

Mapping the historical landscape of southern Transylvania and its German-speaking minority in the 18th and 19th centuries.

Andrei Nacu, Researcher Assistant, Romanian Academy,
Institute of Social Sciences and Humanities in Sibiu (Hermannstadt)
hermannstadtgis@gmail.com
nacu@icsusib.ro

Our research on the historical landscape and the cartographic representation of southern Transylvania lasted for nine years (2013-2022) and was conducted as part of a MA thesis (*The road infrastructure patrimony of south-central Transylvania from the Habsburg-era*, 2013-2015, University of Sibiu), PhD thesis (*The Province of Sibiu/Transylvanian Saxon Seats in Cartographic Documents produced at the Dawn of the Modern Age*, 2015-2018, University of Sibiu) and a European-funded Postdoctoral research project (*Heritage and Ethnicity in Romania: Mapping with Advanced New Software Tools, an Accessible Database for Transylvania - HERMAN(N)STADT*, 2020-2022, Romanian Academy).

Major research projects which resulted in the creation of HGIS databases have been conducted since the 1990s. The work of Professor Ian Gregory (University of Lancaster, United Kingdom) and of his collaborators constitutes one of the more prominent examples (<https://wp.lancs.ac.uk/dighum/resources/>). A noteworthy project, which will increasingly move to publishing online maps and data for European urban areas is the European Historic Towns Atlas, produced in several countries (including Romania) under the auspices of the International Commission for the History of Towns.

In contrast, HGIS databases in Romania are scarce and only a few have been published so far. Our research has upgraded the knowledge on the cartographic sources depicting southern Transylvania in the Modern Age and presented the historical heritage related to the Transylvanian Saxons (the German-speaking minority settled here by the kings of Hungary in the 12th century) in a new light. To this purpose we have used modern GIS tools for the processing of the most important regional maps and city plans created before the end of the 19th century.

Most of the cartographic sources required for the research were identified in the Austrian National Library, the War Archive Department of the Austrian State Archives, the National Széchényi Library of Hungary, the Museum and Institute of Military History in Budapest and the Brukenthal Library in Sibiu. A few other maps were consulted online. One of our aims was to discover new documents and to investigate known maps which did not previously constitute the object of in-depth research.

The digital analysis of the maps and city plans, together with the creation of a comprehensive digital database – published on the postdoctoral project website – was modeled after the principles exposed in *Historical GIS. Technologies, Methodologies and Scholarship* (Ian N. Gregory, Paul S. Ell, eds., Cambridge University Press, 2007). GPS measurements for several important locations (monuments and other heritage sites – needed for the georeferencing of the old maps and city plans) were also employed in 2020 and 2021.

The 18th and 19th century HGIS data was used to create interactive webmaps in the later stages. The designing of these maps was partially inspired by the work of Ian Muehlenhaus, *Web Cartography. Map Design for Interactive and Mobile Devices* (Taylor and Francis, 2014). The interactive maps can be freely accessed on the dedicated section of the *HERMAN(N)STADT* research project website (hermannstadt-gis.ro/english/database). The HGIS database and interactive maps will allow future historical analysis and will offer a solid starting point for conducting spatial research.