New 18th Century Venetian Border in Croatia and its Spatial and Demographic Implications

Borna Fuerst-Bjeliš, Ivan Zupanc

After the peace treaties of Srijemski Karlovci (1699) and Požarevac (1718) Venice extended and consolidated its possessions in Dalmatian interior the most in the history. That was the occasion of new policy of land repartition that was regulated by new agrarian laws and followed by cadastral surveys. Apart from jurisdiction change, after its establishment the border has not undergone any significant changes until today. Consequently, the interior Dalmatian territory consolidated in the 18th century as the Venetian New Acquisition, presents the base for distinctive development of cultural landscape. The topic of the research is to point to the main spatial as well as demographic implications of the new border establishment in Dalmatia.

Key words: Venetian border, Dalmatian zagora, deforestation, Croatia, 18th Century, environmental degradation, cadastral survey

INTRODUCTION – SCOPE AND METHODS

Apart from jurisdiction change, after its establishment the 18th century Venetian border in Dalmatia has not undergone any significant changes until today. Consequently, the
interior Dalmatian territory consolidated in the 18th century as the Venetian New Acquisition, presents the base for distinctive development of cultural landscape. The scope of the research is an attempt to answer the questions of the main spatial as well as demographic implications of the new border establishment in Dalmatia.

The research relies mainly on the results of the recent investigations of the environment, cultural landscape and population of central Dalmatian Zagora - border region par excellence, as well as images of the Croatian borderlands carried out by Fuerst-Bjeliš (2002, 2003), Fuerst-Bjeliš, Lozić (2003) and Fuerst-Bjeliš, Zupanc (2007). The investigations are based mainly on the original cadastral documents, kept in Zadar State Archives, as well as authentic Venetian maps of the area that documented new circumstances on the Venetian frontier that are available mainly in the cartographic monographs of Croatia and Bosnia and Herzegovina (Marković, 1993, 1998). These sources are complemented with comparative narratives of the time i.e. Fortis’ voyages in Dalmatia.

A number of earlier references can not be avoided while reseraching Dalmatia in 18th century: historical-geographical studies of Dalmatian Zagora (Friganović, 1961; Matas, 1993), as well as some aspects of pastoralism in Dalmatia (Rogić, 1957), and studies of agrarian operations and cadastre on the newly gained Venetian territories in Dalmatia (Grgić, 1962; Omašić, 1974).

**NEW BORDER AND NEW TERRITORIES IN DALMATIA UNDER THE VENETIAN RULE; AN OVERVIEW**

After the peace treaties of Srijemski Karlovci in 1699-1700 and Požarevac in 1718, the new border was transferred and established along the highest mountain ridges of Velebit, Dinara and Kamešnica in the interior area of Dalmatia. New 18th century borderline in Dalmatia has unique importance in the development of the territory. Apart from jurisdiction change, after its establishment it has not undergone any significant changes until today. Consequently, the interior Dalmatian territory consolidated in the 18th century as the Venetian New Acquisition, presents the base for distinctive development of cultural landscape.

The territory under the Venetian rule in Dalmatia prior to the extension and marked by «Linea Nani» was called then «Aquisto Vecchio», and referred only to the narrow coastal zone and islands. «Aquisto Nuovo» and «Nuovissimo», newly gained after the peace treaties of Srijemski Karlovci and Požarevac and marked by «Linea Grimani» and «Linea Mocenigo», referred to the territory in the hinterland, in Dalmatian Zagora and Boka Kotorska area.

The delimitation and demarcation of the new Ottoman-Venetian border after the Srijemski Karlovci and Požarevac peace treaties have been very precisely documented by the official Venetian cartographers. The demarcation was carried out by Venetian representatives Grimani and Mocenigo while mapping was assigned to the team of Venetian cartographers led by military engineer Giusto Emilio Alberghetti. Accordingly,
relatively numerous changes of the border from 1700 -1723 were documented the best on the Alberghetti’s and Melchior’s maps (Marković, 1993, 1998)

Alberghetti’s maps of the new 18th century border recorded both “Linea Grimani”, according to the Peace treaty of Srijemski Karlovci from 1700, and “Linea Mocenigo” added later after the Peace treaty of Požarevac.

“Linea Grimani” started from Medviđa glavica (Bear’s peak) at the Triple border point (Triplex Confinium) towards Knin, Vrlika, Sinj, Zadvarje, Vrgorac and Čitluk, encircling also the areas of Herceg Novi and Risan in Boka Kotorska. The borderline alternated straight-line and semicircular line of one hour walking distance (5 km) surrounding important towns and places.

After Požarevac peace treaty the demarcation line moved further more into the hinterland towards Imotski and Metković, including the whole Boka Kotorska with Župa and Paštrovići southwards. Although Venice lost the Low Herzegovina and two corridors (Klek-Neum and Sutorina) which divided it from the Republic of Dubrovnik, the whole continental Dalmatia was then in the possession of Venetian Republic.

Alberghetti recorded the “Linea Mocenigo” together with “Linea Grimani” on the same maps, only with the exception of Venetian losses in the Low Herzegovina where he has left only the prior “Linea Grimani”. In 1720, Melchior recorded both - old “Linea Grimani” and new “Linea Mocenigo” as they were finally approved by all sides (Fig. 1). On the Alberghetti’s supplemented map by the anonym author one can find all three lines: “Linea Nani”, “Linea Grimani” and “Linea Mocenigo” showing all Venetian territorial acquisitions in 18th century. These maps are very important documents of relatively numerous changes of the border in the time of its final constitution.

NEW VENETIAN AGRARIAN POLICY AND CADAstral SURVEY IN 18TH CENTURY DALMATIA

The extension of territory was the occasion for the new policy of land repartition that was regulated by the agrarian laws and followed by cadastral surveys (Gržić, 1962; Omašić, 1974). Two cadastral surveys are known in the course of the 18th century, following two major territorial extensions in the interior Dalmatian area. The first one is accomplished at the beginning of the 18th century, in the years of 1709-1711, following the Peace treaty of Srijemski Karlovci and the other one dates from the middle of the century, i.e. 1756 -1760 as a part of the Grimani’s agrarian law («Legge agraria Grimani»).

The territory between the the “Linea Nani” and “Linea Mocenigo” was the new Venetian acquisition in the 18th century in Dalmatia. It has become the part of the new legal system and the agrarian policy.

The basic difference between the old and new acquisitions lies in the land property. In the legal system of the old acquisition the land was private, while the new land belonged to the State. «Linea Nani», formerly political boundary, stayed still as the boundary of two legal systems. According to the agrarian legal system on the territory of the New
Fig. 1  Melchior’s map of the new border in central Dalmatia, 1720  (Facsimil from Marković, 1998)

Sl. 1.  Melchiorova karta nove granice u središnjoj Dalmaciji, 1720. (Faksimil iz Marković, 1998.)
Acquisition the Investitures regulated the questions of property and disposition. As the land was the State property, tenants were not supposed to change, divide or sell it in any way or in any case. The land was given to the autochtonous population as well as to the Morlacchi immigrants from the Dinaric hinterland. The quantity of land was strictly regulated by the Grimani’s law in a way that every newcomer / «investiti» has got two Campi Padovani⁴ of land per capita including both the head of the family and all the members of the family. Implementation of those measures of land repartition policy on the newly gained territory clearly point out to the Venetian interest in stimulating the repopulation and colonization of the area as well as the attachment to the land through the forced sedentarization of the settlements with intensification of agriculture.

As the Ottoman retreat in Dalmatia left the land deserted and uncultivated, Grimani’s agrarian policy particularly emphasized the growth of crops, tree-crops – notably olive trees and vineyards as well as keeping the paths and water in the fields in a good condition. All those obligations were implemented in the Investiture, a document (agreement) of land repartition and conditions of its use and disposition, in order to make the “Dalmatian frontier” more stable, productive and safe.

**DEMOGRAPHIC IMPLICATION: POPULATION AND MIGRATION**

According to the previous research of the 18th century Dalmatian environment, cultural landscape and population² (Fuerst-Bjeliš, 2002, 2003; Fuerst-Bjeliš, Lozić, 2003) central – Dalmatian Zagora villages appear to be generally very well inhabited. The average family size (even over 9) point to the very numerous 18th century Zagora families. Numerous families are very well documented as one of the distinctive traits of the entire Zagora in those times (Friganović, 1961, Matas, 1993). According to the cadastral data average family size increases in time - from the period of the first (1710) to the second cadastral census (1751-60) (Tab. 1). It is obviously the consequence of the process of populating the area (either planned or spontaneous) and sedentarization of settlements through the course of the 18th century.

Tab. 1 Population data of selected locations in 18th Century Dalmatian Zagora according to the cadastre, (Knin Territory)

<table>
<thead>
<tr>
<th>Area/settlements</th>
<th>Number of inhabitants</th>
<th>Number of tenants</th>
<th>Average family size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knin (1710)</td>
<td>1302</td>
<td>159</td>
<td>8,2</td>
</tr>
<tr>
<td>Total Mirillovich Zagora (1751-60)</td>
<td>753</td>
<td>80</td>
<td>9,4</td>
</tr>
<tr>
<td>Mirillovich Inf/ Polje (1751-60)</td>
<td>257</td>
<td>29</td>
<td>8,9</td>
</tr>
</tbody>
</table>

The process of gradual sedentarization in 18th century is additionally accentuated by the comparison with the analysis of environmental perception of the borderland on 17th century maps which showed the borderland as deserted, devastated, destroyed and uninhabited area (Fuerst-Bjeliš, Zupanc, 2007).

Borderlands are frequently the areas of more or less intensive migration processes. A number of early modern cartographic sources point out to the process of population change and migration in the area of borderlands. One of the good examples is the Map of the whole kingdom of Croatia by P. Ritter Vitezović (1699). The statement according to the inscription on the map that “there was a Vlach population inhabiting the deserted border area” point out, besides other different levels of meaning (Fuerst-Bjeliš, Zupanc, 2007), to the process of population change i.e. populating the border area, previously deserted by autochtonous population, by other groups, precisely Vlachs or Morlacchi. Venetian cadastral sources of its New Acquisition indicate that the borderland of Dalmatian Zagora was the area of significant migration as well. Village names and family names from the cadastre point out to the the process and direction of population migration (Fuerst-Bjeliš, 2003). There are several examples of the process of population migration directly caused by the circumstances on the «Dalmatian frontier».

Well inhabited hamlets and very high average family size in the course of the 18th century on the new Venetian acquisition in the Dalmatian interior as well as approved migration processes point to the stimulated or spontaneous repopulating and colonization of the area, forced sedentarization of the settlements by the measures of intensification of agriculture. The increased number of population and cattle together with intensification of agriculture additionally led to the process of deforestation.

**RURAL LANDSCAPE, ECONOMIC ACTIVITY AND ENVIRONMENTAL IMPACT: VEGETATION DEGRADATION, deforestation**

Elements of human environment on the Grimani cadastral map indicate the type and the position of the settlements and the forms of subsistence economy (Fig. 2). The rural landscape is characterized by the number of small, irregular patronymic village settlements or hamlets with dispersed or scattered land tenure fragments in strips and square plots and strips (type of openfield). It is related to the autarchic polyculture subsistence, combined
with grazing, and in the Mediterranean type of the environment with the practice of transhumance (Fuerst-Bjeliš, 2003).

The average size of the land parcel varies between 1 – 3 Campi Padovani (0.35 – 1 ha), which classifies them as very small land tenures. Additionally, the distribution of the parcel size frequency shows the highest frequency of the smallest land parcels in general (Fuerst-Bjeliš, 2003). The openfield system with scattered parcels that are additionally rather small in size is usually the sign of the old and spontaneous occupancy, landownership and agrarian relations, which point to the long period/tradition of dividing both families and land. However, the Investitures, according to the agrarian legal system on the territory of the New Acquisition regulate the questions of property and dispositions. Consequently, the level of dispersion and fragmentation of parcels in 18th century Dalmatian Zagora can not be mainly the consequence of dividing families and land, but primarily the consequence of the (un)possibilities of the micro-environmental conditions.

The subsistence economy of central Dalmatian Zagora shows two main activities: land cultivation in the restricted fertile zone and the pastoralism that obviously had great importance and share in the subsistence according to the numerous objects of cattle enclosures outside the hamlets and the significant pasture area. The land tenure layout marks the main fertile zone8, while the number and the distribution of cattle enclosures at the fringe of the arable land determine the intensity of pastoralism (Fig. 2). All the area apart from arable zone is used for cattle grazing.

The predominant characteristics of the Mediterranean karst, such as soil permeability, summer droughts and pastoralism as the most convenient and most adaptable form of subsistence, easily lead to the vegetation degradation (Simmons, 1998). Previous investigations showed that the main phase of the environmental manipulation have begun at the 17th and 18th centuries, as a consequence of the increased number of population and cattle caused by immigration processes. The environmental impact resulted in the intense deforestation (Fuerst-Bjeliš, Lozić, 2003, 2006).

Tab. 2 Land use structure in 18th century central Dalmatian Zagora (Apart from arable); calculated from Mirlović Zagora cadastre

<table>
<thead>
<tr>
<th>Environment / Land use</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasture</td>
<td>86</td>
</tr>
<tr>
<td>Mountain</td>
<td>1</td>
</tr>
<tr>
<td>Rock</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Mirillovich Superior Inferior Territorio di Knin; ZA Fuerst-Bjeliš, 2003
Fig. 2 Dominant forms of subsistence economy in the 18th Century, Central Dalmatian Zagora (based on Mirillovich cadastre)


The analysis of description of the land parcels border in the Grimani cadastre points out that all the area apart from arable zone is a pasture with some rocky karst, without any wooded surfaces. Degraded forest cover and deforestation as the general environmental feature of the 18th century Dalmatia is very well documented in other comparative contemporary narratives as: «horrible rocky desert», scattered bushes, no trees», «rocky mountains» etc. (Fortis, 1984).

CONCLUSIVE REMARKS

The main implications of the new border establishment in Dalmatia are related primarily to the repopulating and colonization of the area, migrations, stimulated sedentarization of settlements and intensification of agriculture, which led to the significant environmental impact as well.

Prior to the stabilization of border in the 18th century, the borderland was generally perceived as deserted and depopulated. In the course of 18th century, the sources point out to the immigration of (Morlacchi or Vlach) population to the region, increased number of population and the average family size. According to the cadastral sources it is possible to trace the evolution of the basic settlement network. Recognized patronymic hamlets from 18th century, appear a century later in the first official population census (1857) and persist until today under the same names.

Implementation of new policy of land repartition on the newly gained territory clearly point out to the Venetian interest in stimulating the repopulation and colonization of the area as well as the attachment to the land through the stimulated sedentarization of the settlements with intensification of agriculture. As the 18th century border in Dalmatia, which is a border region par excellence, has not undergone any other significant changes, the process of gradual sedentarization in 18th century resulted in the development of distinctive cultural landscape. The stability of the border favoured the stability of agriculture as dominant economic activity, and assured the continuity of settlement development. As Mediterranean karst environment in relation to the pastoralism, as the most convenient and most adaptable form of subsistence, lead to the vegetation degradation, increased number of population and cattle caused by immigration processes resulted in the intense deforestation. Degraded forest cover and deforestation appear as the general environmental feature of the 18th century Dalmatia.
NOTES


2 The peace treaty between the Habsburg Monarchy and the Ottoman Empire was signed on January 26th, 1699, while the peace treaty between the Ottoman Empire and the Venetian Republic was signed on February 7th, 1700. The Požarevac Peace Treaty was signed on 21st of July, 1718; while the delimitation was made in 1923.

3 *Triplex Confinium*, triple border point in 18th century, a meeting point between the borders of Ottoman Empire, Habsburg Monarchy and Venetian Republic on the Croatian territory, in the vicinity of Knin.

4 The most common measure in the greater part of Dalmatia, presumably taken from Italy. One Campo Padovano is equivalent to 0.36 ha or 3,655 m².

5 Based on the original documents of the time: the Venetian cadastres from the beginning and from the middle of the 18th century and Investitures; see bibliography.

6 Present name of the village is “Mirlović” (Zagora/Polje). Consequently, it is used as such through the text of the paper.

7 „Terra deserta olim nunc a Valachis habita“.

8 Which corresponds to the Eocene soft conglomerate sediments (Fuerst-Bjeliš, 2003).

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Topographical map 1: 25 000, Surveying and Mapping Authority of the Republic of Croatia, 1977-79

SAŽETAK

Prostorne i demografske implikacije nove mletačke granice u Dalmaciji u 18. stoljeću

Borna Fuerst-Bjeliš, Ivan Zupanc

Po mirovnim ugovorima 1699. (Srijemski Karlovci) i 1718. (Požarevac) Mletačka je republika proširila svoj posjed u Dalmaciji najdublje u unutrašnjost. Tom je prilikom donijela novi agrarni zakon, provela parcelaciju i katastarsku izmjenu. Granica utvrđena u 18. stoljeću nije doživjela naknadnih bitnih izmjena, te područje unutrašnje Dalmacije (Zagora) konsolidirano u okviru mletačke Nove stečevine predstavlja osnovu karakterističnog razvoja kulturnog pejzaža. Cilj je ovog istraživanja ukazati na temeljne prostorne i demografske implikacije promjene granice u Dalmaciji.

Rad se većim dijelom oslanja na recentna istraživanja okoliša, kulturnog pejzaža i stanovništva središnje Dalmatinske Zagore, kao i na rezultate istraživanja percepcija hrvatskog graniča.
Istraživanja se temelje prvenstveno na izvornoj mletačkoj katastarskoj dokumentaciji iz 18. stoljeća, pohranjenoj u Državnom arhivu u Zadru, kao i na autentičnim mletačkim kartama koje dokumentiraju nove odnose na novoj mletačkoj granici u Dalmaciji, a dostupne su kao faksimili u kartografskim monografijama Hrvatske i Bosne i Hercegovine. Kartografski izvori komparirani su s narativnim izvorima, npr. Fortisovim zabilješkama s putovanja po Dalmaciji.

Glavne implikacije nove granice u Dalmaciji 18. stoljeća prvenstveno se odnose na kolonizaciju, naseljavanje, migracije stanovništva, te poticanu sedentarizaciju naseljenosti kroz mjere intenzifikacije poljoprivrede. Ovi su procesi doveli i do značajnih promjena okoliša.

Do stabilizacije granice u 18. stoljeću, granično je područje percipirano kao opustošeno i pretežno nenaseljeno. Izvori ukazuju na migraciju (Morlačkog ili Vlaškog) stanovništva tijekom 18. stoljeća, naseljavanje regije, povećanje broja stanovnika, te prosječne veličine (brojnosti) zagorske obitelji. Prema podacima katastarskih izvora moguće je trasirati nastanak i razvoj osnovne mreže naselja. Zabilježeni patronimički zaseoci u 18. stoljeću, bilježe se i stoljeću kasnije u prvom službenom popisu stanovništva (1857.), a opstoje i sve do danas pod istim nazivima.

Implementacija mjera nove politike podjele zemlje na novoosvojenom teritoriju jasno ukazuje na mletački interes u stimulaciji naseljavanja regije, kao i na poticanje vezanosti uz zemlju kroz obveze intenzifikacije poljoprivrede. Budući da se granica ustanovljena u 18. stoljeću u Dalmaciji – graničnoj regiji par excellence, nije kasnije više bitnije mijenjala, proces postupne sedentarizacije naseljenosti u 18. stoljeću rezultirao je razvojem karakterističnog tipa kulturnog pejzaža. Stabilnost granice pogodovala je stabilnosti poljoprivrede, kao dominantne gospodarske aktivnosti, te je osigurala kontinuitet naseljenosti i razvoja naselja.

Budući da sredozemni krški tip prirodne sredine u sprezi sa stočarstvom, kao najpogodnijem obliku egzistencijalnog gospodarstva vrlo lako vodi degradaciji vegetacije, povećanje brojnosti stanovnika i stoke procesima imigracije, doveo je do intenzivne deforestacije. Degradirani šumski pokrov i deforestacija opća su karakteristika okoliša Dalmatinske Zagore u 18. stoljeću.

Received (Primljeno): 2007 - 06 - 27
Accepted (Prihvaćeno): 2007 - 10 - 30