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Elri Liebenberg  
Peter Collier  
Zsolt Gyözö Török *Editors*

# History of Cartography

International Symposium of the ICA,  
2012



 Springer

Elri Liebenberg · Peter Collier  
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Editors

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# Preface

This volume comprises most of the research papers presented at the 4th International Symposium of the ICA Commission on the History of Cartography which took place at the Eötvös Loránd University in Budapest, Hungary, on June 28–29, 2012. As such this is the second volume in a series which has been made possible through the partnership between the International Cartographic Association (ICA) and the international publishing house of Springer-Verlag.

The ICA was founded in 1959 and, as the world authoritative body on cartography, it has, as its mission, the promotion of the discipline and profession of cartography on as wide a scale as possible. The ICA is basically a technical organisation of professional cartographers who are concerned with current aspects regarding researching, compiling and producing maps. As historical maps and historical cartographic material are in integral part of any modern cartographic database, the ICA also maintains a keen interest in the research on the evolution of modern cartography. In its effort to promote this interest, the ICA Commission on the History of Cartography considers it its responsibility to encourage the active involvement of all interested researchers and institutions in this field.

The history of cartography covers a vast field of knowledge and includes all maps and map-like graphics made by humankind since prehistoric times. Map compilation and map-use today are, however, seldom dependent on maps which were produced before early modern times. With this point in mind, the ICA Commission decided to concentrate on the history of cartography since the Enlightenment and, more specifically, on cartographic developments during the nineteenth and twentieth centuries.

The 4th International Symposium of the ICA Commission on the History of Cartography had, as its general theme, “Exploration—Discovery—Cartography”. The nineteenth century was a period characterised by a quest for empirical knowledge with regard to the geography of the earth, marked by voyages of exploration by sea and land. The exploration undertaken by governments, institutions and individuals inevitably led to discovery as well as to mapping which filled up the empty white spaces so common on maps of the eighteenth century. While contributions towards this general theme were encouraged, the Symposium was also open to relevant research on cartographic endeavours other than exploratory mapping. At the symposium in Budapest 24 papers were presented, and this volume contains the

revised and edited version of twenty of these. Some papers could unfortunately not be included, and because of limited space, none of the eight poster presentations could be published.

We would like to acknowledge our gratitude to the Eötvös Loránd University in Budapest, and especially to the Head of the Department of Cartography and Geoinformatics and Secretary-General of the ICA, Prof. László Zentai, for the logistic support he rendered during the Symposium. We are also indebted to the Director of the University Library, Dr. László Szögi, and to Dr. Máté János Bíbor and his colleagues at the Library's Department of Special Collections, as well as to Mrs. Marianna Nyitrai and her staff, for the map exhibition and reception in the library building. The symposium participants are grateful to Ph.D. students Domonkos Hillier, Ádám Bérces and János Jeney for their technical assistance throughout the meeting. Finally, we gratefully acknowledge the kind assistance of Ms. Agata Oelschläger of Springer-Verlag towards the production of this book.

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# **Part I**

## **Europe**



# Redefining Imperial Borders: Marking the Eastern Border of the Habsburg Monarchy in the Second Half of the Eighteenth Century

Madalina Valeria Veres

**Abstract** In the eighteenth century, Eastern Europe became the stage for concurrent imperial expansion projects. The Habsburg-Russo-Ottoman military confrontations plagued the Danubian principalities of Moldavia and Wallachia, located immediately next to the eastern borders of the Habsburg Monarchy. Despite their alliance with Catherine the Great, the Habsburg rulers Maria Theresa (1740–1780) and Joseph II (1765–1790) witnessed fearfully from their Eastern province of Transylvania the Russian encroachment into the Ottoman lands. At such a time, Habsburg interests in the area had to be incessantly negotiated with their powerful rivals, and cartography became a strong weapon in defending Habsburg territory and even furthering expansionist projects. Historians have shown how the depiction of political borders on maps constituted an early-modern development, and how the concept of “border” acquired a linear visual expression with the help of cartography. In this paper I examine this transformation of the eastern border of the Habsburg Monarchy, namely the border of Transylvania with Moldavia. Using archival documents found in Vienna and Paris, I focus on Habsburg explorations and mapping enterprises from the 1750s to the mid-1770s on their eastern border. Whereas the 1750s maps of Stephan Lutsch von Luchsenstein encompassed the first detailed visual representation of the border regions, by the 1770s the Habsburgs had put into place an impressive system of imperial landmarks and had even infringed into Moldavian territory. I argue that cartographic representations of these borders gave weight to Habsburg pretensions in the region.

## 1 Introduction

On 23 December 1769 an unwanted visitor disturbed the guard watching over the eastern border of the Habsburg Monarchy. The engineer Phillip von Möller, employed by the Russian army, had come all the way to the Carpathian Mountains separating the Habsburg province of Transylvania from the Principality of

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Moldavia to investigate the accurate position of the border (HHStA StK, *Noten von dem HKR*, Karton 82, Fasz. 1: 16). Möller's seemingly innocent questions provoked a panicked reaction from the Habsburg side, and by 7 January 1770, Emperor Joseph II had already received a detailed report about this incident. The reason for such a commotion was the bold step the Habsburg Monarchy had taken in 1769, when Emperor Joseph II and Empress Maria Theresa had decided to push forward the Transylvanian border infringing on the lands of the Danubian Principalities, Moldavia and Wallachia. Taking advantage of the war between the Russians and the Ottomans, the Habsburgs transformed their decades-old claims into reality and acquired better strategic positions in the Carpathian Mountains.

At a time when European empires were striving to mark their borders more clearly and eliminate enclaves, the Habsburg Monarchy was an active participant in this process. However, the ideal frontiers the Habsburgs tried to attain did not go unchallenged and the competing Russian, Ottoman and Habsburg claims for domination met in the lands of the Danubian Principalities (Aksan 2007; Hochedlinger 2003; Roider 1982). In my paper I examine how despite these strong challenges, the Habsburg Monarchy managed not only to demark the border of Transylvania with Moldavia to their advantage, but also to claim successfully what was in fact the northern section of the Principality of Moldavia.

I argue that in addition to the international context which favoured the Habsburg claims, cartographic representations and geographic descriptions of the border regions gave weight to and helped finalize Habsburg territorial pretensions by 1775. Indeed, starting in the early 1750s, the Habsburg engineers accumulated a corpus of maps and other documentary evidence to support a redrawing of the Transylvanian border towards Moldavia. The correspondence between the State Chancellery and the Aulic War Council in Vienna addressed the mapping projects coordinated by the War Council at the borders of Transylvania and the efforts of the military to mark the eastern border of the Habsburg Monarchy. The reports of the French ambassadors in Vienna analyzed in depth the Habsburg actions in their eastern lands and their expansion attempts; moreover, French diplomats of the time often obtained copies or information about secret imperial Habsburg orders and reports, thus offering further insight into the Habsburg policy.

Some scholars have mentioned in their work the existence of border maps for Transylvania and discussed how the 1775 Habsburg annexation of the northern part of Moldavia, Bukovina, was preceded by cartographic operations (Hochedlinger 2003: 356–358; Ceașu 1998: 52–59; Paldus 1919). Moreover, in the context of the formation of the Habsburg military border in Transylvania starting with the second half of the eighteenth century, scholars have addressed the incessant border disputes the inhabitants of Transylvania and the Habsburg authorities had to settle with the Danubian Principalities (Göllner 1973; Micu 1943). However, none of these historians focused on the relationship between the map-making operations and the marking of the eastern border of Transylvania, which kept Habsburg military engineers engaged from the 1750s to the 1770s. Using the history of cartography's methodology can bridge this gap.

John Brian Harley revolutionized the history of cartography by encouraging scholars to read maps as they would other historical documents, to go beyond their purely

illustrative role (Harley 1990: 3). Furthermore, Harley built on Foucault's discussion of the relationship between power and knowledge, and stressed the importance of maps as tools furthering the power of a state (Harley 1988: 58–59; Harley 2002: 57–58). However, Harley's approach has been nuanced by recent historians of cartography, who did not simply admit that comprehensive maps served state interests without being challenged (Edney 1996: 189). Indeed, as my paper shows, imperial policies often conflicted with their neighbours' claims and their own subjects' ambitions.

Paul Mapp's recent book reveals the importance of analyzing cartography in a trans-imperial context. This historian shows the impact geographical perceptions of the western part of North America had on eighteenth century imperial diplomacy. In their "race towards the West", the British, French, and Spanish empires relied heavily both on indigenous peoples' and their European competitors' geographic knowledge (Mapp 2011). Following in Mapp's footsteps, this paper examines how cartography influenced the redrawing of the eastern border of the Habsburg Monarchy, while also bringing to light the intense negotiations the Habsburgs had to pursue with not only the Ottoman and Russian Empires, but also with the local inhabitants of the principality of Moldavia.

Historians of cartography examining the maps commissioned from Vienna in the second half of the eighteenth century have usually focused on one province of the Monarchy and they have rarely made connections with other parts of the empire. In the case of the imperial border delimitation, scholars have thoroughly examined this process for the Austrian Netherlands. As Nelly Girard d'Albissin demonstrated, the border between France and the Austrian Netherlands was marked clearly as a consequence of the treaties signed in 1769 and 1779 between the Bourbons and the Habsburgs. This legal historian shows how increased map-making accuracy was used to trace the borders while, at the same time, the existence of advanced map-making technology encouraged the border surveyors to draw clearer frontier lines (d'Albissin 1970; Dubois 2001; Lentacker 1974; Watelet 1992). Indeed, the engineers' ability to take exact measurements and make maps, thus tracing a precise line of demarcation, led to further negotiations between Paris and Vienna and the elimination of additional enclaves. However, whereas until now scholars have treated the demarcation of the border between France and the Austrian Netherlands in isolation, I will show that a similar process occupied the Habsburgs in the 1770s in their efforts to mark a frontier line towards the Danubian Principalities. These two cases demonstrate that Maria Theresa and Joseph II had a clear programme for defining the contours of their empire.

## **2 The First Detailed Maps of the Border Between Transylvania and Moldavia**

In the sixteenth and seventeenth centuries, Ottoman control over Transylvania posed a significant threat to the security of the Habsburg Monarchy, and this Principality maintained a high geopolitical value in the Habsburg-Ottoman confrontation (Ingrao 2000: 65). However, towards the end of the seventeenth century,

the Habsburgs gained the upper hand in the area against the Ottomans. By signing the 1699 Treaty of Karlowitz, the Ottoman Empire confirmed the Habsburg military's conquest of Hungary and Transylvania, and this treaty brought with it the desire to regulate the new imperial borders (Magyari 2009: 343–355). As Virginia Aksan contends, the Ottomans had become potential partners in regulating the exact position of borders, as in the eighteenth century, the rulers in Constantinople strove for fixed boundaries and “permanent” peace (Aksan 2006: 76). Indeed, by 1741 the Habsburgs had sealed an agreement with the Ottomans which fixed the border between the Principality of Moldavia and the Principality of Transylvania high in the Carpathian Mountains, on the watershed (Porcius 1928: 14). However, such a vague principle did not easily translate into a clear frontier line, and it was impossible to enforce a strict separation between the inhabitants of Moldavia and Transylvania, who often trespassed into each other's lands.

Due to the nonexistence of one accepted border between Transylvania and Moldavia, the early 1750s witnessed the creation of competing border maps representing the interests of the Moldavians and Transylvanians. In 1750, the Court in Constantinople, acting as a representative for the Moldavian prince's interests, sent to Vienna a map of the border between Moldavia and Transylvania, supporting Moldavian claims (KA KPS, B IX c 744). Vienna's reaction was immediate: an Imperial Order was sent from Vienna to the General Commander of Transylvania, Count Maximilian Ulysses von Browne, to obtain an accurate survey and border map, together with other documentary proofs that would support the Transylvanian pretensions in the border regions shared with Moldavia. Browne put in charge of this mission Captain Stephen Lutsch von Luchsenstein, a Saxon from Transylvania. Whereas von Luchsenstein finished the required map by 1751, he took six more years to finalize a detailed memoir in which he attacked the map sent from Constantinople, while also discussing all the controversial points on the border and trying to demonstrate the Habsburg claims in the area (KA KPS, B IX c 744).

Luchsenstein raised serious doubts about the accuracy of the map supporting Moldavian claims, based on its inaccurate representation and incongruities between the map and on-ground toponyms. Throughout his memoir Luchsenstein gives numerous examples such as his claim on page 2, which states that the villages Vuolidania, Pitrechun, Karavul Cskivarda and others, and the mountains Tzapaf, Arhir, Kosder cannot be found anywhere in reality except on the Moldavian map (KA KPS, B IX c 744). In addition to erroneous names for villages and geographic features, the Habsburg officer also considered this map closer in style to a painting than to an actual accurate land survey, and accused the cartographer of having used only oral reports to draw it. Luchsenstein's assessment criteria are congruent with eighteenth-century ideas on what made a map accurate and “scientific”. In the second half of the eighteenth century, European scientists came to consider topographical surveys based on geometrical frameworks of triangulation and the use of special instruments to measure distances as the necessary prerequisite of “good” maps (Edney 2009: 41–42). Knowing the represented land first-hand had become a necessary condition for the reliability of a cartographic source and, as map-making became a science, using symbols to codify the landscape had become the norm (Godlewska 1999: 44–49).

Despite a close scrutiny of the 1782–1783 inventories of the War Archive's Map Collection (KA HKR 1782 34 105; KA HKR 1783 34 60), the only trace of the 1751 Moldavian map I have recovered in the Viennese archives was located in the title of the counter-map drawn by Luchsenstein in 1751. However, whereas I could not find this Moldavian map, I have retrieved a 1755 map which helps to illustrate the type of cartographic representations the Habsburgs challenged in the 1750s. This map, labelled in the 1782 map collection inventory as a "Turkish drawing", contains a bilingual explanation, in German and Ottoman Turkish, which suggests that its audience was the Habsburg and Ottoman Courts. The map's explanation indicates that it is a representation of part of the contested border between Transylvania and Moldavia, and it claims that the goal of the mapmakers was to put a stop to the Transylvanians' abuses in the area by clarifying the real position of the border (KA KPS, B IX c 748).

Luchsenstein's critique of the 1751 Moldavian map's graphic representation could also apply to this 1755 map. As seen in the fragment below, the representation supporting the Moldavian claims clearly did not meet the criteria of the emerging scientific conventions mentioned above. In depicting the town Kiesti, the mapmaker disregarded the natural proportions of buildings in relationship to landscape features and vegetation, such as mountains and trees. Moreover, the image does not include the road network and the placement of buildings in relationship to each other; the viewer only sees a cluster of houses and churches (KA KPS, B IX c 748) (Fig. 1).

In his 1757 memoir Luchsenstein does not only attack the scientific quality of the Moldavian map, but also refutes the principle according to which the border should traverse the peaks of the mountains and take into account the watershed as a geographical entity dividing the two territories. The Habsburg military's main argument against this principle is the Moldavians' inconsistency regarding their border delimitation, as the border separating Moldavia from Poland and Wallachia does not enforce the watershed rule. A section of the Moldavian and Polish border follows the flow of

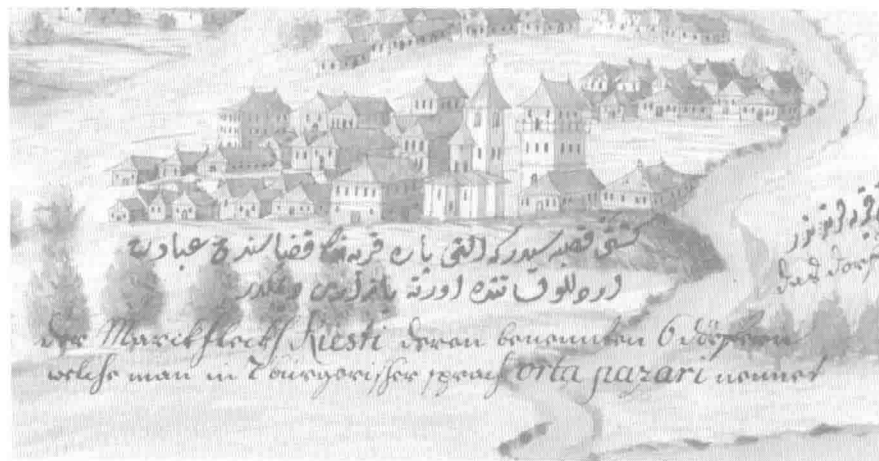


Fig. 1 Fragment from the 1755 map showing the Moldavian pretensions at the border with Transylvania (Courtesy of the Kriegsarchiv, Vienna) (KA KPS, B IX c 748)

stream, while part of the border dividing Moldavia and Wallachia is located on the Jabola Pudna River. Moreover, Luchsenstein attacks the validity of the five written pieces forwarded to the Court in Vienna by the Moldavian Prince, and which included the evidence for the Moldavian pretensions in the border area. I have not located these five documents in the archives in Vienna, but they are discussed in Luchsenstein's memoir (KA KPS, B IX c 744). Using historical documents, such as the ones gathered during the 1642 border investigation coordinated by the Transylvanian prince George Rákóczi II and the Moldavian prince Vasile Lupu, Luchsenstein presents the Habsburg pretensions as a just enforcement of the ancient border between Transylvania and Moldavia. Moreover, the cartographer argues that Hungarian toponyms as exhibited by a long list of mountains and rivers located in the contentious border regions denote those areas as Transylvanian (KA KPS, B IX c 744).

In contrast to the map discussed above, Luchsenstein presented an alternate representation of the border by focusing on the landscape and following the mountainous chain as a guideline. This cartographer included in his map three border lines: the so-called ancient border between Transylvania and Moldavia, the border enclosing the Transylvanian possessions at the time, and the "unlawful Moldavian pretensions" (KA KPS, B IX c 744) (Fig. 2).

As can be seen in Fig. 2, the mapmaker marked the various moments of what he calls the Moldavian usurpations, from 1727, 1733, 1734, 1735 and 1746 (KA KPS, B IX c 744). Numbers from 1 to 100 mark the points of interest located on the three competing border lines. These numbers helped Luchsenstein to organize his exposé, as the Habsburg officer included in the memoir more geographic information about all these points of interest.

For example, Fig. 3 includes the Borda Mountain, denoted by number 39. It is plausible to state that the documents accompanying the map supporting the Moldavian pretensions mentioned a stone located on the Borda Mountain, which had been incised with a Moldavian coat of arms, as Luchsenstein devotes a long paragraph to counteracting this declaration. Luchsenstein seems to have seen the above-mentioned stone first hand as he describes the signs as the mere doodles of idle herdsmen, and in no way reminiscent of an official coat of arms (KA KPS, B IX c 744).

As proven by Luchsenstein's memoir, the Transylvanian side had a strong documentary-base supporting their border claims. However, probably due to the turmoil created by the Seven Years' War (1756–1763), the Habsburg monarchs had to wait until the 1768–1774 Russo-Ottoman war to transform their intentions in the area into actions.

### **3 The 1768–1774 Russo-Ottoman War and the Habsburg Border Markers**

The official neutrality of the Habsburgs in this Russo-Ottoman conflict did not translate into actual non-involvement. Maria Theresa and Joseph II knew that at any point the conflict might overflow to move inside their borders and they had to





**Fig. 2** The 1751 Luchsenstein Map of the border between Moldavia and Transylvania (Courtesy of the Kriegsarchiv, Vienna (KA KPS, B IX c 744))