

AN OUTSTANDING PERSON OF THE 1ST MILITARY SURVEY: MIHÁLY LAJOS JENEY

Annamária JANKÓ

Head of Library and Maproom
War History Institute and Museum, Budapest, Hungary
janko.annamaria@hm-him.hu



JENEY MIHÁLY LAJOS, AZ I. KATONAI FELMÉRÉS KIEMELKEDŐ ALAKJA

Összefoglalás

A XVIII. század második felében Európa fejlett államaiban megindul a részletes topográfiai felmérés. Mária Terézia a hetéves háborút (1756–1763) követően rendeli el az Osztrák Birodalom összes tagországának, köztük Magyarországnak a felmérését, amely a Birodalom teljes területén 1763–1787-ig folyt, összesen 3324 1 : 28 800 méretarányú és 275 1 : 11 520 méretarányú (az Osztrák Németalföld területén) szelvény készült el 21 ország ill. tartomány részfelmérésének eredményeképpen. Történelmi Magyarország területét 1950 szelvény fedi. A színes, kéziratosszalványok egy eredeti és egy másolati példányban készültek, saját korukban titkosak voltak, így a polgári kartográfiára viszonylag kis hatással lehettek, az utókor számára viszont pótolhatatlan forrásértéket jelentenek.

Az eredeti, színes felmérési szelvények a bécsi Hadilevéltárban találhatóak. A Hadtörténelmi Intézet és Múzeum Térképtárában az eredeti szelvények színes, eredeti méretű fénymásolatai vannak meg a teljes Magyar Királyság, az Erdélyi Nagyfejedelemség és a Temesi Bánság területére.

Az erdélyi születésű Jeney Mihály Lajos az I. felmérés egyik vezető alakja. A Császári-Királyi Főszállásmesteri Karban szolgált, kezdetben őrnagyként, majd vezérőrnagyi rangig vitte. Résztvevője és irányítója volt a következő felméréseknek: Erdélyi Nagyfejedelemség, Horvát–Szlávon Királyság, Horvát–Szlávon Katonai Határőrvidékek, Belső-Ausztria. Nevéhez fűződik az Erdélyi Nagyfejedelemség területére elkészült 1 : 96 000 méretarányú levezetett térkép készítése is.

Summary

The developed countries of Europe started their detailed topographical surveys in the second half of the 18th century. The first detailed topographical survey of the territory of the Hapsburg Empire between 1763 and 1787, including Hungary, was ordered by Empress Maria Theresa after the Seven Years War (1756–1763). The full survey took place between 1763 and 1787 and as a result of 21 different surveys of countries and regions the number of sheets is 3324 in scale 1 : 28 800 and 275 in scale 1 : 11 520 (for the territory of Austrian-Netherlands). The territory of Historical Hungary is covered by 1950 sheets.

The coloured manuscript sheets were secret in their time and were made in one original and one copy form, consequently they could hardly exert influence on the contemporary civil cartography but mean irreplaceable source for the posterity.

The original coloured sheets, as source materials, are in the Vienna Kriegsarchiv. The coloured and original size copies of the source sheets of the whole territory of the Hungarian Kingdom, Transylvania and the Banat of Temes can be found in the Maproom of the War History Institute and Museum, Budapest.

One of the leading persons of the 1st military survey was Mihály Lajos Jeney. He served at the Imperial-Royal Staff of the Logistics first as major and as major general at the end. He was partaker or leader of the surveys of Transylvania, the Croatian–Slavonian Kingdom, the Military frontier districts of Croatia–Slavonia, Inner-Austria. Jeney is the author of the derived map of Transylvania at the scale of 1 : 96 000 as well

First military survey

The developed countries of Europe started their detailed topographical surveys in the second half of the 18th century. The first detailed topographical survey of the territory of the Hapsburg Empire between 1763 and 1787, including Hungary, was ordered by Empress Maria Theresa after the Seven Years War (1756–1763). As the survey itself was realized under the reign of Emperor Joseph II, it is often called as „Josephinische Aufnahme“. Owing to primarily military interests, the work was performed by soldiers, so it is often called as „military survey“. In the lack of mapping organization, the surveys were done by officers of Kaiserlich–Königlich Generalquartiermeisterstab (Imperial–Royal Staff of the Logistics) together with officers commandeered from their regiment. The surveys were commenced in countries and regions.

The scale of survey is 1 Wiener Zoll (Vienna inch): 400 Wiener Klafter (Vienna fathom), 2.63 cm: 758.59 m that is 1 : 28 800. The size of one sheet is 24 × 16 Wiener Zoll that is 63 × 2 cm covering in practice an area of 18 × 12 km.

The full survey of Austrian Empire took place between 1763 and 1787 and as a result of 21 different surveys of countries and regions the number of sheets is 3324 in 1 : 28 800 scale, and 275 in 11 520 scale (on the territory of Austrian-Netherlands). The territory of Historical Hungary is covered by 1950 sheets.

The chronology of surveys on the territory of Historical Hungary

Territory	Year	Number of sheets
Temesvarer Banat (Banat of Temes)	1769–1772	208
Grossfürstenthum Siebenbürgen (Transylvania)	1769–1773, 1773–1774	280+103
Banalgrenze (Military frontier district of Banat)	1774–1775	25
Karlstädter Grenze (Military frontier district of Karlovac)	1775–1777, 1791–1794	64, 11
Slavonische Grenze (Military frontier district of Slavonia)	1780–1782	51
Deutsch-Banatische Grenzregiment (Military frontier district of German Banat)	1780–1784	33
Walachisch-Illyrische Grenzregiment (Military frontier district of the Banat of Moldavia-Walachia)	1780–1784	47
Warasdiner Grenze (Military frontier district of Warasdin)	1781–1782	26
Provincial Slavonien (Slavonia)	1781–1783	66
Königreich Ungarn (Hungarian Kingdom)	1782–1785	965
Provincial Croatien (Croatia)	1783–1784	71

The coloured manuscript sheets were secret in their time and were made in one original and one copy form. Consequently, they could exert relatively little influence on the contemporary civil cartography but mean irreplaceable source for the posterity.

The country-descriptions, belonging to the surveys, give the explanation and description of those facts that can not be presented by the maps.

The original coloured sheets, as source materials, are in the Vienna Kriegsarchiv (Archives for Military Maps). The coloured and original size copies of the source sheets of

the whole territory of the Hungarian Kingdom, Transylvania and the Banat of Temes can be found in the Maproom of the War History Institute and Museum, Budapest.

Role of Mihály Lajos Jeney in the 1st military survey

The Hungarian origin of Jeney was unknown for a long time; he was believed to be a Frenchman as he served in the French army. Even the double Christian name was disturbing: French archival sources mention him as Lois (Lajos) while the Austrian sources call him Michael (Mihály). In the related literature on the 1st military survey (Paldus) no Christian name is mentioned, only Jeney alone with the given military rank and even there is no other name but only Jeney on the maps. József Zachar has clarified the situation in his publication in 1986. He translated and published Jeney's book published in the Hague in 1759: *The Partisan, or the Art of Making War in Detachment*. Based on Jeney's own publications and archives sources Zachar describes the personality of the author in the foreword of his book.

Before starting the 1st military survey Jeney had a long and serious military experience. Supposedly he was born in a protestant, noble Transylvanian family in 1723 or 1724; he began his military career as a hussar probably in the Turkish War in 1737–1739. In the Austrian War of Succession he served as a non-commissioned officer with the Baranyay Hussars from where he went over to the French. According to archives in 1747 there was a proposal for his appointment as a lieutenant. Between 1747 and 1753 he served at the Bercsényi Hussar-Regiment. From 1754 he is a geographer-engineer officer at the French Army of the Rhine: this is the first evidence on his cartographic background.



Figure 1. The territory of the 1st military survey of the Hapsburg Empire

In the 18th century, France was the leader of topographic mapping; a geographic-engineer body was formed, and mapping was taught in many institutions at high level (from 1747 at the École des Ponts et Chaussées [bridge and road-building], from 1748

at *École du Génie Militaire* [artificer-engineers]). Besides, in the military academies the teaching of cartography had a serious role. Even the first topographical map series, the so-called Cassini „*Carte géométrique de la France*” – Map of France – based on survey was made in France between 1750–1793, on a scale 1 : 86 400 and 182 line-engraved printed sheets. However, there is no evidence if Jeney was a student of any institute of cartography, his mapping knowledge – owing to the local spirit – was developed in France, though his 7 sketches in his book „*Partisan*” show experience in cartography. Following the French service at the Rhine from 1758 September to 1763 he was captain of the engineers in the army of Prussian king. According to the Vienna *Kriegsarchiv* he was appointed to major at the *Generalquartiermeisterstab* in August 29, 1768. He was assigned in the staff that made the surveys, so that was the beginning of his outstanding career in the 1st military survey.

From the member countries of the Empire the survey of Silesia and Bohemia was completed by Colonel Fabris and the survey of Moravia by Major Elmp between 1763 and 1768. The survey of Transylvania came after.

Survey sheets of Transylvania

Owing to the danger of Tartar invasion from Transylvania in 1769 Colonel Fabris together with his subordinate officers (officers from *Generalquartiermeisterstab* included Jeney and his cadets and commanded officers on the locations) were appointed by the *Generalquartiermeisterstab* to survey the borderland from Moldavia–Walachia, consequently Transylvania itself. The 1769 decision on military survey and country-description was extended to economic details and recording the settlements as well. The scale of survey is 1 : 28 800 applying plane table and „*a la vue*” including the results of economic survey. In 1772 Major Jeney was appointed to the head of survey. On 1st November 1772 he reported to General Preys, the military commander in Sibiu (Nagyszeben), Transylvania, that the sketches of the survey on the whole territory were ready and would be copied in winter. By July 1773 the survey together with four volumes of country-description were completed in 280 sheets plus one original coloured summary-sheet. The original coloured manuscripts contain only numbering but no other data (e. g. the names of surveying officers) so there is no information which sheet was made by Jeney. The second series has a legend on the cover (*Erklärung der Farben, Zeichen, und Buchstaben*) that is interesting, because no unified legend has been made to the 1st military survey.

Crown Prince Joseph, future Emperor Joseph II in 1773 travelling in Transylvania experienced that the sheets at the borders of Moldavia–Walachia are not accurate enough, so he ordered the surveying local officers, headed by Major Jeney, to accomplish the necessary reparations. This additional new border-survey was completed at the end of 1774 first at the scale 1 : 57 600, 103 coloured manuscript sheets, later enlarged to 1 : 28 800 for the compliance of the Transylvanian sheets. According to the summary-sheet the borderline sheets were joined to the Transylvanian sheets in East and South direction, the red numbering indicates the Transylvanian, the black numbering the additional border-sheets.

Jeney is the author of the derived map of Transylvania at the scale of 1 : 96 000 that was made soon after the Transylvanian survey (1775) including the borders of Moldavia–Walachia. The hand-made, coloured sheets are 30% reduction of the original survey sheets containing all possible details. The full size of the map is 410 × 161 cm in four parts. The only original is in the Vienna National Library and there is a coloured photocopy of it in the Maproom of the War History Institute and Museum, Budapest. Curiously wrought on the left upper side, under the title is a mapping scene (rare at military surveys) on the Moldavian territory – a telescope-rule, pole, soldiers in uniform (on horse and foot).

Other survey works of Jeney

After surveying works in Transylvania Jeney conducted the surveys in the Croatian–Slavonian Kingdom and in Military frontier district of Croatia–Slavonia (constituting: Karlstädter Grenze, Warasdiner Grenze, Banalgrenze, Slavonische Grenze). These surveys were very important as they were reorganized after 1745 following the liberation after the Peace of Karloca.

The 1st military survey followed the above distribution. The survey of the Military frontier district of Croatia–Slavonia constitutes four independent parts: the earliest is Banalgrenze (1774–1775) then Karlstädter Grenze (1775–1777), Slavonische Grenze (1780–1782) and ended with Warasdiner Grenze. All of them are connected with Jeney.

The chronology of the surveys is as follows. After finishing the revision border survey in Transylvania Major Jeney (lieutenant colonel from December 21, 1775) was commissioned to heading the survey of Karlstädter Grenze that had four divisions on its territory: Liccaner, Ottochaner, Oguliner, Szluiner. At the same time an economic survey was ordered at the scale of 1 : 7200. The officers completed the triangular basis in summer, the 1 : 28 800 scaled military mapping was finished in 1777 (the economic survey a year later). The title of the survey, where Jeney is mentioned, is: *Originalaufnahme des Karlstädter Generalats oder der Grenze, bestehend aus der Liccaner, Oguliner, Otocaner und Szluiner Grenz-Infanterie-Regiment, bearbeitet unter der Direktion des Major, später Oberstleutnant Jeney in den Jahren 1775–1777*. 64 coloured manuscripts plus 15 additional sheets with one volume of country-description.¹

The surveys were interrupted by the Bavarian War of Succession between 1778–1779, when Jeney was ordered back to Vienna. He continued the survey after 1780 at the Slavonische Grenze, so the 1st military survey included the territories of three divisions: Gradiskaner, Broder, Peterwardeiner and the Csajkás area (Hungarian military frontier district). This situation originated from 1747 (except Csajkás, which belongs there from 1764). The military and economic surveys were parallel, the completed work was sent to Esseg, to the Generalkommando, by Lieutenant Colonel Jeney in April 1782. 51 colored survey sheets were made with one volume of country- description.

Besides the above work in 1780 Jeney reconstructed and redrew the sheets of Banalgrenze (19 sheets from 25), surveyed earlier by Major Brady in 1774–1775.² The title of the survey (based on wiener fathom scale well directed medians), where Jeney is mentioned, is: *Aufnahmskarte der Banalgrenze, welche unter der Direction des Oberstleut. Jeney 1780 verbessert, mit der Carlstädter Generalats Aufnahme in gleiche Orientierung und Masstab gebracht, dann durch determinieren mehrer Hauptpunkte neuerdings bearbeitet worden ist*.

Parallel to the above activities the survey of Warasdiner Grenze was in progress. The organization of its two divisions (Kreutzer and St. Georger) exists from 1745. The economic survey lead first by Lieutenant Jeeger preceded the military (scale: 1 : 7 200) and lasted longer (1779–1783). Based on that, in 1781–1782, directed by Lieutenant Colonel Jeney, at the scale of 1 : 28 800, a military map was made. Its title: *Militär-Mappa des Warasdiner*

¹ In 1791 following a new demarcation line by the Una River a territory was annexed to Karlstädter Grenze so the survey was expanded by 11 new sheets made between 1791 and 1794 at the scale of 1 : 28 800. It was directed by Major Boxich, and not Jeney.

² At the territory of Banalgrenze the Banal divisions I and II were stationed. Its organization was established in 1750 and existed in the time of 1st military survey. Directed by Major Brady 25 coloured manuscript sheets were made with two volumes of country-description. The scale was 1 : 28 800 but Major Brady did not use wiener fathom but a 1/20 proportion smaller scale. Captain Vilius, who took part in the survey, was using wiener fathom. So the survey was completed in two different scales. The originals of these survey sheets can be found in the Maproom of the War History Institute and Museum (Maproom No: B IX a 771).

Generalats. Aufgenommen unter der Direction des Oberstleutnants Jeney in den Jahren 1781–1782, in Esseg bearbeitet. 26 hand-made, colour sheets were made at the town Esseg together with one volume of country-description containing an alphabetical index. Its interesting is that the original sheets were NW oriented but the copies are N bounded.

Based on the surveys many derived hand-made maps were made, e.g. the map made under direction of Jeney at the scale of 1 : 43 200 (sheets reduced by 2/3 proportion) describing Warasdiner Grenze a hand-made map drawn by Captain Jeeger in 1782.

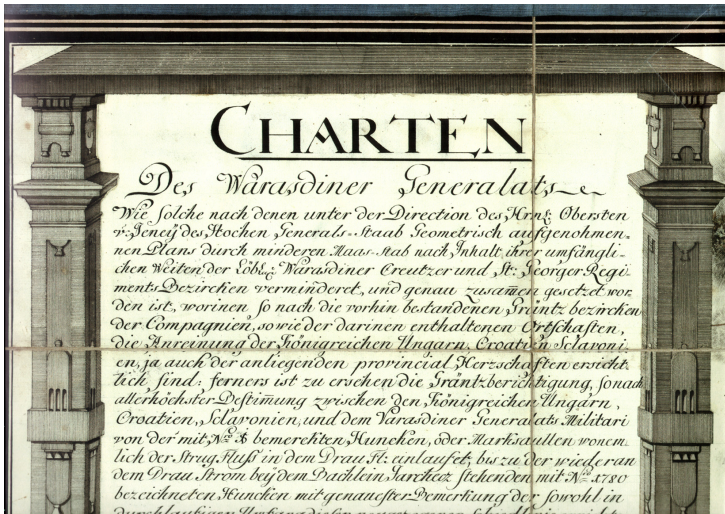


Figure 2. An extract from the title of the map of Warasdiner Grenze at the scale of 1 : 43 200, where Jeney is mentioned

In 1776, for the basis of a unified survey of three sub-surveys of the Military frontier district of Croatia and directed by Lieutenant Colonel Jeney on the territory of surveyed Karlstädter Grenze (containing SE part of Croatia) the meridian crossing Karlstadt (Karlovac) was extended. Parallels and perpendiculars were constructed and the church towers and other main objects on the Warasdiner Grenze under survey were put into this network. The same method was applied in the case of Banalgrénze at the 1780 correction.

At the time of surveying Slavonische Grenze, in 1781 Jeney commenced the survey of the parts of the Slavonian Kingdom under civil administration (Pozega, Veröcze, Syrmien counties). The map, based on plane-table survey was completed in 1781–1783 and has 66 colour manuscript sheets with country-description and key.

Jeney's next work in 1781–1783 was the survey of the counties of Croatia under civil administration (Severin, Agram [Zagreb], Warasdin, Kreuz). Using plane-table method 71 colour manuscript sheets were made at the scale of 1 : 28 800. The title is: *Militärische Mappa von Provincial Croatién, aufgenommen unter der Direction des Oberstleut. Jeney in den Jahren 1783–1784.* A country-description was made with the settlements name in alphabetical order.

In the title of the Croatian survey Jeney is mentioned as Lieutenant Colonel (Paldus). According to archival sources on August 2nd 1783 he was promoted to colonel together with Andreas Neu, who directed the survey of Hungarian Kingdom. As a colonel, Jeney directed the survey of Inner-Austria (Steiermark, Krain, Kärnten, Istrien) till 1787. As a result, 250 manuscript sheets were drawn. After that, on February 2nd, 1787 Emperor Joseph II decreed the survey of Tyrol. Colonel Jeney was commissioned but after some

