



Fig. 5. Gj. Linardović, Hotel and kursalon in Lazaretto, south façade, drawing, 1929



Fig. 6. A. Keller, Hotel and kursalon in Lazaretto, south façade, drawing 1936

it into the urban tissue, at the intersection of the historical nucleus and the suburban gardens, the architect saturated the fragmented volumes of different heights with many half-open spaces – arcades, loggias, terraces and green courtyards, and kept only the coastal wall line from the original Lazaretto structure.<sup>37</sup>

The outbreak of World War I, as well as the social-political changes that ensued after its end, did not significantly influence the fate of the Lazaretto complex, and it remained in military possession, however now under the Military state office of the Kingdom of Serbs, Croats and Slovenes (later the Kingdom of Yugoslavia). Despite the fact that the Municipality of Dubrovnik managed to arrange the property exchange with the Military state office as early as 1921 (in exchange for the city walls and fortresses, the Sponza Palace, the Rupe grain depository, Lazaretto and other buildings within the historical nucleus, the Military state office would also be given the complex of the home guard military barracks in Gruž), the contract was not fully executed until April 1930.<sup>38</sup> The agreement was reported on in the article published in September 1921, in the local weekly “Rad,” including the details and conditions of the future usage of individual buildings, according to which the Lazaretto was supposed to be demolished and a replacement building erected in its place.<sup>39</sup> In the course of almost a full decade that elapsed between signing the contract and its execution, the military authorities continued to manage the Lazaretto unimpeded by leasing it as warehouses and stables.<sup>40</sup>

The municipality, however, was impatiently expecting the handover and started, as early as 1928, to negotiate with the Hotel Engineering Association “Dubrovačka rivijera” about relinquishing the area of the slaughterhouse and the “property known as the Lazaretto,” for the construction of a hotel with a kursalon.<sup>41</sup> Several of Dubrovnik’s dignitaries and a wealthy Estonian financier, William Zimdin, invested capital in the Association and were interested in building in a number of suitable locations in the immediate vicinity of the historical nucleus, such as Pile and Danče. The municipal authorities were prepared, in an attempt to encourage the development of tourism, to contractually agree to give the investors many concessions. The contract’s conclusion was made difficult by the military authorities who delayed turning over the Lazaretto, and in the meantime, in mid-1929, “Dubrovačka rivijera” bought a nearby hotel “Odak” at an auction, and in the circumstances of the serious global economic crisis, was obviously becoming less interested in uncertain investments.<sup>42</sup> The negotiations lasted a while longer, Lazaretto was mentioned in the context of building a public promenade and a bathhouse with winter swimming pools, however the final agreement was not reached.<sup>43</sup>

Even though we can assume that several conceptual designs for Lazaretto redevelopment were created during the negotiations, only one project dated in November 1929 was preserved, created by the lesser-known engineer Gjuro Linardović, employed in the Directorate of Maritime Traffic (Cro. *Direkcija pomorskog saobraćaja*) in Split. According to Linardović’s project, the hotel, a voluminous high-rise with 210 rooms was located to the west, and the kursalon, a separate smaller building with a pool at ground level, to the east. The buildings at ground level were connected through a spacious terrace-covered “promenade,” opened to the sea with arcades. The author said that when he designed the building he was guided by the “dogana style,” i.e. the Sponza Palace, however, it was obviously a very loose interpretation of the template.<sup>44</sup>

<sup>37</sup> State Archive in Dubrovnik, Zbirka građevinskih planova Općine Dubrovnik (hereafter: HR-DADU-292), vol. 121/15. – A. BAĆE, *Arhitektura Dubrovnika između dva svjetska rata*. Doctoral dissertation, Zagreb, 2015, p. 152.

<sup>38</sup> L. BERITIĆ, *Utvrđenja grada Dubrovnika*. Dubrovnik, 1955, p. 213. – I. VIDEN, Dubrovački slikar i konzervator Marko Murat, *Godišnjak zaštite spomenika kulture Hrvatske* 29-30, Zagreb, 2007, p. 15.

<sup>39</sup> AUTHOR UNKNOWN, Važan ugovor za razvitak grada, *Rad* 95, Dubrovnik, 1921, p. 2.

<sup>40</sup> AUTHOR UNKNOWN, Licitacija vojno državnih zgrada, *Dubrovački list* 10, Dubrovnik, 1924, pp. 4-5.

<sup>41</sup> State Archive in Dubrovnik, “Kursalon” – unclassified document (hereafter: HR-DADU - “Kursalon”)

<sup>42</sup> AUTHOR UNKNOWN, Prodaja Hotela Odak, *Narodna svijest* 35, Dubrovnik, 1929, p. 2.

<sup>43</sup> HR-DADU-292, vol. 121/15 – HR-DADU – “Kursalon”.

<sup>44</sup> HR-DADU-292, vol. 185/19



Fig. 7. M. Kauzlarić and S. Gomboš, Hotel in Lazaretto, photomontage, 1936

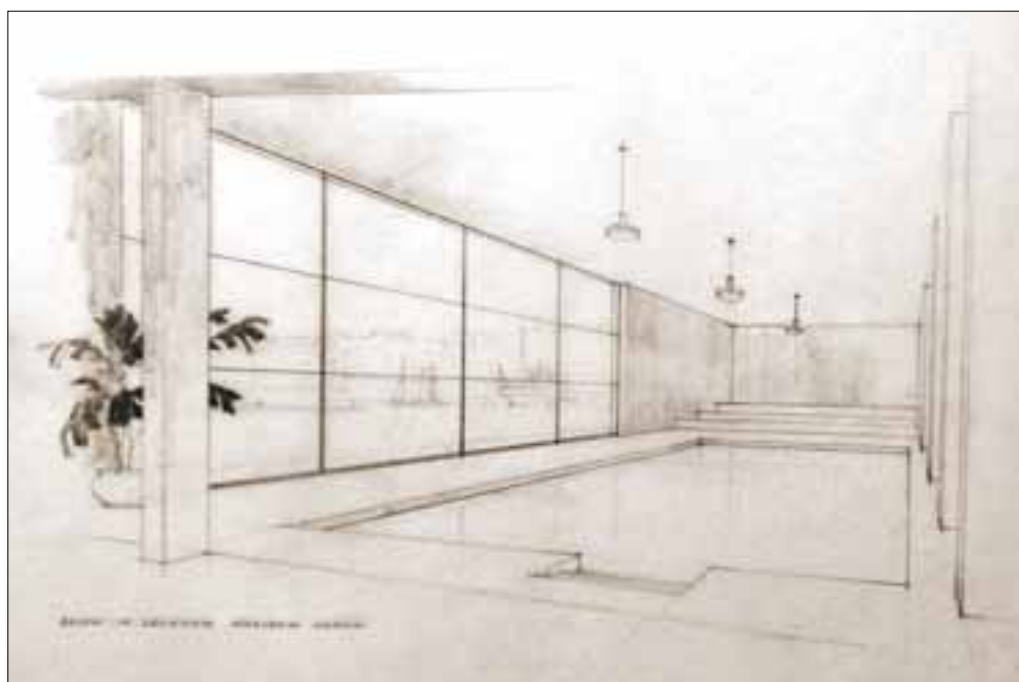


Fig. 8. M. Kauzlarić and S. Gomboš, Hotel in Lazaretto, perspective view, interior, 1936

In contemporary local media, there was only a minor debate in the “Narodna svijest” newspaper, however the opinion that “today’s Lazaretto buildings have a relatively insignificant value” was not questioned, and the debate was reduced to the issue of whether it was better to use the Lazaretto to build a hotel, public bath or a large field – walkway with a series of hotel buildings to the north, in the area of Ploče.<sup>45</sup>

<sup>45</sup> AUTHOR UNKNOWN, Što bi se moglo učiniti s Lazaretom?, *Narodna svijest* 17, Dubrovnik, 1930, p. 5. – AUTHOR UNKNOWN, Pitanje starih Lazareta, *Narodna svijest* 23, Dubrovnik, 1930, p. 5. – AUTHOR UNKNOWN, Pitanje starih Lazareta, *Narodna svijest* 29, Dubrovnik, 1930, p. 3. As far as we know, conservationists Marko Murat and Kosta Strajnić, from the Bureau of Art and Monuments, were not involved in the early 1930s debate. Although Strajnić, in his texts and publications, harshly criticized many contemporary building interventions and initiatives that “undermined the historical character of Dubrovnik,” his opinion on this issue remains oddly unknown.

During the global economic crisis, understandably so, the interest in the transformation of the Lazaretto completely subsided. The issue only became current again in the latter half of the 1930s when the then Mayor Ruđer Bracanović made the shipowner Božo Banac Jr. interested in the Lazaretto. The negotiations between the municipality and Božo Banac, i.e. the “Yugoslav Lloyd” shipping company, about the takeover of the Lazaretto started in the summer 1936. In September that same year, Lloyd made an offer to buy the Lazaretto, build a large hotel and dislocate the slaughterhouse to a different location.<sup>46</sup>

Negotiations surrounding the draft contract lasted until the beginning of 1937 when Banac, on behalf of the “Yugoslav Lloyd,” backed out of the purchase agreement because he considered the final sale conditions approved by the municipal council unfavourable. During negotiations, in autumn of 1936, Banac commissioned as many as three design projects for the hotel, and later he explained the reasons for not buying the Lazaretto in an open letter: “Several days before Christmas, I received all commissioned projects. Among them were project of the distinguished architects Gomboš and Kaulzarić, the renowned expert in hotel construction prof. Keller from Vienna, and finally the project of Messrs. architects Bilinić and Horvat. The last project was created under the supervision of Ivan Meštrović himself, and when I and my friends saw these plans, we were simply elated, together with all the esteemed experts who had the opportunity to see them. This project was accepted and sent to Dubrovnik for you to examine and submit it for approval, so that a definitive contract could be signed immediately and the construction started.”<sup>47</sup> The perspectival illustration of the hotel by Lavoslav Horvat and Harold Bilinić was published as an addition to the article entitled “Singing of a beautiful future” in the “Hrvatska Dubrava” newspaper. According to the article, the hotel was supposed to have 180 rooms, a concert hall with 1,250 seats, seawater swimming pool, steam room, several restaurants, exhibition hall, and a garden located in the area of the slaughterhouse. The writer shared Banac’s enthusiasm with the hotel project that would “only contribute to the overall picturesque image of both the city and Ploče,” and added that he “immediately noticed that Messrs. architects paid strict attention to the historical outlines of the city, avoiding even the idea of building some grotesque skyscraper.”<sup>48</sup>

The Horvat and Bilinić design proposed the removal of all buildings west of the new hotel’s entrance atrium to the Ploče outer bridge – the slaughterhouse and several residential houses, as well as the creation of a spacious cascading plateau. The broad strokes of the plateau purification were in total harmony with the monumental hotel design, inspired less by traditional models than those liked by contemporary totalitarian regimes.<sup>49</sup>

<sup>46</sup> HR-DADU-292, vol. 121/15. In the letter sent to Mayor Bracanović on 9 October 1936, Božo Banac said as follows: “As soon as I returned to Zagreb, I immediately dealt with the issue of the Lazaretto, because, in this business, time is of the essence. I got in touch with most of the Croatian architects, especially Mr. Gomboš and prof. Keller, whose experience and expert knowledge of the subject matter will definitely be useful. They are already actively working on initial designs and we will do everything in our power to start working in the field as soon as possible. However, the work is cumbersome, and it is hugely important for both sides, and especially for the city, not to waste a single season, which means that the hotel should be finished and ready for opening at Easter 1939. As all experts tell me, this deadline cannot be met, unless the construction starts in February 1937 at the latest, and only if we use time as rationally as possible.”

<sup>47</sup> HR-DADU-292, vol. 121/15. – AUTHOR UNKNOWN, Izgradnja hotela na Lazaretima?, *Hrvatska dubrava* 69, Dubrovnik, 1937, pp. 5-9.

<sup>48</sup> AUTHOR UNKNOWN, Kao pjesma lijepe budućnosti..., *Hrvatska dubrava*, 68, Dubrovnik, 1937, p. 3. It is interesting to mention the opinion of Neven Šegvić five decades later: “We should point out that, at that time, the Lazaretto was in a derelict state, completely in disrepair and there were discussions about its dismantling. However, the plan, its contour, was inspiring. It was definitely a bold approach to the task. Appropriating the basic design idea and developing it into a new grand hotel, that had all the important elements of our regional architecture, i.e. an abundant vocabulary of that architecture. There were arcades, lobby, loggia, elements of Dubrovnik summer residences, insufficiently studied to this day, and whose values are far superior to many of today’s realizations.” Still, the author hedges with the conclusion that “Realization of this project would probably (...) create a collision with the entire agglomeration of Dubrovnik.” N. ŠEGVIĆ, Ivan Meštrović i arhitektura, *Arhitektura* 36/37 (186-188), Zagreb, 1983-1984, pp. 2-9.

<sup>49</sup> Z. PALADINO, *Lavoslav Horvat: arhitektonsko djelo 1922.-1977*. Doctoral dissertation, Faculty of Humanities and Social Sciences, Zagreb, 2011, p. 479. – Z. PALADINO, Desetljetni opus graditelja Lavoslava Horvata i Harolda Bilinića za dubrovačkog investitora Božu Banca, *Radovi Instituta za povijest umjetnosti* 35, Zagreb, 2011, p. 247. – Z. PALADINO, *Lavoslav Horvat - Kontekstualni ambijentalizam i moderna*. Zagreb, 2013, pp. 52-53. – A. BAĆE, *Arhitektura Dubrovnika između dva svjetska rata*, pp. 155-156, 217-218

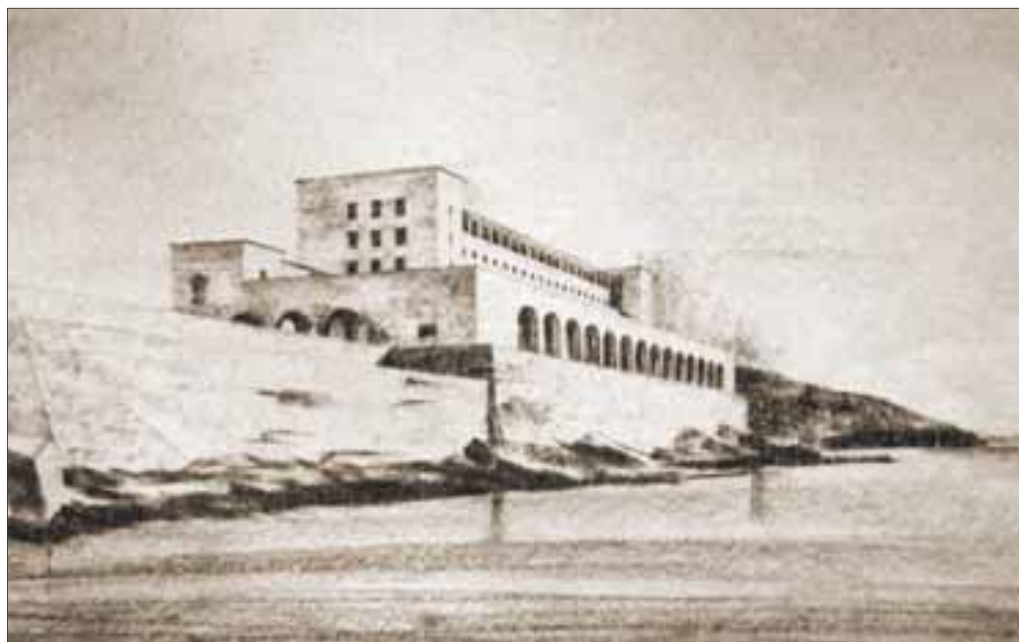


Fig. 9. L. Horvat and H. Bilinić,  
Hotel in Lazaretto,  
perspective view, 1936-1937

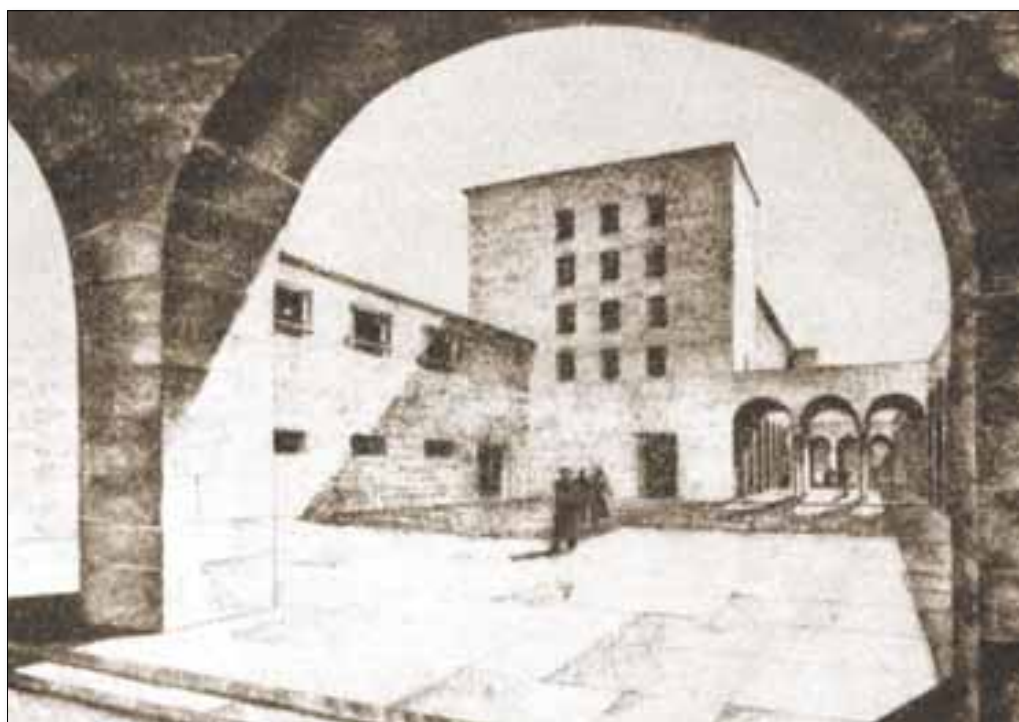


Fig. 10. L. Horvat and H. Bilinić,  
Hotel in Lazaretto,  
perspective view, 1936-1937

The other two projects that participated in Banac's internal architectural tender were also preserved: Alfred Keller modified his 1911 project, mostly in keeping with the earlier visual and spatial concept, while Mladen Kauzlarić and Stjepan Gomboš, true to their modernist principles, based their concept on the interrelationship between large cubic volumes, without any significant concessions to the local architectural context.<sup>50</sup>

<sup>50</sup> HR-DADU-292, vol. 121/15. – Zagreb City Museum, Mladen Kauzlarić Archive. – A. BAČE, Arhitekti Mladen Kauzlarić i Stjepan Gomboš u Dubrovniku (1930-1940), *Peristil* 53, Zagreb, 2010, p. 111. – A. BAČE, Arhitektura Dubrovnika između dva svjetska rata, pp. 202-203

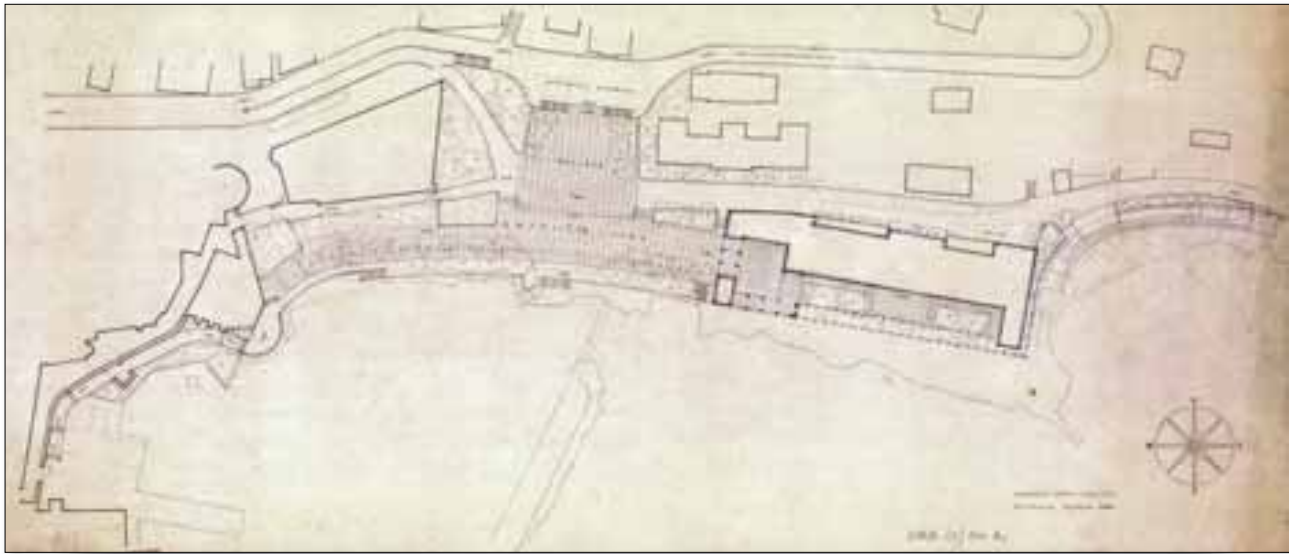


Fig. 11. L. Horvat and H. Bilinić, Hotel in Lazaretto and Ploče plateau, plan, 1936-1937

The State Archive in Dubrovnik also contains undated plans for a hotel in the Lazaretto that were created by the Parisian architect Georges Appia (1892-1993).<sup>51</sup> This project was also probably created in the late 1930s, and may have been commissioned by the “Dalmatinska rivijera” company, i.e. William Zimdin, who expressed a renewed interest in the Lazaretto in 1936, however the Municipality sided with the “Yugoslav Lloyd” and rejected his offer. This project, like all the previously presented projects, completely negated the existing historical structures, and only considered integration of the new building into the environment, in this case by moving the volume of the hotel further west, and partially opening the panoramic view from Ploče to the sea by positioning the access atrium, connected to the park, in the eastern section where the slaughterhouse once was.

### *Towards the Cultural-Historical and Architectural Valorisation*

In the second half of the 1930s, concurrent with the attempts of big business and the Municipality of Dubrovnik to convert the Lazaretto into a hotel, the awareness of its cultural-historical and architectural value was gradually rising. In 1937, Lujo Vojnović was the first to publicly oppose the construction of the hotel in the Lazaretto, in his text entitled “Vivisection of Dubrovnik” in the “Javnost” weekly.<sup>52</sup> Up until the late 1940s, Vojnović enjoyed the untouchable status of an arbiter on issues regarding the preservation of Dubrovnik’s traditions, and he harshly attacked the advocates of the hotel construction by calling them Neros and vivisectionists.<sup>53</sup>

In 1938, Safet Burina, professor in the Dubrovnik High School, published an article about the Lazaretto problem in the Belgrade paper “Politika.”<sup>54</sup> He listed all previous initiatives that advocated its transformation into a hotel, including the last one from the beginning of 1938, when a group of Austrian bankers allegedly offered a loan of 12,000,000 dinars to the Municipality of Dubrovnik to erect the hotel designed by architect Keller. It was probably a version of the project that Keller offered to “Yugoslav Lloyd” in the internal

<sup>51</sup> State Archive in Dubrovnik, Privremeni popis građevinskih planova, map XIX 21 a-d. – A. BAĆE, Arhitektura Dubrovnika između dva svjetska rata, pp. 326-327.

<sup>52</sup> L. VOJNOVIĆ, Vivisekcija Dubrovnika, *Javnost* 8, Beograd, 1937, pp. 135-136.

<sup>53</sup> Critical review of Vojnović’s text was published in the local weekly: *Dubrovnik*, 27 February 1937, entitled: *Vivisekcija Dubrovnika*. Correspondence between the Yugoslav Lloyd and the Municipality was published in the same issue: *Prepiska o gradnji hotela na Lazaretima*. Soon after, the author responded in the same weekly “... so as not to corrupt the character of Dubrovnik” (See: L. VOJNOVIĆ, Vivisekcija Dubrovnika, *Javnost* 8, Beograd, 1937, pp. 135-136. – AUTHOR UNKNOWN, Vivisekcija Dubrovnika, *Dubrovnik* 4, Dubrovnik, 1937, p. 6. – AUTHOR UNKNOWN, Prepiska o gradnji hotela na Lazaretima, *Dubrovnik* 4, Dubrovnik, 1937, p. 2-6. – L. VOJNOVIĆ, ... da se ne iskvaru crte Dubrovnika, *Dubrovnik* 7, Dubrovnik, 1937, p. 1).

<sup>54</sup> S. BURINA, Da li će stari dubrovački lazareti biti pretvoreni u moderan hotel ili u studentske ferijalne stanove, *Politika* 10669, Beograd, 1938, p. 8.

tender. The text said that “There are various conflicting opinions: one side is in favour of demolishing the Lazaretto, and the other wants to preserve it as a historical building,” and then the conflicting opinions were presented, as follows: “- We are not antiquities experts – said one representative of the group that was in favour of destruction. – We love our history and our monuments, and we selfishly protect them. But, life goes on. Some things have to be sacrificed. The Lazaretto complex is of no use to Dubrovnik. The Lazaretto should be demolished and new buildings erected in its place that would meet the demands of modern times.” Lujo Vojnović opposed such thinking: “Dubrovnik is a uniquely cut gemstone, and even if one of these humble buildings, - that together create its singular charm - were to be removed, Dubrovnik would cease to be one of the most beautiful and original of places.” We finally find out, from this article, the opinion of local conservationist Kosta Strajnić, who was otherwise extremely agile about all of Dubrovnik’s architectural and urban planning issues, and who had thus far not given his opinion on the fate of the Lazaretto complex: “We have to prevent the destruction of this valuable and historic monument, in any way we can.”<sup>55</sup>

In April 1938, the “Novo doba” newspaper in Split published an extensive and substantive text by Vinko Foretić, PhD, entitled – “The old Dubrovnik Lazaretto at Ploče.”<sup>56</sup> The author provided a brief historical overview of the Lazaretto development in Dubrovnik, and attempted to explain the negative attitude of the public towards the Lazaretto: “In order for us to understand the sad state of the Lazaretto today, we should mention that immediately next to it, to the east, is the slaughterhouse whose location represents a true blemish on the city of Dubrovnik. All of Dubrovnik is united in the opinion that the monstrosity should be moved. The presence of the slaughterhouse in the vicinity of the historical Lazaretto contributed, in the eyes of some citizens, to the compromised image of it. Namely, the municipality rents the Lazaretto to the butchers for storing meat and drying leather, as well as to the coachmen for horse stables. One part is used by some of the most impoverished people as living quarters. To complete the picture of tawdriness and disorder, several years ago the municipal authorities permitted the construction of a crude wooden shack in front of its entrance. A horrible stench emanates from the slaughterhouse and the Lazaretto and spreads around Ploče. The municipal administrators are to blame for the state of Lazaretto’s disrepair and that it became the synonym of filthiness and dereliction in Dubrovnik, so many people are in favour of its destruction. However, the problem is misrepresented. The Lazaretto should be cleaned and organized, not removed.” The author then explained the architectural and urban planning importance of the Lazaretto: “The Lazaretto complex, viewed from the city port, is a massive building but not too high, built in the style of fortification architecture, rather simple, but nevertheless segmented here and there. Even though its exterior, in itself, does not represent a particular work of art, it still fits extremely well with the entire complex of the port of Dubrovnik enclosed in its imposing fortresses, and it represents an important and characteristic part of this unique architectural complex. Once we go inside, we will see Lazaretto’s internal organization and be pleasantly surprised that this building, which appears massive from the outside, is magically beautiful in the diversity and practical functionality of its interior.” (...) “The Lazaretto complex is also an important monument in Dubrovnik’s economic history. It is the historical part of the old city port, which therefore did not end at the Kaše embankment, but it encompassed the Lazaretto as well.” Finally, Foretić also offered his vision for the Lazaretto future: “The question of the slaughterhouse and the Lazaretto should be resolved so that the slaughterhouse is moved as soon as possible, the Lazaretto is cleaned and restored to its original state as an important monument of Dubrovnik, while there are many other wonderful and appropriate locations for hotels along the beautiful and spacious Dubrovnik Riviera.” (...) “Also, there is a suitable function it could

<sup>55</sup> SAFET BURINA, *Da li će stari dubrovački lazareti*, p. 8.

<sup>56</sup> V. FORETIĆ, *Stari dubrovački lazareti na Pločama*, *Novo doba*, 17 April 1938, Split, pp. 6-7.



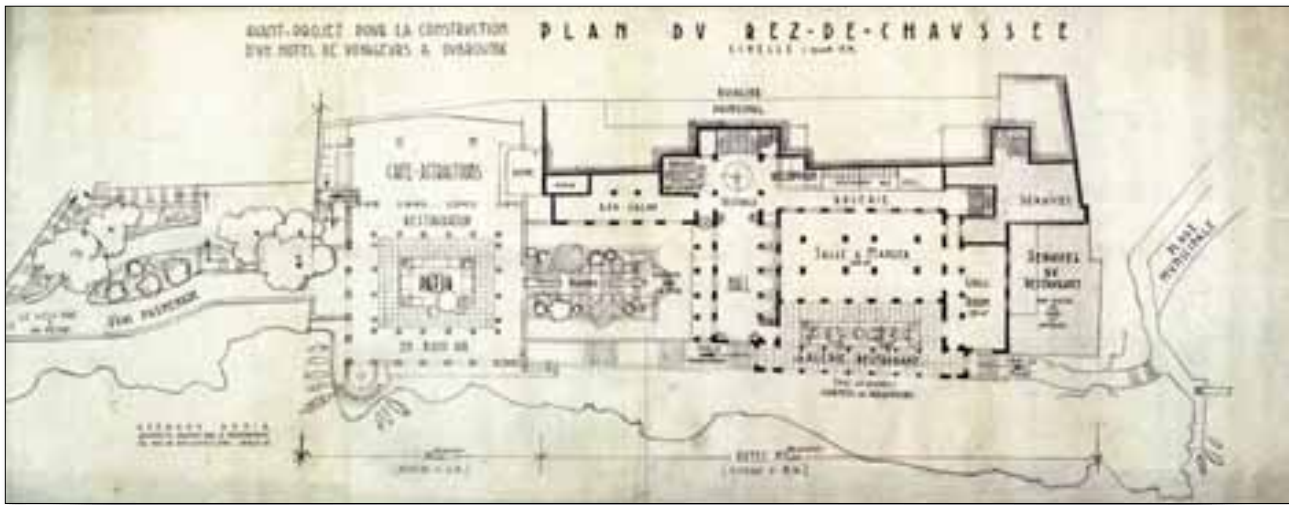


Fig. 12. G. Appia, Hotel in Lazareto, ground-floor plan, around 1936 (?)

be used for. (...) We should organize the Lazaretto so as to reopen the formerly open and now bricked-up arches, which would create an ideal place for a lapidarium. Although the current collection of stone monuments in the museum of Dubrovnik is not that extensive, Dubrovnik and its surroundings hide many treasures above ground and underneath, that are left to ruin and lay undiscovered, and would in the future require spacious rooms.”<sup>57</sup>

Two years later, in July 1940, Foretić published a short article in the local media entitled “Lazaretto in danger of collapse and the park at Ilijina Glavica at risk of destruction.”<sup>58</sup> Namely, after several failed attempts to build a hotel, there was an idea to build a public and civil school in the Lazaretto.<sup>59</sup> The author repeated his opinion on the importance of the Lazaretto from the “Novo doba” newspaper and concluded: “Its renovation does not require millions, as some wrongly claim, but it needs good will, cultural sense and affection for local antiquities. We live in a terribly materialistic age and, unfortunately, many people cannot comprehend why we should preserve a historical monument in this location if it could be used in other more lucrative ways. They don’t understand why we should not build a hotel in its place, or why should the municipality have to buy land elsewhere to build a school if it has the Lazaretto, which only needs to be demolished?”<sup>60</sup>

### *Post-World War II Period*

Soon after the end of World War II there was a renewed interest in the Lazaretto. In March 1947, the honorary conservationist in Dubrovnik Lukša Beritić informed the Conservation Department of Dalmatia in Split about the plan to build a swimming pool at Ploče, where the slaughterhouse was, however he expressed concern that this intervention might encourage the destruction of the Lazaretto because the slaughterhouse space was not big enough for that purpose.<sup>61</sup> In September he sent a similar letter in which he described two possible versions of building the swimming pool; the first would maintain the external appearance of the Lazaretto and the pool would be excavated inside, while the second would install the swimming pool in the slaughterhouse, however, since that space is not long enough for a 50 metre pool, it would probably require demolishing part of the Lazaretto.<sup>62</sup> In November

<sup>57</sup> V. FORETIĆ, Stari dubrovački lazareti, pp. 6-7.

<sup>58</sup> V. FORETIĆ, Lazareti pred opasnošću rušenja i park Ilijine Glavice pred pogibelji uništenja, *Dubrava* 106, Dubrovnik, 1940, p. 3.

<sup>59</sup> M. KOLIN, Neka se čuje i druga strana, *Dubrava* 105, Dubrovnik, 1940, pp. 1-2.

<sup>60</sup> V. FORETIĆ, Lazareti pred opasnošću rušenja, p. 3

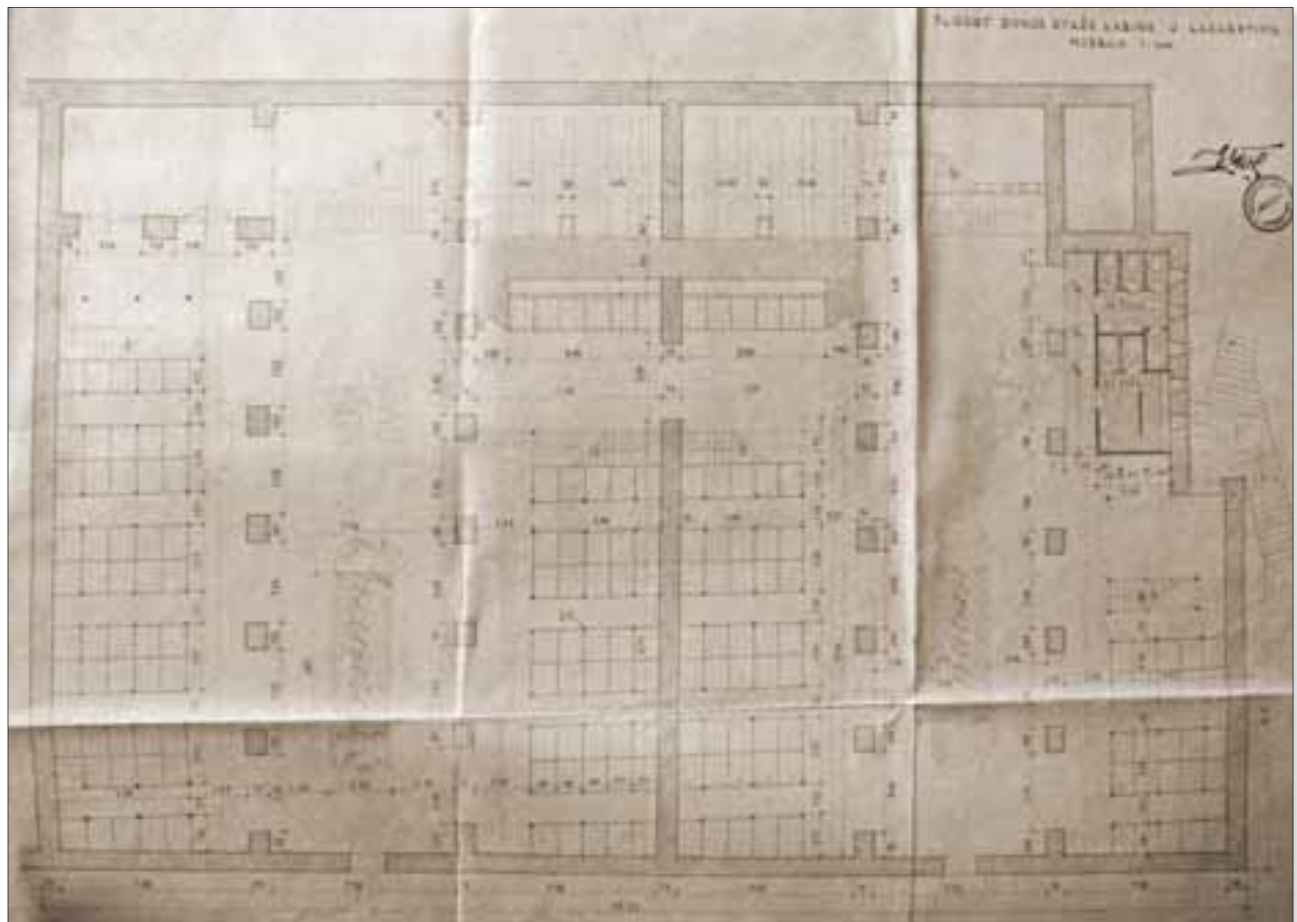
<sup>61</sup> Ministry of Culture, Directorate for the Protection of Cultural Heritage, Conservation Department in Dubrovnik, Dossier “Lazareti” (hereafter: MK-KDU-Lazareti).

<sup>62</sup> MK-KDU-Lazareti.

Fig. 13. Lazaretto around 1950



Fig. 14. J. Dražić, renovation project of the Lazaretto eastern section, plan, 1958



that same year, the Municipal Assembly of Dubrovnik was considering current urban construction problems, including the Lazaretto, and it concluded that “the Lazaretto facilities and courtyard should be adapted into a combination of restaurant, cabins, social and other bathing facilities and terraces. The upper section of the access courtyard should be used for parking of luxury vehicles and was to include some greenery, while all the barracks and inappropriate annexes should be removed. Accordingly, a detailed project should be created.” They also proposed the construction of the coastal road in front of the Lazaretto.<sup>63</sup>

In November 1948, Beritić informed the Conservation Department of Dalmatia that the Lazaretto adaptation works were suspended. Namely, after several roof structures were removed and conservation works were supposed to be carried out, the works were suspended due to insufficient funds, and the “entire object looks like a ruin.”<sup>64</sup> In a letter dated in February 1949, Beritić wrote about the resumption and then another suspension of works in the Lazaretto, and said that it was necessary to at least rebuild the roof structures so that the building is not exposed to further deterioration. In April of the same year, he again wrote about the suspension of works, and stated that the “object was indeed turned into an utter ruin.”<sup>65</sup>

Public interest in the condition and future renovation of the Lazaretto was evident from newspaper articles published in local newspapers and magazines at the time. Among them was the article written in 1952 by art historian and conservationist Cvito Fisković in which he expressed his unreserved support for the preservation of Lazaretto’s architectural and monumental integrity, continuation of the suspended renovation, and finding a suitable function for it.<sup>66</sup> That same year, historian of medicine Vladimir Bazala, MD published the most extensive article (based mostly on archival sources) about the origin of the institution and development of construction of Dubrovnik’s quarantine complexes, including the Lazaretto at Ploče.<sup>67</sup> Also interesting is the article published in 1954 in the magazine “Naše more” which summarized previous discussions on the fate of the Lazaretto and proposed new solutions. The unsigned article presented two radically different opinions – construction of replacement buildings or complete preservation in its original state, and presented a third, compromise solution that *a priori* recognized the monumental status of the complex, but insisted on looking for a suitable contemporary function.<sup>68</sup> The article also expressed an opinion of the university professor and renowned doctor Antun Šerčer, who proposed the creation of public indoor baths for hygiene with steam rooms.<sup>69</sup>

In 1958, the “Design project of the bath at Ploče” was created and it included the adaptation of the eastern part of the Lazaretto into changing rooms.<sup>70</sup> The project planned to adapt the access staircase to two eastern courtyards, and construct a staircase at the southern façade to have access to the sea. The Conservation Department in Dubrovnik objected and proposed the possible extension of the access staircase, and asked that the external

<sup>63</sup> MK-KDU-Lazareti.

<sup>64</sup> MK-KDU-Lazareti.

<sup>65</sup> MK-KDU-Lazareti.

<sup>66</sup> C. FISKOVIĆ, Lazarete treba obnoviti, *Dubrovački vjesnik* 85, Dubrovnik, 1952, p. 2.

<sup>67</sup> V. BAZALA, Pomorski lazareti u starom Dubrovniku, pp. 293-308.

<sup>68</sup> “The third opinion was, to an extent, a compromise but it also had different versions. It did not suggest demolition, but it did advocate adapting the old to the new, i.e. simultaneous reconstruction of the old and determination of the new function. With an expert study of the solution, all important features of this monument could be preserved, but we should also pay attention to the urban planning demands which arise out of new life needs. With an appropriate regulation and alignment of the entire surrounding space, we would be able to remove everything that hampered development, and the monument itself would thus come to the forefront.” AUTHOR UNKNOWN, Razgovori o Lazaretima, *Naše more* 1, Dubrovnik, 1954, pp. 67-69.

<sup>69</sup> AUTHOR UNKNOWN, Razgovori o Lazaretima, 69. “According to this opinion, the Lazaretto should definitely be preserved as a monument, but it also has to be revived. On old grounds, but with new resources, thus extending the tradition of this institution which connected two basic and important elements: the sea and health. In the reconstructed Lazaretto building, we should create an institution for hygiene and body culture, that is essential for Dubrovnik and its population, which would also represent a special attraction for local and foreign tourists. (...) It would not disturb the architectural and cultural-historical importance of the monument, it would meet scientific requirements, and be in accordance with interests of social, urban planning and tourist development. The Lazaretto would continue to live as a health institution in new, contemporary conditions. (...)”

<sup>70</sup> State Archive in Dubrovnik, National Council, Municipality of Dubrovnik, construction permit no. 05-8387/1, dated 12 November 1958. The project design was created by architect Jozo Dražić, architectural bureau “Arhitekt”.



Fig. 15. Lazaretto prior to 1967 renovation



Fig. 16. Lazaretto prior to 1967 renovation



Fig. 17. Lazaretto prior to 1967 renovation



Fig. 18. Lazaretto during renovation, 1967-1969



Fig. 19. Lazaretto during renovation, 1968

staircase be temporary and removable. The realization of the project started in 1959, and after some pressure, the Conservation Department agreed to the redesign of one internal access staircase based on the project documentation.<sup>71</sup> Changing rooms and showers were built in the last eastern nave, which was connected to the local Banje beach with a new door and staircase.

In 1961, Slavomir Benić, an architect from Dubrovnik, a long-term associate of conservationist Lukša Beritić, published an article entitled “Conservation – urban planning problems in Dubrovnik – the Lazaretto in Dubrovnik.” The author gave an overview of the historical development of the complex, and also advocated finding a suitable contemporary function as the best guarantor of future survival of any monument. He thought that a central public market and a shopping centre would be a preferable function for the Lazaretto and would be easy to accommodate without major adaptations.<sup>72</sup> Several years later, the Lazaretto became the subject of interest of the Centre for study of tourism in Dubrovnik, which conducted a study in 1964 entitled “Lazaretto and tourism – contribution to the discussion.” Instead of the exclusive hospitality, bathing or trading function, the study ended with a proposal to create a permanent economic – tourist fair that would promote economic and tourist offer of the city and the region. Together with different exhibition and retail

<sup>71</sup> MK-KDU-Lazareti.

<sup>72</sup> S. BENIĆ, Konzervatorsko – urbanistički problemi, p. 111-113.

spaces (production, industry, agriculture, trade) it also envisaged a series of support facilities (trade representative offices, photo studios, tourist offices and agencies), that would generate not only tourist potential for this fair (called bazaar or festival, in the study), but also economic.<sup>73</sup>

The long-awaited complete reconstruction of the Lazaretto finally started in October 1967, based on the project by the architectural bureau “Arhitekt” from Dubrovnik. The works were supervised by the Institute for the protection cultural monuments, headed by conservationist Dubravka Beritić, and were conducted by the “Graditelj” construction company. Many recent modifications and annexes were removed, and research and documentation of the complex was conducted.<sup>74</sup> The roof structures were reconstructed based on their original geometry, as were many damaged and missing stone elements (cornices, corbels, window and door frames, arches, staircases), a new external and internal paving was done and modern fixtures installed.<sup>75</sup>

### *Between Two Renovations (1969-2018)*

In autumn of 1969, after the Lazaretto renovations finished in terms of construction works, there was again a problem of public function: opposing viewpoints again called into question the revitalization of the complex. It is interesting that the largest investor in the renovation



Fig. 20. Lazaretto after renovation, 1974

<sup>73</sup> AUTHOR UNKNOWN, Lazareti i turizam – prilog diskusiji, *Centar za izučavanje turizma*, Dubrovnik, 1964, p. 12-15.

<sup>74</sup> The extant photo documentation is located at the photo library of the Conservation Department, Ministry of Culture, in Dubrovnik and were made available for purposes of writing this article, for which the authors would like to express their gratitude.

<sup>75</sup> S. AHMETOVIĆ, Lazaret doživljava preobražaj, *Dubrovački vjesnik* 937, Dubrovnik, 1968, p. 3. Part of the pavement works and reconstruction of the stone staircase was conducted by the “Jadrnkamen” company from Split. The total value of the works was around 300 million dinars.



Fig. 21. Lazaretto renovation, 2013

was the socially-owned “Standard” company for management of residential buildings, and the Municipal Assembly of Dubrovnik gave them a permanent right of use of the Lazaretto buildings, which then became part of the company’s equity. At this time, everyone decided to participate in a wide-ranging public discussion on the future function: from conservationists, architects and artists, to economists, businessmen, municipal administrative bodies and investors. An eight-person commission of the Municipal Council of education, culture and technical culture, formed especially for this purpose, concluded that in the process of making the decision it would be a good idea to conduct a broad survey among workers in cultural institutions, while the investor thought that would represent an encroachment of the promised right of use of the complex, which was why they financed its renovation in the first place. The company’s representatives, therefore, threw their heartfelt support behind the formation of the permanent economic-tourist fair based on the aforementioned 1964 study of the Centre for study of tourism.<sup>76</sup> Nevertheless, the commission recommended a relatively elaborate set of guidelines that would define the future function of the Lazaretto, reflect the awareness of its continued importance and offer several solutions that included cultural, artistic and tourist functions.<sup>77</sup> Although the commission was against opening

<sup>76</sup> M. ALKOVIĆ, Prostor za atraktivne izložbe, *Dubrovački vjesnik* 991, Dubrovnik, 1969, p. 5. – S. AHMETOVIĆ, Lazarete treba koristiti izvorno i jedinstveno, *Dubrovački vjesnik* 1009, Dubrovnik, 1970, p. 6.

<sup>77</sup> “The common weak point of all previous ideas was that their advocates again approached the consideration of the Lazaretto’s function partially and one-sidedly, and they lost sight of the fact that the Lazaretto, with its location, size, internal organization, differentiation and communication between open and closed spaces, and technical capacity could, and in current conditions even must, be used for different purposes and functions that complement one another, but are still in accordance with the monumental character and value of this object. Also, the Lazaretto can optimally be valued only if it is generally activated and used as a poly-functional object. For this reason, instead of singular ideas that are not connected and only propose partial use, we should start from a global concept of optimal valorisation of the entire Lazaretto space. (...)” D. ALFIER, *Konceptija suvremene namjene obnovljenih Lazareta*, *Dubrovački vjesnik* 1002-1003, Dubrovnik, 1969, p. 4.





the marketplace in the Lazaretto, this idea nevertheless temporarily prevailed, and in 1974 the local market was dislocated from the historical nucleus. After being faced with real problems (difficult driveway and delivery access) and popular objections, the market was returned to its previous location after a short-term experiment, and the Lazaretto continued searching for a suitable function.

Between the late 1970s and the early 1990s, the idea of a multifunctional, social, cultural and tourist-hospitality function of the Lazaretto was realized for a short time, however the outbreak of the Croatian War of Independence brought about the facilities' gradual decline and most of them were again left without a function. Interest in the commercial exploitation of the Lazaretto began to wane because of the post-war crisis in tourism industry, and the owner, the City of Dubrovnik, started to gradually rent the vacant premises to non-profit organizations.<sup>78</sup> We should point out that because of its position the Lazaretto complex is exposed to open sea, strong winds and sea salt, which demands constant upkeep, that was partly provided in the last few decades precisely by the non-profit organizations. Diverse content demanded certain adjustments in space, however generally speaking, the interventions are reversible in nature, without adverse effects for the historical structures and the clearly legible original organizational spatial structure is preserved.

Fig. 22. Lazaretto after the first phase of renovation (2012-2014)

<sup>78</sup> Art Workshop Lazareti is one of the organizations that uses the space. With its activities in the field of contemporary visual and performance art, collaborative programmes with many Croatian and international artists, it became an extremely important institution at the national level. The facilities are also used by the Deša Association whose programmes aim to preserve the traditional handicraft and non-material culture of the region of Dubrovnik, the Lindo Folklore Ensemble, that uses one of the courtyards as an open-air stage in the summer, and the Lero Student Theatre.

The revival of tourism in the early 21<sup>st</sup> century renewed the interest of the local government in the economic exploitation of the Lazaretto, often to the detriment of the monumental character and importance of the complex, its historical and spatial context.<sup>79</sup> The long-awaited complete renovation of the Lazaretto began in the fall of 2012 and lasted for two years, during which seven naves and three courtyards were reconstructed. The City of Dubrovnik planned to use the renovated facilities for cultural events, however without a clear programmatic concept. The renovation of the remaining three eastern naves and two courtyards continued in 2018, mostly financed by the European Union and the partnership of the City of Dubrovnik and several other institutions, among which are the future occupants of the space, i.e. non-profit cultural and art associations.

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<sup>79</sup> The idea about the establishment of the “Dubrovnik Virtual Museum,” that would use contemporary technologies to present the historical development of Dubrovnik, was closely related to an attempt to build docking stations for tender boats from cruise ships, on the Lazaretto waterfront, in order to allegedly alleviate the pressure on the City Port. This idea brought the Lazaretto dangerously close to the treatment it had in the first half of the 20<sup>th</sup> century, because any alteration of the original disposition of its rocky shore would diminish its fortification character, and also the authenticity of the historical space of the City Port. S. SEFEROVIĆ, Intervencija u fizički i duhovni prostor Grada, *Dubrovački vjesnik* 3097, Dubrovnik, 2010, p. 52. The national institutions, Ministry of Culture and the Expert-advisory commission for the reconstruction of Dubrovnik, were unwilling to consider the broader, negative context of the intervention and openly oppose the local government’s intentions, so this initiative was finally defeated only thanks to UNESCO’s arbitration.

# Architectural and Construction Documentation of the Lazaretto in Dubrovnik

Tabor was located east of the Ploče Gate. It was a spacious walled plateau where the caravan road, called the Great road (*strada maestra*) or the Vlach road (*via Murlaccorum*), ended. Inside, we find an assortment of health and commercial infrastructure buildings and structures. Since cattle trade was conducted there as well, the area had a water fountain called Međed for watering people and livestock, as well as a decontamination pool that the cattle had to go through. Only after the cattle was led through the pool of disinfection solution could it be sold and transported. Buildings called the “han” and “čardak” were also located at Tabor and were used to accommodate foreign merchants and the Turkish consul. The Lazaretto was a distinct unit separated from the rest of Tabor with a high wall. The two were connected through a guarded vaulted passageway located underneath the road that led to the Church of St. Jacob and Župa dubrovačka.

The Lazaretto is the most important and largest architectural complex built between 1627 and 1647, and is, in large measure, preserved to this day. Because of its exceptional economic and strategic importance during the time of the Republic, the complex was maintained by the state. The Lazaretto was also functional during the 19<sup>th</sup> century and the Austro-Hungarian rule. In the course of the last century it lost its original function. It was used for a variety of purposes, and a more substantial renovation and a partial reconstruction was conducted in 1967 (Fig. 1). The complex existed in such a preventively renovated state until the 2013 reconstruction began.

The complex was built on the slopes of Mount Srđ, by the sea, on a natural grade-separated terrain that fell from the north to the south. The road towards St. Jacob that led from the Ploče Gate to the hinterland and Župa dubrovačka, was located above the Lazaretto. It was erected on a relatively narrow and long stretch of land between the said road and the sea. The Lazaretto is between 33 to 47 metres wide, and approximately 122 metres long. It was surrounded by a high wall with guardhouses, that prevented contact between goods and travellers and the local population for some time. The Lazaretto was part of the city fortifications. Its main entrance is located at the western end of the courtyard, at road level, in the direction of St. Jacob. The road rises further east following the natural terrain, while the courtyard, the main communication with the Lazaretto naves, is positioned completely horizontally.



Fig. 1. Lazaretto on the slopes of Mount Srđ, east of the city port (photograph: A. Milošević)

The complex is comprised of the access courtyard that has, on its southern maritime side, a sequence of five uniformly organized, three-partite units composed of the central courtyard and lateral rectangular naves, open to the courtyard with a series of arched openings. The first two, western units are somewhat shorter than the eastern ones. The courtyards and the naves are located at considerably different levels than the entrance courtyard, which was determined by the natural configuration of the terrain. Today, the height difference is solved with a staircase at the mid-third of the courtyard's width, however the architectural survey from the mid-20<sup>th</sup> century shows long ramps, in the full length of the courtyard. Every courtyard had two doors each; the main, northern door that was accessed by a staircase, and the second door in the opposite southern wall, towards the sea. Both openings were secured with metal lattice doors. The doors on opposite sides are explained by the need for enhanced air circulation through the open courtyard, i.e. for better decontamination. However, it is possible they had another function. Namely, the goods were certainly stored under the roof, inside the Lazaretto naves, to protect it from rainfall. There are no preserved remains of doors beneath the arches, as the only link between the naves' ground floor and the courtyard, which does not mean they did not exist. Because rainfall and wind would frequently endanger the unprotected goods, we can assume that partitions with doors existed.

The naves were between 7.2 and 7.7 metres wide, and between 20.4 and 28.4 metres long. It seemed to be a completely empty space, like a hangar in "industrial" architecture of the time, created using the most rational structures and forms. A large portion of the nave had a wooden roof structure covered with clay tiles. The northern, smaller part of the nave was vaulted and a single-storey house was built above, at the level of the upper courtyard, which was used to accommodate officials and guards. The first and second houses to the west had 2 storeys in relation to the entrance courtyard. It is possible that the little houses were connected to the nave through an opening towards the roof, to enable communication with persons restricted to quarantine.

It appears that the naves, as they are today, were interconnected through smaller openings in longitudinal walls for communication at ground floor level. Such openings would be bricked up during serious epidemic outbreaks. Modest remains of earlier installations required for lengthier stay of people were found inside the naves, which enable partial reconstruction of their appearance. All naves were equipped with a sanitary facility in their southern wall, devised as a shallow niche with a flat stone lintel. The seat area was a thick stone slab with a circular hole 20 cm in diameter, and a sewerage exit went through

the southern wall. At the end of this opening was a semi-circular stone groove along which the faeces flowed down the escarpment of the Lazaretto southern façade. Often situated next to the toilet was a fireplace, whose role may have been two-fold; to heat the room or, which is more likely, for cooking. It was devised similar to the toilet, as a niche with a chimney installation inside a stone wall. We do not know what a fire hood on the cantilever that protruded into the nave looked like. The furnace was elevated 80 cm above the floor.

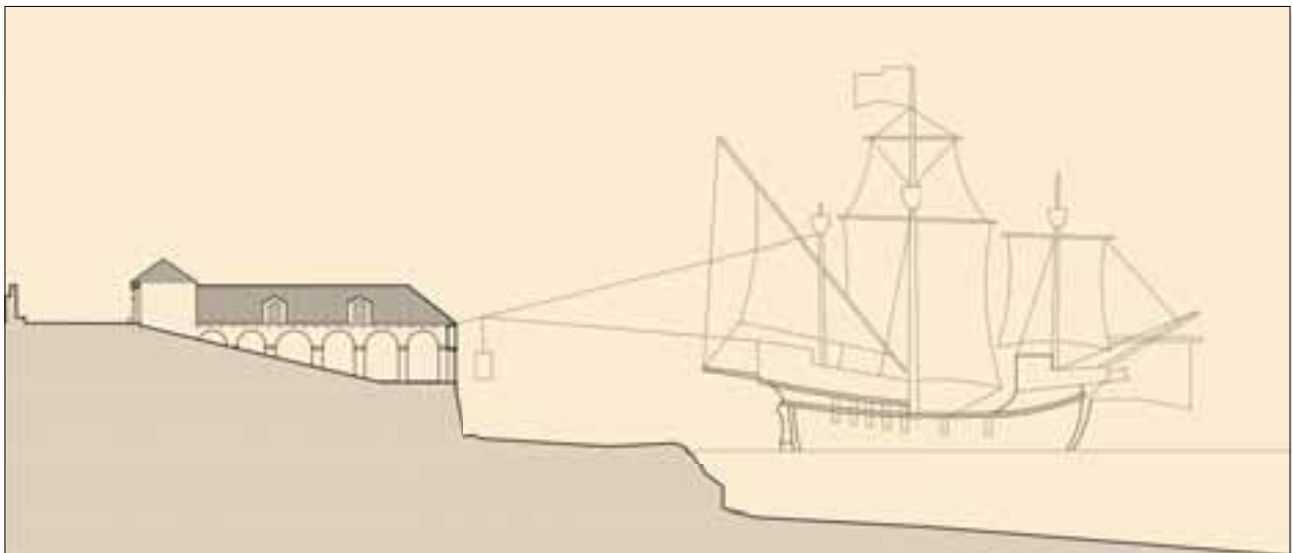
The height of naves to the tie beams is between 4.8 and 6.2 metres. Longitudinal walls underneath the roof tie beams have large holes of the mezzanine structure, more than two metres apart. The large gap between the beams supports the view that this structure carried a lighter load, so we assume that the loft was only used to accommodate people. The level of the loft was not the same as the level of house floors in the upper courtyard. It was grade-separate, and since water, sanitation and the “kitchen” were on the ground floor, the loft communicated with the ground floor using ladders or a wooden staircase.

The courtyard, between the seventh and the eighth nave, had a cistern with drinking water. The question is how did the water supply function when the connections between the naves were interrupted. It was perhaps brought in from the outside, from the fountain in Tabor. During renovations, remains of installations of the bricked pipeline and “fountain” were found in the first nave, so the complex was probably at least partly supplied with drinking water.

The distance from the sea to the southern Lazaretto wall is between 9 and 24 metres, the shoreline is rocky and there is no evidence of port facilities. Also, there are no traces of a pier in written records, so it was not possible to dock there. This part of the port is exposed to almost all kinds of wind. Ships that had to be quarantined definitely did not unload their goods in the port and then carry it, through the City, to quarantine. The manner in which the goods were transported to the naves remains unanswered. Some of it was surely brought in through the entrance door from the upper courtyard, and it was possibly carried up the steep stairs in front of the Lazaretto western façade. Even today, there is still a metal lattice door at the top of this staircase.

We can only guess the way in which the goods were transported from the ships to the Lazaretto. The ships could have been anchored or moored stern-to (two stern lines to the quay and two anchor lines in the sea, Fig. 2). They had to be moored at about a 10-metre distance from the shoreline because the sea there was relatively shallow. The goods could then be transported in two ways: by transferring it to smaller boats and then to the shore,

Fig. 2. Drawing of the supposed manner of unloading cargo from ships



which was difficult for docking, or by a pulley system to the opening/door in the Lazaretto courtyard wall. We believe that courtyards had such large openings in their southern wall precisely so the goods could be carried inside. The volume of the Lazaretto naves was equal to that of a carrack ship, so that one nave could take an entire ship's load.

The courtyards originally did not have staircases, as previously mentioned, but long ramps that were used to transport the goods, after being quarantined, by block and tackle system to the entrance courtyard on the upper level.

The small houses were located above the northern part of the nave and were, for security reasons, separated with barrel vaults whose abutments spatially defined a separate room on the ground floor of the nave. The floor level in the upper house was grade-separate in relation to the flooring of the residential loft in the nave, and a narrow door was discovered in the wall leading to the roof that was used for communication and control of entrance and exit of quarantined persons.

### *Architectural Documentation*

The Lazaretto architectural complex is located in the vicinity of the eastern entrance to Dubrovnik's historical nucleus (Fig. 3), cadastral plot 710 Lazaret, K.O. Dubrovnik (new land survey 4651/1, K.O. Dubrovnik). The Lazaretto complex is an individually protected immovable cultural good, inscribed in the Register of Cultural Goods of the Ministry of Culture of the Republic of Croatia under designation RST-1217-1986.

The works on the complete reconstruction of the complex started in 2005. At the request of the contracting entity, the City of Dubrovnik, the existing situation was architecturally surveyed for the purpose of reconstruction and adaptation of the space, so that facilities inside the complex could have new content and be used by different entities, that is appropriate for the protected site and benefits the citizens, as well as being in the function of cultural and tourist promotion of the City.

The technical project documentation for the main reconstruction and renovation project of the entire existing building, was drawn up in accordance with the current spatial planning documents and the special conditions set by the Conservation Department of the Croatian Ministry of Culture and other competent public administrative bodies. In 2008, the building permit for reconstruction was obtained, followed by the adoption of project modifications in 2012, and modifications to the II main project for construction of the building in phases in 2014.

The planned spatial intervention does not alter the original horizontal and vertical dimensions of the existing building. For the most part, original materials were used for reconstruction and renovation. The project maintains the building's original function (public and social on the ground floor and economic-business on the upper floor), which is in accordance with the current General Urban Plan of Dubrovnik (Official Gazette of the City of Dubrovnik no. 10/05, 10/07, 8/12) and the amendments to the General Urban Plan of Dubrovnik (Official Gazette of the City of Dubrovnik no. 3/14).

## Description of the Existing Situation – Plan Layout

The Lazaretto architectural complex is organized at two levels. Vehicular access to the building is made possible from the public road, Frano Supilo Street, and from its western side we access the common “public” courtyard – street, located at the height of the upper floor of the complex (at an elevation gradient of 12.00 m.a.s.l.), separated from the road with a high wall (Fig. 3). Ground floors of eight detached buildings are located at that level, two on the north side and six to the south. The two buildings to the north and the first to the south have a ground floor, an upper floor and a loft, while the rest have a ground floor and a loft. The buildings have hip roofs covered with clay tiles. The level of the common “public” courtyard is considered the complex’s *first floor* (Figs. 4-7).



Fig. 3. Lazaretto before the 2018 restoration (photograph: Institute for Restoration of Dubrovnik)

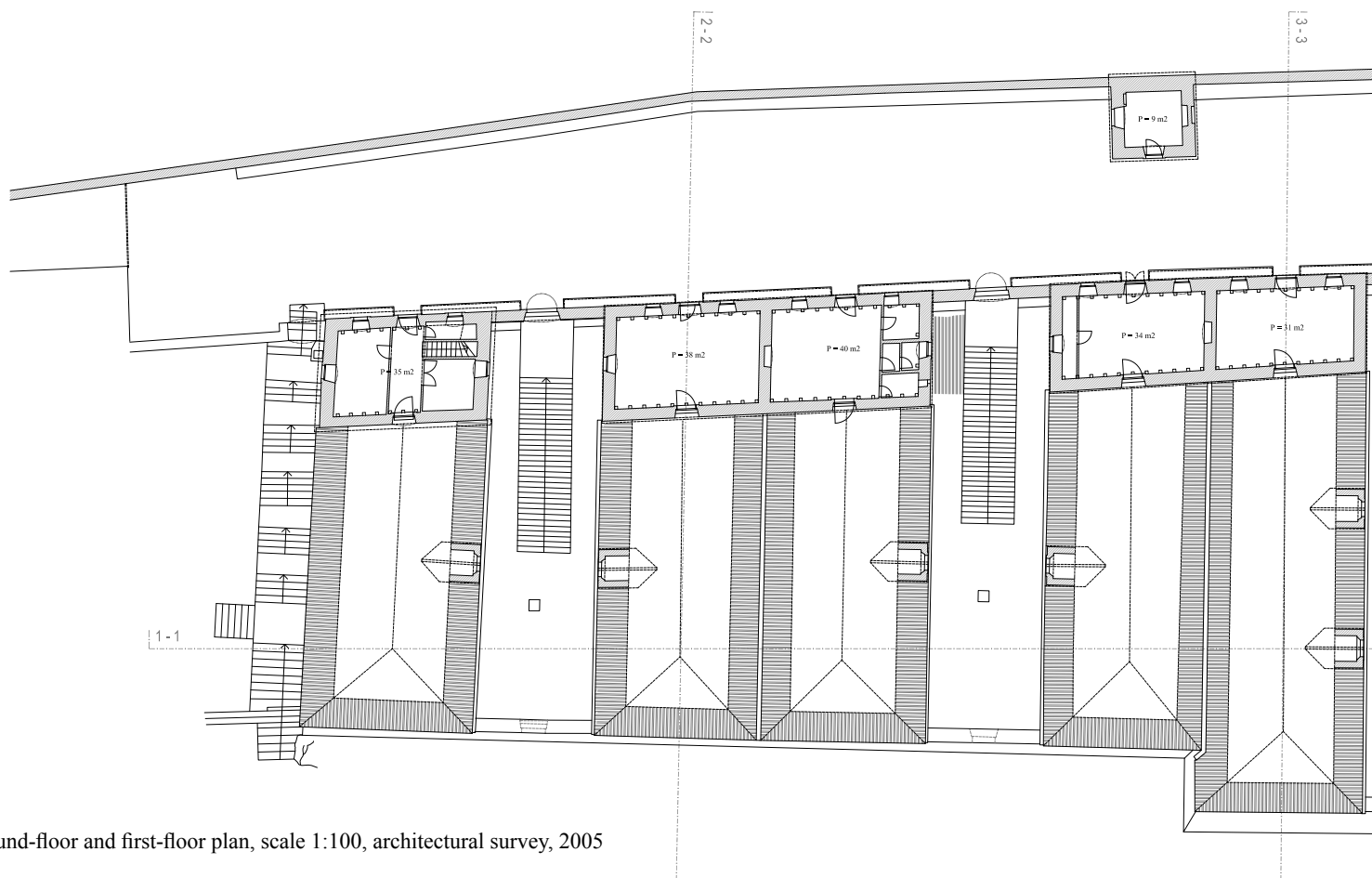
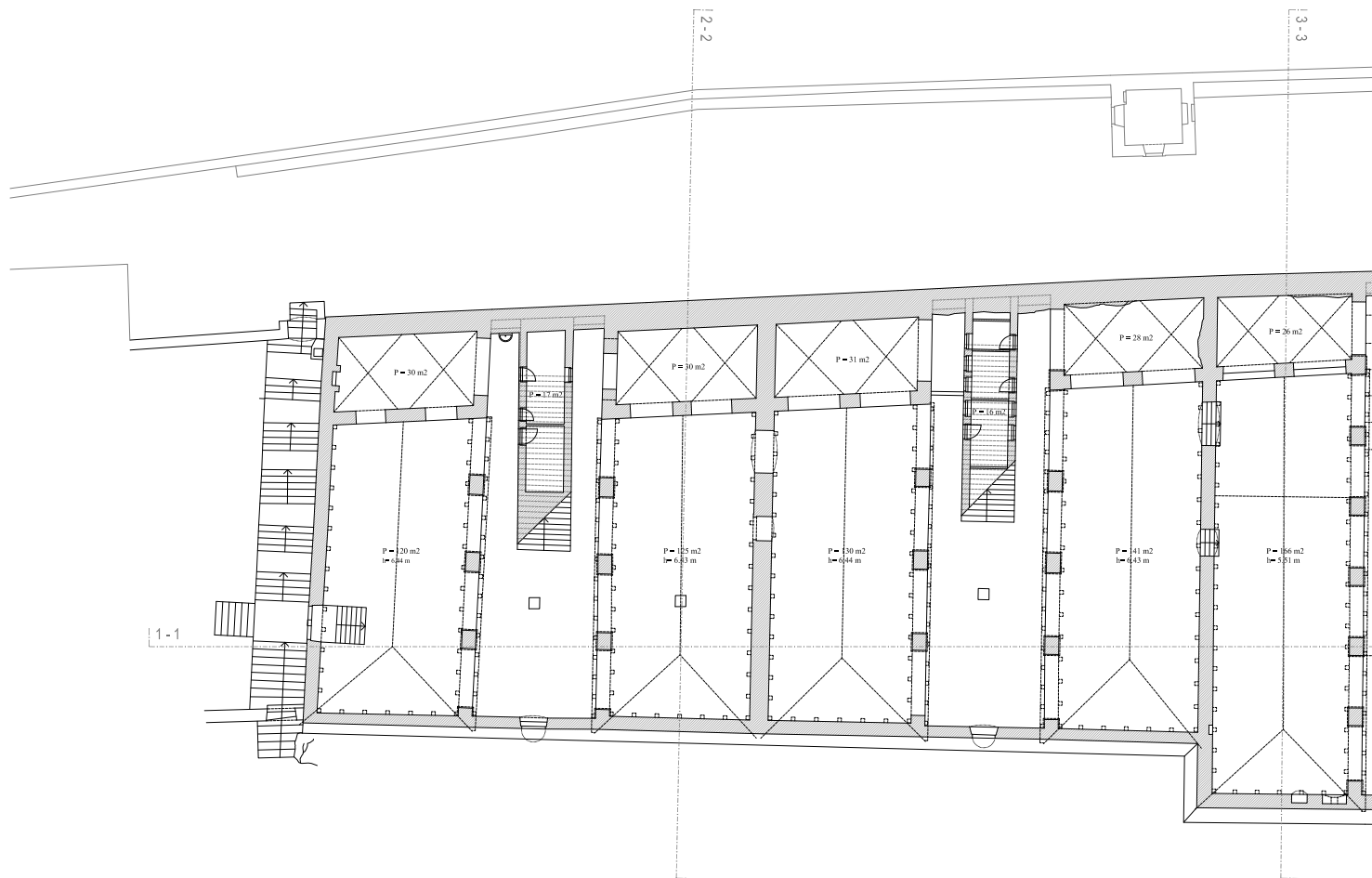
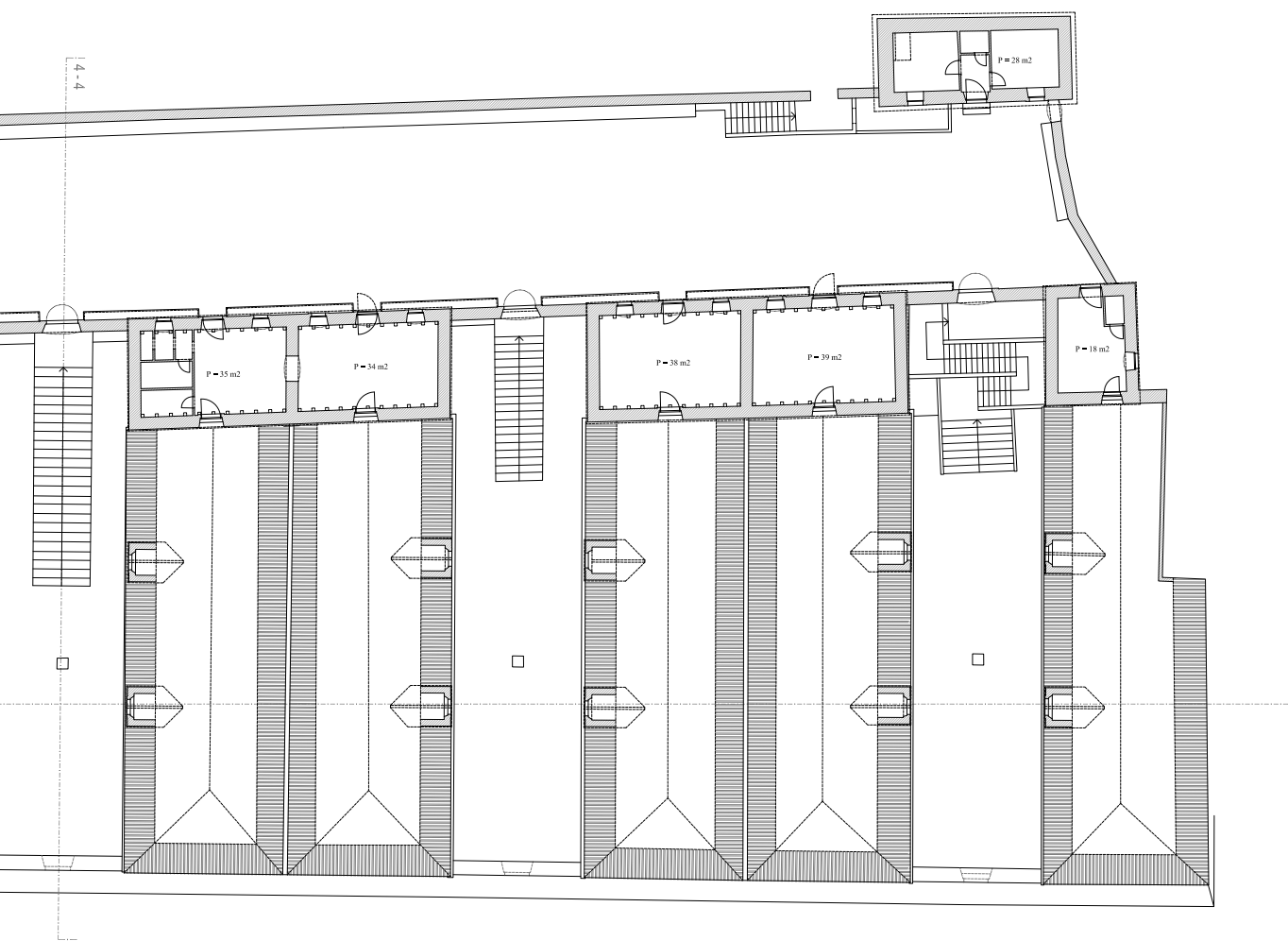
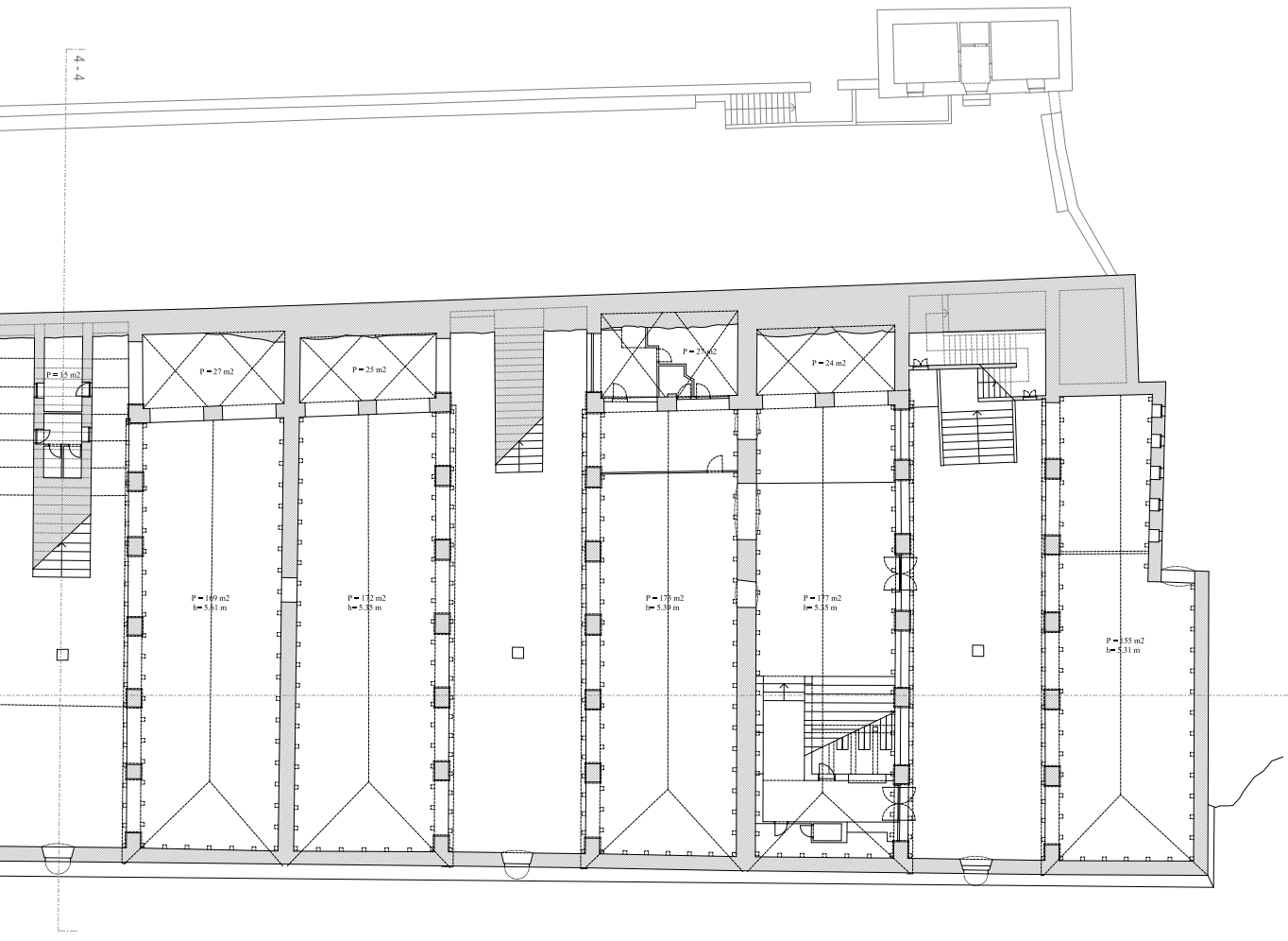


Fig. 4. Ground-floor and first-floor plan, scale 1:100, architectural survey, 2005





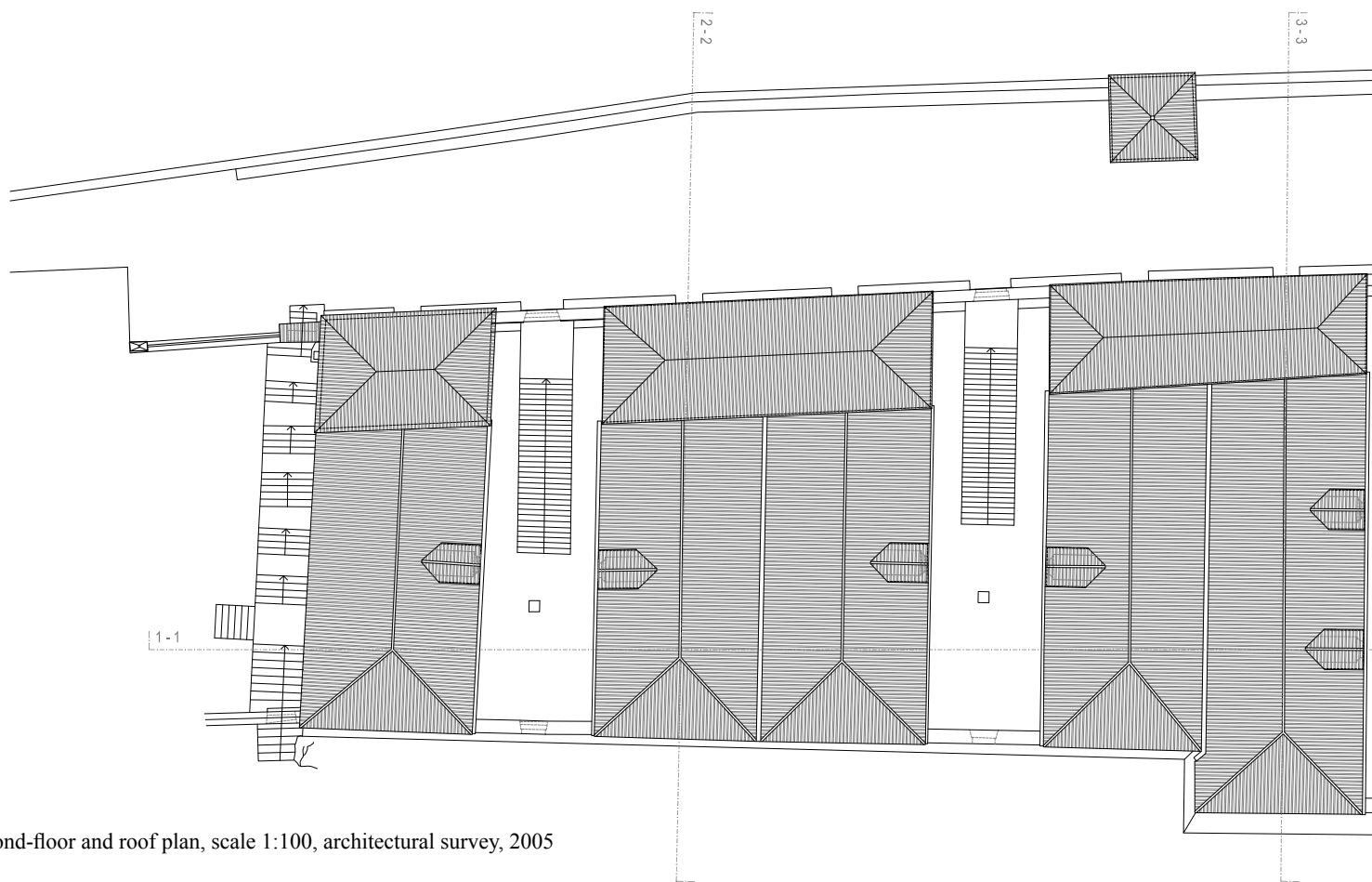
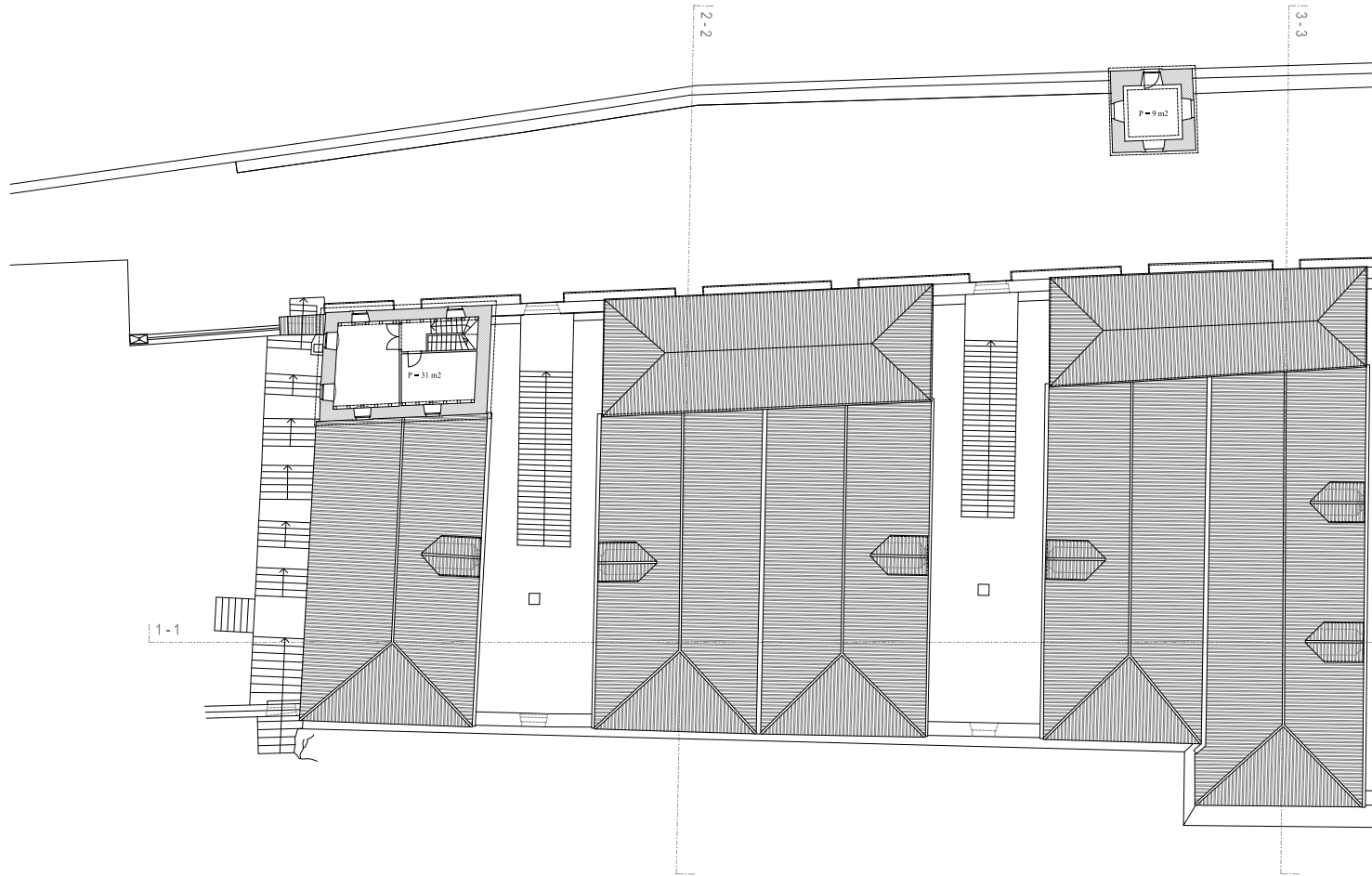
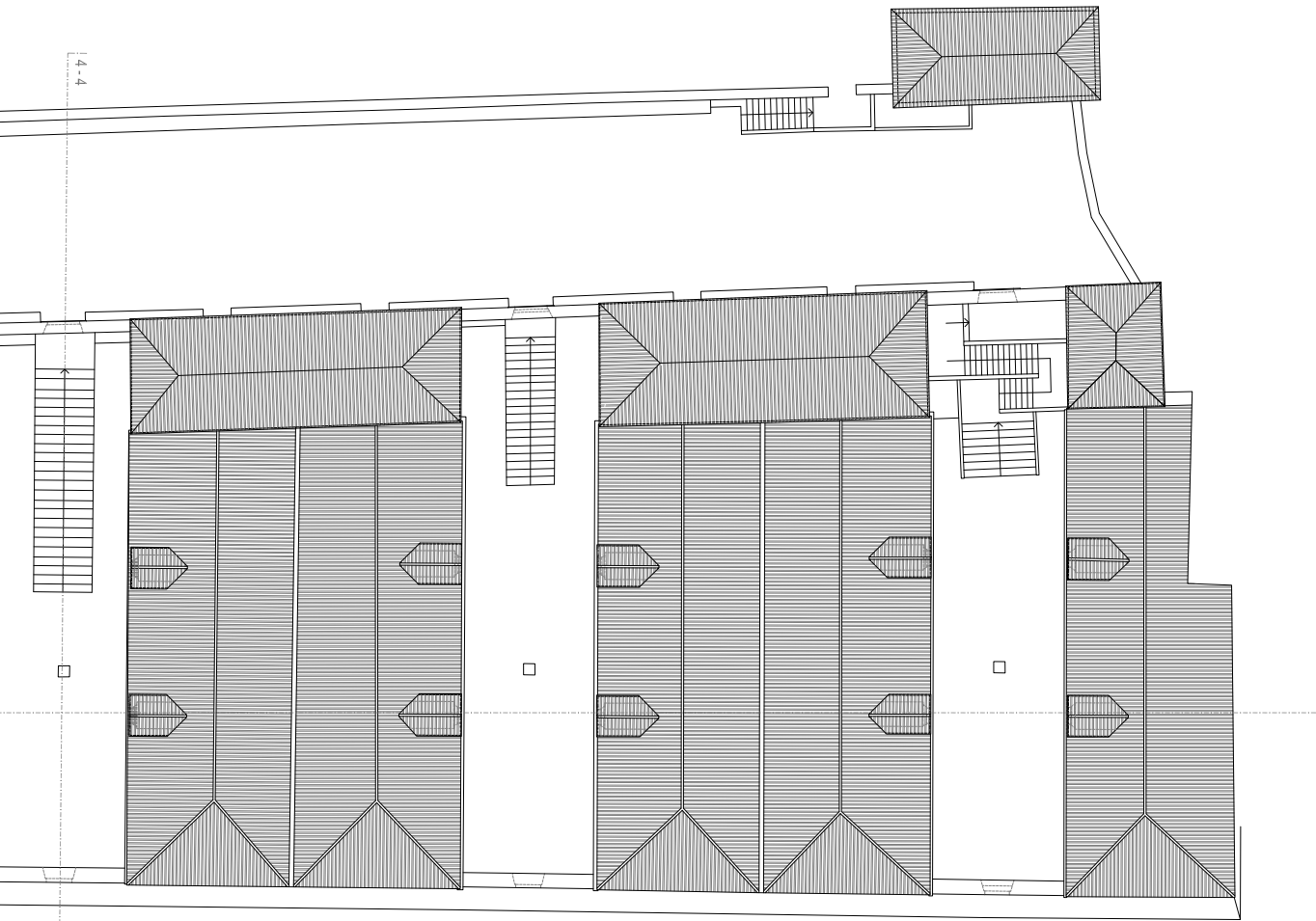
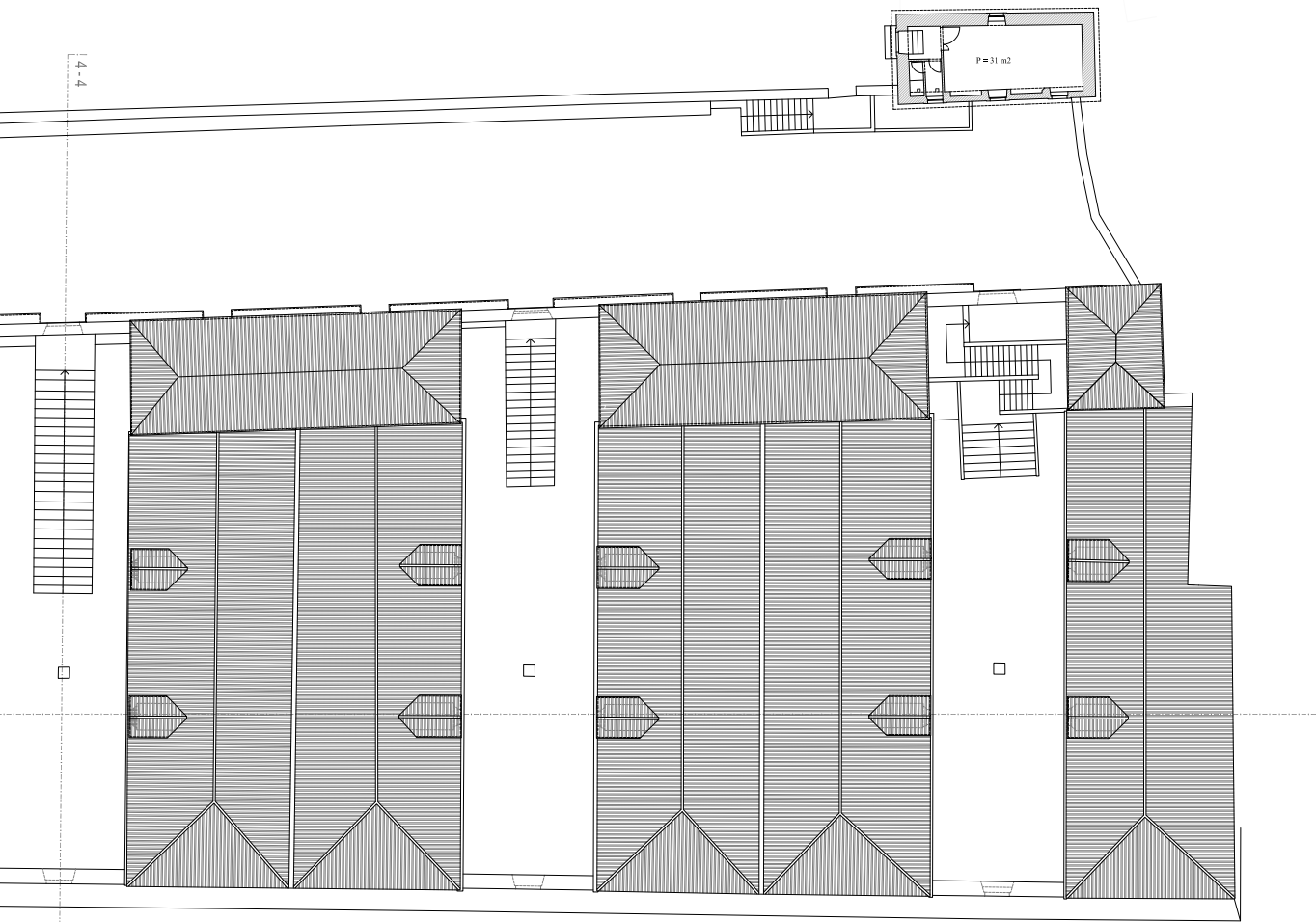


Fig. 5. Second-floor and roof plan, scale 1:100, architectural survey, 2005



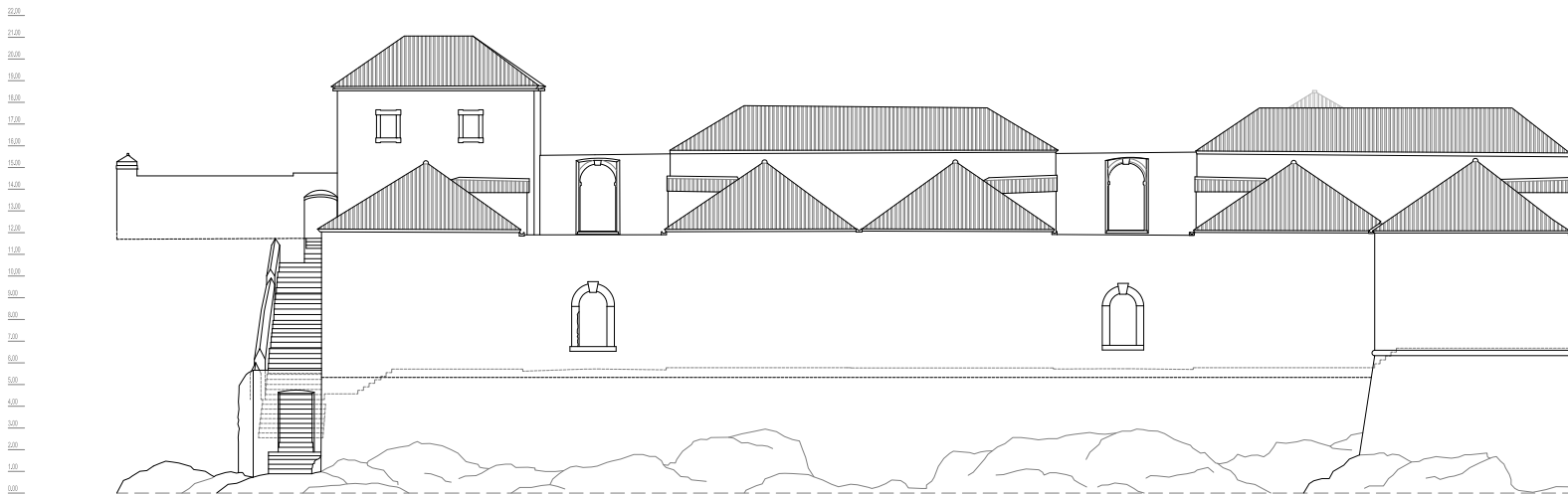
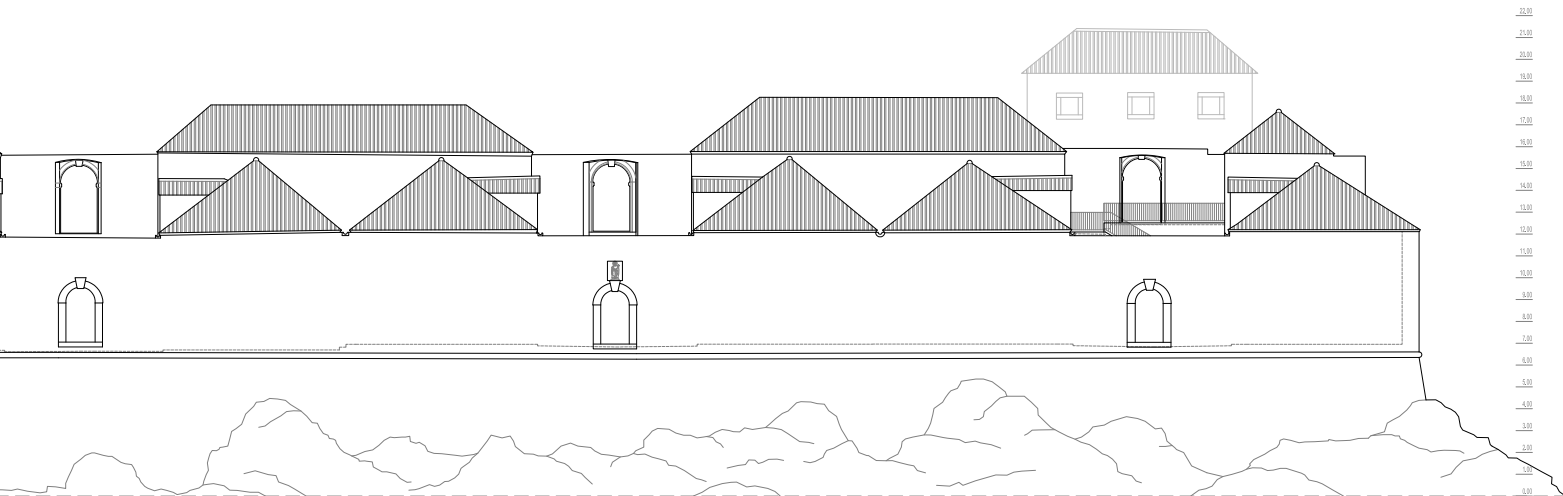


Fig. 6. Longitudinal cross-sections, scale 1:100, south and north façade, cross-section 1-1, architectural survey, 2005



The complex's *ground floor* (at an elevation gradient of 6.00 and 7.00 m.a.s.l.) is composed of 10 separate spaces – “naves,” organized around five internal open courtyards, which are accessible from the level of the common courtyard on the upper floor through an open stone staircase. There is a direct entrance from the side street in the western façade of the first western nave. The closed nave spaces are open to the courtyard with high arched openings. The naves have one single internal space that is 6.50 m and 5.50 m high to the roof beams, and a smaller vaulted space on the north side of each nave that is 4.70 m high to the vault crown. The roofs are three-pitched and covered with clay tiles.

Stone walls act as load bearing structures of the building on the complex's first floor, they are 65 cm thick, made with lime mortar, and are covered in plaster on the inside. The existing mezzanine structures are made of wooden joists with wood flooring, and the roof structure is made of wood and covered with clay tiles.

The existing load bearing walls of naves on the complex's ground floor are made of stone and constructed with lime mortar, they are between 75 and 100 cm thick, and have stone visible on both sides. The roof structure is made of wood and covered with clay tiles. It is possible to enter the existing roof structures from buildings on the upper floor of the complex. Constructed above the load bearing horizontal beams of the roof structure, is a wooden floor.

During the implementation of the project, the Lazaretto facilities owned by the City of Dubrovnik were used by various civil society organizations, public companies and institutions, with cultural, artistic, sport and other functions, and some spaces were also used as warehouses (Art Workshop Lazareti, DEŠA - Dubrovnik, Lindo Folklore Ensemble, “Lero” Student Theatre, Marin Držić Theatre, badminton club, and the Sanitat Dubrovnik Ltd. company).

### *Urban Planning Documents*

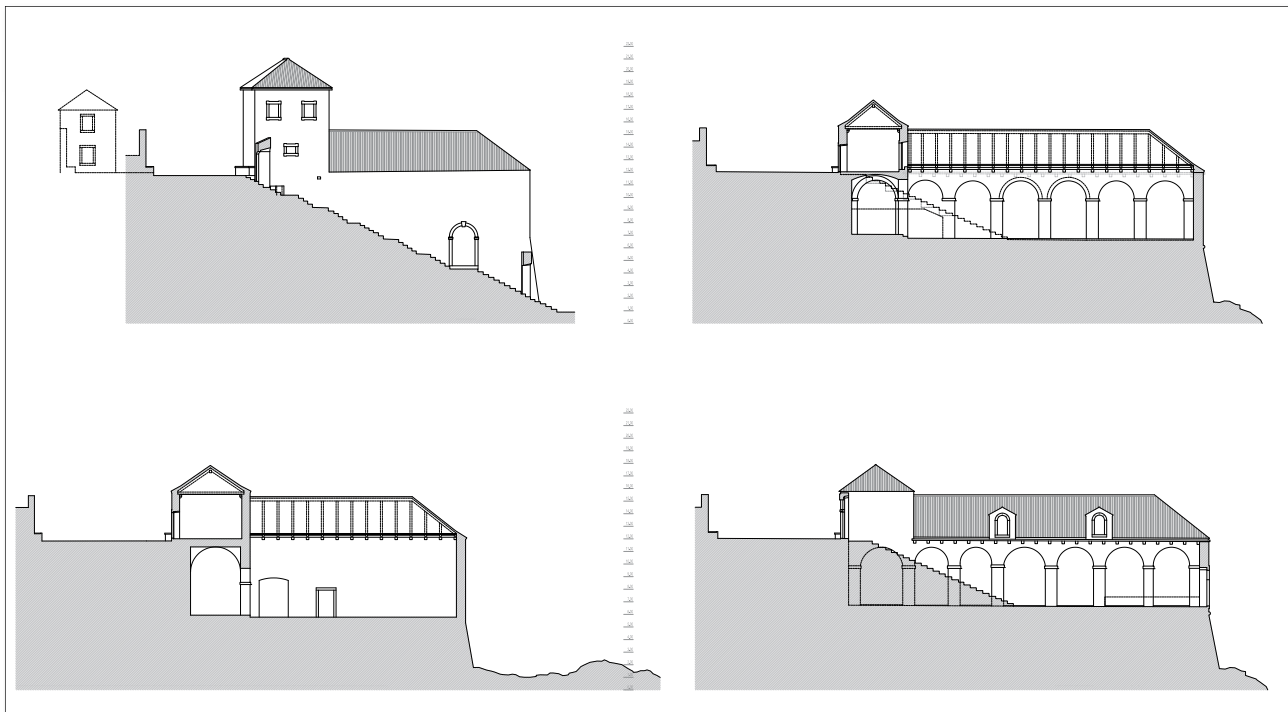
According to the Urban Regulatory Plan “Pile – Ploče – St. Jacob,”<sup>1</sup> the relevant urban planning document at the beginning of the project implementation, the anticipated function of the building is public, i.e. those parts of the building located at an elevation gradient of 12.00 m.a.s.l. with facilities for pedestrians along a tourist walkway, such as specialized shops, information points, agencies, smaller catering facilities, and a supermarket that is supposed to be moved from the nearby location. Parts of the Lazaretto located at an elevation gradient of 6.00 and 7.00 m.a.s.l. are anticipated to have specialized tourist functions – presentation of quality local products, mixed-use with agencies, services and cultural institutions, tax-free shopping, and similar. According to the General Urban Plan<sup>2</sup> of the City of Dubrovnik, the Lazaretto is located inside the M5 zone, historical nucleus – cultural centre, that has a polyvalent function, and is under obligation to preserve original monumental structures and complexes, and interventions are only possible in accordance with special conditions and approval of the relevant conservation department.

### *Conversion of Space*

The main project's technical project documentation was drawn up on the basis of the request and guidelines of the contracting party. It includes reconstruction works of the existing Lazaretto building that would improve the basic requirements of the building, and would preserve it as the individual immovable cultural good in accordance with the preconditions defined by the protection of cultural goods, and would also improve usage of the building in accordance with positive regulations of the Republic of Croatia.

<sup>1</sup> Provedbeni urbanistički plan “Pile – Ploče – Sv. Jakob” – Dubrovnik (“Službeni glasnik općine Dubrovnik,” number 1/90)

<sup>2</sup> Generalni urbanistički plan Grada Dubrovnika, “Službeni glasnik Grada Dubrovnika,” number 10/05, 10/07, 8/12 and 03/14.



Reconstruction of the existing Lazaretto building entails the renovation and restoration of damaged and deteriorated construction elements of the building and the roof, functional modification of parts of the building in accordance with the function set by the investor, replacement of old equipment and installations in accordance with the new technical design, and the reconstruction of connections to public utility infrastructure in accordance with the conditions set by the relevant public legal bodies.

The building permit obtained in 2008 for the main project, envisaged a new function for parts of the architectural complex. The investor intends to accommodate most of the previous users inside the complex, but also to resolve the problem of the lack of space at the Luka Sorkočević Art School and some of its departments.

The project defines new functions on the ground floor (at an elevation gradient of 6.00 and 7.00 m.a.s.l.), as follows, from east to west:

- the first nave would house the Virtual Museum of the City of Dubrovnik with an information desk and retail space;
- second and third nave would be used by the visual arts department of the Luka Sorkočević Art School as an exhibition/lecture hall, for classrooms and workshops, and would alternatively be used outside the school year for special tourist needs – organization of summer art workshops that would complement the seasonal tourist offer;
- the fourth nave would be used by the “Deša” Association as an exhibition-retail space and workshop (sales exhibitions of quality local products made in the traditional and creative workshops of the association);
- the fifth nave would be used by the ballet department of the Art School – as dance studios, and would also alternatively be used for summer dance workshops and thus complement the seasonal tourist offer;
- the sixth nave would be used by the Lindo Folklore Ensemble for rehearsals and performances;

Fig. 7. Longitudinal cross-sections, scale 1:100, western façade, cross-section 2-2, cross-section 3-3, cross-section 4-4, architectural survey, 2005

- the seventh nave would be used by the Art Workshop Lazareti (ARL) for their Residency program – accommodation of visiting artists, while the ground floor section would be used as a workshop by the Art School's visual arts department;

- the eighth nave would be used by the Art Workshop Lazareti for workshops and offices; the ninth nave would also be used by ARL for stage performances; and the tenth nave, by ARL as an exhibition hall and club space.

The facilities on the upper floor, which are accessed through the common courtyard, at an elevation gradient of 12.00 m.a.s.l, are used to expand the City's tourist offer. The spaces allocated for the Art School's visual arts department (1., 2., 3. and 7. from the west) would alternatively be used as an info centre, for specialized shops and as an exhibition-retail space. The Art Workshop Lazareti (8., 9. and 10.) hosts exhibitions and multimedia presentations in their facilities, while the other spaces in the independent unit are intended to be used by artistic and traditional crafts workshops, associations and ateliers. The facilities used by the Multiple Sclerosis Association, the commercial gallery and post office, which can be accessed from the upper level, from Frano Supilo Street, were not the subject of this project and their function remains the same.

Every new function in these facilities corresponds with those envisaged in the Detailed plan on facilities' functions from the then current Urban Regulatory Plan "Pile – Ploče – St. Jacob" – Dubrovnik, which stipulated that the ground floor of the Lazaretto architectural complex should be used for Special tourism needs (according to the project: a museum, info, art and dance workshops, exhibitions, Lindo, ARL performance and club space), and the intended function of the upper floor of the complex is: specialized shops, agencies, information, supermarket, small catering facilities and similar content used by pedestrians as they walk along the route of the tourist promenade (according to the project: art exhibition-retail spaces, ateliers, workshops, specialized shops, associations, ARL exhibition space).

In 2011, at the request of the investor, the City of Dubrovnik, amendments to the main reconstruction project were made, which changed the function of certain naves inside the building. The Lazaretto architectural complex is renovated as a space for public, social and cultural function on the ground floor – naves (at an elevation gradient of 6.00 and 7.00 m.a.s.l), as a museum-gallery and exhibition space, music-performance space and facilities for other civil society organization. The function of the facilities on the upper level, which are accessed through the common courtyard at an elevation gradient of 12.00 m.a.s.l, is economic-business in nature, mostly commercial, i.e. for specialized shops and exhibition-retail salons of traditional crafts. The function of all these spaces corresponds to that envisaged by the current General Urban Plan of the City of Dubrovnik (Dubrovnik Official Gazette no. 10/05) and its amendments (Dubrovnik Official Gazette no. 10/07, Fig. 8).

Amendments to the main reconstruction project abolished the mezzanine structures in the 4<sup>th</sup> and 5<sup>th</sup> naves that were originally envisaged by the project, while five new small galleries were designed at the mezzanine level of the 1<sup>st</sup> to the 5<sup>th</sup> nave, to be used as auxiliary warehouse spaces in the function of multipurpose halls. The floor area of the mezzanine gallery in the 7<sup>th</sup> nave was significantly decreased, and based on this project, it was given a function of a rehearsal hall for the Lindo Folklore Ensemble, as was the ground floor of this nave. Likewise, at the ground floor level, two custom toilets and new kitchens were planned in the naves' auxiliary spaces. Amendments to the construction project follow the said changes in the configuration of mezzanine structures inside the naves, while the installation project of water supply and drainage system, and the project of electrical wiring follow the said changes in the interior.





Fig. 8. Reconstruction project, new function of the Lazaretto space, scale 1:200. From: Architectural-construction project of the Lazaretto reconstruction - Dubrovnik. Amendments to the main project, December 2011.

The main project was again changed in 2013, in terms of small changes in the mezzanine structure, interior decoration and equipment in parts of the building, and it envisaged the construction in phases (Figs. 9, 10).

Because of valid contracts with users of certain spaces inside the Lazareto complex (ARL in naves 8, 9 and 10), the City of Dubrovnik, as an Investor in the reconstruction project, was unable to relocate the existing users for the expected period that construction works were supposed to last. For that reason, the project proposed to conduct reconstruction works in two phases, in two parts of the building that this project defined and separated. The main project documentation for construction in phases was created. The envisaged *phase 1* of construction was related to all reconstruction works in the western section of the building, which includes naves 1, 2, 3, 4, 5, 6 and 7 of the Lazareto architectural complex, while the envisaged *phase 2* was related to all reconstruction works in the eastern section of the building, which includes naves 8, 9 and 10. Each of the two sections of the building that were separated into different construction phases represents an individual technical and functional unit within the architectural complex. Only after all works envisaged in *phase 1* of construction are completed, can parts of the building included in that phase fully be used again, and only then are the conditions for continuation of construction works envisaged by *phase 2* met. *Phase 2* of construction can be conducted concurrently with *phase 1*, if the eastern section of the building became available for implementation of works within envisaged duration of *phase 1* of construction.

### *Reconstruction Projects*

The reconstruction project renovates the complex in its existing dimensions, it maintains the existing load bearing structure with added strengthening of the masonry by means of grouting.

New open wooden roofs covered with clay tiles were built within existing dimensions. The roof structure is a historical construct, a simple primitive gable roof made of massive coniferous wood beams, 20x30 cm in cross-section. A 48 mm thick layer of boards is constructed above the beams at about 2-metre distance, and on top of that the building is treated for hydro-thermal isolation and protection. Clay tiles are set into lime mortar above the double lathing that has a ventilation layer on top of the thermo-isolation. The wooden structure is protected with waterproof coating.

New mezzanine structures, that were occasionally needed for new functions in the naves, were made of steel profiles. The profiles of primary load-bearing girders are I- and U-shaped and 240 mm high, while the secondary I-profiles are 120 mm high. Above the secondary profiles is the composite AB structure, 5 cm high, on a profiled sheet metal. Above the AB slab is the final floor treatment, a wood strip flooring. The mezzanine structure, on its bottom side, is coated in two layers of fireproof plaster-cardboard (2 x 12.5 mm, and 2 x 15 mm of fire resistance limit) as fire protection.

A new partition is created towards the external, courtyard space in the lower level of naves, as a transparent steel structure encased in double ISO glass, with revolving doors, recessed from the surface of the existing arched openings (Figs. 11-13).

Horizontal communication inside the complex was achieved through the open courtyards: public at the entrance level, with driveway access, and five internal courtyards at ground floor level, that will independently be used by various users. The possibility of movement between naves of related functions is envisaged at ground floor level. The vertical communication with ground floor levels is enabled through five external stone staircases in the courtyards. The courtyards are used as internal, and the entrance is closed with the

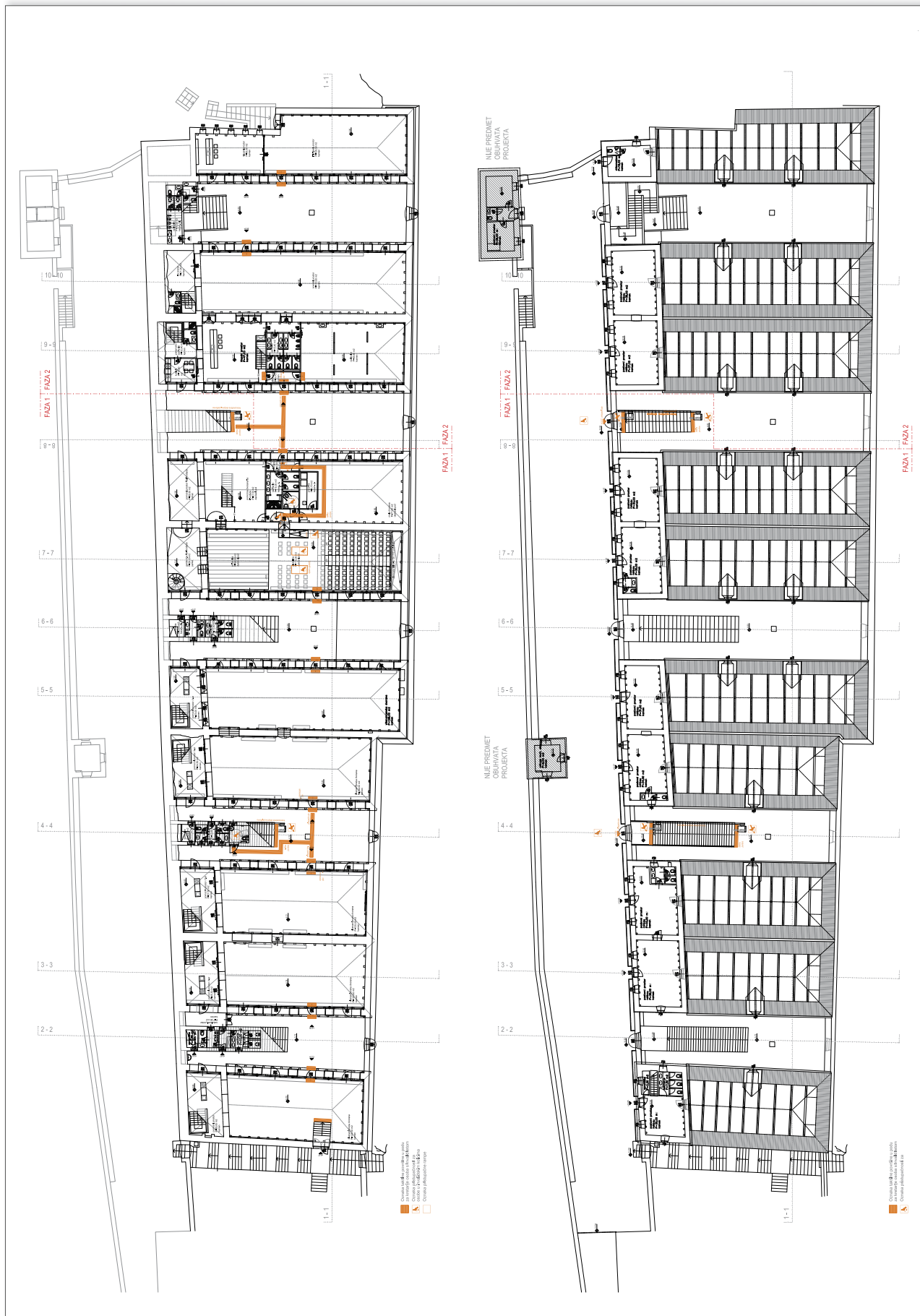


Fig. 9. Reconstruction project, ground-floor and first-floor plan, scale 1:100. From: Architectural-project of the Lazarett reconstruction - Dubrovnik. Amendments to the II. main project. Construction in phases, December 2013.

Fig. 10. Reconstruction project, cross-section 1-1, scale 1:100. From: Architectural- project of the Lazaretto reconstruction - Dubrovnik. Amendments to the II. main project. Construction in phases, December 2013.

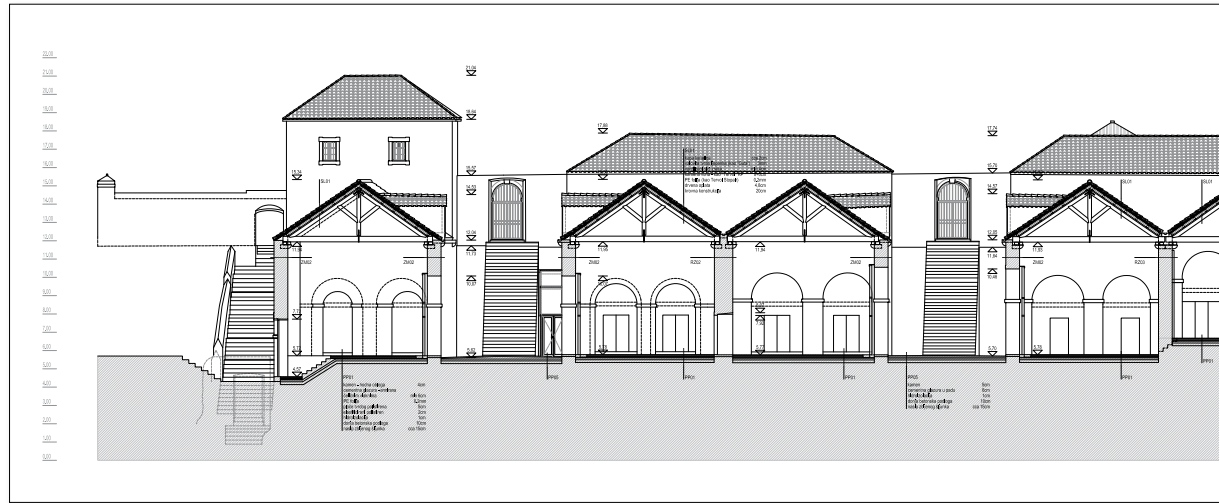


Fig. 11. Glazed arcades and staircase in the Lazaretto (photograph: Institute for Restoration of Dubrovnik)



existing metal lattice doors. Inside the naves, where the new function necessitated the creation of the mezzanine, the vertical communication is made possible with new internal steel staircases.

Because of the public function of the space, the building was modified to enable access of persons with disability and reduced mobility. A platform-lift for disabled persons is positioned along the external stone staircase, in the second and fourth courtyards. Accessible entrances into multipurpose halls were also designed, as were the modified seats in the auditorium of the performance space of the Lindo Folklore Ensemble, and at the ground floor level accessible toilets for persons with disability and reduced mobility were designed as part of the sanitary installations in the courtyard between the 3<sup>rd</sup> and 4<sup>th</sup> nave, and in the 7<sup>th</sup> nave.

The ground level flooring in all buildings is made of stone, as before, except where the specific function of the space created different demands: wooden floorboards were laid in the Lindo Folklore Ensemble rehearsal hall, as well as in the performance space of the Art Workshop Lazareti, while the changing rooms and office spaces have parquet floors.

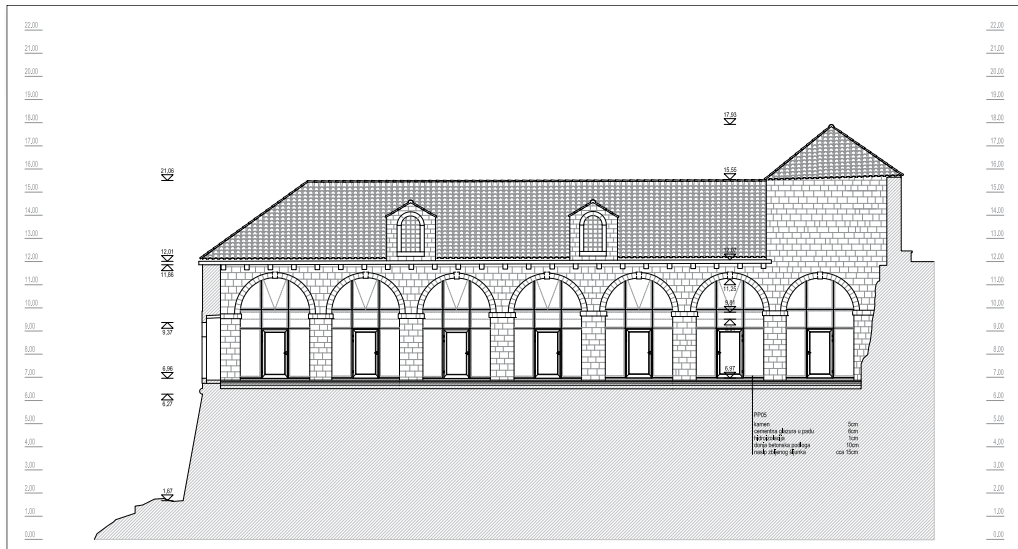
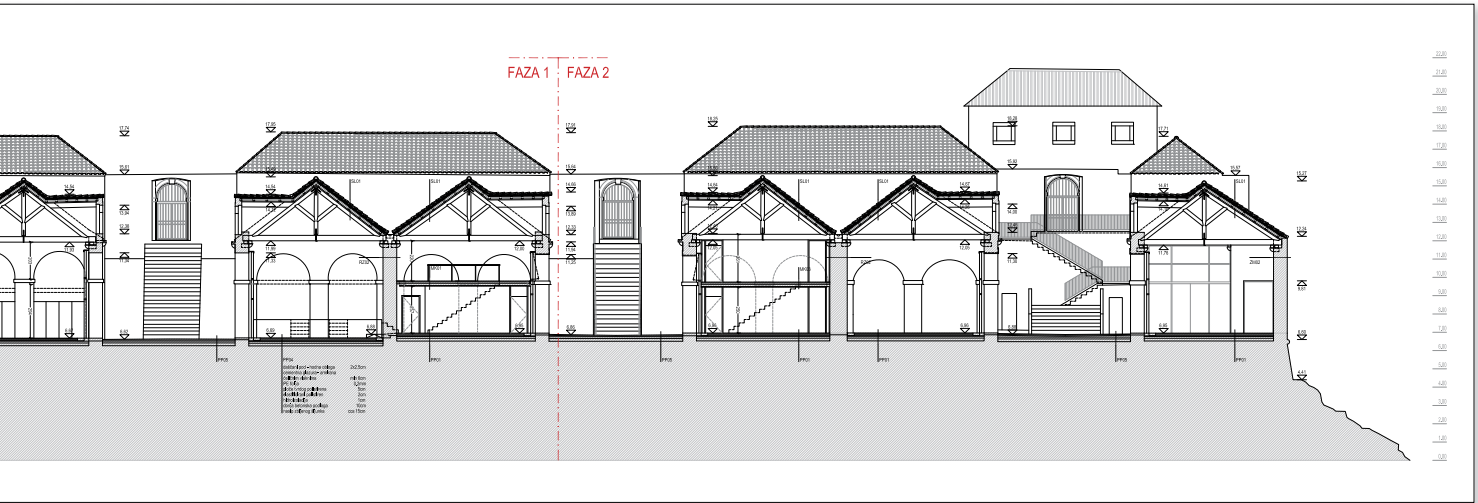


Fig. 12.  
Reconstruction  
project, cross-section  
8-8, scale 1:100.  
From: Architectural-  
construction project  
of the Lazaretto  
reconstruction  
- Dubrovnik,  
September 2005.

The new mezzanine structures were finished with a floating floor. Wet joints are finished with ceramic tiles, floor height – 2 cm in relation to the floor height of adjacent rooms. Stone is left visible in the interior stone walls and grouted. Façades with visible stone projections are kept in their original state. Partition walls are made as a montage of plaster-cardboards on a metal substructure. The ceiling soffit of the naves' ground floor, where there are mezzanines, are made of plaster-cardboards.

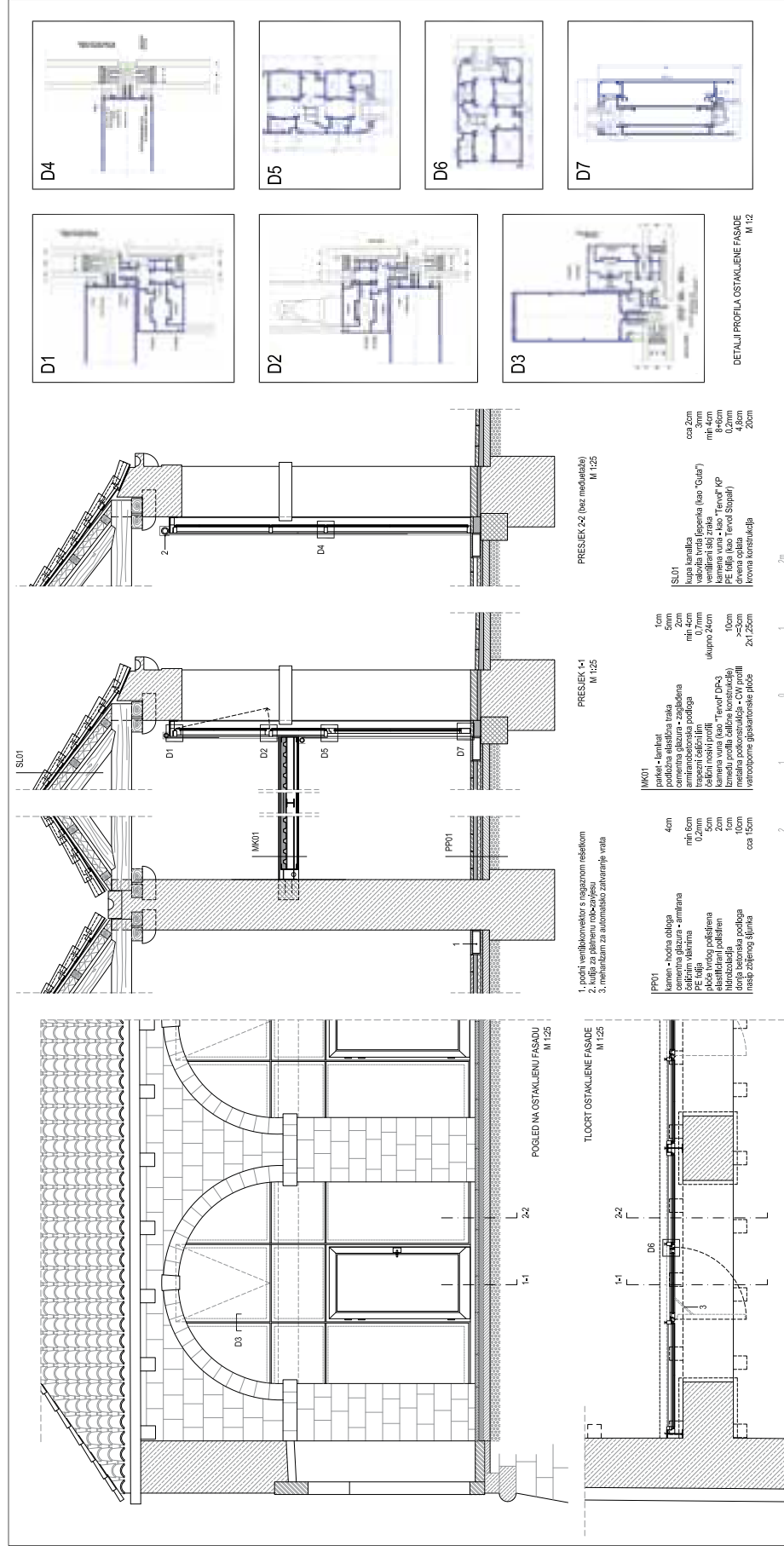


Fig. 13. Reconstruction project, detail of aluminium structure of glazed arcades, scale 1:25. From: Architectural-construction project of the Lazareto reconstruction - Dubrovnik, September 2005.

Ante Milošević

## Quarantine and Lazarettos in Dubrovnik: *Fortuna critica et historica*

The Republic of Dubrovnik was the first city-state to develop the concept of quarantine (1377) for all local and foreign travellers who arrived by sea or land from distant places, especially those coming from suspected pestiferous regions. At first, the one-month quarantine was established on the nearby uninhabited islands of Supetar, Bobara and Mrkan (1377), and in case of overpopulation of those islands, in the nearby town of Cavtat, then a more remote on the island of Mljet (1397). It is usually thought that the quarantine on the island of Mljet, which was managed by the island's Benedictine monks, was held near the monastery of St. Mary in the Great Lake. At that time, however, large merchant ships were not able to sail there, so it is more likely that the multiple-week isolation was conducted in some of the more suitable coves on the western or northern side of the island. These coves, as secure anchorage areas, of which the old and naturally protected Polače cove was most suitable, were depicted by the Ottoman cartographer Piri Reis (Fig. 1.). Afterwards, the one-month isolation of passengers and goods was conducted on the island of Lokrum near the



Fig. 1. Island of Mljet with secure ports, map compiled by the Ottoman cartographer Piri Reis, first decades of the 16<sup>th</sup> century



Fig. 2. Dubrovnik, Lokrum, Cavtat and the nearby Cavtat islands, map compiled by the Ottoman cartographer Piri Reis, first decades of the 16th century

Dubrovnik port (1534-1586). The quarantine in these locations met the needs of maritime traffic, however after the fall of Bosnia when the situation in the hinterland normalized and the overland communication was re-established – especially in the 16<sup>th</sup> century – a need to organize a quarantine on the mainland, closer to the City, became apparent. First such quarantine was established west of the city walls, on the peninsula of Danče, by the Church of St. Mary (1428-1430). On that occasion, the entire peninsula was separated from the mainland with a long and high wall for better supervision of those held in quarantine and greater security of the population outside. In time, the overland trade grew exponentially, especially after the so-called “Dubrovnik caravan road” (*strada maestra* or *via Murlaccorum*) was traced and equipped with necessary facilities, that connected Dubrovnik and Istanbul, via Bosnia, Sandžak, Kosovo and Bulgaria. The beginning of this journey for those who were departing and a destination for those who were arriving, was at Ploče, in the port by the eastern city gate. The marketplace of Tabor was already located there, at the foot of Mount Srđ, it had all the necessary facilities, a stable and a fountain, with a house and a building called Čardak for accommodation of merchants and Ottoman consuls. The future development of trade in that area and an increasing number of merchants who were coming by land and sea, as well as frequent plague epidemics and other infectious diseases that ravaged the hinterland in the 16<sup>th</sup> and 17<sup>th</sup> centuries, prompted the Dubrovnik authorities to expand the health, hygienic and sanitary protection of its inhabitants. Therefore, a decision was made to begin the construction of a new Lazaretto (1590) at Ploče, on the rocks by the sea, modelled after similar edifices that had already been organized in some Mediterranean ports, primarily Venice. The construction, which started in 1627, lasted approximately twenty years. This Lazaretto complex functioned as Dubrovnik’s quarantine until the 19<sup>th</sup> century and it is, to a large extent, preserved to this day (Fig. 3).

The works in this book attempt to explain how quarantine was organized in today’s Lazaretto and to elucidate the intense and continuous development, from the 14<sup>th</sup> century onwards, of the health service in Dubrovnik. In order to illustrate this further we bring, in the ensuing text, the selection of quotations from previously published articles, discussions and books on the subject.<sup>1</sup> The illustrations accompanying this text serve the same purpose, although most of them are not their original part.

### *On the Establishment of Quarantine in 1377 for Those Arriving from Plague-infected Areas to Dubrovnik and its District<sup>2</sup>*

The greatest peril Dubrovnik faced, like every other port city, was the *plague*. The first appearance of plague in Europe, in a virulent form, was the so-called *black death* in 1348 that decimated one fifth of the population. According to Gundulić’s chronicle and a

<sup>1</sup> The selection of quotes was determined by the subject of this book. In the narrow sense, that is the Lazaretto complex in Dubrovnik and related matters. Additional information can be found in: A. BAČE - I. VIDEN, Lazareti na Pločama od pada Dubrovačke Republike do danas (1808.-2013.), *Prostor* 21/2(46), Zagreb, 2013, pp. 326-339. – V. BAZALA, Pomorski lazareti u starom Dubrovniku, in: *Dubrovačko pomorstvo: zbornik u povodu sto godina nautičke škole u Dubrovniku*, Dubrovnik, 1952, pp. 293-308. – V. BAZALA, Della peste e dei modi di preservarsene nella Repubblica di Ragusa (Dubrovnik), *Comunicazione al XVI. Congresso internazionale di storia della medicina a Roma*, II., Rome, 1954, pp. 723-756. – Z. BLAŽINA-TOMIĆ, *Kacamorti i kuga: utemeljenje i razvoj zdravstvene službe u Dubrovniku*. Zagreb-Dubrovnik, 2007. – Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague. The Health Office and the Implementation of Quarantine in Dubrovnik, 1377-1533*, Montreal, 2015. – A. BOROVIČKI - S. LANG, *Povijesno-medicinski vodič kroz medicinu starog Dubrovnika*. Zagreb, 2007. – V. FORETIĆ, Stari dubrovački lazareti na Pločama, *Novo doba*, Split, 17 April 1938, pp. 6-7. – M. D. GRMEK, Le concept d’infection dans l’antiquité et au moyen âge, Les anciennes mesures sociales contre les maladies contagieuses et la fondation de la première quarantaine à Dubrovnik (1377), *Rad JAZU* 384, Zagreb, 1980, pp. 9-54. – J. GELČIĆ, *Delle istituzioni marittime e sanitarie della Repubblica di Ragusa*, Trieste, 1882. – Z. JANEKOVIĆ-RÖMER, I lazareti di Dubrovnik (Ragusa), in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano 2004, pp. 246-249. – R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture starog Dubrovnika*. Vol. 1, Belgrade, 1938. – I. LENTIĆ KUGLI, Građevinske intervencije u Dubrovniku potkraj 18. i na početku 19. stoljeća, *Radovi Instituta za povijest umjetnosti* 12-13, Zagreb 1989, pp. 276-285. – V. MIOVIĆ-PERIĆ, Emin na Pločama kao predstavnik Osmanlija na području Dubrovačke Republike, *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 37, Dubrovnik, 1999, pp. 205-215. – I. MITIĆ, O poslovanju dubrovačkih lazareta na Pločama krajem 18. stoljeća, *Dubrovnik* 4, Dubrovnik, 1977, pp. 98-102. – S. M. STUARD, A Communal program of Medical Care, Medieval Ragusa-Dubrovnik, *Journal of the History of medicine and allied sciences* 28, Oxford, 1973, pp. 126-142.

<sup>2</sup> From: V. BAZALA, *Pregled povijesti zdravstvene kulture Dubrovačke Republike*. Zagreb, 1972, pp. 31-32.





hand-written note found on folio 3 of the 15<sup>th</sup> century copy of the *Liber statutorum*, kept in the State Archive in Dubrovnik, 25,000 people died between 1348 and 1374. It is no wonder the Ragusans were trying to find successful measures of protecting people from plague, but it was no easy task because the cause of plague was unknown. There was no time to search for its cause, the only concern was how to get rid of it. The opinion of the medical science was, *it does not matter what produces the disease, but what relieves it (non interesse quid morbum faciat, sed quid. tollat)*. The best advice not to become infected by plague was this: *Flee fast, as far as possible and return as late as possible (Fuge cito, longe et tarde revertere)*. Since it was not possible for the entire city to escape the plague, in some cities an order was issued to expel all infected and suspicious persons (Basel, 1370). Other cities prohibited entrance to suspicious persons (Duke Barnabò Visconti, 1374 in Milan and Reggio nell'Emilia). In 1374, a proclamation was issued in Venice which stated that all ships and passengers had to be stationed on the island of San Lazzaro until the special health council gave them permission to enter the city. This led to the discrimination of ships and travellers from certain countries as well as other wrongdoing that was occurring in Venice regularly. Hence, Dubrovnik implemented a method that was not only just and fair, but also very wise and successful, and it prevailed around the world. Namely, with a regulation in the *Liber viridis* (cap. 49, fol. 78), dated 27 July 1377, entitled *Veniens de locis pestiferis non intret Ragusium vel districtum* (Those arriving from plague-infected areas shall not enter Dubrovnik or its district), it was decreed that travellers coming from pestiferous or suspicious places had to spend one month in predetermined locations in Cavtat, Mrkan, Bobara and St. Peter (Fig. 4). This stay was later extended to 40 days,

Fig. 3. Orthophoto of Dubrovnik with the Lazaretto to the east of the port

hence the name quarantine (from *quaranta* = 40). They had to spend this time in the so-called *kontumac* or *kontumacia* (confinement). Special buildings, called the *lazarettos*, were organized and built for this purpose. Since one such institution was located in Venice on the island of Santa Maria di Nazareth for a period of time (1408-1432), these institutions were also called *nazareto*! Later on, all these names were mixed so lazarettos were also called *karantena* (quarantine) and *kontumac*.

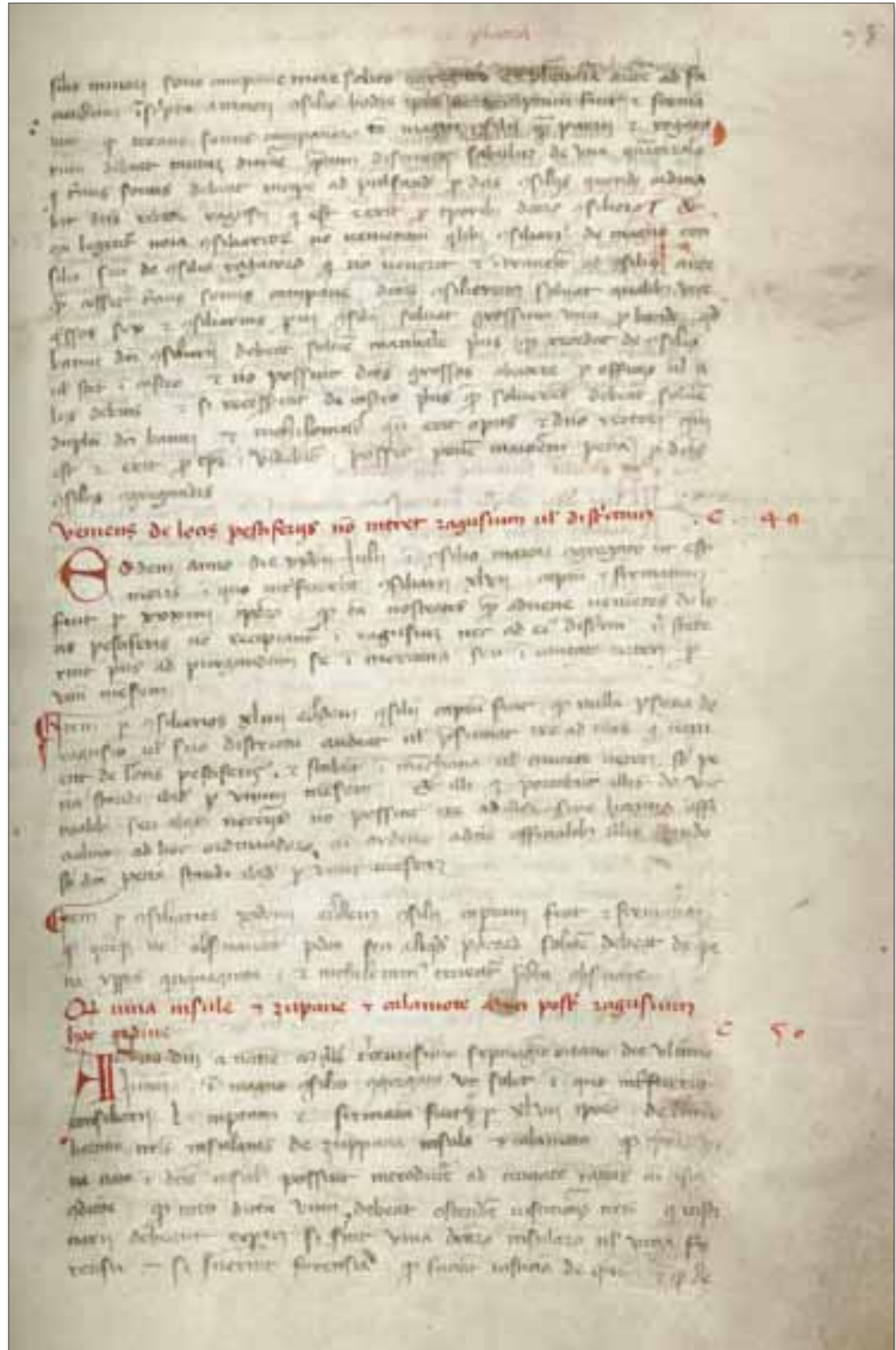


Fig. 4. *Liber viridis*, cap. 49, information on the 1377 quarantine are on fol. 78 (State Archive in Dubrovnik)

An entire history of plague defence in the Republic of Dubrovnik is reflected in the history of the Dubrovnik *Lazaretto*. Quarantine in Dubrovnik was established in 1377 in Cavtat and the nearby islands, in 1430 the lazaretto at Danče was built, then another, in an extended and more modern form, on the island of Lokrum (1534-1586), and from 1590 the Lazaretto at Ploče was gradually built in the form and size that still impresses to this day (Fig. 5).



Here is the document in Latin:

*Veniens de locis pestiferis non intret Ragusium vel districtum*

*Eodem anno (1377) die XXVII Julii in consilio maiori congregato, ut est moris, in quo interfuerunt consilarii XLVII, captum et firmatum fuit per XXXIII ipsorum, quod tam nostrates quam aduene venientes de locis pestiferis non recipiantur in Ragusium nec ad eius districtum nisi steterint prius ad purgandum se in Mercana seu in Civitate Veteri per unam mensem.*

*Item per consiliarios XLVIII eiusdem consilii captum fuit, quod nulla persona de Ragusio vel suo districtu audeat vel presumat ire ad illos qui venient de locis pestiferis et stabunt in Merchana vel Civitate Veteri sub pena standi ibidem per unum mensem. Et illi qui portabunt illis de victualibus seu aliis necessariis non possint ire ad illos sine licentia officialium da hoc ordinandorum cum ordine a dictis officialibus illis dando sub dicta pena standi ibidem per unum mensem.*

*Item per consiliarios XXVIII eiusdem consilii captum fuit et firmatum, quod quicumque non observaverit predicta seu aliquid predictorum, soluere debeat de pena ypperperos quinquaginta et nichilominus teneatur predicta observare.<sup>3</sup>*

Fig. 5. View of Lazarettos, the city port and the eastern walls of Dubrovnik (lithography of F. X. Sandmann from 1846)

<sup>3</sup> Latin transcript acquired from: Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, pp. 81-82.

English translation:

*Those arriving from plague-infected areas shall not enter Dubrovnik or its district*

*On 27 July 1377, gathered in the Major Council, according to custom, in which forty-seven members were present, thirty-four Councillors voted in favour of the proposed regulation, which stipulates that those who come from plague infested areas shall not enter Dubrovnik or its district unless they previously spend a month on the islet of Mrkan (St Mark) or in the town of Cavtat, for the purpose of disinfection – ad purgandum.*

*Furthermore, forty-four Councillors decided that, under the threat of being sent into quarantine for a month, the residents of Dubrovnik are strictly forbidden to visit those who arrive from plague-infested areas and who will be confined on the islet of Mrkan or Cavtat. Those who dare bring food or any other necessities to the interned, without the permission of the officials designated for that function, will have to stay there in isolation for a month.*

*Furthermore, twenty-nine councillors decided that whoever did not obey the above decisions, would have to pay a fine of fifty hyperperi, and everyone would be obliged to observe it.*

### *On the Cazamorti (Health Officials) in the 15<sup>th</sup> century<sup>4</sup>*

#### *Part Three: Chapter Fourteen*

Let the tenth be the authority of those who watch over the health of the city and all its districts, so that plague does not take hold and spread by infecting people. Namely, as was known previously, if the plague epidemic broke out in Dubrovnik, it exterminated but did not destroy indiscriminately. In relation to that, an office was established on the basis of disciplinary regulations and sanctions, headed by officials called the *Cazamorti*. Five noblemen of the best repute and among the most cautious when facing death were elected to this office, to examine and keep a vigilant eye on those who come from plague-infected cities, fortresses, places and regions. Therefore, those who arrive from a pestiferous city or place, whomever they may be, shall not enter Dubrovnik or its district, and shall not kiss their friends or relatives nor shake hands with them.<sup>5</sup> Those who arrive by land will be separated from any company for two or three days, under a hut where archers used to stay during festival competitions, in order to be able to talk to their families. After that, they and all the others would be banished for one month to uninhabited islands removed from the city by six thousand steps. These islands were called Supetar, where two houses were built for this purpose, then Bobara and Mrkan, where some of them now live, however, they did not send anyone there unless the Bishop of Trebinje, a pastor of the region, approved of it. When all the islands become full of exiles, then some are sent to Epidaurus, also called Old Dubrovnik (Fig. 6). After the passage of one month, if they remain healthy, they were allowed to freely enter the city, otherwise the exile was extended. These officials were not allowed to reduce the proscribed period of one month for anyone nor move them somewhere else, because that decision was in the hands of the Major Council, but they were empowered to extend that period to more than one month, if they so willed. However, if someone left from Dubrovnik to go to a pestiferous location and returned from there while the epidemic was ongoing, he would be banished for two months, inclusive of the days spent travelling, which was not counted for those who were

<sup>4</sup> From: F. DE DIVERSIS, *Opis slavnoga grada Dubrovnika*. (Foreword, transcription and translation from Latin: Z. Janeković Römer), Zagreb, 2004, pp. 82-84.

<sup>5</sup> Quarantine in Dubrovnik was established in 1377.



detained for one month. All Rectors of extra-urban places should fully obey the letters and orders of the *Cazamorti* in matters related to their service. The sailors from infected ships, both local and foreign, were known to sometimes leave infected persons somewhere along the coast of Dubrovnik. When this was suspected, one or two armed boats would be sent right away to investigate. Their commander would not allow anyone arriving from infected areas to dock in the district of Dubrovnik (Fig. 7). When Rectors of these places discovered that plague appeared somewhere, they were obliged to inform the *Cazamorti*. Under no circumstances should the fabric coming from a dangerous location be brought in, unless it spent one month laying at the foot of some fortress. I saw that sometimes they treated other goods in the same manner. If someone in the city or outside of it were to become infected, by accident or by God's will, or if local physicians suspected him of having the plague, he would be sent outside the city and away from human company as quickly as possible, or he would be locked in a house. Often, they even forbade everyone from accessing that street, with the exception of someone who could assist the afflicted person. If the patient died, that person had to immediately go, together with those who buried the body, to a place called Danče. I heard that sometimes when the disease was suspected, the city was completely decontaminated using these and similar measures. And, to conclude this description, they protected the city from infectious diseases so effectively by using these measures that the epidemic did not attack it for many years, which cannot be said of many cities in Greece, Illyria, Italy and other provinces that did not have such a service and such careful protection...

Fig. 6. Dubrovnik, Old Dubrovnik and the Bay of Kotor (from: G. F. CAMOCIO, *Isole famose, porti, fortezze e terre marittime sottoposte alla Ser. Sig. di Venetia, ad altri Principi Christiani, et al Sig. Turco nouamete poste in luce. In Venetia alla libreria del segno di S. Marco. Venice, 1574, tav. 75*)



Fig. 7. Republic of Dubrovnik on the map of V. M. Coronelli, 1690.

### *On Ragusan Behaviour During the 1437 Plague Outbreak<sup>6</sup>*

#### *Part Four: Chapter Thirteen*

Since it sometimes happened that the *Cazamorti* were unable, with their influence, to eliminate the deadly plague from the city, a laudable Ragusan custom was to immediately remove all children, little girls and boys, and youth of both genders from the city. It seemed, in fact, that they were most susceptible to the infection, and they truly were. And, actually, they did it to prevent the city from extinction, because no remedy was invented that was more salutary than escape, according to the medical proverb: “Flee fast, as far as possible and return as late as possible.” They promulgated new regulations which said that several patricians had to stay in the city for the duration of the epidemic, and they managed the Republic’s affairs as paid municipal officials.<sup>7</sup>

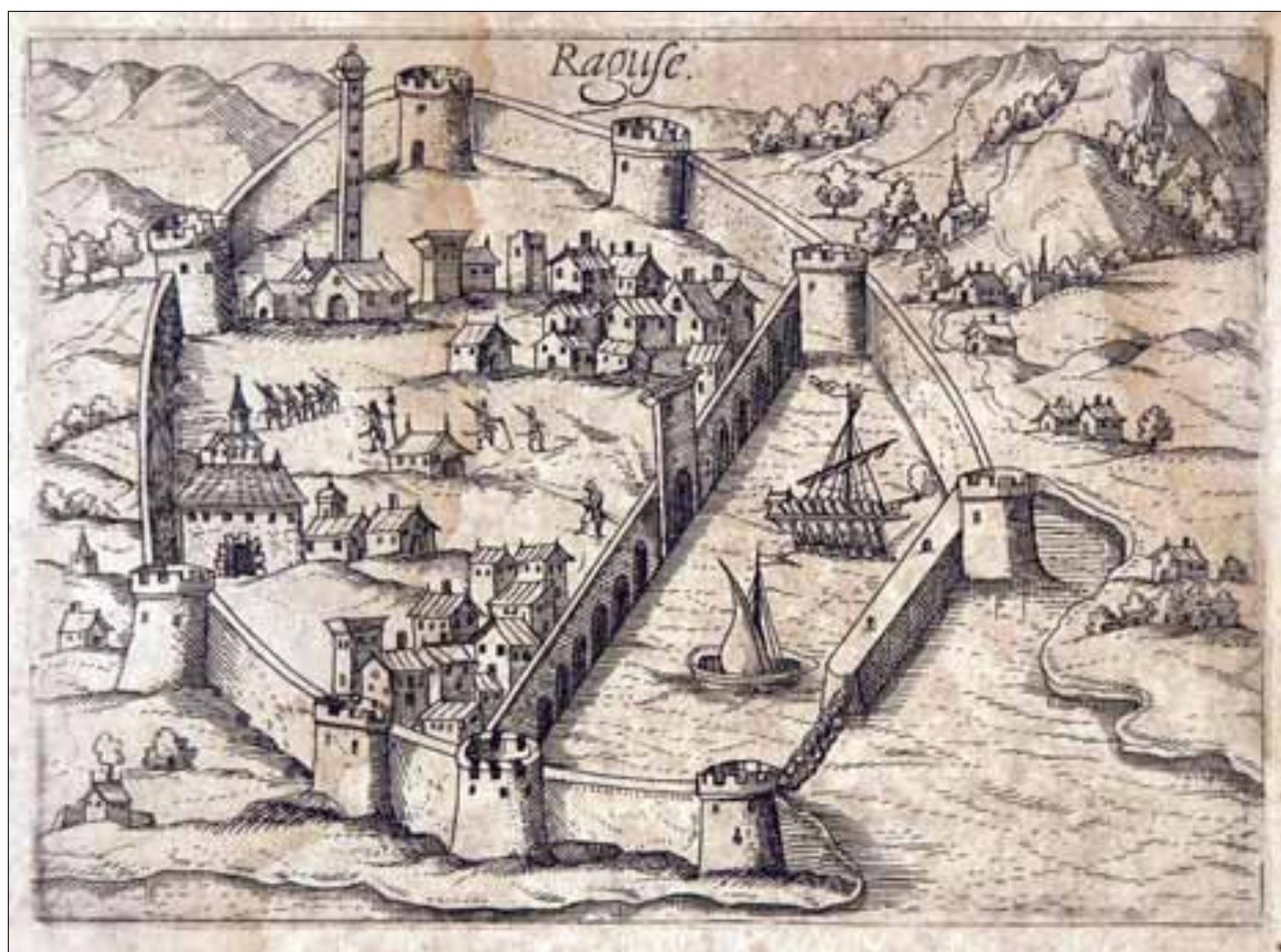
They indeed had the authority and competence of an entire Major Council, albeit limited with many new decisions. Therefore, after putting the Republic in their hands, the others fled to healthier areas, some to those nearby, others to the more remote. Those who remained, were not allowed to leave under threat of punishment by death and confiscation of all their property. Together, they organized and hired people to guard the city gate, the

<sup>6</sup> From: F. DE DIVERSIS, *Opis slavnoga grada Dubrovnika*. (Foreword, transcription and translation from Latin: Z. Janeković Römer), Zagreb, 2004, pp. 116-118.

<sup>7</sup> During the plague epidemic, especially strict disciplinary measures and punishments were put in place, and patricians who stayed behind to govern the city had very broad authorities.

walls and the Placa. If the Republic were to face any kind risk or danger, the exiled patricians and commoners would gather in the port and organize everything that was required, and if need be, they would enter the city, disregarding the danger to their lives, issue orders and then leave again. If they could do everything from the outside, they would not expose themselves to the epidemic, which was wise. To make this completely clear, I will describe in greater detail what happened during the plague that raged in the year of our Lord 1437, although I already touched upon it when I wrote about the air quality. That year, ten patricians stayed to govern the city, nine of whom died of the disease within fifteen days. Only one 83-year-old patrician survived, by the name of Marin de Resti, fateful husband, clever, thoughtful, vigilant guardian of the Republic and its property, kind to strangers, Christian Catholic and the most virtuous of citizens.<sup>8</sup> When his wife died and when, under similar circumstances, almost all the people paid to guard the city died of the disease, it seemed that the city was left without assistance. When patricians who were outside the city found out about this ordeal, they were forced to convene the Council in Zaton and on the island of Daksa. Three patricians were nominated there – Župan de Bona,<sup>9</sup> devotee of justice and probity, and another two. They ordered that one thousand mercenaries be positioned outside the city walls in order to monitor the city from both sides of the hill. Two ships were anchored

Fig. 8. Veduta of Dubrovnik, print by V. M. Coronelli, 1690.



<sup>8</sup> According to reports of chroniclers, an old patrician Marin Šimunov de Resti remained in the city and governed alone. For this, the municipality rewarded him with 500 hyperperi. *Annales Ragusini Anonymi item Nicolai de Ragnina*: 55, 252; DAD. *Acta Consilii Maioris*. vol. 5:148

<sup>9</sup> Ivan (Župan) Marinov de Bona (mentioned from 1420. † 1464) was one of the most distinguished patricians of his time. He held high judicial and ambassador positions, he was elected Rector 12 times. He was especially prominent in architecture – he became the first architect of round fortresses in the Dubrovnik area. The Republic asked for his advice and assistance in all architectural endeavours. We know of thirteen of his children from two marriages.

in front of the port, each with one hundred soldiers aboard (Fig. 8), while two armed trireme galleys and other ships supervised the city at sea. In addition to all that, three patricians came every day, of course, each in their own boat, with six or eight armed sailors and some food, and stopped in front of the port. Inside, that laudable old man tirelessly governed the city by himself. At his insistent requests, when the disease already subsided, and the citizens were still refusing to return, several more patricians were added to govern and manage the Republic with him, until all patricians came back to the city. Therefore, this is how, with beneficial help and salutary measures they saved themselves, the city, the sweetness of freedom, and they protected the city from plague. All this I saw and heard, and in my judgment, after those nine passed away, the care for the salvation, security and preservation of the city became better than before. Now, I hear, they promulgated new laws and new measures that had to be respected in such cases. All this is attributed to the tenth permanent government, which I should not have mentioned here, because now I am talking about what was customary, and not permanently decreed by the authorities. Whomever gave this some thought and wanted to examine it carefully, I claim they would have come to the same conclusion, that nothing better should, nor could, have been done in this matter.

### *On the Lazaretto in Dubrovnik in Evliya Çelebi's Travelogue<sup>10</sup>*

#### *Lazaretto Bandiška-han<sup>11</sup>*

Travellers, caravans and officials coming from every region, from Constantinople, Herzegovina and Bosnia, would reside in this han (Fig. 9). Officials of this Lazaretto-han served and accommodated the travellers and discovered many of their secrets and private affairs. Some people stayed there for forty days, while the minimum prescribed period was ten or seven days. The guests who resided here were supervised by one agha soldier with fifty men. If goods that did not stay here for forty days had to be brought into the city, then it had to be sprinkled with vinegar around the edges, and only then could the goods, that was guarded in turns, be taken to the city to be sold. Actually, based on their inexpert opinion, the plague could not be brought into the city with the goods covered in vinegar.

#### *Lazaretto-han and its Form*

This han is located to the west of Dubrovnik.<sup>12</sup> It is located far from the city and it was built at four corners like a quadrangular han. It has several storeys, good rooms, a kitchen, stables, as well as rooms for "soldiers." Guards who take turns to guard the guests each evening close the gates at night and open them again at dawn.

Several other gypsy and soldier's houses are located outside the han. This han had a quadrangular form, it was located in a rocky place by the sea. Local guards monitored also the poor old me (Fig. 10). On our third day here, my entourage and I were invited to the city, and we left.

<sup>10</sup> From: E. ČELEBIJA, *Putopis. Odlomci o jugoslovenskim zemljama*. Tome II, (translation foreword and commentary by: H. Šabanović), Sarajevo, 1979, pp. 424-425.

<sup>11</sup> This is the Lazaretto (quarantine) at Ploče, in the eastern suburb of Dubrovnik. There was also Tabor, for unloading of Ottoman goods and trade with Ottoman people. Some of those buildings, like the han, (erected in the early 17<sup>th</sup> century) still stand today. With regards to the name Bandiska, it is related to the Italian word: *bandire* (Ven. *bandizar*), which was used in coastal areas in the form of *bandižati* – meaning to expel, banish, place outside the law. Before leaving Dubrovnik, travellers spent their last night prior to departure in the lazaretto, they were expelled – quarantined, and were not allowed to return before they finished serving the full period of quarantine.

<sup>12</sup> The Lazaretto complex is located east of Dubrovnik.





Fig. 9. Traders in Dubrovnik  
(from: CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne*. Paris, 1878.)



Fig. 10. Ragusan soldier (from: F. M. APPENDINI, *Notizie istorico-critiche sulle antichità, storia e letteratura de Ragusei*. Tome I, Dubrovnik, 1802, p. 334, tab. 2).

## *On the Cazamorti, Gravediggers, Hygienic Measures and the 1526 Plague<sup>13</sup>*

### *Signori Cazamorti*

In the 15<sup>th</sup> century, the health officials were called *Cazamorti*, coming from the word *cazzamorti*, a term of Venetian origin that denotes persons who expel the dead. The plagues cyclically repeated every five, ten or fifteen years, and the Ragusans promulgated new health regulation each time the epidemic reappeared in order to better protect themselves from plague. The regulation on the election of the *Cazamorti* was adopted in 1426, it stipulated that the *Cazamorti* had to work without pay (*per angariam*), and that they should also not be members of the Minor Council or the Civil Court. This regulation was in accordance with the general principles of the Republic, which was ever vigilant to avoid the concentration of power in the hands of a few. Also, it was preferred not to ask the same patricians to perform several onerous duties at the same time.

In time, the *Cazamorti* were given wide-ranging executive and judicial powers in all matters related to anti-plague measures. Their work became more complex because they supervised the plague doctors, barber-surgeons, notaries, priests, guards, gravediggers and all those who worked in the quarantine. At the same time, they decided which commoners should be sent to the quarantine, while the Senate decided on the noblemen in order to avoid potential political rivals of the *Cazamorti* from ending up in quarantine. The *Cazamorti* also decided on burial places for those who died of plague and they had to quickly organize new burial places if the previous became full. However, their most odious duty was burning the plague-infected houses of their fellow citizens. If they hesitated, the government would instruct them to do it on the same day and threatened them with

<sup>13</sup> From: Z. BLAŽINA TOMIĆ - V. BLAŽINA, Dubrovnik, preteča javnih zdravstvenih mjera u Europi, *Hrvatska revija* 3, Zagreb, 2016, pp. 21-26.

a monetary fine of one hundred ducats. Otherwise, the authorities would decide who among the *Cazamorti* would have to carry out this unpleasant order. If we consider the complexity and difficulty of all these duties, it is not at all surprising that the authorities eventually decided to give the *Cazamorti* a salary in 1457. From this time forward, they are mentioned as officials with a salary (*salariati in civitate*), but we do not know the amounts that they were paid. However, knowing the proverbial thriftiness of the Republic of Dubrovnik, that salary was definitely not high enough to attract patricians to that service...

### *Regulation on Gravediggers*

... One of the deadliest plague epidemics struck the Republic in 1482. The Senate immediately adopted several wide-ranging regulations for the protection of health. The *Cazamorti* were supposed to investigate, even with a threat of torture, because it was suspected that the infection spread with the goods unloaded from ships in the city port. Everybody was avoiding spending time in the infected city, including the *Cazamorti*. All three of them were ordered to remain permanently present in the city, under threat of a monetary fine of twenty-five *hyperperi* for each violation. Moreover, the *Cazamorti* were to meet every morning, and on the basis of the most recent data, decide how best to protect the Republic. They had to name special guards who were to supervise gravediggers and make sure that the gravediggers had no contact with the healthy and that they did not cause a fire. Three months later, additional regulations were adopted, again concerning the movement of gravediggers and the rapid disinfection of houses. The state allocated additional sums of money for this action and employed a special workforce to clean the infected items, decontaminate the houses and wash clothes and items.

### *Mistrust of the Recovered – Gravediggers, the So-Called Kopci (Male) and Kopice (Female)*

It was decided, in the 1482 Regulation, to employ women who survived the plague, the so-called *resanatae* – the recovered – to wash the infected items since they could handle them without endangering their lives. It was a significant step in the right direction that contributed to limiting the plague. At the end of the year, a new regulation on gravediggers was adopted. They were forbidden from touching the healthy and from throwing infected items along the way, on their way back from the funeral. Punishment prescribed for this violation was death by hanging. The gravediggers were among the poorest of the *resanati*, who were conducting very important work for the health officials, but there was great mistrust of them. When there was lack of adequate workforce, the women also helped with burying the dead – that is why there were called *kopice* (Fig. 11). Otherwise, women were mostly disinfecting houses and washing clothes. On the one hand, the authorities badly needed their services, and on the other it constantly supervised them and kept them in the quarantine long after they recovered. All classes of society envied the *resanati* because they were immune to plague, even though nobody knew how long the immunity lasted, which intensified the mistrust and state supervision. Namely, even if the *resanati* could no longer be infected by plague, they could transmit it to the healthy through infected items that they handled. It must be said that the disinfection measures were unpopular and often frightening to all levels of society because they impinged on their class, family and property interests. They were implemented in unbearable circumstances of mass death, were difficult to accept and sometimes detrimental. However, they still managed to limit the spread of plague at the time when the aetiology of plague was completely unknown.

On the other hand, it is more than obvious that the gravediggers, either out of ignorance or because of pecuniary interests, did not observe the quarantine regulations. Expensive clothing and other moveable property of the wealthy deceased represented too much of a temptation for those who had nothing to lose but their life. This is why things were often hidden and presents remained undeclared, while the *Cazamorti* were putting in motion energetic measures to get rid of these dangerous practices.



Fig. 11. Gilles Le Muiset, Burying the dead during the plague epidemic in the Belgian city of Tournai, 1349 (Bibliothèque Royale de Belgique, Brussels)

In December 1482, two gravediggers, Mihoč from Rijeka Dubrovačka and Živan Pupak, were caught stealing at Danče and sentenced to death by hanging. The fate of these two unfortunate gravediggers, who were “hanged by the neck in order to separate the soul from the body,” was decided in the Senate with the difference of only three votes against them. It is possible that the punishment reflected the frustration of the *Cazamorti* who were unable to stop the epidemic. It is unclear if the gravediggers were aware of their transgression, if they understood the manner of transmission of the disease, if they even knew of the regulation that punished them, or they only thought this was ill fortune that has befallen them. This was the first time anyone in Dubrovnik had been sentenced to death for contravening plague control measures. Obviously, in a society with a definite class bias, such punishment was reserved for the individuals from the lowest social class who were not protected either by their social rank or an institution such as a confraternity.

Such a harsh sentence represented a serious escalation of repressive measures by the state. From today’s perspective this seems very cruel, but this kind of penal system was customary in other European cities as well. Because it was believed that plague was caused by some agent that taints the environment or objects, the *Cazamorti* persistently traced the route of each infected item in order to stop the infection...<sup>14</sup>

... Even with the stricter supervision of the transport of travellers and goods, on 6 December 1526, one of the most catastrophic plague epidemics erupted in Dubrovnik (Fig. 12). Allegedly, the plague was brought into the city by the tailor Andrija Gundević who had returned from Ancona and entered the city unreported. More than twenty-five thousand inhabitants died, and the Republic never recovered from this demographic loss. Based on Nenad Vekarić’s estimate, the Republic had around ninety thousand inhabitants in 1498, and in 1536 that number dropped to only sixty-five thousand.<sup>15</sup> According to Ragusan chroniclers, this was not only the result of the disease but of the wrath of God – *Non fu mortalità, ma ira di Dio*.

<sup>14</sup> Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague: The Health Office and the Implementation of Quarantine in Dubrovnik, 1377–1533*, Montreal, 2015, pp. 129–132.

<sup>15</sup> N. VEKARIĆ, Broj stanovnika Dubrovačke Republike u 15., 16. i 17. stoljeću, *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 29, Dubrovnik, 1991, pp. 7–22.



Fig. 12. Peter Bruegel, Triumph of Death, oil on canvas, c. 1562 (Museo del Prado, Madrid)

The plague was first diagnosed by the physician from Venice, Donato Muzi, who stayed in Dubrovnik for ten years, between 1526 and 1536. He was called to examine a young female patrician and he noticed buboes typical of plague developing on her body – and high fever. He fled quickly, persuaded that his patient was doomed. Honouring his professional duty, Muzi informed the Ragusan authorities about his diagnosis of plague. While examining the patient he got infected himself. Soon he noticed he had high fever, a headache, and buboes in the femoral area of his right leg and under the armpit. As a therapy, he wanted to perform a phlebotomy on his right arm, but not one of his colleagues dared to approach him and hand him the instruments. Finally, someone gave Muzi a lancet and, using his left hand, the doctor let almost 600 millilitres of blood from his vein on the right arm. Muzi was persuaded that this procedure had helped him recover from plague, while his patient died the next day.<sup>16</sup>

Following Muzi's diagnosis, the bustling city of Dubrovnik, usually noisy and overflowing with dockworkers loading and unloading goods from all sorts of ships – brigantines, carracks, grips, galleons, or caravels – as well as from overland caravans, suddenly fell eerily silent. Extreme fear gripped the city, so the authorities acted promptly and instigated a series of anti-plague measures from the past and added several more. The health officials were bestowed with wide-ranging executive and judicial powers. It was decided who had to stay in the city for continuity of government, bread and food supply was organized and the state provided assistance to the poorest inhabitants. They also organized the defence of the Republic so that the enemy would be unable to abuse the epidemic to occupy the Republic. Then, all those who could, fled the infected city...

... On 7 February 1527, the Senate adopted special regulations concerning the protection of the city in case the councils were obliged to temporarily withdraw from the city. The introductory paragraph shows the senators as persons of high moral values and exceptional personal courage in spite of the persistent death threat. Their choice of words is evidence of the care shown for their fellow citizens and the love of their homeland and we quote it here in the English translation:

<sup>16</sup> M. D. GRMEK, Renesansni učenjak Donato Muzi i njegov rad u Dubrovniku, *Anali Zavoda za povijesne znanosti IC JAZU u Dubrovniku* 17, Dubrovnik, 1979, pp. 49-72.

“Let it be known that in this life, a free and enlightened person should not hold anything more dear and sweet than the protection of his homeland for which every good man should voluntarily expose himself to any danger, be it even at the risk of his own life. Considering that, by protecting the homeland we protect our own children, our fathers, and our wives, the divine temples, and everything that is sacred, our homes, and our possessions as well as all our public and private possessions, the authorities of the city consider that in this case of ultimate danger, in which our city has found itself by God’s will, every good patrician and citizen should be ready to come to its rescue. And should the government be forced to abandon the city because of this plague calamity, which God in his compassion and mercy should not allow to happen, the measures cited below should be undertaken in the name of God for the salvation of our city and our homeland.”<sup>17</sup>

On the same day, “the physician Bartholomeus Barisonus and the surgeon Hieronymus Pavanellus asked for an unpaid leave of absence because “they could not and dared not practice medicine for fear of the plague.” The government was happy to oblige and thus reduce the expenses of the state so they were allowed to leave the city.  
*Councils Leave the Infected City and Move to Gruž*

Since the plague continued to rage unabated, on 12 March 1527, the Councils finally moved to Gruž after deciding to lower its quorum requirements. Ten thousand ducats were transferred from the state treasury to the Dominican monastery of St. Cross in Gruž for governmental needs. Nikola Franov Tudišić, as Rector and seven patricians were nominated to stay behind and govern the city. When the government returned to the city on 16 June 1527, the day of the feast of Holy Trinity, the gate was opened by the only surviving patrician of those eight – Nikola Franov Tudišić. Holy mass was celebrated in honour of the Holy Spirit and of St Blaise.

On the next day, 17 June, after a long break of five months, the health officials resumed recording the arrivals of travellers in the section of the manuscript *Libro a recto*, on the same page they had stopped on 28 January. We know, therefore, that it was not the case of the missing record, but the absence of men who could have performed this duty during the crisis. In the manuscript *Libro a tergo*, this break is somewhat shorter, only four months.

During the 1526–1527 plague epidemic, the gravediggers performed important jobs, but since they were immune to plague, they started removing valuable items from the houses of the deceased which they sometimes also traded. So, they came into conflict with health officials who thought that the infected items helped spread the plague so they punished the gravediggers severely. The manuscript *A tergo* is filled with judicial proceedings against them. In 1528, four guards of infected goods were hanged because they traded goods despite all warnings by the health officials. Such trials were common in other European cities as well, for example in Geneva.

Finally, we should mention that there were no plague epidemics in Dubrovnik after 1533, and two more virulent forms of plague epidemics recurred in Italy in 1575 and 1630, while plague still ravaged the rest of Europe in the 19<sup>th</sup> century.

### *On Quarantine in the District of Dubrovnik Before the Construction of the Lazaretto at Ploče*<sup>18</sup>

As a European maritime-trade pandemic the plague appeared in Europe in 1348, and it killed 1/5 of the total population. The City of Dubrovnik was not spared – and a note from the 15<sup>th</sup> century states that 25,000 people died in the territory of the Republic of

<sup>17</sup> State Archive in Dubrovnik, *Acta Consilii Rogatorum*, vol. 38, f. 212 v. – Z. BLAŽINA TOMIĆ, *Kacamorti i kuga*, p. 156.

<sup>18</sup> From: J. BAKIĆ, Dubrovnik - grad najvrjednije higijensko sanitarne hrvatske i svjetske baštine, *Hrvatski časopis za javno zdravstvo* 7/2, Zagreb, 2006.

Dubrovnik from 1348 to 1374. As plague was spreading by both land and sea, certain restriction measures were introduced in Europe related to the transportation of goods and a 10-day isolation of persons during epidemics (Reggio Emilia, 1374), or prohibiting all ships coming from plague-infected areas from entering into ports (Venice, 1374), which led to a complete cessation in maritime transportation and trade.

In the Republic of Dubrovnik, a powerful Mediterranean maritime force (more than 200 trade vessels, Fig. 13) with a flourishing trade in the Mediterranean, the Levant and the Black Sea, there was a question between the survival of trade, the survival of the population or surviving with measures that would cause the collapse of Republic's economic power.

Fig. 13. 15<sup>th</sup> century trade galley (from: K. VON GRÜNENBERG, *Beschreibung der Reise von Konstanz nach Jerusalem*. Konstanz (?), c. 1487, p. 107)





Fig. 14. On the islands of Supetar, Bobara and Mrkan in front of Cavtat, the first Dubrovnik quarantine was organized in the 14<sup>th</sup> century.

Since trade was the main source of transmission of plague epidemics, on 27 July 1377 the Major Council of Dubrovnik promulgated the regulation which said that “those arriving from plague-infected areas shall not enter Dubrovnik or its district,”<sup>19</sup> and it decreed that those persons had to spend one month in isolation (quarantine) on the islet of Mrkan and in Cavtat.<sup>20</sup> It prohibited ships from entering the port which limited trade and circulation of travellers, and it allowed ships to anchor near the port with strict isolation measure in order to preserve the cargo, passengers and trade (Fig. 14). Later on, for practical reasons, this 30-day stay was extended to 40 days of confinement, whereby the term quarantine is derived (from *quaranta* = 40).

Therefore, a rather confined space of the Benedictine monastery of St. Mary on Mrkan, with additional wooden huts, served as quarantine (accommodation of persons suspected of having plague, disinfection of goods and treatment of the sick). The Benedictine monastery on the islet of St. Peter in Pelago, in front of Cavtat, was used for the same purpose. The Republic of Dubrovnik gave to the Bishop of Mrkan-Trebinje two houses in Dubrovnik and the islet of Molunat as restitution, because the monasteries were converted for health purposes.

Initially, quarantine accommodation was poor, improvised, in huts, tents, and sometimes in the open air. The benefit of huts was that they could easily be burnt as a disinfection measure. In 1397, in order to improve the life of quarantined people, but also to strengthen epidemiological measures, it was decided to establish a quarantine in the Benedictine Monastery of St. Mary on the island of Mljet: “Verutamen dicti venientes de loci pestiferis per dictum tempus unius mensis, quod debent stare extra Racusium et districtum, si voluerint, possint stare Mercanae, vel in Monasterio Melitae, non obstantibus confinibus superius contentis et expressis,” (*Liber viridis*, Cap. XCI., 1397), which was also the first comfortable Dubrovnik lazaretto, situated in a beautiful, natural environment with a

<sup>19</sup> J. BAKIĆ, Ključne godine utemeljenja zdravstvenopreventivnih načela i institucija u Hrvata. in: *Zaštita uskladištenih poljoprivrednih proizvoda*, Crikvenica, 1999, pp. 1320.

<sup>20</sup> J. BAKIĆ - M. LJUBIČIĆ, Stoljeća temeljnih vrijednosti higijenskosanitarne uljudbe u Hrvata, in: *I. hrvatski epidemiološki kongres* (zbornik sažetaka), Split, 1999, pp. 23.

secure anchorage area for quarantined boats, after residing on the inhospitable islet of Mrkan. One health document from that time provides testimony of numerous sick people on the island of Mljet (“Melada era plena d’infermi”). The lazaretto on the island of Mljet was operational, with some interruptions, for more than 130 years (1397-1527).

At the same time, an entire package of epidemiological measures, contained in the Green book (*Liber viridis*, Cap. 91, fol. 91100) were adopted. Gathering of information about infected areas through diplomatic means, procedures related to those coming from pestiferous regions or going there, unloading of suspicious goods, processes of decontamination of each individual type of cargo, on goods that did not require disinfection, on sick persons and what to do with violators, etc. In order for the state to function successfully in that segment and be able to implement the said procedures and measures, health officials were appointed in 1420 to serve as “*officiales cazamortuorum*,” popularly called *Cazamorti* (catchers of death), as the supreme health authority in the Republic for the prevention of plague and, as such, they had wide-ranging judicial powers. Special persons were designated to bury the dead, popularly called *kopci* (gravediggers). There is an interesting practical decision by the Senate, dated in 1462, to employ 20 women who survived the plague in the Lazaretto, because they were not in danger of contracting the infection – which indicated an early comprehension of acquired immunity.

It was also decided, in 1486, that ships had to have health certificates, which contained health information on situations in ports that the ships sailed from, in order for port health authorities to be able to determine the level of preventive measures for persons and cargo upon their arrival. There were four types of health certificates:

- *patente libera*: there has not been an epidemic in the port for a long time;
- *patente netta*: there has not been an epidemic in the port in the last weeks;
- *patente sospetta*: there are suspected sick people in the port;
- *patente brutta*: the epidemic is ongoing in the port.

By taking special care of the lazarettos, but also trade and accommodation of overseas and overland caravan travellers, the Republic of Dubrovnik was considering the impracticality of lazarettos being distant as well as their strategic defence, and trying to find a more appropriate location closer to the city. With the lazaretto on the island of Mljet, in 1429 they decided to build a solid lazaretto building on the island of St. Peter *in Medio mare* (Supetar in front of Cavtat), as well as a building on the islet of Bobara (there are indications that this idea was never fully realized). Quarantine on the islet of Mrkan was strategically unacceptable, and that on the islands of Bobara and Supetar led to the change in strategy by positioning the quarantine closer to the city, so private houses at Gradac were used for that purpose (1430). Then in 1465, a dedicated lazaretto at Danče was built and used as a plague hospital. After that, a large, but never finished, lazaretto on the island of Lokrum (1534) was built, but because of new strategic reasons (possible enemy stronghold) it never became functional (Fig. 15). After the construction of the lazaretto at Danče, all other lazarettos were abolished as quarantine stations (the islands, Cavtat). Finally, in 1590 the Senate decided to build a new Lazaretto at Ploče, at the intersection of overland and maritime trade routes, strategically close to the city and defensible, whose construction started as late as 1627, and was completed in 1642. This still extant Lazaretto complex was needed more for accommodation of numerous overland trade caravans than for ships, which were confined to quarantine while anchored in front of the Lazaretto or by the island of Lokrum. This change of the isolation strategy speaks to the fact that epidemiological danger moved from sea to land, and that a sanitary cordon was established towards suspected lands, which survived until the fall of the Republic of Dubrovnik. Besides sequestering goods and persons,





Fig. 15. Dubrovnik quarantine at Danče and the island of Lokrum

all lazaretto facilities were used for decontamination of goods, persons and mail, as was customary at the time.<sup>21</sup>

In order for us to understand the value of the medieval decision on establishing the first quarantine in the world as an anti-epidemic institution, we should note that it was introduced on the same principles in Marseille in 1383, Venice in 1403, Pisa in 1464, Genoa in 1467, Mallorca in 1471, and locally in Split in 1592, which provides an additional proof of a progressive understanding of healthcare and an advanced level of civilizational development of national portent, and of the overall world heritage at the eastern Adriatic coast. We could add to this an entire range of organizational, administrative, health and judicial guidelines in the service of an efficient systematic supervision of the suspicious and infected persons, but also the general anti-epidemic warning, identification and care.

<sup>21</sup> J. BAKIĆ, Arhaični postupci raskužbe roba i brodova u Hrvata, in: *600. obljetnica karantenskog lazareta na otoku Mljetu s početkom djelatne usluznosti dezinfekcije*, Dubrovnik, 1997, pp. 5262.

## *On the First Quarantine and Measures in Case of Epidemic<sup>22</sup>*

*Fuge cito, fuge longe et tarde revertere!*

Flee fast, as far as possible and return as late as possible!

This was the only principle that could provide protection from infections, especially from plague that raged unabated. And those who were able to follow it, managed to lessen the consequences and the horror of the scourge.

Dubrovnik was one of those medieval city-states that understood the importance of this principle and took it seriously early on. And although Dubrovnik experienced dozens of epidemics, the measures it undertook to prevent them testifies to what would have happened had it not done so.

### *The First Quarantine in 1377*

Here is the regulation promulgated by the Major Council on 27 July 1377 that was, it seems, among the first of its kind in the world, which is related to the isolation, i.e. compulsory quarantine of persons who arrive from pestiferous regions. Specifically, this decision forbade entry into Dubrovnik and its district, to all local and foreign persons who arrive from plague-infected areas, before they completed a period of quarantine of one month on the islet of Mrkan. Residents of Dubrovnik were strictly forbidden from visiting them or bringing them food, and if they did not obey they would be punished with a fine of 25 *hyperperi* and one month in quarantine.

This was, therefore, the date of the establishment of quarantine in Dubrovnik, that was strictly enforced until the fall of the Republic, and was implemented on the uninhabited islands of Mrkan, Bobara and Supeter, at Danče, and from the 17<sup>th</sup> century onwards in the monumental, recently renovated building of the Dubrovnik Lazaretto complex (Fig. 16).

Fig. 16. Veduta of Dubrovnik, view of Lazarettos and city port (from: CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne.* Paris, 1878.)



<sup>22</sup> From: Z. ŠUNDRICA, *Dubrovčani su prvi u svijetu uveli karantenu*, in: *Tajna kutija dubrovačkog arhiva II.*, Zagreb-Dubrovnik, 2009, pp. 7-8.

### *Measures and Severe Punishments*

If plague nevertheless appeared in the city, an entire state apparatus would be put in motion with the sole task of lessening the tragedy. At the head of this apparatus were special health officials called the *Cazamorti*. They were to meet every morning, and on the basis of the most recent data, submit a report on the health condition in the Republic and undertake appropriate measures: they had to supervise gravediggers and make sure that they had no contact with the healthy, they had to submit a list of infected homes, they had to supervise digging of deep holes outside the city, far from the road, to receive all those who died from the plague. They had to make sure that houses in the city were cleaned, washed, burned and disinfected (with vinegar). Sufferers from other diseases had to be reported to the authorities and were not allowed to have contacts with the others until the true nature of their disease could be determined, etc.

Violators of these preventive measures were strictly punished, especially the gravediggers if they had contacts with the healthy or if they threw infected items around. Death by hanging was a common punishment, but there were also draconian measures like the one used to punish gravedigger Radovan, known as Kozoje, in 1483. A Ragusan notary described his death in the following manner:

*Fuit ustus ad ignem et vi ignis infra paucos dies e vita migravit.*

He was burned by fire and through the power of fire he migrated from this world.

This was how Dubrovnik desperately tried to protect itself from epidemics; because they represented not only loss of life, but, as a commercial centre, also economic doom.

*About Tabor at Ploče*<sup>23</sup>

#### *Tabor at Ploče*

Tabor was a place where foreign merchants came by caravan from the hinterland to bring their products for sale and, in exchange, buy items that they needed in Dubrovnik. This space was enclosed within a wall and it extended from today's Hercegovačkih brigada Street (formerly Put od Bosanke Street) to the house of the Račić Foundation, above the Lazaretto.

At that location, where today's Mato Kalaš street is, there was a building for accommodation of the Ottomans and others who came in caravans from the hinterland. The building itself had a lower and upper levels. The lower level was called Han, and the upper level Čardak. Han was built pursuant to the Senate regulation, dated 4 June 1592.<sup>24</sup> In 1617, the building was extended by 12 cubits (approximately 6 m), vaulted and a stone staircase was added (Fig. 17). The cost of that adaptation and extension was born by the administrators of the Customs Office.<sup>25</sup>

The Međed water fountain (most of which still exists at Ploče) was located in Tabor. Adjacent to it were two large stone sinks for watering horses and other livestock (Fig. 18). There was a ramp where the house at Frano Supilo Street No. 1 stands today, which opened to the serpentine road that led through Tabor to Han and the upper exit door. In the vicinity of the Ploče bridge, where the road turns from the city, there was a house of the financial guard.

<sup>23</sup> From: L. BERITIĆ, Ubikacija nestalih građevinskih spomenika u Dubrovniku II., *Prilozi povijesti umjetnosti u Dalmaciji* 12, Split, 1960, pp. 61-62.

<sup>24</sup> *Acta Consilii Rogatorum* 72, f. 23-23v.

<sup>25</sup> *Cons. Rog.* 85, f. 194v.

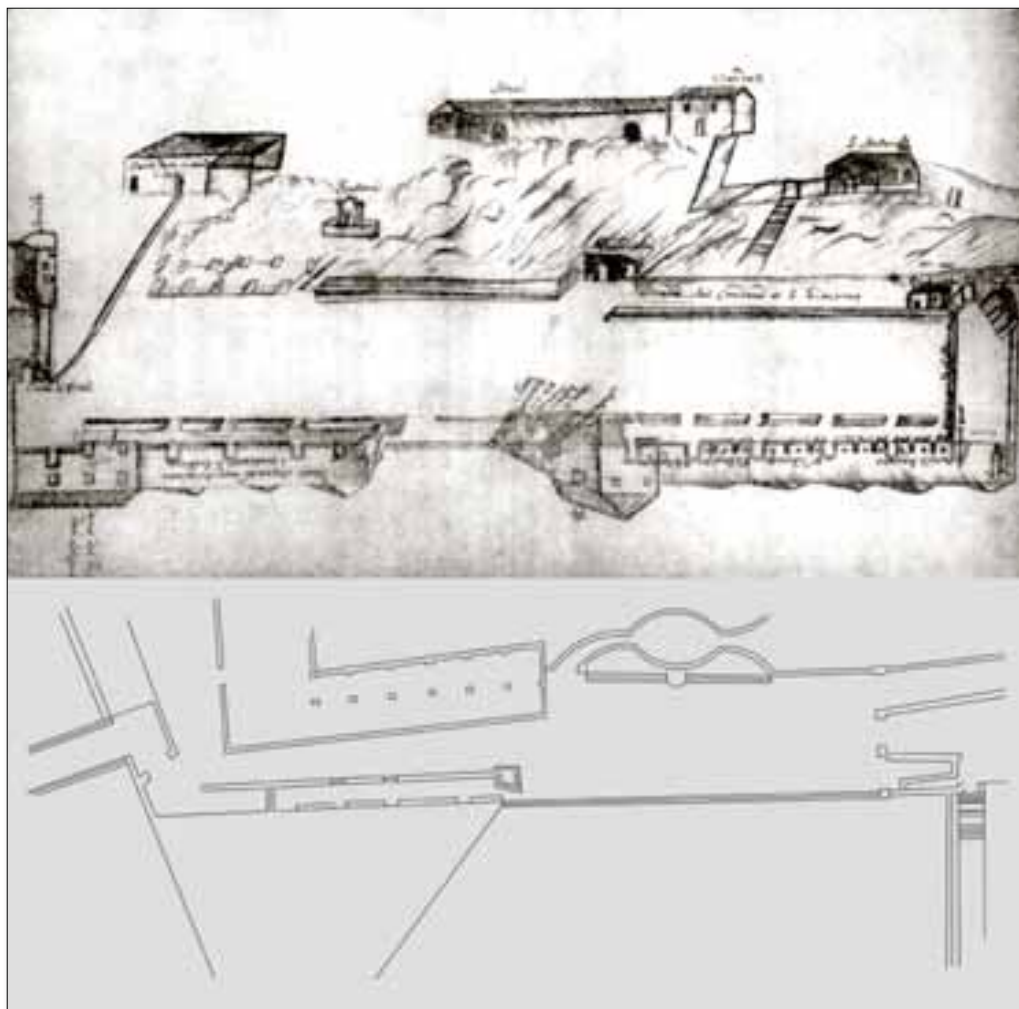


Fig. 17. Plan of "Tabor" in Dubrovnik from 1809, with a copied plan of the western section of "Tabor" and a bridge at the Gate of Ploče from 1857 (State Archive in Dubrovnik)



Fig. 18. "Meded" fountain at Ploče in Dubrovnik (from: CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne*. Paris, 1878.)

The whole of Tabor was owned by the state and in 1883, the municipality bought it for only 1,200 florins.<sup>26</sup> The sales contract states that the municipality will organize this space to be used for commercial purpose and to park waggons and coaches.<sup>27</sup> However, the municipal authorities did not abide by the contract instead, they sold part of the former Tabor to individuals for construction of houses, even wooden barracks! It was an unforgivable mistake to construct a tasteless high school building in one part of Tabor between 1910-1920, despite public protestations evident in magazines of the time,<sup>28</sup> because its height and size competes with the city walls. The construction of high school, the Alaga House (today, the Račić Foundation, in Frano Supilo Street No. 1) and the building in the location of the so-called Small lazaretto, close to the exterior Ploče gate, tarnished the view of the city, narrowed the badly needed parking space and made the extension of the road in the busiest part of Dubrovnik, impossible.

### *On Rules of Behaviour in the Lazaretto and its Extension in 1784*<sup>29</sup>

On 11 August 1784, the Senate entrusted the health officials to write and submit a draft – rulebook on the public lazarettos. On this occasion, it was proposed that health officials create “...a plan related to the public lazarettos. The said health officials gave serious consideration to the necessary intervention that was extremely important and urgent for public health, because our lazarettos have an excellent reputation with all the people who engage in trade with our Republic. This is why we need to apply strict precautionary measures of quarantine for them all, in order to prevent any lethal occurrence of infection. It was concluded, as follows:

First:

At present, people and goods from countries (Fig. 19) that are suspected of, or have already been infected by plague, come to our Lazaretto by land and sea. We therefore have to look for any possible means to protect the state from such a horrible event. To prevent contact with those sequestered in quarantine, we have to erect a wall opposite the lazaretto, beginning at the Jannisaries’ house to the area opposite to, and inclusive of, the emin’s house, and extend it to the corner of the said emin’s house, as explained in the presented plan. Thus, the Lazaretto would be completely enclosed which would make any contact with quarantined people impossible, as was happening in the past, to everybody’s dismay. The wall should be opened with a gate, as is mentioned in the said plan. It has to be high enough for a horseman to ride through. The gate has to be closed with a grill door, locked both day and night, as circumstances required. When the gate was open, it would always have to be guarded, by as many persons as the illustrious Senate decided.

Second:

A wall should also be erected, with benches leaning against it facing the sea, that enclose Tabor (Fig. 20). This wall should be extended, in the same height, all the way to St. Anthony’s garden, as described in the attached plan. Thus, the wall would enclose Tabor, and Han and the little house adjacent to Han called Čardak. A door should be opened above the wall, in accordance with the plan, which would enable the communication between Tabor and the Lazaretto. This door should be locked with a key that has to be kept by the Lazaretto captain, and that can only be opened in the presence of the captain or a health official.

<sup>26</sup> “Gušterica” magazine, No. 18, dated 15 June 1883.

<sup>27</sup> “Crvena Hrvatska” magazine, No. 14, dated 4 April 1896.

<sup>28</sup> “Prava Crvena Hrvatska” magazine, No. 101, dated 16 February 1907.

<sup>29</sup> From: Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta na Pločama, in: *Tajna kutija dubrovačkog arhiva II.*, Zagreb-Dubrovnik, 2009, pp. 33-37.



Fig. 19. Commercial caravans in the hills of the Western Balkans. A small Bosnian horse (*roncin*) in these conditions was the most appropriate transport animal (from: CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne*. Paris, 1878.)

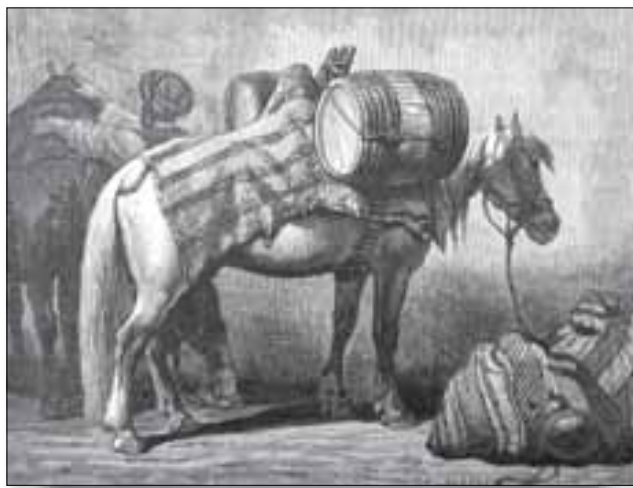


Fig. 20. "Meded" fountain at Ploče in Dubrovnik, ruins and Tabor's perimeter wall are visible in the background, postcard from the early 20<sup>th</sup> century

Third:

In front of the door of each individual lazaretto, from inside the perimeter wall, a special enclosed space should be created and shut with a lattice door (*rastello*) and a key, that will be kept by the Lazaretto captain. This door can only be opened in the presence of the captain, i.e. a health official. This door can be opened without the said officials only in exceptional circumstances, but with their permission.

Fourth:

Since all the lazarettos and *bagiafers* (courtyards between the lazarettos) were used only for quarantine purpose, all those who were sequestered will have to be released from the said location as soon as they complete the quarantine period, and none of their possessions should remain in these rooms.

Fifth:

Since provisions of article IV cannot be applied to Ottoman merchants who arrive to our lazarettos by land or sea, a special place should be allocated for them where they could reside after they were released from quarantine and sell their goods (especially foodstuff). For this reason, a building modelled after the Ottoman han should be erected within the confines of the Lazaretto, next to the captain's lazaretto, with an upper floor for residential facilities and the ground floor for storage of goods and horse stables. The Turkish customs officer or *giumrukci* would live in this building for the duration of his service. Therefore, he does not belong in lazarettos intended for quarantine.”

### *On the Quarantine at Danče and Lokrum and the Appeal for the Protection of the Lazaretto at Ploče*<sup>30</sup>

In 1439, Dubrovnik adopted an extensive regulation on governance and protection of the city, because they were frightened by the 1437 plague outbreak when Ragusans had to flee the city and protect it from outside, from both land and sea. With health regulations adopted from 1456 to 1459 and 1481 to 1483, started the preventive fight against the epidemics by controlling the arrival of goods and travellers and introduction of quarantine. These protection measures needed buildings suitable for quarantine sequestration in healthy conditions, and for isolation of infected persons in times of epidemic outbreaks.

The first such building was constructed by the Venetians on the island of Santa Maria di Nazareth in 1423. The term lazaretto is derived from the name of Nazareth, and all similar institutions in the world were called by that name. Dubrovnik followed closely behind every progress made in that field. We can assume that the first lazaretto in Dubrovnik was erected in 1428 on the peninsula of Danče. These were wooden barracks for the confined.<sup>31</sup>

Out of these provisional wooden structures they built objects made of solid material, and the church of Our Lady of Danče was built in 1457 (Figs. 15, 21).<sup>32</sup> In 1465, a well and several houses for accommodation of families who were suspected of being infected were also built. In order to prevent the infected persons from leaving they erected a 2-metre high perimeter wall, along the entire peninsula, and they kept the confined under guard.<sup>33</sup>

<sup>30</sup> From: S. BENIĆ, Konzervatorsko-urbanistički problemi Dubrovnika. Dubrovački Lazareti, *Zbornik zaštite spomenika kulture* 12, Belgrade, 1961, pp. 106-111.

<sup>31</sup> *Cons. Min.*, 4, 74, 76, 151, 153.

<sup>32</sup> *Cons. Rog.*, 15, 201, 212, 219, 226, 231, 240. State Archive in Dubrovnik.

<sup>33</sup> *Cons. Malus*, 13, 11. – *Liber croceus*, cap. 25.

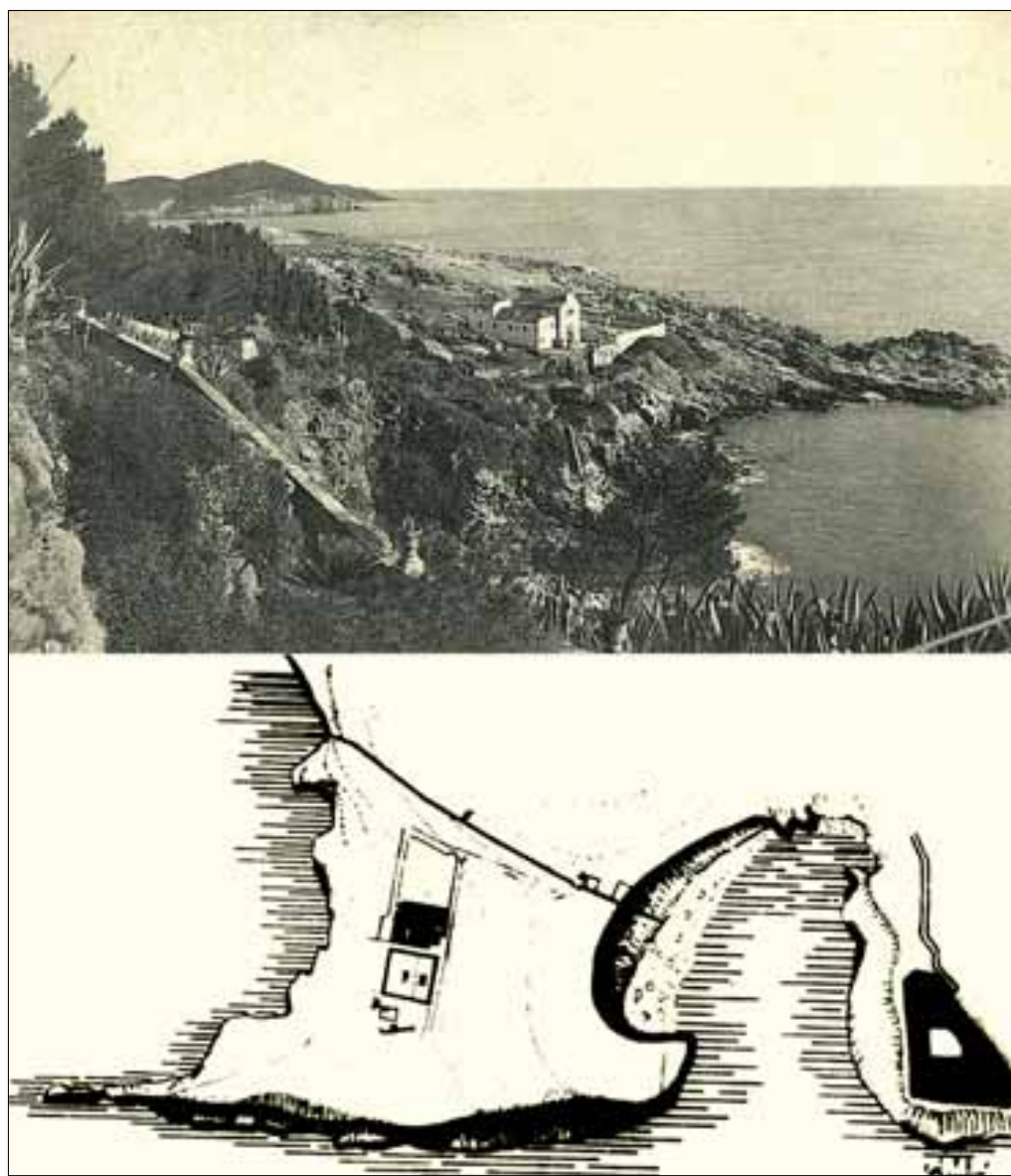


Fig. 21. Photograph and plan of the quarantine at Danče (from: S. BENIĆ, Konzervatorsko-urbanistički problemi Dubrovnika. Dubrovački Lazareti, *Zbornik zaštite spomenika kulture* 12, Belgrade, 1961, p. 107)

In 1482, a cemetery was built, and in 1496 it was decided to erect “a hospital floor, called the lazaretto, besides the church at Danče.”<sup>34</sup> So, at the end of the 15<sup>th</sup> century, with its provisional wooden barracks and buildings made of hard material that were separated by a stone wall, Danče became the first lazaretto in Dubrovnik that continued to be used as quarantine throughout the 16<sup>th</sup> century.

When plague epidemics subsided and gave Dubrovnik authorities some room to breathe, they considered the issue of planned construction of the great lazaretto for disinfection of travellers and goods that arrived by sea. The island of Lokrum, in the immediate vicinity of the city (Figs. 15, 22), was chosen as a suitable location, as it was already used for isolating the diseased during plague epidemics of 1465 and from 1526 to 1528. In 1534, Dubrovnik Senate adopted the plan for the construction of the lazaretto on the island of Lokrum.<sup>35</sup> The construction started but was interrupted, probably because the infection subsided. This issue was raised again in 1553, when the location of Lokrum was confirmed

<sup>34</sup> *Div. Not.*, 75, 5-5.

<sup>35</sup> *Cons. Rog.*, 42, 102.





Fig. 22. Lazaretto on the island of Lokrum (source: Geoportal DGU)

again and the precise type of the lazaretto in the “form of a square with double walls”<sup>36</sup> was determined. The lazaretto in Milan, destroyed in the previous century, was square-shaped and was famous for its size (360 rooms) and its external and internal terracotta decoration. Building of the second Dubrovnik lazaretto on Lokrum was probably suspended for strategic reasons.<sup>37</sup> Although unfinished, we know that it was used during the 1691 epidemic for confinement of the sick. Today, only a high stone wall remains standing of this lazaretto, and inside that enclosed square space is a beautiful olive garden (Fig. 23). In the 16<sup>th</sup> century, the direction of trade through Dubrovnik changed, instead from the sea towards the continent, the direction Balkans-Dubrovnik, i.e. from the sea to the west, started to prevail. The new direction of the movement of goods made the lazaretto on Lokrum unsuitable, so the question of building a new structure was raised again, even more so because the goods were now coming from lands that were frequently infected by plague. Dubrovnik Senate decided that the location of the new Lazaretto would be under

<sup>36</sup> *Acta S. Mariae Maioris XVII*, 1-6.

<sup>37</sup> S. RAZZI, *Storia di Ragusa*, p. 239.

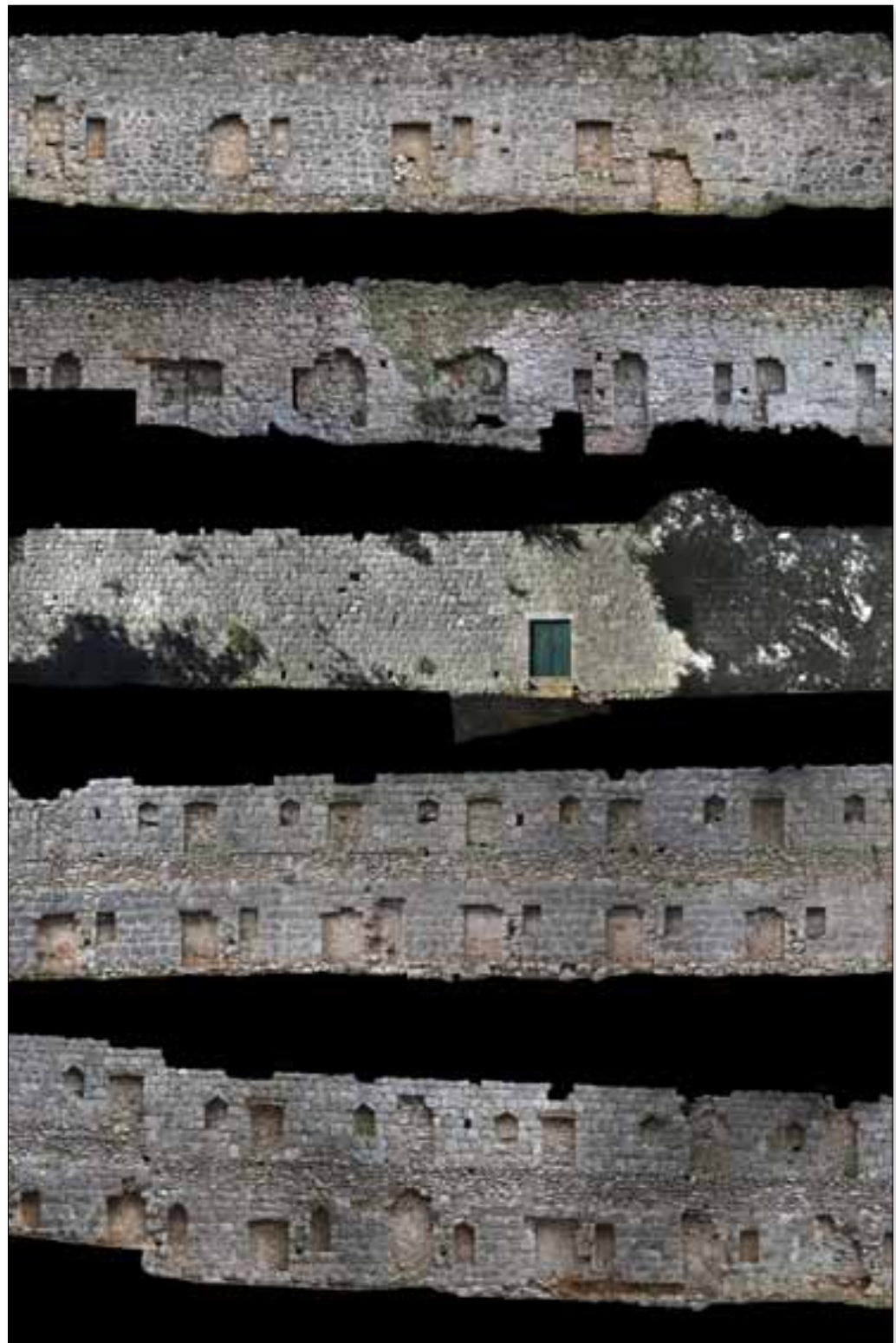


Fig. 23. Details of walls structures of the lazaretto on the island of Lokrum: 1. internal side of north-eastern wall; 2. internal side of south-eastern wall; 3. external side of south-eastern wall; 4. internal side of south-western wall; 5. internal side of north-western wall (source: Geographica d.o.o. - Split, Institute for Restoration of Dubrovnik)

the Church of St. Anthony at Ploče.<sup>38</sup> This location was completely justified because it was where the so-called “Dubrovnik caravan road” ended, which led to Constantinople and connected all important economic centres in the Balkans. The construction of the Lazaretto at Ploče started in 1627, after five years of bickering around the location of the

<sup>38</sup> *Cons. Rog.*, 70, 152-153, 197, Id. 78, 159.



structure between Ploče or Danče. The first part of the Lazaretto at Ploče, composed of three sections, was finished around 1630, while the other two sections, which were needed because of the increase in trade, were finished in 1648.

This was the third Dubrovnik lazaretto that was central to Dubrovnik's commercial life in the last two and a half centuries.

What remains today of these three Dubrovnik lazarettos?

A perimeter wall, partly destroyed in 1930, remains of the lazaretto at Danče, then the Church of Our Lady of Danče, remains of the well, the cemetery and several stone walls in a dilapidated state. Building that was called the lazaretto is seen only partially because it was incorporated in the extension built between two world wars.

We already mentioned and described what remained of the unfinished lazaretto on Lokrum. The third Lazaretto is preserved in its original form to this day (Fig. 24). It was sporadically perforated, remodelled, but the original form is clearly discernible. The historical importance of this Lazaretto is obvious, and we can easily say it was as consequential, if not even more so, as the famous Dubrovnik fortifications for the survival and preservation of independence of this small Republic.

Let us examine the Lazaretto at Ploče from an urban planning aspect. Dubrovnik functions as a unit. Observed from the sea, the Lazaretto harmoniously completes the playful symphony of Dubrovnik's fortifications, and without it they would lack a convincing finale (Fig. 25). In the urban planning and conservation sense, it survived a difficult epoch when the only consideration was the Lazaretto destruction to make room for a bigger, more elaborate and modern structure in its place.

Fig. 24. Watercolour of Dubrovnik from the 18<sup>th</sup> century (Dubrovnik Museums, Maritime Museum)



Fig. 25. Anton Perko, View of Dubrovnik, watercolour, 1896.

The right side of the painting shows the Lazaretto in a derelict state

However, it is certain that no other structure in that location would blend with the ambience in such a way, as the high school building, or the Rudnice building and others, were unable to do. The future Excelsior will also not be able to blend harmoniously because it uses a new module that is significantly different from the old architectural and urban planning module of Dubrovnik. It is not enough to have preserved the Lazaretto from destruction, we have to infuse it with new life today to ensure its future protection... To revitalize a historical building means to provide it with a permanent caretaker, that is the best way to preserve a monument, but we have to be careful because a poorly chosen new function can do more damage than good to the monument.

### *On Goods and Business Activities in the Lazaretto in the 18<sup>th</sup> century*<sup>39</sup>

Only 133 books, dated between 1660 and 1816, were preserved of this archival series. However, only the subseries entitled *Contumacie* is relevant for the subject discussed here, because only this subseries contains information on the work of the Lazaretto at Ploče, while the other subseries refer only to Dubrovnik's maritime affairs and trade. The said *Contumacie* subseries has, according to a hand-written list, 14 books, as follows:

- for the period from 1716 to 1717 (signed I/1.)
- for the period from 1728 to 1737 (signed 11/2.), and
- for the period from 1737 to 1741 (signed 111/3.)

Then:

- book entitled *Mercanzie*, dated from 1774 to 1777 (Sig. 10/b)
- book entitled *Mercanzie*, dated from 1786 to 1796 (Sig. 11/c)
- book entitled *Registro dei Lazzaretti*, dated from 1814 to 1816
- book entitled *Contumacia dei Lazzaretti*, dated from 1814 to 1816.

The first three books encompass a period of 25 years (1716/41) and are extremely important for us, because they register, in chronological order, the names of all persons who were serving quarantine at that time, days of their arrival to the Lazaretto and the place they

<sup>39</sup> From: Z. ŠUNDRICA, Dubrovčani su prvi u svijetu uveli karantenu, in: *Tajna kutija dubrovačkog arhiva II*, Zagreb-Dubrovnik, 2009, pp. 77-81.

came from, quantity and type of goods they brought, time spent in quarantine and finally the name, i.e. the ordinal number of the lazaretto they were isolated in.

The enclosed list shows data on persons and goods sequestered in quarantine from 1716 to the first quarter of 1720, because it would take too much time and effort to analyse the other books. Even though the effort would be well spent, as it would give us a clear idea of the burgeoning commercial traffic at Ploče and precise information on the quantity and type of imported goods, we should still restrict ourselves to the commonly established fact that the Lazaretto at Ploče, a place for decontamination of merchandise imported from the Balkan peninsula, became the centre of Dubrovnik's commercial-economic life in the 17<sup>th</sup> century (Fig. 26). Merchants from every trade centre in the Balkans met there, it was where they served quarantine, loaded and unloaded goods from hundreds of horses, mules and donkeys. They also sold goods there, in the *rastello* by the main entrance to the Lazaretto in order to avoid any direct contact with the clients. The buyer would throw the money in boiling water of hot vinegar, and the seller would remove it using special pliers.

The Lazaretto at Ploče was used to isolate travellers and goods that came by both land and sea, and was under the jurisdiction of the Health Magistracy composed of five noblemen (*Officiali alla Sanita*), who prescribed measures against the spread of infectious diseases. The work was conducted by the specially nominated health officials, assisted by a large number of servants and guards. The Lazaretto was headed by a captain who had to live there. The captain or his deputy had to be in the institution at all times. The captain organized the accommodation of travellers, and made sure that their clothes and shoes were properly decontaminated. We should point out that greater attention was paid to the decontamination of things than of persons, because it was believed that the plague bacteria could not remain active in the human body for longer than three weeks, while

Fig. 26. Possible social life in Lazarettos during quarantine (from: CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne.* Paris, 1878.)



it remained active for longer on clothes or some other insignificant item. Finally, the captain had to verify that the scribe inscribed all necessary data into the register. They did not have a permanent physician, so the examination of the sick was conducted by state surgeons, and the expense of the health service was born by the state treasury on account of the customs income.

I will repeat, in abbreviated form, the most important regulations of the Major Council and the Senate:

- 3 July 1636

Merchants who bring goods to Ploče have to pay at least half of the transport cost to the so-called *kiridžije* and *kramars* in Dubrovnik *grosso* (*Consilium Minus* /hereafter *Cons. Min.*, vol. 75 f. 43).

- 12 June 1636

Disputes that arise at Ploče between the merchants on one side, and *kiridžije* and *kramars* on the other, have to be resolved before the Ottoman emin at Ploče (*Cons. Min.*, vol. 76).

- 21 March 1647

15 guards (*stipendioum*) were hired for better security (*Cons. Min.*, vol. 100).

- 2 July 1775

Only local *facchini* (porters) were allowed to handle goods during decontamination in the Lazaretto (*Consilium Rogatorum*, vol. 184).

- 5 July 1783

The Lazaretto captain or his deputy must be present when Ottoman goods are received. They would immediately list the type and quantity of received goods, as well as the names of owners (merchants) and turn the list over to the Lazaretto scribe for registration (This instruction was published on the wall of the captain's lazaretto.) (*Cons. Min.*, Vol. 106 f. 228.).

- 6 July 1788

Transportation of goods from Ploče to the Customs Office could only be conducted by the *facchini* (porters) hired by the owner of the goods in question (*Cons. Min.*, vol. 108 f. 30).

- 1 May 1787

The noblemen are forbidden to play cards in any of the Lazaretto facilities (*Cons. Min.*, vol. 108 f. 136.).

The Lazaretto is composed of residential buildings and courtyards between them called *bagiafers*. It is interesting that when Jeremić-Tadić described the Lazaretto at Ploče in his work "Contributions to the History of Health Culture in the Old Dubrovnik," he claims that it contains eight buildings and five *bagiafers*. However, the archival sources show that there were indeed five *bagiafers*, but nine lazarettos (Fig. 27).

Merchants and various Ragusan ambassadors, who were returning to Dubrovnik after their mission ended, as well as those who were coming back from Constantinople after paying tribute, were regularly quarantined in the so-called *camere* – rooms, which means that each lazaretto was subdivided into several sections. So, for example, Vladislav Sorokočević, who returned from Vitaljina on 13 November 1716, where he was sent as ambassador, was quarantined in lazarettos no. 7, 8, and 9 (*venuto da Vitagliana con la sua corte (in tutto 9 persone), e posti in carantena di no. 7, 8, e 9.*).



Couriers and other travellers who did not have any luggage were regularly quarantined in the so-called “Mandarica,” then in the “lazzaretto vecchio” (the old lazaretto), in the “lazzaretto piccolo” (small lazaretto), the guardhouse, even in Čardak.

Fig. 27. A. Sandmann - J. Högel Müller, Dubrovnik c. 1850.

I also found, in the 19<sup>th</sup> century archival sources, special names for individual lazarettos. For example, “Lazzeretto della cera” (for wax) and “Cassuccia del Corriere” (courier’s house). Also interesting are the special names for certain *bagiafers*: such as, “Bagjafer detto na gustirni,” “Bagjafer sotto Jemini,” “Bagjaver detto na smokvi.”

As an example of how a Lazaretto scribe registered merchants and goods, I provide here, translated from the book of *Sanitas*, the arrival of the merchant Mehmed Čelebi from Shkodër:

- 7 June 1723

Mehmed Čelebi from Shkodër arrived with 18 friends and one slave, 20 persons in total, they came from Bojana with a tartane sailboat of patron Ilija Franković, with the below described goods, that was unloaded today and stored in the lazaretto no. 1, while the travellers with their personal luggage disembarked on 3 July and were housed in the quarantine number 5 and 7.

Description of goods:

300 bales of tanned leather (*Aluta Cordovana*), 100 bales of ram leather, 17 bales of wax, 28 tobacco sacs, 55 pieces of buffalo leather, 75 pieces of bovine hide, 65 pieces of bear meat, 100 pieces of wild cat fur, 12 bales of deer antlers (vol. 1, f. 90 v).

I found two interesting inscriptions in the same series, from the time of the Austrian occupation of Dalmatia, that I think should be underlined here:

From 16 April to 25 May 1816, the French consul Marko Bruer was quarantined in the lazaretto no. 9, having arrived from Shkodër with his family:

his wife Marina, daughters Amalia and Ana, and servants Bastijan Nardi and Nikola Stjepković.

(This was Marko Bruerović, a renowned Dubrovnik poet, son of the French consul in Dubrovnik: Renè Charles Desrivaux).

From 29 May 1815, Baldo Bogišić spent 20 days in lazaretto no. 3. He arrived from Cavtat with his family Marija and children: Ivan, Vlaho, Petar, Stanislav and Marta, and their servant Marko Perušin.

In order to get a complete picture of the activity of the Lazaretto at Ploče and all measures undertaken in combatting different epidemics, we should study also documents from the time of the French occupation of 1806/14 (the so-called: *Acta Gallica*), as well as those from the Austrian occupation (1814/18).

Austria immediately implemented a special health service and anti-epidemic defence was conducted by specifically appointed Health deputy offices. If epidemics broke out in neighbouring countries, Austria would close its borders with military cordons, and in 1830 it issued a special order on the organization of the maritime health service.

Similar to the health cordons on land, the quarantine service at sea could not prevent the importation and spread of infectious diseases nor stop the epidemic, and they concluded that it was necessary for all states to cooperate in that fight. France took the initiative, so the first international conference on the subject was held in Paris in 1851. Three more conferences ensued, until the International Sanitary Regulations were published in 1951.

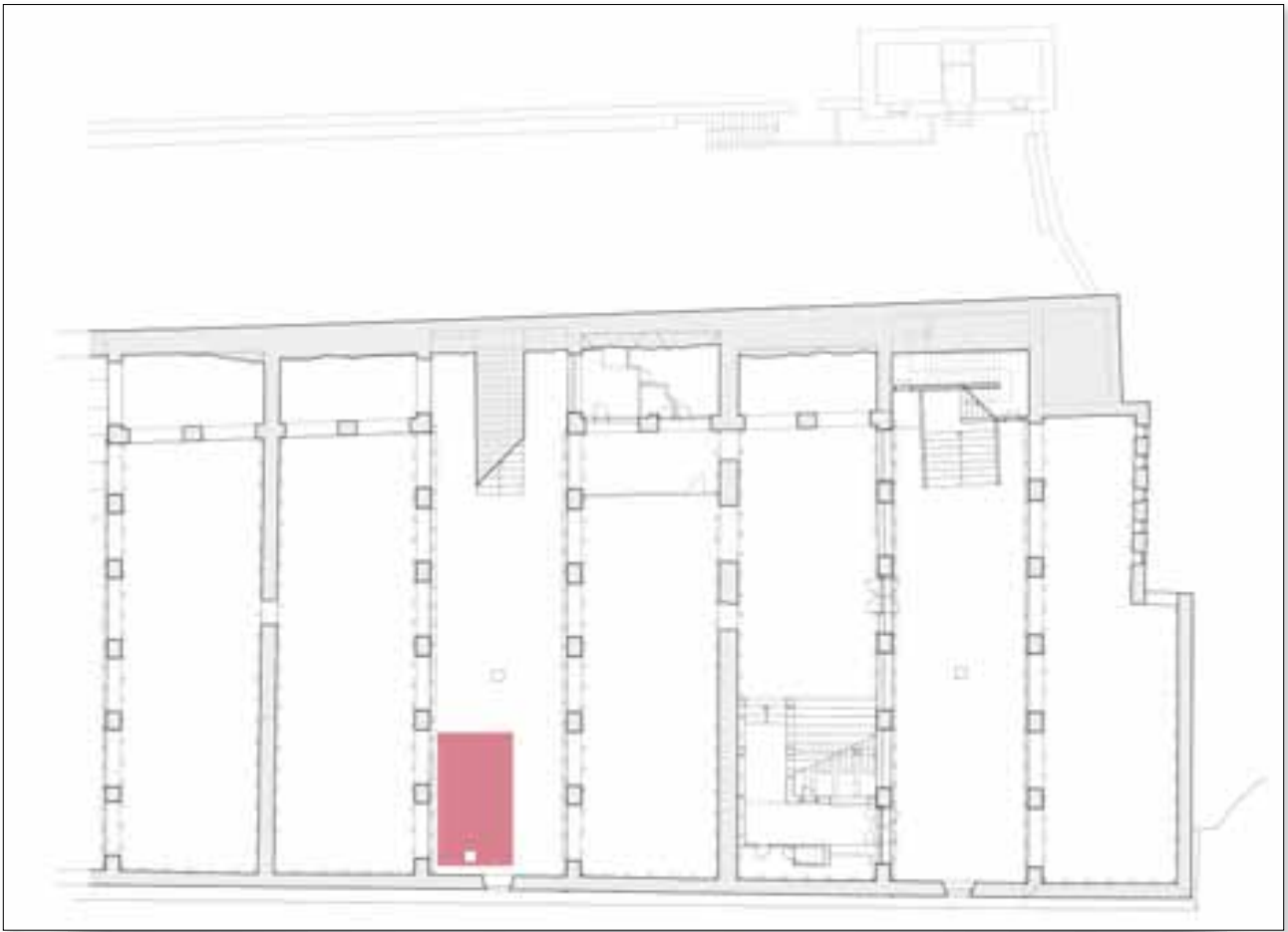
### *On the Well in the Second Bagiafer in the Lazaretto at Ploče*<sup>40</sup>

As part of the August 2018 reconstruction of the Lazaretto, archaeological supervision of works on cleaning the interior of the newly discovered well in the second courtyard (*bagiafer*, Fig. 28) was conducted. In historical documents, it was precisely this *bagiafer* that was named “Above the well” (*Bagjafer detto na gustirni*).<sup>41</sup> The well has a square form, its internal dimensions are 6.30 m x 3.75 x 3.60 m. The opening for the extraction of water, probably with a pail, was located in the middle of the vault on the south narrow side. It was covered with a stone slab the size of 0.77 x 0.77 m and had a round opening 0.50 m in diameter. The interior of the well is covered in a thick layer of waterproof plaster, subsequently repaired with cement glaze. Cement patches are also visible in some places. The bottom is smooth and it tilts southward. The vault is composed of plaster and stone blocks bound by lime mortar mixed with red soil, which was common in Dalmatian architecture in the 16<sup>th</sup> and 17<sup>th</sup> centuries. There are two smaller openings at the centre of the vault’s crown, the size of 0.25 x 0.25 m, which were used for pouring in the water that was collecting and coming down from neighbouring roofs. Built in along the eastern and the western wall, is a series of five regularly spaced consoles. Since they were positioned

<sup>40</sup> From: *Izvještaj o provedenom arheološkom nadzoru nad radovima čišćenja unutrašnjosti novootkrivene gustijerne u dvorištu između 7. i 8. lađe kompleksa Lazareti*. Arheo plan d.o.o., Dubrovnik, 2018.

<sup>41</sup> See notes 34 and 35 in V. Miović’s text in this book.





at the height of 1.70 m from the bottom of the well, in the place where the straight vertical of the side walls crosses to the arch vault, we can assume that the consoles were built to carry the wooden substructure (frame) when constructing the semi-circular vault.

No archaeological excavations were ever conducted in the Lazaretto complex, but considering that a wall segment of an earlier structure was noticed at the bottom of the well, future excavations appear necessary.

Fig. 28. Position of the well in the second *bagiafer* in the Lazaretto



Fig. 29. Opening of the well in the second *bagiafer* (photograph: Institute for Restoration of Dubrovnik)



# Abstracts

Vesna MIOVIĆ, PhD  
Scientific advisor with tenure  
Croatian Academy of Sciences and Arts  
The Institute for Historical Sciences in Dubrovnik  
HR – 20000 Dubrovnik, Lapadska obala 6  
e-mail: vesna.miovic@du.htnet.hr

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## Life in the Quarantine: Lazaretto at Ploče During the Republic

The Dubrovnik Lazaretto in the eastern suburb of Ploče is composed of ten lazarettos, 5 courtyards and two guardhouses. It was constructed in two stages, that lasted from about 1627 to 1647. During the time of the Republic of Dubrovnik, life in the Lazaretto was an intricate part of life in the suburb of Ploče. The whole area of Ploče functioned as one body, one scene. All of its houses, even the churches of St. Anthony and St. Lazarus, as well as all of Ploče's permanent residents played different roles in the life of the Lazaretto and the implementation of quarantine measures. The Lazaretto captain and the sanitation soldiers were responsible for law and order in the entire complex. The unofficial Ottoman consul, *emin*, who lived in the Tenth lazaretto, also supervised the implementation of quarantine measures and he had his hands full because the Lazaretto and other quarantine areas of Ploče were full of Ottoman travellers and merchants. They brought different kinds of merchandise, most often wool, cotton, leather, fur and wax. During times of great danger, almost everyone was quarantined for 40-odd days, while during the so-called “healthy

times” the quarantine lasted from 3 to 30-odd days. It was clear that travellers found it difficult to sit still for long, so they were known to consume alcohol. Nerves were frayed, guns, swords and muskets were drawn, and rocks were flying. Ploče and the Lazaretto were known to resemble a battle field. The travellers were known to escape the Lazaretto in the dead of night. The plague once “entered” the City itself, once into a suburb north of the city walls. During periods when horrible epidemics ravaged not only the Dubrovnik hinterland, but also a large part of the Ottoman Empire, the plague spread to the quarantine area at Ploče on several occasions. Each time, the Ragusans quickly suppressed and concealed it. They failed to inform Mediterranean Health Offices about the plague, even though they always cooperated and exchanged information with them. They did not enter the information about the infection into health certificates that they issued to sea captains. Dubrovnik's trade instinct was stronger than its conscience. The Ragusans conceptualized the sanitation measures against the plague in the 14<sup>th</sup> century, in such a way so as not to interrupt trade. Then they developed and adapted them as needed. They successfully protected the health of the citizens of the Republic, as well as the trade in goods, with carefully developed quarantine measures. The best examples date back to the 1760s and 1780s. In those periods, the plague ravaged Bosnia and Herzegovina and the Venetian Dalmatia. Despite all the difficulties and disturbances in the Lazaretto and at Ploče, the Republic of Dubrovnik only had an insignificant number of victims.

Jesse HOWELL, PhD  
 Harvard University  
 Center for Middle Eastern Studies - Department of  
 History - Alumnus  
 USA - MA 02138 Cambridge, Kirkland Street 38  
 e-mail: jesse.c.howell@gmail.com

### Balkan Caravans: Dubrovnik's Overland Networks in the Ottoman Era

While the Dubrovnik Republic has long been celebrated for its naval expertise and broad-reaching networks of maritime diplomacy and trade, Dubrovnik's systems of overland transportation and communications have received relatively little attention. During the Ottoman era, long-distance travel by horse caravan across the Balkan Peninsula reached new heights, as the "Ragusa Road" became the primary axis for overland travel between the Ottoman capital and the Adriatic Sea. This network of mobility and communications helped bind together the small Dalmatian republic with the vast empire on its borders.

Dubrovnik's caravan trade was a flexible system that relied on cooperation between multiple actors and groups. Caravan brokers based in the port city worked with Vlach pastoralists from hinterland areas of Herzegovina and Montenegro to organize animals, equipment, and guidance. Ottoman Janissary guards were often hired for security, especially for important diplomatic missions. Caravans were typically diverse groups, comprised of Catholic, Orthodox Christian, and Muslim travelers. Wheeled vehicles were very rare in the mountains of the western Balkans. Merchandise and travelers were carried by teams of small, hardy horses. Stopping places and infrastructure (caravanserais and bridges, above all), along with environmental factors, determined the course of overland routes. Ottoman officials invested heavily in road architecture, supporting the development of an effective transportation system that could compete with the well-established sea route between the Adriatic and the Bosphorus.

Ana BAKIJA-KONSUO, MD-PhD  
 Polyclinic for dermatovenerology CUTIS  
 HR – 20000 Dubrovnik  
 Vukovarska 22, e-mail: abkonsuo@gmail.com

### Lazarettos – From Isolation to Contemporary Scientific Medical Findings

The Lazaretto complex, located behind the eastern city gate, at the intersection of maritime and land routes, represents not only a unique architectural complex, but an institution that best articulates the rich medical heritage of old Dubrovnik. The history of Dubrovnik lazarettos precisely describes the entire history of defence against infectious diseases in the Ragusan Republic.

There were numerous diseases that ravaged Dubrovnik throughout its history. Leprosy and plague represented the gravest public health hazard in old Dubrovnik. Leprosy did not play such a destructive locally role as it did globally, but it was the reason behind the first mention of isolation of leprosy victims in the Statute of the City of Dubrovnik in 1272. Both diseases were deeply ingrained in the collective consciousness of both Dubrovnik and European populations, they acquired a deeper metaphorical meaning, and today continue to inspire researchers from different scientific fields and interests, and open new possibilities of research.

The work presents a comprehensive development of the quarantine, from isolation in the open air to the imposing architectural complex; from diseases that left a deep trace in the history of the City to contemporary scientific research that not only helps treat the disease but contributes to the humanization of diagnostic and therapeutic procedures, understanding of victims and protection of their human rights.

In this work we pointed out that both leprosy and plague are extinct in Europe, as well as other diseases that require isolation of the victims. In the past, infectious diseases represented great danger, but today, a different kind of infection occupies that same space in the Lazaretto. In that context, this text discusses the link between the past and the present, and closes the circle between the reason the Lazarettos were built, i.e. stigma and isolation, to the birth of the creative quarter.

## The Invention of the Lazarets: Bulwarks Against the Plague in Venice and in the Western Mediterranean

Thanatos is the fourth Horseman of the Apocalypse. According to the prophecy of the apostle John, he will complete the work of the other Horsemen, War and Famine, exterminating with pestilence any survivors they leave behind. Only when his job is done will the gates of hell be opened. It's no coincidence that Thanatos is the final death-bearer. Pestilence cares for nothing and for nobody. Men or women, rich or poor, young or old, nobility or commoner, all die. The only way to avoid it is to flee or to isolate the infected and to depend on doctors, charlatans or magic practice for cures. Imitating the practice of ancient time when lepers were isolated in leper colonies, Dubrovnik became the first city in early medieval Europe in 1377 to adopt preventive measures against the spread of disease by the isolation of people, animals and goods arriving there from suspected infected countries. The first two locations where such isolation was instituted were Mrkan and Cavtat and represent a transformative event in the history of European medicine, social policy and maritime trading. However, Venice was the first maritime city to establish the first lazaret in 1423, intended as an isolated place for the contumacy of men and goods and for the treatment of plague victims thanks to a public hospital managed by laic personnel and at the expense of the State. A model for many other European health institutions.

After a short introduction in order of the epidemiology of pestilence along the Mediterranean coast, this essay will take a detailed look at the Venetian model of health care and the important role played by its lazarets, showing how Venice managed outbreaks of plague in 1575-77 and 1630.

Darka BILIĆ, PhD

## Plague and Trade Control. Form and Function of the Dubrovnik Lazaretto

Lazaretto in the Dubrovnik suburb of Ploče is one of the few buildings constructed in the early modern period for the purpose of control of the spread of plague, that is preserved to this day almost in its integral form. This Lazaretto was the last in a series of structures built by the Republic of Dubrovnik to quarantine merchants and travellers who came from pestiferous regions. Out of all the older structures that were used for quarantine of persons and disinfection of goods: Benedictine Monastery on the island of Mljet, near the Republic's northern border, the houses on the islands of Supetar, Mrkan and Bobara, the Lazaretto on the island of Lokrum and the Lazaretto on the peninsula of Danče, the Lazaretto at Ploče was closest to the city of Dubrovnik. Deliberately located next to the city gate, at the end of the caravan road that connected Dubrovnik with the Ottoman Empire, close to the docking facility in the port and the customs office in the city, the Lazaretto was part of the complex of buildings intended to stimulate and control trade, such as the han and čardak that accommodated Ottoman merchants after they were released from quarantine, and the bazaar where goods from the Dubrovnik hinterland were sold. Due to intense trade, the suburb of Ploče, together with the Lazaretto, became the meeting point of two cultures, the Western European and Ottoman. The Lazaretto was constructed in two phases between 1627 and 1647, based on a carefully conceived project that allocated more space in the Lazaretto to warehouses for disinfection of goods and courtyards in between, than spaces for quarantine of merchants and travellers. The form of the Lazaretto and its position confirm its primary trade-sanitary role that, with the general tendency towards the development of the lazaretto function in the second half of the 16<sup>th</sup> century, was still the result of the specific geopolitical situation of Dubrovnik and the intensification of overland trade in the first few decades of the 17<sup>th</sup> century. With its primary trade-sanitary role, the Lazaretto at Ploče still remained in the service of the local community, as one of the quarantine structures for the local population and the disinfection of their goods during plague outbreaks in the city of Dubrovnik.

Antun BAČE, PhD  
Ministry of Culture of the Republic of Croatia  
Conservation Department in Dubrovnik  
HR – 20000 Dubrovnik, Restićeva 7  
e-mail: antun.bace@min-kulture.hr

Ivan VIĐEN, Professor of art history  
Independent Researcher  
HR – 2000 Dubrovnik, Vicka Lovrina 4  
e-mail: ivanvigjen@yahoo.com

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## The Lazaretto at Ploče from the Fall of the Republic of Dubrovnik to Present-day

**L**azaretto at Ploče is the architectural and health culture monument whose importance transcends national boundaries.

After a brief suspension during the French occupation, the quarantine activities at Ploče were re-established as early as 1808, and new work regulations were written. During the Austrian rule, a robust sanitary cordon at the border with the Ottoman Empire was established, and land and maritime quarantines were separated. Since then, the Lazaretto at Ploče was only used for merchandise that arrived to Dubrovnik by land, and the maritime lazaretto in Gruž was established in 1832. Even though in a different framework, the functioning of the quarantine was conducted similar to the past centuries. Because of new health and economic conditions in the second half of the 19<sup>th</sup> century, it lost its original function of the station for people and goods and became a warehouse, which started a protracted phase of the complex's degradation.

From the beginning of the 20<sup>th</sup> century, the lack of awareness of its cultural-historical and architectural value, and the convenient location in the vicinity of the historical nucleus of the city, were fertile ground for a series of initiatives for tourist exploitation of the complex, i.e. its fundamental transformation. Many projects, commissioned from the renowned Croatian and foreign architects, are extremely interesting in the context of inter-war architecture and cultural climate in Dubrovnik and Croatia. Unlike the inter-war period, when the survival of the Lazaretto in its original form could primarily be ascribed to the complex relationships between interest groups, the period after World War II was marked by a growing awareness of its cultural-historical and architectural value, which lead to a crowning achievement of the comprehensive reconstruction of the complex (1967-1969). However, the search for an appropriate function, i.e. content that would have

an institutional status, did not bear fruit in the following four decades. The new reconstruction of the Lazaretto started in 2012-2014, and it continues in 2018.

Željka BUŠKO, mag. ing. arch.  
CORE d.o.o.  
HR – 20000 Dubrovnik, Riječka 16a  
e-mail: zbusko@gmail.com

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## Architectural and Construction Documentation of the Lazaretto in Dubrovnik

**A**fter abolishment of its original quarantine function, the Lazaretto was used for various purposes, and was significantly renovated and partly reconstructed in 1967. Recent works on the project of the complete reconstruction of the Lazaretto complex started in 2005 and lasted until 2014. The works on the first phase of the reconstruction project lasted from 2013 to 2015, while the implementation of the second phase of the project started in May 2018 and is still ongoing.

With the architectural analysis of this important architectural complex, located by the eastern entrance to the historical nucleus of Dubrovnik, this paper presents the creation of the technical project documentation for the reconstruction and conversion of space, that took place in the course of ten years, for the benefit of future users of the renovated building.

Ante MILOŠEVIĆ, PhD  
Museum of Croatian Archaeological Monuments  
HR – 21000 SPLIT, S. Gunjače 3  
e-mail: milosevic.tonci@gmail.com

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## Quarantine and Lazarettos in Dubrovnik: *Fortuna critica et historica*

**W**orks in the monograph Lazarettos in Dubrovnik. Establishment of Quarantine in Europe, attempt to explain how quarantine was organized in today's Lazaretto and to elucidate the intense and continuous development, from the 14<sup>th</sup> century onwards, of the health service in Dubrovnik. In order to illustrate this further we bring, in the ensuing text, the selection of quotations from previously published articles, discussions and books on the subject. The illustrations accompanying this text serve the same purpose, although most of them are not their original part.

# Literature

- G. AGAMBEN - E. COCCIA, *Angeli: ebraismo, cristianesimo, islam*. Vicenza, 2009.
- J. AGRIMI - C. CRISCIANI, Carità e assistenza nella civiltà cristiana medievale, in: *Storia del pensiero medico occidentale*, I, *Antichità e Medioevo*, (ed. M. D. Grmek), Roma-Bari, 1993, pp. 217-259.
- S. AHMETOVIĆ, Lazaret doživljava preobražaj, *Dubrovački vjesnik* 937, Dubrovnik, 1968, p. 3.
- S. AHMETOVIĆ, Lazarete treba koristiti izvorno i jedinstveno, *Dubrovački vjesnik* 1009, Dubrovnik, 1970, p. 6.
- D. ALFIER, Koncepcija suvremene namjene obnovljenih Lazareta, *Dubrovački vjesnik* 1002-1003, Dubrovnik, 1969, p. 4.
- M. ALKOVIĆ, Prostor za atraktivne izložbe, *Dubrovački vjesnik* 991, Dubrovnik, 1969, pp. 5.
- V. ANIĆ - I. GOLDSTEIN, *Rječnik stranih riječi*. Zagreb, 2004.
- Architecture of the Islamic world: its history and social meaning*. (Ed. G. Michell), New York, 1978.
- F. M. APPENDINI, *Notizie storico-critiche sulle antichità, storia e letteratura de Ragusei*. Tom I-II., Dubrovnik, 1802.
- Âşıkpaşazâde, Tevarih-i Âl-i 'Osman*. (Ed. A. Bey), Istanbul, 1914.
- AUTHOR UNKNOWN, Oganju Lazaretima, *Slovinac* 12, Dubrovnik, 1878, pp. 131-132.
- AUTHOR UNKNOWN, dr. Biagio Sciarich, *Decimoquinto pregramma del' i. r. scuola nautica di Ragusa per anno scolastico 1895.-1896*. Dubrovnik, 1896, pp. 10-11.
- AUTHOR UNKNOWN, Važan ugovor za razvitak grada, *Rad* 95, Dubrovnik, 1921, p. 2.
- AUTHOR UNKNOWN, Licitacija vojno državnih zgrada, *Dubrovački list* 10, Dubrovnik, 1924, pp. 4-5.
- AUTHOR UNKNOWN, Prodaja Hotela Odak, *Narodna svijest* 35, Dubrovnik, 1929, p. 2.
- AUTHOR UNKNOWN, Što bi se moglo učiniti s Lazaretom?, *Narodna svijest* 17, Dubrovnik, 1930.
- AUTHOR UNKNOWN, Pitanje starih Lazareta, *Narodna svijest* 23, Dubrovnik, 1930.
- AUTHOR UNKNOWN, Pitanje starih Lazareta, *Narodna svijest* 29, Dubrovnik, 1930.
- AUTHOR UNKNOWN, Izgradnja hotela na Lazaretima?, *Hrvatska dubrava*, 69, Dubrovnik, 1937, pp. 5-9.
- AUTHOR UNKNOWN, Kao pjesma lijepa budućnosti..., *Hrvatska dubrava*, 68, Dubrovnik, 1937, p. 3.
- AUTHOR UNKNOWN, Vivisekcija Dubrovnika, *Dubrovnik* 4, Dubrovnik, 1937, p. 6.
- AUTHOR UNKNOWN, Prepiska o gradnji hotela na Lazaretima, *Dubrovnik* 4, Dubrovnik, 1937, pp. 2-6.
- AUTHOR UNKNOWN, Razgovori o Lazaretima, *Naše more* 1, Dubrovnik, 1954, pp. 67-69.
- AUTHOR UNKNOWN, Lazareti i turizam – prilog diskusiji, *Centar za izučavanje turizma*, Dubrovnik, 1964, pp. 12-15.
- E. H. AYVERDI, *Avrupâda Osmanlı Mimarî Eserleri*. Vol. 2, book 3, Yugoslavia, Istanbul, 1977.
- A. BAĆE, Arhitekti Mladen Kauzlarić i Stjepan Gomboš u Dubrovniku (1930.-1940.), *Peristil* 53, Zagreb, 2010, pp. 105-120.
- A. BAĆE, *Arhitektura Dubrovnika između dva svjetska rata*. PhD thesis, Zagreb, 2015.
- A. BAĆE, Gimnazija na Pločama – izgradnja i arhitektonsko oblikovanje, in: *90 godina Dubrovačke gimnazije na Pločama*, (eds. K. Tolja, M. Giljača), Dubrovnik, 2017, pp. 51-66.
- A. BAĆE - I. VIDEN, Lazareti na Pločama od pada Dubrovačke Republike do danas (1808.-2013.), *Prostor* 21/2(46), Zagreb, 2013, pp. 326-339.
- J. BAČIĆ, Posebne odluke vezane za epidemije, in: J. Bačić, *Nekad u Dubrovniku*, ser.: *Dubrovnik zdravi grad*, Dubrovnik, 1990, pp. 72-79.
- N. BAČIĆ, Epidemije kuge na otoku Korčuli, *Hrvatski časopis za javno zdravstvo* 3/10, Zagreb, 2007. (<http://www.hcjz.hr/index.php/hcjz/article/view/2146/2118>)

- N. BAJIĆ-ŽARKO, *Split kao trgovačko i tranzitno središte na razmeđu istoka i zapada u 18. stoljeću*. Split, 2004.
- N. BAJIĆ-ŽARKO, Zvanja i zanimanja u Lazaretu krajem XVI. st. do tridesetih godina XVII. st., *Kulturna baština* 14, Split, 1983, pp. 90, 91.
- J. BAKIĆ, Arhaični postupci raskužbe roba i brodova u Hrvata - Prilog svjetskoj raskužbenoj baštini, in: *600. obljetnica karantenskog lazareta na otoku Mljetu s početkom djelatne uslužnosti dezinfekcije*, (eds. J. Bakić, R. Dujmović), Dubrovnik, 1997, pp. 52-62.
- J. BAKIĆ, Dubrovnik – grad najvrjednije higijensko-sanitarne hrvatske i svjetske baštine, *Hrvatski časopis za javno zdravstvo* 7/2, Zagreb, 2006. (<http://www.hcjz.hr>)
- A. BAKIJA-KONSUO - R. MULIĆ - V. BORASKA, Leprosy epidemics during history increased protective allele frequency of PARK2/PACRG genes in the population of the Mljet Island, Croatia. *European Journal of Medical Genetics* 54, London, 2011, pp. 548-552.
- A. BAKIJA-KONSUO, *Istraživanje povijesnog utjecaja lepre na prevalenciju varijanti gena PARK2/PACRG kod stanovništva otoka Mljeta*. PhD thesis, Medicinski fakultet Sveučilišta u Splitu, Split, 2011.
- A. BAKIJA-KONSUO, *Mal de Meleda – the Mljet disease*. Zagreb, 2017.
- A. BAKIJA-KONSUO, *Keratitis palmo-plantaris transgrediens – Mljetska bolest*. Magistarski rad. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 2001.
- A. BAKIJA-KONSUO - M. ŽITINSKI - S. FATOVIĆ-FERENČIĆ, A new entity or leprosy imitator - Ethical strongholds in studies on the Mal de Meleda, *Clinics in Dermatology* (prihvaćeno za tisak).
- A. BAKIJA-KONSUO, Mljetska bolest – jučer, danas, sutra, *Dubrovački horizonti* 41, Zagreb, 2001, pp. 118-126.
- A. BAKIJA-KONSUO - R. MULIĆ, The history of leprosy in Dubrovnik: An Overview, *International Journal of Dermatology* 50, Oxford, 2011, pp. 1428-1431.
- A. BAKIJA-KONSUO, Mal de Meleda – through the history and today, *Acta Dermatovenerologica Croatica* 22/2, Zagreb, 2014, pp. 79-84.
- A. BAKIJA-KONSUO - A. BASTA-JUZBAŠIĆ - I. RUDAN, Mal de Meleda: Genetic Haplotype Analysis and Clinicopathological Findings in Cases Originating from the Island of Mljet (Meleda) - Croatia, *Dermatology* 1, California University, 2002, pp. 32-39.
- A. W. BACOT - C. J. MARTIN, Observations on the mechanism of the transmission of plague by fleas, in: *Journal of Hygiene, Plague Supplement*, 3, Cambridge University Press, 1914, pp. 423-439.
- G. BAIAMONTI, *Storia della peste che regnò in Dalmazia negli anni 1783-1784*. Venezia, 1786.
- V. BAZALA, Bolesti i pošasti, in: V. Bazala, *Pregled povijesti zdravstvene kulture Dubrovačke Republike, Dubrovački horizonti* 1, Zagreb, 1972, pp. 27-41.
- V. BAZALA, „Calendarium pestis“, *Acta Historica medicinae, pharmaciae, veterinaire* 2/1, Beograd, 1962, pp. 55-65.
- V. BAZALA, Pomorski lazareti u starom Dubrovniku, in: *Dubrovačko pomorstvo: zbornik u povodu sto godina nautičke škole u Dubrovniku*, Dubrovnik, 1952, pp. 293-308.
- V. BAZALA, Della peste e dei modi di preservarsene nella Repubblica di Ragusa (Dubrovnik), *Comunicazione al XVI Congresso internazionale di storia della medicina a Roma*, II, Roma, 1954, pp. 723-756.
- V. BAZALA, *Pregled povijesti zdravstvene kulture Dubrovačke Republike*. Zagreb, 1972.
- A. BEJTIĆ, Povijest i umjetnost Foče na Drini, *Naše starine* 3, Sarajevo, 1957, pp. 23-74.
- J. BELAMARIĆ, Cloth and Geography: Town Planning and Architectural Aspects of the First Industry in Dubrovnik in the 15<sup>th</sup> Century, in: *Dalmatia and the Mediterranean*, (Ed. A. Payne), Leiden, 2014, pp. 268-309.
- N. BELDICEANU, Les Valaques de Bosnie à la fin du XVe siècle et leurs institutions, *Turcica* 7, Paris, 1975, pp. 122-134.
- L. BELTRAMI, *Il Lazzaretto di Milano*. Milano, 1899.
- S. BENIĆ, Konzervatorsko-urbanistički problemi Dubrovnika: Dubrovački Lazareti, in: *Zbornik zaštite spomenika kulture*, 12, Beograd, 1961, pp. 105-114.
- L. BENYOVSKY - D. ZELIĆ, Knjige nekretnina dubrovačke općine (13.-17. st.), *Monumenta historica Ragusina* VII/2, Zagreb-Dubrovnik, 2007.
- L. BERITIĆ, *Utvrdjenja grada Dubrovnika*. Zagreb, 1955.
- L. BERITIĆ, Ubikacija nestalih građevinskih spomenika u Dubrovniku II, *Prilozi povijesti umjetnosti u Dalmaciji*, 12, Split, 1960, pp. 61-84.
- J. BERSA, *Dubrovačke slike i prilike (1800-1880)*. Dubrovnik, 2002.
- N. H. BIEGMAN, *The Turco-Ragusan Relationship According to the Firmans of Murâd III (1575-1595). Extant in the State Archives of Dubrovnik*. The Hague-Paris, 1967.
- D. BILIĆ, Daniel Rodriga's Lazaretto in Split and Ottoman Caravanserais in Bosnia: Cultural transfer of architectural model, in: *From Riverbed to Seashore. Art on the Move in Eastern Europe and the Mediterranean in the Early Modern Period*, (ed. A. Payne), Brill, u tisku
- J.-N. BIRABEN, *Les hommes et la peste en France et dans les pays européens et méditerranéens*. I., *La peste dans l'histoire*. Paris, 1975.
- J.-N. BIRABEN, *Les hommes et la peste en France et dans les pays européens et méditerranéens*. II., *Les hommes face à la peste*. Paris, 1976.
- Z. BLAŽINA-TOMIĆ, *Kacamorti i kuga: utemeljenje i razvoj zdravstvene službe u Dubrovniku*. Zagreb-Dubrovnik, 2007.
- Z. BLAŽINA TOMIĆ - V. BLAŽINA, *Expelling the Plague. The Health Office and the Implementation of Quarantine in Dubrovnik, 1377-1533*. Montreal, 2015.
- Z. BLAŽINA TOMIĆ ZLATA - V. BLAŽINA, Dubrovnik, preteča javnih zdravstvenih mjera u Europi, *Hrvatska revija* 3, Zagreb, 2016. (<http://www.matica.hr/hr/492/dubrovnik-preteca-javnih-zdravstvenih-mjera-u-europi-260777>)
- Z. BLAŽINA TOMIĆ, Utemeljenje i razvoj zdravstvene službe u Dubrovniku, in: Z. Blažina Tomić, *Kacamorti ili kuga*, Zagreb, 2007.
- B. I. BOJOVIĆ, *Raguse et l'Empire Ottoman (1430-1520)*. Paris, 1996.
- J. BOOKER, *Maritime Quarantine: The British Experience, c. 1650-1900*. Aldershot: Ashgate 2007.
- A. BOROVIČKI - S. LANG, *Povijesno-medicinski vodič kroz medicinu starog Dubrovnika*. (<http://www.snz.unizg.hr/~mmilosev/Povijest-medicine.pdf>)
- E. BORSOOK, The Travels of Bernardo Michelozzi and Bonsignore Bonsignori in the Levant, *Journal of the Warburg and*



- Courtauld Institutes 36, London, 1973, pp. 145-197.
- S. BOŠNJAKOVIĆ, Tzv. Mljetska bolest, *Liječnički vjesnik* 53, Zagreb, 1931, pp. 103-113.
- S. BOŠNJAKOVIĆ, Jedno endemično oboljenje u povijesno pučkoj predodžbi, *Liječnički vjesnik* 60, Zagreb, 1938, pp. 563-566.
- I. BOŽIĆ, *Dubrovnik i Turska u XIV i XV veku*. Beograd, 1952.
- P. BROWN, *Il sacro e l'autorità. La cristianizzazione del mondo romano antico*. Roma, 1996.
- M. BRUNETTI, Venezia durante la peste del 1348, in: *L'Ateneo Veneto* 32, vol. II, fasc. 1, Venezia, 1909, pp. 5-42.
- S. BUBLE, Analiza Katastra Dubrovnika 19. st. s transkripcijom upisnika građevinskih čestica te izradom baze podataka. Područje grada Dubrovnika u Franciskanskom katastru, *Baština: pokretač razvoja*, Split, 2014.
- T. BUKLIJAŠ, Bolest i stigma: tragom lepre u našim krajevima, *Hrvatska revija* 2, Zagreb, 2001, pp. 108-110.
- T. BUKLIJAŠ, Kuga: nastajanje identiteta bolesti, *Hrvatska revija* 2, Zagreb, 2002, pp. 90-94.
- S. BURINA, Da li će stari dubrovački lazareti biti pretvoreni u moderan hotel ili u studentske ferijalne stanove, *Politika* 10669, Beograd, 1938, p. 8.
- D. CALABI, Città ed edilizia pubblica nel dominio veneziano da mare: modelli, significato civile, linguaggio architettonico, in: *D'une ville à l'autre. Atti del Colloquio Internazionale della École Française di Roma, 1-4 dicembre* 1986, Roma, 1989, pp. 813-843.
- G. CANIATO, Il Lazzaretto Nuovo, in: *Venezia e la peste*, Venezia, 1979, pp. 343-362.
- G. CANIATO, L'isola e la galea. I documenti d'archivio, in: *La galea ritrovata. Origine delle cose di Venezia*, Venezia, 2002, pp. 89-107.
- C. CANTÙ, *Storie minori*. Vol. II, *Storia di Milano. La Lombardia nel secolo XVII. Parini e il suo secolo*. Torino, 1864.
- A. CAR - LJ. BETICA-RADIĆ - M. NARDELLI-KOVAČIĆ, Mljetska bolest - povijesni prikaz, in: *Simpozij "Prirodne značajke i društvena valorizacija otoka Mljeta"*, Pomena, 1995, pp. 605-608.
- G. CARBONARO, *La peste orientale relativamente al sistema delle quarantene*. Napoli, 1845.
- A. G. CARMICHAEL, *Plaque and the poor in renaissance Florence*. Cambridge -New York, 1986.
- F. W. CARTER, Dubrovnik: The Early Development of a Pre-Industrial City, *The Slavonic and East European Review* 47/109, London, 1969, pp. 355-368.
- F. W. CARTER, *Dubrovnik (Ragusa) A Classic City-State*. New York-London, 1972.
- G. CASONI, *La peste di Venezia nel MDCXXX. Origine della erezione del tempio a S. Maria della Salute*. Venezia, 1830.
- P. CATTANEO, Indagini recenti - I dati archeologici a confronto con le fonti archivistiche, in: *Venezia. Isola del Lazzaretto Nuovo*, (ed. G. Fazzini), Venezia, 2004, pp. 91-108.
- E. ÇELEBI, *Seyahatnâmesi: Topkapı Sarayı Bağdat 304 Yazmasının Transkripsiyonu* 6, (eds. S. A. Kahraman, Y. Dağlı), Istanbul, 1996.
- C. CIPOLLA, *Contro un nemico invisibile. Epidemie e strutture sanitarie nell'Italia del Rinascimento*. Bologna, 1986.
- E. CLERAY, Le Voyage de Pierre Lescapier, Parisien: de Venise à Constantinople, l'an 1574, *Revue d'Histoire Diplomatique* 35, Paris, 1921, pp. 21-55.
- E. CONCINA - P. MORACHIELLO - G. D. ROMANELLI - G. SCARABELLO, Lazzaretti. L'Istituzione e la riforma, in: *Venezia e la Peste 1348/1797*, Venezia, 1979, pp. 165-192.
- M. P. CONTARINI, *Diario del Viaggio da Venezia a Costantinopoli*. Venice, 1856.
- G. COSMACINI, *Storia della medicina e della sanità in Italia: dalla peste nera ai giorni nostri*. Roma-Bari, 2005.
- G. COSMACINI - M. MENGHI, *Galeo e il galenismo. Scienza e idee della salute*. Milano, 2012.
- E. CROUZET-PAVAN, La maturazione dello spazio urbano, in: *Storia di Venezia. Dalle origini alla caduta della Serenissima, V, Il Rinascimento: società ed economia*, (eds. A. Tenenti, U. Tucci), Roma, 1996, pp. 3-100.
- Š. CURIĆLENERT - N. LONZA, Bratovština Sv. Lazara u Dubrovniku (1531-1808): osnutak, ustroj, članstvo, *Anali HAZU Zavoda za povijesne znanosti u Dubrovniku* 54/1, Dubrovnik, 2016, pp. 39-113.
- Ž. CVETNIĆ, Lepra - „smrt prije smrti“, zoonoza koja još uvijek prijete, *Veterinarska stranica* 45, Zagreb, 2014, pp. 315-324.
- G. CVJETINOVIĆ, *Karika obavještajne mreže Dubrovačke Republike: kultura samozaštite - denuncijacije Malom vijeću (1740-1799)*. PhD thesis, Sveučilište u Zagrebu, 2015.
- S. ĆOSIĆ, *Dubrovnik nakon pada Republike (1808.-1848.)*. Dubrovnik, 1999.
- E. ČELEBI, *Putopis; odlomci o jugoslavenskim zemljama*. Sarajevo, 1979.
- Đ. ČELIĆ, Počitelj na Neretvi. Urbanističko - arhitektonska studija s osvrtom na problematiku održavanja, *Naše Starine* 7, Sarajevo, 1960, pp. 5-49.
- Đ. ČELIĆ - M. MUJIĆ, Jedna novootkrivena građevina starijeg doba u Mostaru, *Naše starine* 3, Sarajevo, 1956, pp. 261-264.
- N. ČOLAK, *Regesti marittimi Croati*. Vol. I, Padova 1985.
- N. ČOLAK, *Regesti marittimi Croati*. Vol. II, Padova, 1993.
- N. ČOLAK, *Regesti marittimi Croati*. Vol. III, Split, 2017.
- J. ČULIĆ, Način za rješenje problema naših pasivnih krajeva! (Historijat akcija za podizanje hotela u Dalmaciji), *Jugoslavenski turizam* 2, Split, 1928, pp. 5-7.
- C. FISKOVIĆ, Lazarete treba obnoviti, *Dubrovački vjesnik* 85, Dubrovnik, 1952, p. 2.
- I. DABELIĆ, Mljetske crkvene župe, in: I. Dabelić, *Arhivska grada za povijest otoka Mljeta*, Dubrovnik, 2000, pp. 153-203.
- R. D'ALBERTON VITALE, Tra sanità e commercio: il difficile ruolo del lazaretto veneziano alla scala di Spalato, *Studi Veneziani*, n. s., 39, Venezia, 2000, pp. 253-288.
- D. DAVANZO POLI, Mercanzie forestiere per una moda veneziana, in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano, 2004, pp. 115-130.
- P. DAVIES - D. HEMSOLL, *Michele Sanmicheli*. Milano, 2004.
- F. DE DIVERSIS, *Opis slavnog grada Dubrovnika*. (Foreword, transcription and translation from Latin: Z. Janeković-Römer), Zagreb, 2004.
- R. DELORT, La peste ovvero il topo, in: *Per una storia delle malattie*, (eds. J. Le Goff, J. C. Sournia, Bari, 1986.
- Description ou traité du gouvernement et régime de la cité et Seigneurie de Venise. Venezia vista dalla Francia ai primi del Cinquecento*, (eds. Ph. Braunstein, R. C. Mueller), Venezia-Paris, 2015.

- S. DIMITRIJEVIĆ, *Dubrovački karavani u južnoj Srbiji u XVII veku / Les Caravanes de Dubrovnik dans la Serbie du Sud au XVIIe siècle*. Belgrade, 1958.
- M. DINIĆ, Dubrovačka srednjovekovna karavanska trgovina / Dubrovnik Medieval Caravan Trade, *Jugoslavenski istoriski časopis* 5/3, Beograd, 1937, pp. 119-146.
- Encyclopaedia of Islam, Second Edition*. (Eds. P. Bearman, Th. Bianquis, C. E. Bosworth, E. van Donzel, W. P. Heinrichs), Leiden: Brill, 2002.
- M. DRŽIĆ, Dundo Maroje, in: M. Muhoberac, *Marin Držić: Dundo Maroje i druga djela*, Vinkovci, 1998, p. 126.
- PH. DU FRESNE-CANAYE, *Le voyage du Levant*. (Eds. H. Hauser, E. Leroux), Paris, 1897.
- A. DUPLANČIĆ, Neobjavljeni nacrti i opisi splitskog lazareta, *Adrias* 4-5, Split, 1993-1994, pp. 167-190.
- S. ĐORĐEVIĆ - Z. ŠUNDRICA, Stanje zdravstvenih prilika u Dubrovniku i predlog Vlaha Stulija 1808. godine maršalu Marmonu za njihovo popravljjanje, *Srpski arhiv za celokupno lekarstvo* 89, Beograd, 1961, pp. 1226-1232.
- Epidemija kuge na Madagaskaru*. Hrvatski zavod za javno zdravstvo. (<https://www.hzjz.hr/sluzba-epidemiologija-zarazne-bolesti/epidemija-kuge-na-madagaskaru/>)
- A. EVANS, *Kroz Bosnu i Hercegovinu pješke tokom ustanka augusta i septembra 1875*. Sarajevo, 1965.
- S. F. FABIJANEC, Hygiene And Commerce: The Example of Dalmatian Lazarettos, *Ekonomska i ekohistorija*, 4, Zagreb, 2008, pp. 115-133.
- S. FATOVIĆ-FERENČIĆ, Šestota obljetnica karantenskog lazareta na otoku Mljetu u ozračju odluke Velikog vijeća 1377. godine, in: *600. obljetnica karantenskog lazareta na otoku Mljetu s početkom djelatne uslužnosti dezinfekcije*, (eds. J. Bakić, R. Dujmović), Dubrovnik, 1997, pp. 35-44.
- S. FATOVIĆ-FERENČIĆ, Konceptualizacija i istraživački potencijal kuge, in: M. Tomasović, *Kuga u Makarskoj i primorju 1815*, Makarska, 2017, pp. 499-514.
- S. FAROQHI, Camels, Wagons and the Ottoman State in the Sixteenth and Seventeenth Centuries, *International Journal of Middle East Studies* 14/4, Cambridge University Press, 1982, pp. 523-539.
- S. FAROQHI, Horses owned by Ottoman officials and notables: means of transportation but also sources of pride and joy, in: *Animals and People in the Ottoman Empire*, (ed. S. Faroqhi), Istanbul, 2010, pp. 293-311.
- S. FATOVIĆ-FERENČIĆ, The Island of Mljet: History, Heritage and Health, *Croatian Medical Journal* 44/6, Zagreb, 2003, pp. 661-662.
- K. FILAN, *Sarajevo u Bašeskijino doba*. Sarajevo, 2014.
- J. FISCHER JUDITH - B. BOUADJAR - R. HEILIG, Genetic linkage of Meleda disease to chromosome 8qter, *European Journal of Human Genetics* 6, Basel, 1998, pp. 542-547.
- J. FISCHER - B. BOUADJAR - R. HEILIG - M. HUBER - C. LEFÈVRE - F. JOBARD - F. MACARI - A. BAKIJA-KONSUO - F. AIT-BELKACEM - J. WEISSENBAACH - M. LATHROP - D. HOHL, Prud'homme Jeane-Françoise. Mutations in the gene encoding SLURP-1 in Mal de Meleda, *Human Molecular Genetics* 10/8, Oxford, 2001, pp. 875-880.
- C. FISKOVIĆ, *Splitski lazaret, Četiri priloga historiji grada Splita XVII i XVIII stoljeća*. Split, 1953, pp. 5-37.
- J. FITNESS - K. TOSH - A. V. S. HILL, Genetics of susceptibility to leprosy, *Genes and Immunity* 3, London, 2002, pp. 441-453.
- A. FOA, *Ebrei in Europa: dalla peste nera all'emancipazione XIV-XIX secolo*. Roma-Bari, 1999.
- A. A. FRARI, *Cenni storici sopra la peste di Venezia del 1630-31 per la quale si celebra in questi giorni la festa del secolo votiva*. Venezia, 1830.
- PH. DU FRESNE-CANAYE, *Le Voyage du Levant*. Paris, 1898.
- V. FORETIĆ, Stari dubrovački lazareti na Pločama, *Novo doba*, 17. 4., Split, 1938, pp. 6-7.
- V. FORETIĆ, Lazareti pred opasnošću rušenja i park Ilijine Glavice pred pogibelji uništenja, *Dubrava* 106, Dubrovnik, 1940, p. 3.
- A. FORTIS, *Viaggio in Dalmazia* Venice. 1774.
- M. FOUCAULT, *Madness and civilization: a history of insanity in the Age of Reason*. New York, 1988.
- J. GELČIĆ (GELCICH), *Delle istituzioni marittime e sanitarie della Repubblica di Ragusa*, Trieste, 1882.
- B. GEREMEK, *La pietà e la forca. Storia della miseria e della carità in Europa*. Roma-Bari, 1986.
- H. GJANKOVIĆ, Epidemijske bolesti, lazareti, karantene u prošlosti, *Naše more* 2, Dubrovnik, 1970, pp. 83-91.
- S. GRACIOTTI, La Dalmazia e l'iter gerosolimitano da Venezia tra affari, devozione e scoperte, in: *La Dalmazia nelle relazioni di viaggiatori e pellegrini da Venezia tra Quattro e Seicento*, (ed. S. Graciotti), Rim, 2009, pp. 67-114.
- M. D. GRMEK, Karantena in: *Medicinska enciklopedija*, II ed., book III, Zagreb, 1968, pp. 591-594.
- M. D. GRMEK, Renesansni učenjak Donato Muzi i njegov rad u Dubrovniku, *Analiza Zavoda za povijesne znanosti IC JAZU u Dubrovniku* 17, Dubrovnik, 1979, pp. 49-72.
- M. D. GRMEK, Le concept d'infection dans l'Antiquité et au Moyen Age, les anciennes mesures sociales contre les maladies contagieuses et la fondation de la première quarantaine à Dubrovnik (1377), *Rad JAZU* 384, Zagreb, 1980, pp. 9-55.
- G. GULLINO, Il patriziato, in: *Storia di Venezia. Dalle origini alla caduta della Serenissima*, IV, *Il Rinascimento: politica e cultura*, (eds. A. Tenenti, U. Tucci), Roma, 1996, pp. 379-413.
- A. V. S. HILL, Aspects of genetic susceptibility to human infectious diseases, *Annual review of genetics* 40/2006, pp. 469-486.
- E. HAKKI AYVERDI, *Avrupa'da osmanlı mimârî eserleri*. Vol. 3, Istanbul, 1981.
- H. HAJDARHODŽIĆ, Jedno suđenje pred ljubinjским kadijom iz 1714. godine, *Godišnjak Društva istoričara Bosne i Hercegovine* 18, Sarajevo, 1970, pp. 271-282.
- P. HORDEN - N. PURCELL, *The Corrupting Sea. A Study of Mediterranean History*. Oxford - Blackwell, 2000.
- O. HOVORKA - E. EHLERS, Mal de Meleda, *Archives of Dermatology Syphilis* 40, Berlin, 1897, pp. 251-256.
- J. HOWARD, *An account of the principal lazarettos in Europe, with various papers relative to the plague, together with further observations on some foreign prisons and hospitals and additional remarks on the present state of those in Great Britain and Ireland*. London, 1789.
- O. HOVORKA, Über einen bisher unbekanntem endemischen Lepraheerd in Dalmatien, *Archives of Dermatology Syphilis* 34, Berlin, 1896, pp. 51-53.
- B. HRABAK, Kramari u karavanskom saobraćaju preko Sandaka (1470-1720), in:

- Simpozijum: Seoski dsnri Sretena Vukosavljevića* 10, Prijepolje, 1983, pp. 191-223.
- H. İNALCIK, 'Arab' Camel Drivers in Western Anatolia in the Fifteenth Century, *Revue d'Histoire Maghrebine* 10, Casablanca, 1983, pp. 247-270.
- H. İNALCIK, 'An Outline of Ottoman-Venetian Relations,' in: *Venezia Centro di Mediazione tra Oriente e Occidente*, (eds. H.-G. Beck, M. Manoussacas, A. Pertusi), Florence, 1977, pp. 83-90.
- H. İNALCIK, *The Ottoman Empire: the Classical Age*. London - Phoenix, 1994.
- H. İNALCIK, 'Foundations of Ottoman-Jewish Cooperation' in: *Jews, Turks, Ottomans: a Shared History*, (ed. A. Levy), Syracuse University Press, 2002, pp. 3-14.
- H. İNALCIK - D. QUATAERT, *An Economic and Social History of the Ottoman Empire, 1300-1914*. Vol. 1, Cambridge University Press, 1994.
- V. IVANČEVIĆ, *Luka Livorno i dubrovački brodovi (1760-1808)*. Dubrovnik, 1968.
- Z. JANEKOVIĆ-RÖMER, 'I lazaretti di Dubrovnik (Ragusa), in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano 2004, pp. 246-249.
- R. JEREMIĆ - J. TADIĆ, *Prilozi za istoriju zdravstvene kulture starog Dubrovnika*. Vol. 1, Beograd, 1938.
- T. JEREN, 'Povijest razvoja infektološke službe na tlu Hrvatske,' *Croatian Journal of Infection* 25/3, Zagreb, 2005, pp. 125-130.
- K. JIREČEK, *Die Handelsstrassen und Bergwerke von Serbien und Bosnien während des Mittelalters*. Prague, 1879.
- M. KAPOVIĆ, 'Statut Grada Dubrovnika 1272.,' in: M. Kapović, *Statut Grada Dubrovnika 1272*, Dubrovnik, 1990, pp. 263-493.
- T. KATINIS, *Medicina e filosofia in Marsilio Ficino: il consilio contra la pestilentia*. Roma, 2007.
- D. KEČKEMET, 'Prilozi opisu i povijesti splitskog lazareta,' *Pomorski zbornik društva za proučavanje i unapređenje pomorstva Jugoslavije* 13, Rijeka, 1975, pp. 377-400.
- J. KELLY, *La peste nera*. Casale Monferrato, 2005.
- M. KIEL, 'The Vakfnâme of Raḳkas Sinân Beg in Karnobat (Karîn-âbâd) and the Ottoman Colonization of Bulgarian Thrace (14th-15th century),' *Osmanlı Araştırmaları / The Journal of Ottoman Studies* 1, Istanbul, 1980, pp. 15-32.
- M. KOLIN, 'Neka se čuje i druga strana,' *Dubrava* 105, Dubrovnik, 1940, pp. 1-2.
- G. Ž. KOMAR, *Pisma Miha Kuveljića dubrovačkoj vladi; Kandijski rat 1646-1662*. Herceg Novi, 2010.
- K. KONSTANTINIDOU, *Lazzaretti veneziani in Grecia*. Padova, 2015.
- E. KORIĆ, 'Životni put prvog beglerbega Bosne. Ferhad-paša Sokolović (1530-1590).' Sarajevo, 2015.
- R. KRALJ-BRASSARD, 'Detta presvijetlog i preuzvišenog gospodina kneza: troškovi Dvora u Dubrovniku od 16. do 19. stoljeća,' *Anali HAZU Zavoda za povijesne znanosti u Dubrovniku* 52/1, Zagreb-Dubrovnik, 2014, pp. 131-160.
- R. KRALJ-BRASSARD, 'A City Facing the Plague: Dubrovnik, 1691,' *Dubrovnik Annals* 20 Dubrovnik, 2016, pp. 109-148.
- R. KRALJ-BRASSARD, 'Grad i kuga: Dubrovnik 1691. godine,' *Anali Zavoda za povijesne znanosti HAZU* 54/1, Dubrovnik, 2016, pp. 115-170.
- B. KREKIĆ, *Dubrovnik (Raguse) et le Levant au Moyen Âge*. Paris, 1961.
- B. KREKIĆ, *Dubrovnik in the 14<sup>th</sup> and 15<sup>th</sup> Centuries; A City between East and West*. University of Oklahoma Press, 1972.
- H. KREŠEVLJAKOVIĆ, 'Sarajevska čaršija, njeni esnafi i obrti za osmanlijske uprave,' *Narodna starina* 6/14, Sarajevo, 1927, pp. 15-58.
- H. KREŠEVLJAKOVIĆ, *Hanovi i karavan-saraji u Bosni i Hercegovini*. Sarajevo, 1957.
- B. KRIZMAN, 'Memoire Bara Bettere austrijskom generalu T. Milutinoviću o Dubrovačkoj Republici iz 1815. godine,' *Anali Historijskog instituta JAZU u Dubrovniku* 1, Dubrovnik, 1952, pp. 423-465.
- LJ. KRMPOTIĆ, *Car Franjo I. u Hrvatskoj 1818*. Sv. 1, Hannover-Čakovec, 2002.
- L. KUNČEVIĆ, 'The Maritime Trading Network of Ragusa (Dubrovnik) from the Fourteenth to the Sixteenth Century,' in: *Maritime Trade around Europe, 1300-1600: Commercial Networks and Urban Autonomy*, (eds. W. Blockmans, M. Krom, J. Wubs-Mrozewicz), Routledge: New York, 2017, pp. 141-158.
- V. KURSAR, 'Being an Ottoman Vlach: On Vlach Identity(ies), Role and Status in Western Parts of the Ottoman Balkans (15<sup>th</sup>-18<sup>th</sup> Centuries),' *OTAM (Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi)* 34, Ankara, 2013, pp. 115-161.
- I. LENTIĆ-KUGLY, 'Građevinske intervencije u Dubrovniku potkraj 18. i na početku 19. stoljeća,' *Radovi Instituta za povijest umjetnosti* 12-13, Zagreb, 1989, pp. 277-285.
- M. LEVY, *Sefardi u Bosni; Prilog historiji Jevreja na Balkanskom poluotoku*. Sarajevo, 1996.
- N. LONZA, *Kazalište vlasti; ceremonijal i državni blagdani Dubrovačke Republike u 17. i 18. stoljeću*, Zagreb-Dubrovnik, 2009.
- N. LONZA, *Pod plaštem pravde. Kazneno-pravni sustav Dubrovačke Republike u XVIII. stoljeću*. Dubrovnik, 1997.
- J. LUETIĆ, 'Pravilnik Dubrovačke Republike o nacionalnoj plovidbi,' *Građa za pomorsku povijest Dubrovnika* 5, Dubrovnik, 1972, pp. 71-139.
- J.-J. MANGET, *Traité de la peste recueilli des meilleurs auteurs anciens et modernes, et enrichi de remarques et observations théoriques et pratiques*. Vol. I, Genève, 1721.
- R. MANNINGHAM, *The Plague no Contagious Disease*. London, 1744.
- G. MARTINO, *Preserve salutevoli contro il contagioso morbo. Deputazione di Sanità e Lazaretto di Messina in epoca borbonica*. Roma, 2014.
- G. MAZZUCCO, 'Una grangia del monastero di San Giorgio Maggiore di Venezia: l'isola della Vigna Murata poi Lazaretto Nuovo,' in: *Venezia, isola del Lazaretto Nuovo*, (ed. G. Fazzini), *Archeo Venezia* 14/1-4, supplement, Venezia, 2004, pp. 15-22.
- W. H. MCNEILL, *La peste nella storia. Epidemie, morbi e contagio dall'antichità all'età contemporanea*. Torino, 1981.
- L. MEZINI - D. POJANI, 'Defence, identity, and urban form: the extreme case of Gjirrokastër,' *Planning Perspectives* 30/3, London, 2014, pp. 397-428.
- M. MIOVIĆ, 'Ulcinjani i Dubrovačka Republika u prvoj polovici XVIII. stoljeća,' *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 30, Dubrovnik, 1992, pp. 99-116.
- V. MIOVIĆ, *Dubrovačka diplomacija u Istanbulu*. Zagreb-Dubrovnik, 2002.
- V. MIOVIĆ, *Dubrovačka Republika u spisima osmanskih sultana / Dubrovnik Republic in the Documents of the Ottoman Sultans*. Dubrovnik, 2005.

- M. MIOVIĆ, *Dubrovačka Republika u spisima namjesnika Bosanskog ejaleta i Hercegovačkog sandžaka*. Dubrovnik, 2008.
- V. MIOVIĆ, "Diplomatic Relations Between the Ottoman Empire and the Republic of Dubrovnik" in: *The European Tributary States of the Ottoman Empire*, (eds. G. Kármán, L. Kunčević), Leiden, 2013, pp. 187-208.
- V. MIOVIĆ, *Mudrost na razmeđu. Zgode iz vremena Dubrovačke Republike i Osmanskog Carstva*. Dubrovnik 2011.
- V. MIOVIĆ, *Židovski rodovi u Dubrovniku (1546-1940)*. Zagreb-Dubrovnik, 2017.
- V. MIOVIĆ-PERIĆ, *Na razmeđu; osmansko-dubrovačka granica (1667-1806)*. Dubrovnik, 1997.
- V. MIOVIĆ-PERIĆ, "Emin na Pločama kao predstavnik Osmanlija na području Dubrovačke Republike", *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 37, Dubrovnik, 1999, pp. 205-215.
- I. MITIĆ, "Utjecaj kopnene trgovine na osnivanje dubrovačke karantene u XIV. stoljeću", *Rad JAZU, Razred za medicinske znanosti* 16, Zagreb, 1980, pp. 85-92.
- I. MITIĆ, "O poslovanju dubrovačkih lazareta na Pločama krajem 18. stoljeća", *Dubrovnik* 4, Dubrovnik, 1977, pp. 98-102.
- I. MITIĆ, "Prilog proučavanju običajnog prava na području Dubrovačke Republike", *Zbornik za narodni život i običaje južnih Slavena* 49, Zagreb, 1983, pp. 413-427.
- H. H. MOLLARET, "Presentazione della peste", in: *Venezia e la peste*, Venezia, 1979, pp. 11-17.
- M. MORONI, *L'impero di San Biagio. Ragusa e i commercio balcanici dopo la conquista turca (1521-1620)*. Bologna, 2011, *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 54/2, Dubrovnik, 2016, prikaz: Dario Dell'Osa, pp. 476-479.
- S. MOSHER STUARD, "A Communal Program of Medical Care: Medieval Ragusa / Dubrovnik", *Journal of the History of Medicine and Allied Sciences* 2, New Haven, 1973, pp. 126-142.
- J. MULIĆ, "Počitelj u vrijeme osmanske vladavine", *Anali Gazi Husrev-begove biblioteke* 25-26, Sarajevo, 2006, pp. 261-296.
- Ž. MULJAČIĆ, "Pomorske i kopneno-pomorske poštanske veze staroga Dubrovnika", in: *Iz dubrovačke prošlosti*, (ed. J. Hekman), Zagreb, 2006, pp. 151-181.
- R. C. MUELLER, "Aspetti sociali ed economici della peste a Venezia nel Medioevo", in: *Venezia e la peste*, Venezia, 1979, pp. 71-92.
- M. MURVAR, "Sanitarni kordon za vrijeme Dubrovačke Republike i poslije njena pada", *Naše more* 17/6, Dubrovnik, 1980, pp. 344-346.
- F. M. MARMOR, "The ophthalmic trials of G. H. A. Hansen", *Survey of Ophthalmology* 47/2002, pp. 275-287.
- A. MUZUR, "Stigme svetog Franje i drugih svetaca i karizmatika: između čuda i znanstvenog odgovora", *Acta medico-historica Adriatica* 9/2, Rijeka, 2011, pp. 293-306.
- G. NECIPOĞLU, *The Age of Sinan. Architectural Culture in the Ottoman Empire*. Princeton University Press, 2005.
- G. NECIPOĞLU, "Connectivity, Mobility, and Mediterranean 'Portable Archaeology: Pashas from the Dalmatian Hinterland as Cultural Mediators", in: *Dalmatia and the Mediterranean*, (ed. A. Payne), Leiden, 2014, pp. 311-381.
- S. OBAD - S. DOKOZA - S. MARTINOVIĆ, *Južne granice Dalmacije od XV. stoljeća do danas*. Zadar, 1999.
- T. R. O'BRIEN - CH. WINKLER - M. DEAN - J. A. E. NELSON - M. CARRINGTON - M. NELSON - G. C. WHITE, "HIV-1 infection in man homozygous for CCR5del32", *Lancet*, 1997.
- C. ORHONLU, *Osmanlı İmparatorluğu'nda Derbend Teşkilâtı*. Istanbul, 1990.
- Đ. ORLIĆ, "Dubrovačke vijesti o epidemijama u Bosni i Hercegovini u XVII vijeku", *Građa Naučnog društva NR Bosne i Hercegovine* 1, Sarajevo, 1956, pp. 47-63.
- Đ. ORLIĆ, "Kuga u Herceg-Novom 1648 godina", *Srpski arhiv za celokupno lekarstvo* 118, Beograd, 1955, pp. 118-122.
- R. PACI, *La scala di Spalato e il commercio veneziano nei Balcani fra Cinque e Seicento*. Venezia, 1971.
- Z. PALADINO, *Lavoslav Horvat: arhitektonsko djelo 1922.-1977*. PhD thesis, Filozofski fakultet, Zagreb, 2011.
- Z. PALADINO, "Desetljetni opus graditelja Lavoslava Horvata i Harolda Bilinića za dubrovačkog investitora Božu Banca", *Radovi Instituta za povijest umjetnosti* 35, Zagreb, 2011, 237-254.
- Z. PALADINO, *Lavoslav Horvat - Kontekstualni ambijentalizam i moderna*. Zagreb, 2013.
- R. J. PALMER, "L'azione della Repubblica di Venezia nel controllo della peste", in: *Venezia e la peste*, Venezia, 1979, pp. 103-110.
- D. PANZAC, "Les échanges maritimes dans l'Empire Ottoman au XVIII<sup>e</sup> siècle", *Revue de l'Occident musulman et de la Méditerranée* 39, Aix-en-Provence, 1985, pp. 177-188.
- D. PANZAC, *Quarantaines et lazarets: l'Europe et la peste d'Orient XVIIe-XXe siècles*. Aix-en-Provence, 1986.
- D. PANZAC, "International and Domestic Maritime Trade in the Ottoman Empire during the 18<sup>th</sup> Century", *International Journal of Middle East Studies* 24, Cambridge, 1992, pp. 189-206.
- D. PANZAC, *Osmanlı İmparatorluğu'nda veba, 1700-1850*. Istanbul, 1997.
- D. PANZAC, "La peste in Levante. Epidemiologia, diffusione e sparizione", in: *Rotte mediterranee e baluardi di sanità: Venezia e i lazzaretti mediterranei*, (ed. N.-E. Vanzan-Marchini), Milano, 2004, pp. 165-180.
- L. PATETTA, *L'Architettura del Quattrocento a Milano*. Milano, 1991.
- M. P. PEDANI, *The Ottoman-Venetian Border (15<sup>th</sup>-18<sup>th</sup> Centuries)*. Venezia, 2017 (ebook).
- I. PERIĆ, "Razvoj turizma u Dubrovniku i okolici, od pojave parobrodarstva do 1941. godine", *Dubrovnik*, 1983.
- Š. PERIČIĆ, "Prilog poznavanju pomorsko-trgovačkog prometa Dubrovačkog okružja od 1815. do 1850. godine", *Anali historijskog odjela centra za znanstveni rad JAZU u Dubrovniku* 15-16, Dubrovnik, 1978, pp. 303-319.
- S. PEROJEVIĆ, "Izgradnja lazareta u Splitu", *Prostor* 10, Zagreb, 2002, pp. 119-134.
- Đ. PETROVIĆ, "Sklavina", *Glasnik etnografskog muzeja u Beogradu* 50, Beograd, 1986, pp. 13-41.
- S. PIPLOVIĆ, "Dalmatinski opus arhitekta Alfreda Kellera", *Građa i prilozi za povijest Dalmacije* 15, Split, 1999, pp. 271-290.
- Povijesne i statističke bilješke o Dubrovačkom okrugu, prikupio okružni inženjer Lorenzo Vitelleschi*. Dubrovnik, 1827. (Ed. V. Lupis), Dubrovnik, 2002.
- P. PRETO, *Peste e società a Venezia nel 1576*. Vicenza, 1978.
- P. PRETO, "Peste e demografia. L'età moderna: le due pesti del 1575-77 e 1630-31", in: *Venezia e la peste*, Venezia, 1979, pp. 97-98.
- P. PRETO, "Le grandi pesti dell'età moderna: 1575-77 e 1630-31", in: *Venezia e la peste*, Venezia, 1979, pp. 123-148.

- P. PRETO, Lo spionaggio sanitario, in: *Rotte mediterranee e baluardi di sanità: Venezia e i lazzeretti mediterranei*, (ed. N.-E. Vanzan-Marchini), Milano, 2004, pp. 69-73.
- B. RAMBERTI, *Libri tre delle cose dei Turchi*. Venice, 1539.
- G. RAVANČIĆ, Historiografija o epidemiji Crne smrti s polovice 14. stoljeća, *Povijesni prilozi* 33, Zagreb, 2007, pp. 195-214.
- C. RAVASINI, *Documenti sanitari, bolli e suggelli di disinfezione nel passato*. Torino, 1958.
- S. RAZZI, *La Storia di Raugsa*. Ragusa, 1903.
- S. ROMANIN, *Storia documentata di Venezia*. Vol. III, Venezia, 1855.
- G. SANCASSANI, Il lazzeretto di Verona è del Sanmicheli?, *Atti e Memorie della Accademia di Agricoltura Scienze e Lettere di Verona*, ser. 6, vol.10, 135/1960, pp. 365-377.
- E. SCHICK, *L'Apocalisse. Commenti spirituali del Nuovo Testamento*. Roma, 1984.
- P. SELMI, Il magistrato alla sanità, in: *Difesa della sanità a Venezia, secoli XIII-XIX*, Venezia, 1979, pp. 28-50.
- P. SKOK, *Etimologijski rječnik hrvatskoga ili srpskoga jezika*. Vol. 2, Zagreb, 1971.
- M. SMOLJANOVIĆ - S. RISTIĆ - C. HAYWARD, Historic exposure to plaque and present-day frequency of CCR5del32 in two isolated island communities of Dalmatia, Croatia. *Croatian Medical Journal* 47, Zagreb, 2006, pp. 579-584.
- M. SMOLJANOVIĆ, *Utjecaj srednjovjekovnih epidemija kuge na učestalost mutacije CCR5del32 u izoliranim populacijama hrvatskih otoka*. PhD thesis, Medicinski fakultet Sveučilišta u Splitu, Split 2007.
- A. STANIMIROVIĆ - M. SKERLEV - P. GAČINA - T. BECK - T. STIPIĆ - A. BASTA-JUZBAŠIĆ, Leprosy in Croatia in the twentieth century, *Leprosy Review* 66/1995, pp. 318-323.
- Statut grada Dubrovnika sastavljen 1272*. (Ed. A. Šoljić, Z. Šundrica, I. Veselić), Dubrovnik, 2002.
- J. L. STEVENS CRAWSHAW, *Plague Hospitals. Public Health for the City in Early Modern Venice*. Ed. Ashgate, 2012.
- S. STOJAN, *Vjerenice i nevjernice; žene u svakodnevicu Dubrovnika (1600-1815)*. Zagreb-Dubrovnik, 2003.
- S. M. STUARD, A Communal program of Medical Care, Medieval Ragusa-Dubrovnik, *Journal of the History of medicine and allied sciences* 28, Oxford, 1973, str. 126-142.
- B. STULLI, *Studije iz povijesti Dubrovnika*. Zagreb, 2001.
- L. STULLI, *Di una varietà cutanea*. Antologia di Firenze, 1826.
- N. ŠEGVIĆ, Ivan Meštrović i arhitektura, *Arhitektura* 36/37 (186-188), Zagreb, 1983-1984, pp. 2-9.
- M. ŠIMUNKOVIĆ, Dubrovnik osniva prvi karantenu. *Naše more* 3-4, Dubrovnik, 1965, pp. 143-144.
- Z. ŠUNDRICA, Arhivsko gradivo o izgradnji Lazareta na Pločama, in: *Tajna kutija dubrovačkog arhiva*, II, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 11-116.
- Z. ŠUNDRICA, Osnivanje zdravstvene komisije u Dubrovniku i njezin rad 1808. godine in: Z. Šundrica, *Tajna kutija dubrovačkog arhiva* 2, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 127-130.
- Z. ŠUNDRICA, Otrovi u Dubrovačkoj Republici, in: *Tajna kutija dubrovačkog arhiva* 2, (ed. V. Stipetić), Zagreb-Dubrovnik, 2009, pp. 153-223.
- A. ŠUPUK, Turske riječi u šibenskom govoru, *Čakavska rič* 17/1, Split, 1989, pp. 71-82.
- J. TADIĆ, *Promet putnika u starom Dubrovniku*. Dubrovnik, 1939.
- A. TENENTI, The sense of space and time in the Venetian world of the fifteenth and sixteenth centuries, in: *Renaissance Venice*, (ed. J. R. Hale), London, 1973, pp. 17-46.
- N. TOMMASEO, *Dizionario dei sinonimi della lingua italiana*. Milano, 1925.
- S. TRAKO, Značajniji vakufi na području jugoistočne Bosne / The most noteworthy waqfs in the region of south-eastern Bosnia, *Anali Gazi Husrev-begove biblioteke* 9-10, Sarajevo, 1983.
- S. TRALJIĆ, Trgovina Bosne i Hercegovine s lukama Dalmacije i Dubrovnika u XVII. i XVIII. stoljeću, *Pomorski zbornik* 1, Zagreb, 1952, pp. 341-371.
- U. TUCCI, L'economia veneziana, in: *Storia della civiltà veneziana*, (ed. V. Branca), Firenze, 1979, pp. 155-167.
- N.-E. VANZAN MARCHINI, Le pratiche di espurgo, in: *Venezia e la peste*, Venezia, 1979, pp. 112-113.
- N.-E. VANZAN MARCHINI, L'Ospedale di S. Lazzaro e Mendicanti, in: *La memoria della salute. Venezia e il suo ospedale dal XVI al XX secolo*, (ed. N.-E. Vanzan Marchini), Venezia, 1985, pp. 138-142.
- N.-E. VANZAN MARCHINI, Venezia e l'invenzione del Lazzeretto, in: *Rotte mediterranee e baluardi di sanità*, (ed. N.-E. Vanzan Marchini), Milano, 2004, pp. 17-45.
- N. VEKARIĆ, Broj stanovnika Dubrovačke Republike u 15., 16. i 17. stoljeću, *Anali Zavoda za povijesne znanosti HAZU u Dubrovniku* 29, Dubrovnik, 1991, str. 7-22.
- N. VEKARIĆ, *Vlastela grada Dubrovnika* 7. Zagreb-Dubrovnik, 2016.
- V. VINAVER, *Dubrovnik i Turska u XVIII. veku*. Beograd, 1960.
- L. VITELLESCHI, *Povijesne i statističke bilješke o dubrovačkome okrugu*. (Prir. V. Lupis), Dubrovnik, 2002.
- I. VIĐEN, Dubrovački slikar i konzervator Marko Murat, *Godišnjak zaštite spomenika kulture Hrvatske* 29-30, Zagreb, 2007, 7-21.
- I. VIĐEN, Preobrazba i razvoj pod dvoglavim orlom: crtice o dubrovačkoj gimnaziji tijekom dugog 19. stoljeća (1806.-1914.), in: *90 godina Dubrovačke gimnazije na Pločama*, (eds. K. Tolja, M. Giljača), Dubrovnik, 2017, pp. 19-49.
- L. VOJNOVIĆ, Smrt dubrovačkih stijena in: L. Vojnović, *Književni časovi*, Zagreb, 1912, pp. 155-165.
- L. VOJNOVIĆ, Vivisekcija Dubrovnika, *Javnost* 8, Beograd, 1937, pp. 135-136.
- L. VOJNOVIĆ, ... da se ne iskvare crte Dubrovnika, *Dubrovnik* 7, Dubrovnik, 1937, p. 1.
- G. VUKOVIĆ, Preobrazba Dubrovnika početkom 19. stoljeća, *Radovi Instituta za povijest umjetnosti* 24, Zagreb, 2000, pp. 35-60.
- Ž. VRBICA - M. WOKAUNN - I. JURIC, Posljednji leprozorij u Hrvatskoj, *Dubrovački horizonti* 41, Zagreb, 2009, pp. 165-177.
- N. WEILL-PAROT, La rationalité médicale à l'épreuve de la peste: médecine, astrologie et magie (1348-1500), *Médiévales* 46/2004, pp. 73-88.
- WHO (World Health Organization), Global leprosy situation, *Weekly Epidemiological Record* 92/2017, pp. 501-520.
- R. WIMMEL, *Architektur osmanischer Karawanseraien Stationen des Fernverkehrs im Osmanischen Reich*. PhD thesis, Fakultät VI Planen Bauen Umwelt der Technischen Universität Berlin, Berlin, 2016.
- M. WOKAUNN - I. JURIC - Ž. VRBICA, Between stigma and dawn medicine: the last leprosarium in Croatia, *Croatian Medical Journal* 47, Zagreb, 2006, pp. 759-766.

L. WOLFF, *Venice and the Slavs: The Discovery of Dalmatia in the Age of Enlightenment*. Stanford University Press, 2002.

S. YERASIMOS, *Les Voyageurs dans L'empire Ottoman, XIV<sup>e</sup>-XVI<sup>e</sup> siècles: bibliographie, itinéraires et inventaire des lieux habités*. Ankara, 1991.

A. YERSIN, La peste bubonique à Hong Kong, *Annales de l'Institut Pasteur* 8, Paris, 1894, pp. 662-667.

CH. YRIARTE, *Les bords de l'Adriatique et le Monténégro: Venise, l'Istrie, le Quarnero, la Dalmatie, le Monténégro et la rive Italienne*. Paris, 1878.

A. ZANNINI, L'impiego pubblico, in: *Storia di Venezia. Dalle origini alla caduta della Serenissima, IV, Il Rinascimento: politica e cultura*, (eds. A. Tenenti, U. Tucci), Roma, 1996, pp. 415-463.

E. ZACHARIADOU, The Via Egnatia under Ottoman Rule (1380-1699), in: *Halcyon Days in Crete II: a symposium held in Rethymnon 9-11 January 1994*. Rethymnon-Crete University Press, 1996.

A. ZITELLI - R. J. PALMER, Le teorie mediche sulla peste e il contesto veneziano, in: *Venezia e la peste*, Venezia, 1979, pp. 21-70.

B. ZLATAR, Sarajevo kao trgovački centar bosanskog sandžaka XVI vijeku, *Prilozi za orijentalnu filologiju* 38, Sarajevo, 1988, pp. 225-240.

Z. ZLATAR, *Dubrovnik's Merchants and Capital in the Ottoman Empire (1520-1620): A Quantitative Study*. Istanbul, 2011.



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