

# From the Rivers to the Ocean: Marsigli's Maps in the Shadows of the Enlightenment

Zsolt Török

Founding member and former Chair of ISHMap

[zoltorok@map.elte.hu](mailto:zoltorok@map.elte.hu)

*Luigi Ferdinando Marsigli* (1658–1730) served more than two decades as military architect in the Habsburg imperial army. His military activity, special missions as well as his boundary surveys after 1699, provided him with the material for his major work, *Danubius Pannonico-Mysicus* (1726). He methodically used maps for different thematic purposes, and the steady creation of maps for specific purposes allows Marsigli to be considered a pioneer in thematic cartography. He was member of a scholarly network and transferred reliable, first hand information about the little known region to Western European centres of learning. As a representative of Enlightenment cartography Marsigli first revised the cartography of the Carpathian Basin by using the modern methods and instruments. He learned to use astronomical observations to determine location.

Working with *Johann Christoph Müller* of Nuremberg they used a quadrant, a sextant, a telescope, a precise clock, astronomical charts, compass, and barometer for observation. Hydrographical survey was of great importance for both general and thematic map making, e.g. Volume I of the *Danubius* monograph included a separate chapter on hydrography, illustrated by maps and sections. After more than 250 years, the course of the Danube was rectified in the Carpathian Basin. However, despite the general improvement, significant geometrical errors appeared in the river's sections. These local errors may reflect the inherent problems of the method of scientific geography: the otherwise relatively accurate field observations were *translated* according to the reference points of limited accuracy in the geographical coordinate system. Due to the surrender of Breisach fortress Marsigli had to leave the Habsburg states in 1704. He spent years in France and devoted his life to natural sciences. While staying in Montpellier he systematically studied the Golf du Lion. The results of his observations and measurements were published later in his milestone work, *Histoire physique de la mer* (1725), containing the first isobath chart, as well as numerous coastal and undersea profiles.

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Associate Professor of Cartography and Geoinformatics, Eötvös Loránd University, Budapest, and Director of Imago Mundi Ltd. He Graduated in cartography (MSc) and philosophy (MA.) and received his PhD in 1990. His research interests lies in Renaissance cosmography and cartography (in the context of Habsburg border defence during the Turkish wars); early modern and Enlightenment cartography in Central Europe; and the 19-20<sup>th</sup> century exploration and mapping of the Libyan Desert. In his private workshop he revived the art of map and globe making and created original technology editions of important early maps and globes. He organized international conferences, symposiums and exhibitions, including the International Map Collectors' Society's International Symposium (1997), the 21<sup>st</sup> International Conference on the History of Cartography (2005) and the 'Sacred Places on Maps' exhibition in (2005). He is a contributor to the History of Cartography series. His recent fellowships and awards: David Woodward Research Fellowship, University of Wisconsin-Madison, Madison (2007–2008); Mellon Fellowship at the Villa I Tatti, The Harvard University Center for Italian Renaissance Studies, Florence (2008–2009), he was presented with the IMCoS Helen Wallis Award in 2009. He has been Chair of the Founding Group for ISHM since 2009.