

The Napoleon Series

Maps and Mapmakers of the Napoleonic Wars: Austrian Cartography and Cartographers

By: [Richard Tennant](#)

Joseph Jean François, Count de Ferraris¹

(Lunéville, April 20, 1726 – Vienna, April 1, 1814) was an Austrian general and cartographer.

Between 1771 and 1778, Ferraris was commissioned by the Empress Maria Theresa of Austria and Emperor Joseph II to create a detailed Carte-de-Cabinet of the Austrian Netherlands. The maps were made on a scale 1:11,520 and formed a collection of 275 hand-coloured and hand-drawn maps 0,90 × 1,50 m each. These were accompanied by twelve volumes of handwritten commentaries relating to topics of economic and military interest (rivers, bridges, forests, possibilities for military camps, etc.)

Three originals of the maps remain. One is in the Kriegsarchiv in Vienna, one is in the Rijksarchief in The Hague and the third one remains in the Royal Library of Belgium in Brussels. The maps held in Brussels were the maps destined for Prince Charles Alexander of Lorraine, the Governor of the Austrian Netherlands, and were transferred to Belgium by Austria in 1922 as part of the World War I reparations.

In 1777 and 1778, Ferraris issued a reduced version of the Cabinet Maps with a scale of 1:86,400 in 25 maps, issued for commercial sale ('Carte Marchande').

The Ferraris maps were used to great extent during the military operations of the French Revolutionary Wars and during the Napoleonic Wars.

Joseph Dirwaldt (sometimes Dirwald)

Very little is recorded about his life other than that he was the main cartographer with the famous Austrian cartographer and publishing house of Tranquillo Mollo in the beginning of the 19th century.

From Cartography of Conquest to Cartographic Cooperation: Cassini de Thury's Geodetic Contribution to the Ferraris Maps²

Soetkin Vervust wrote that

At the end of the 18th century, Empress Maria-Theresa of the Habsburg Empire commissioned a large-scale map of the Austrian Netherlands, one of her dominions that coincided more or less with the current territory of Belgium. The artillery corps of the Austrian Netherlands, under the guidance of its director-general, count de Ferraris (1726-1814), carried out this mapping project between 1770 and 1777. Its end products were twofold: first, a very detailed manuscript map (1:11,520), entitled 'Carte de Cabinet', which was reserved for use by the imperial cabinet; second, a smaller-scale engraved map without military details (1:86,400), known as the 'Carte Marchande' which was intended for sale to a wider public.

¹ [Joseph de Ferraris](#)

² [From Cartography of Conquest to Cartographic Cooperation](#)

Although the Habsburg government in Austria commissioned the mapping project, the part the French played in its execution cannot be overlooked. Some thirty years earlier, in 1744, French troops had invaded the Austrian Netherlands as the Bourbons and the Habsburgs were fighting on opposite sides during the War of the Austrian Succession (1740-1748). French military engineers were charged with the task of systematically surveying the newly conquered territory. To assist them in their mapping endeavours, the French Minister of War sent Cassini de Thury (1714-1784) to the Austrian Netherlands in April 1746. This famous French cartographer, best known for his map of France on a scale of 1:86,400, performed a geodetic survey, resulting in a carefully measured triangulation network covering the northern part of modern Belgium. When the Treaty of Aix-la-Chapelle was signed in 1748, which marked the end of the War of the Austrian Succession, France had to withdraw its troops from the Austrian Netherlands. However, peace would not last long. A decade later, Europe was at war once more, but at the beginning of the Seven Years' War (1756-1763), a reversal of longstanding diplomatic alliances resulted in the French and Austrians fighting on the same side for the first time ever in the European struggle for power. This new-found cooperation still persisted when Count de Ferraris started his mapping project in 1770. He intended to take full advantage of the situation by drawing on the vast French cartographic knowledge of the Belgian region as much as he could. This presentation focuses on Cassini de Thury's contribution to Ferraris's maps, by investigating what inspired Ferraris to want to use Cassini's geodetic data, what proofs survive of their collaboration and how Ferraris incorporated the obtained information in his new maps of the Austrian Netherlands. This research offers an answer to the long-standing question of the *modus operandi* of Ferraris's artillerymen for conducting their survey, but also allows a more well-founded assessment of the maps' geometric accuracy in comparison with the results of previous studies. Within the larger context of European mapmaking, the story is a reminder that cartography was not merely something that different nations were involved with individually in the 18th century, but a cross-national affair. It offers a perfect example of how the alternation of competition and cooperation between states could impact the production and transfer of cartographic knowledge in the Age of Enlightenment.

Liechtenstern, Joseph Marx, Baron von³ (Vienna 1765 – Buchholz, near Berlin 1828) was a cartographer, geographer, and statistician. He studied law, mathematics and sciences in Vienna (including under J. von Sonnenfels, M. Hell and I. von Born) from 1787 to 1813. He administered extensive estates, involving frequent journeys through the Austrian provinces. He founded the `Cosmographic Society in Vienna (1790-1797) and the Cosmographic Institute (which flourished from 1800-1812) in which surveyors, cartographers and engravers were active.

Between 1790 and 1819, more than 70 maps, with more than 120 pages, were designed and produced by, or under the direction of Liechtenstern. Of these, the following should be counted among his most significant works:

- The five, very thematic maps of the Hungarian provinces (1793 - 1794)
- The 5 extremely detailed maps (1804 - 1805) for the Atlas of the Austrian Empire, published by the Viennese `Kunst und Industrie Comptoir` (Art and Industrial Bank)

³ I. Von den Anfängen bis zum ersten Weltkrieg. Verfaßt von zahlreichen Experten, bearbeitet von Ingrid Kretschmer, Johannes Dörflinger und Franz Wawrik. 2 Bde. (2 volumes. Wien, Deuticke, 1986.

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- The 13-page world atlas `Allgemeine Handatlas der Ganzen Erde, issued 1804-1808 by the same publisher; the `Allgemeine Karte des Kaiserthums Osterreich` (General Map of the Austrian Empire) of 9 sheets at a scale of 1:900,000 in 1809
- The 47 sheets of the uncompleted `Charte von Mitteleuropa` (Map of Central Europe) at a scale of 1:640,000, on which he worked from 1807 - 12.

Liechtenstern was one of the most productive cartographers of central Europe at the turn of the 18th - 19th Centuries and his maps reflect very well the transition from traditional to modern representational techniques. He was particularly concerned with the questions of geometrical symbols, the representation of terrain forms (plan views, hill shading) and projection techniques, including quadrangular maps.

In 1819 Liechtenstern moved to Prussia, where, as well as his cartographical work, he became the founder and publisher of geographic-statistical periodicals (e.g. `Archiv fur Geographie und Statistik`, published in Vienna from 1800 - 1804) and the author of geographic-statistical handbooks, especially on Austria, such as the `Grundlinien einer Encyclopadie der Cosmographie und Statistik`, Vienna 1811, 3rd edition produced in 1825.

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