

Beyond East and West - A Framework for Researching and Communicating Historical Landscapes

Markus Breier, Karel Kriz, Alexander Pucher

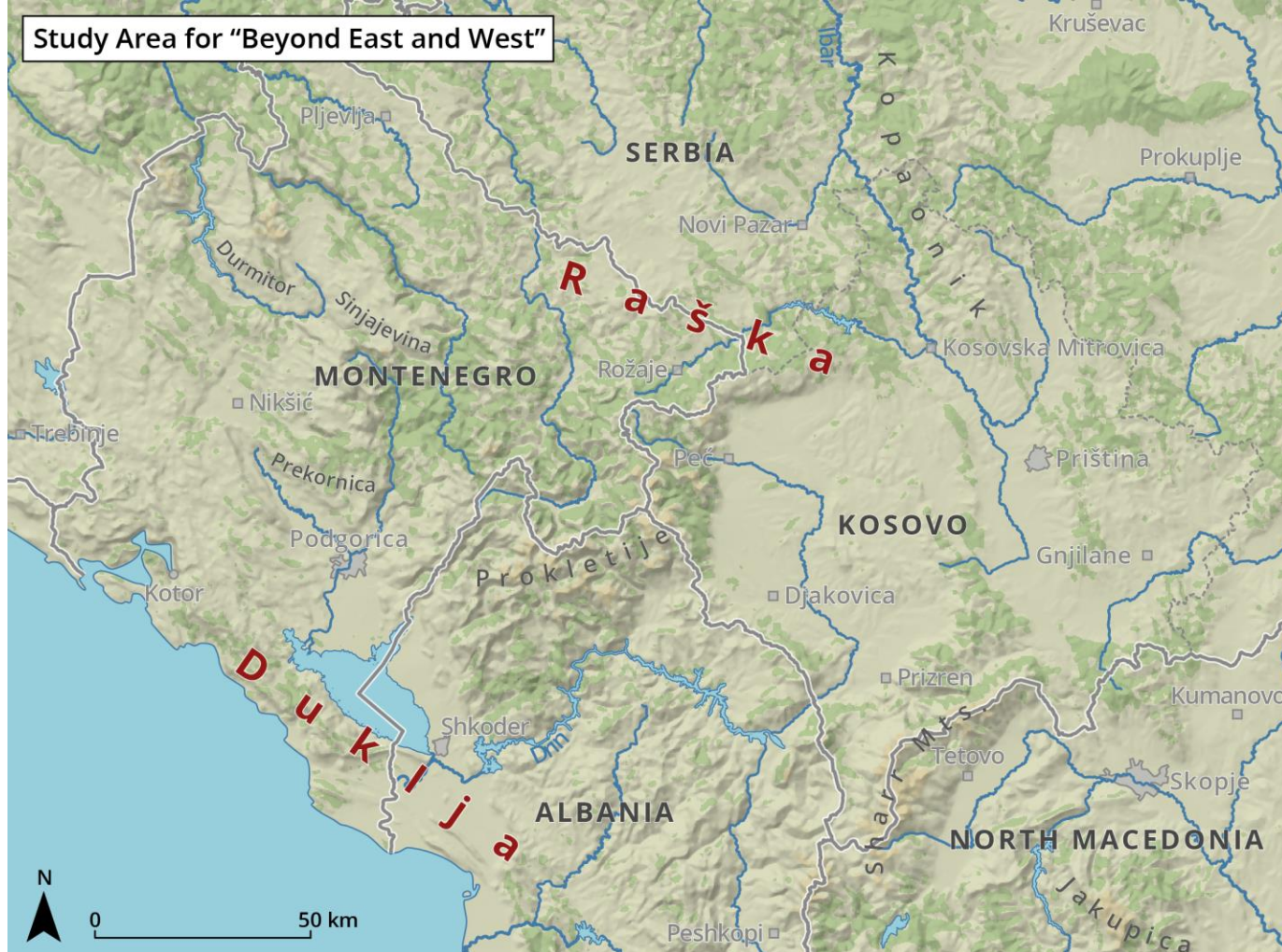


The Project

- Beyond East and West: Geocommunicating the Sacred Landscapes of “Duklja” and “Raška” through Space and Time (11th-14th Cent.)
- Byzantine studies, art history and geocommunication
- March 2020 – February 2023
- Project I 4330-G, funded by the Austrian Science Fund (FWF) and the German Research Foundation (DFG)



Study Area for "Beyond East and West"



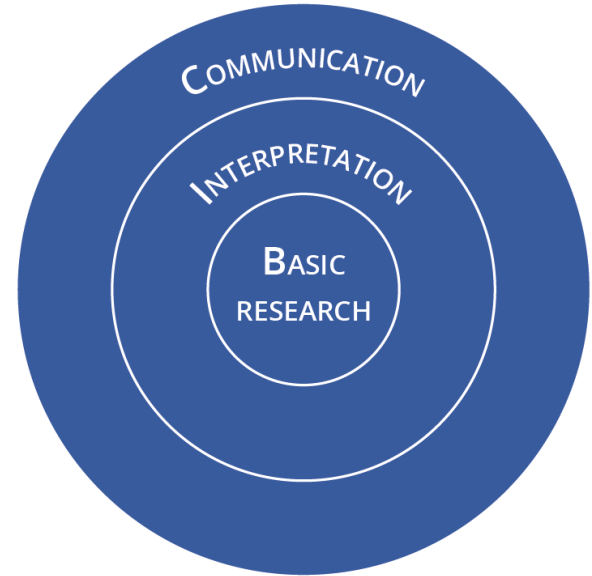
The area and timeframe of interest

- Space
 - Present day Montenegro, border regions of Serbia, Albania and Kosovo
 - Area of interaction between Latin church and Byzantine church
- Time
 - 11th – 14th century
 - Time of transformation
 - Byzantine Empire vs. Bulgarian Empire vs. Serbian Kingdom



Questions, aims and methods

- Interaction between local rulers and churches
- Distribution of monuments
- Visualize and communicate sacred landscape
- Transformation processes
- Various scale levels
- Map based application
 - Research tool
 - Dissemination tool
 - Public relations – make research visible



Maps of Power: Historical Atlas of Places, Borderzones and Migration Dynamics in Byzantium (TIB Balkans)



ACTIVE TYPES

984 Settlement

231 Economic Site

29 Boundary Mark

1 Conflict

502 Change of Property

SELECTION

BACK

Borikovac

Types:

Place, Existing Village chorion selo

Beyond East and West: Sacred Landscapes
Duklja and Raška

Description:

Borikovac was mentioned in 1314 (Sp IV ...)

First: Jan 01, 1314

Events (1)

References (1)

Sources (1)

ÖAW

IMAFO

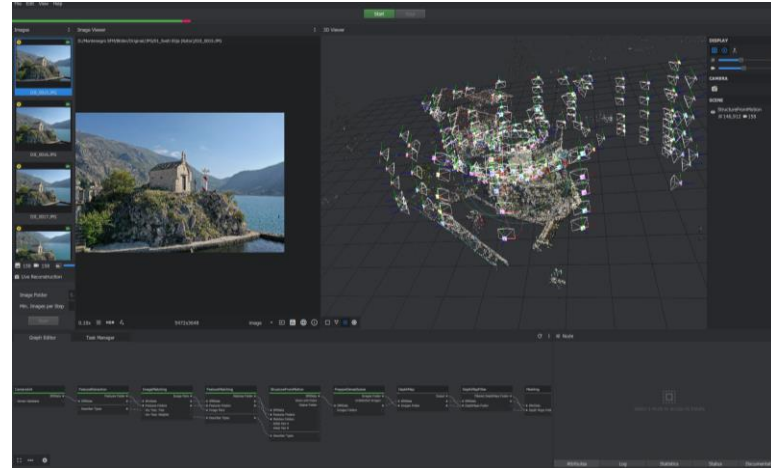
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IMPRINT AND CONTACT

3D models

- Aerial images
- UAV – consumer drone
- Photogrammetry, Structure-from-Motion





Story maps

- Cartographic storytelling
- Easy access to the information for non-experts
- Textual information and pictures complement map based view
- Prepared by historians



Maps of Power: Historical Atlas of Places, Borderzones and Migration Dynamics in Byzantium (TIB Balkans)

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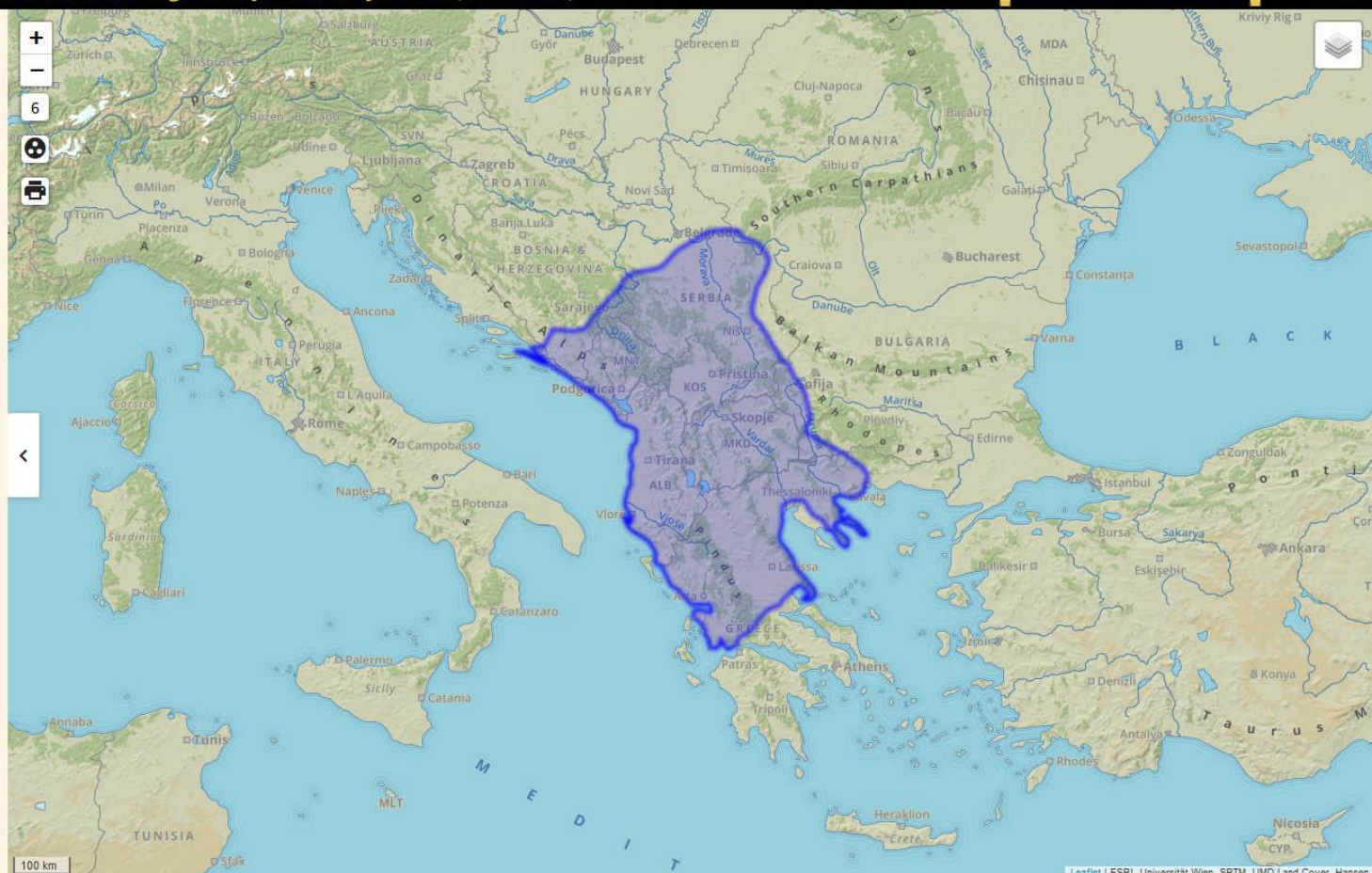
THE AMBULANT RULER STEFAN DUŠAN (M. BREIER, B. KOSCHICEK, M. POPOVIC)

The Expansion of the Serbian Kingdom

Places, Actors and Events

— Dušan's Empire 1355

In the last quarter of the 13th century the Serbian kings initiated their expansion from the Serbian heartland in the North towards the South, that is into Byzantine Macedonia. This expansion was systematically accomplished in ca. 70 years, from 1282 until 1354. It comprised vast areas of what is today known as the Republic of North Macedonia, Bulgaria and Greece. Amongst the Serbian rulers the most outstanding one regarding the aforesaid expansion was king Stefan Uroš IV Dušan.



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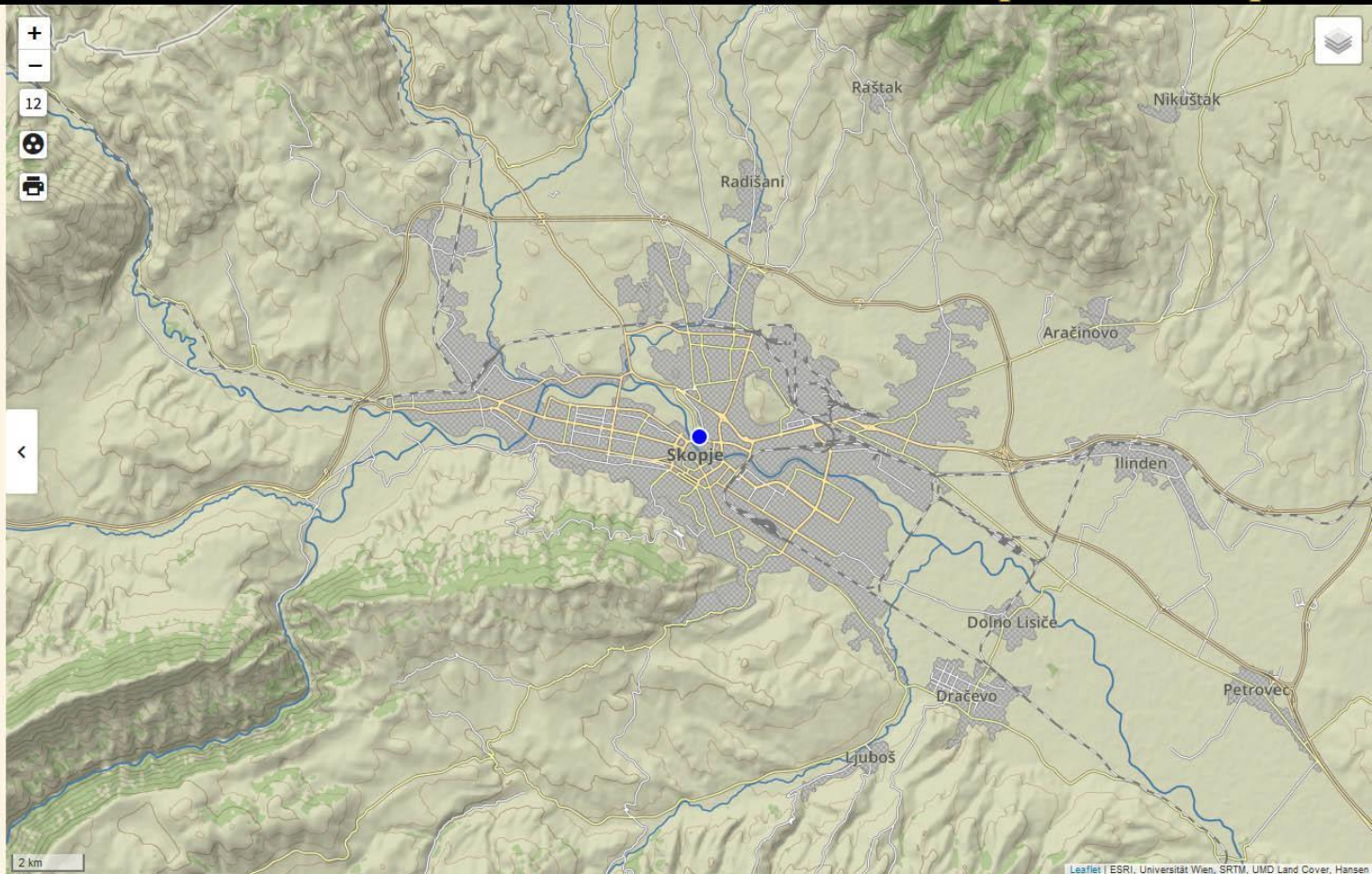
THE AMBULANT RULER STEFAN DUŠAN (M. BREIER, B. KOSCHICEK, M. POPOVIC)

Ambulant Rulership as Sign of Real Power

Places, Actors and Events

● Skopje, Upper Town, Great Gate

Therefore, we would like to pursue an innovative view on the medieval sources, namely the Serbian charters of the 14th century. Those amongst them, which were issued by Stefan Dušan during his reign (1330-1355), lead us to a hypothesis, which we will present on the following slides. Our hypothesis is shaped by the scholarly idea that the real power, which was exercised by Stefan Dušan on the ground in Byzantine Macedonia, might be mirrored in his ambulant rulership.



Current status

- New APIs to connect to database
- New front end in development
- Integration of 3D models



Outlook

- Story Map improvements
- New query builder
- Creation of an online portal
 - <https://map.geo.univie.ac.at/sandbox/bew/index.html>



BEYOND EAST AND WEST

EXPLORE THE SACRED LANDSCAPES OF
DUKLJA AND RAŠKA
THROUGH SPACE AND TIME

TRAILER

EXPLORE



Conclusion

- Testbed for geocommunicating historical landscapes
- Multimedia and multidisciplinary approach
- Visual and technical integration of small- and large-scale visualizations
- Modular framework - adaptable to similar projects



Thank you for your attention!

Markus Breier, Karel Kriz, Alexander Pucher

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Keywords: digital humanities, geocommunication, uncertainty, base map

Abstract:

In the current discourse on the integration of the Western Balkans into the EU, the ongoing and envisaged negotiations with the Republics of Montenegro, Serbia and Albania seem to be of remarkable importance in the contemporary media coverage. They comprise a region, which – in a long ago past – played, under the name of Illyricum (Illyrikon), a vital role in the strategic and administrative considerations of the Byzantine Empire.

The digital humanities project “Beyond East and West: Geocommunicating the Sacred Landscapes of “Duklja” and “Raška” through Space and Time (11th-14th Cent.)” and the corresponding online application “Maps of Power: Historical Atlas of Places, Borderzones and Migration Dynamics in Byzantium (Dig-TIB)” attempt to recreate and communicate the sacred landscape during a time of transition and transformation. The project has an interdisciplinary approach and incorporates multiple media, like maps, images, and 3D models. The University of Vienna (Department of Geography and Regional Research) is cooperating with the Austrian Academy of Sciences (Institute for Medieval Research, Tabula Imperii Byzantini Balkans) and the Leipzig University of Applied Sciences (Faculty of Computer Science and Media).

The study area of the project is at the border regions of the present-day nations of Serbia, Montenegro, Kosovo, and Albania. Historically, the region was shaped by the power struggle between Byzantium, the First Bulgarian Empire, and the Serbian realm. Ecclesiastically, it was a zone of interaction as well as encounter between Rome and Constantinople, i.e. the Latin and the Byzantine (Orthodox) Church. The aim of the project is to discover and visualise the spatial and temporal aspects of these encounters and transformation processes.

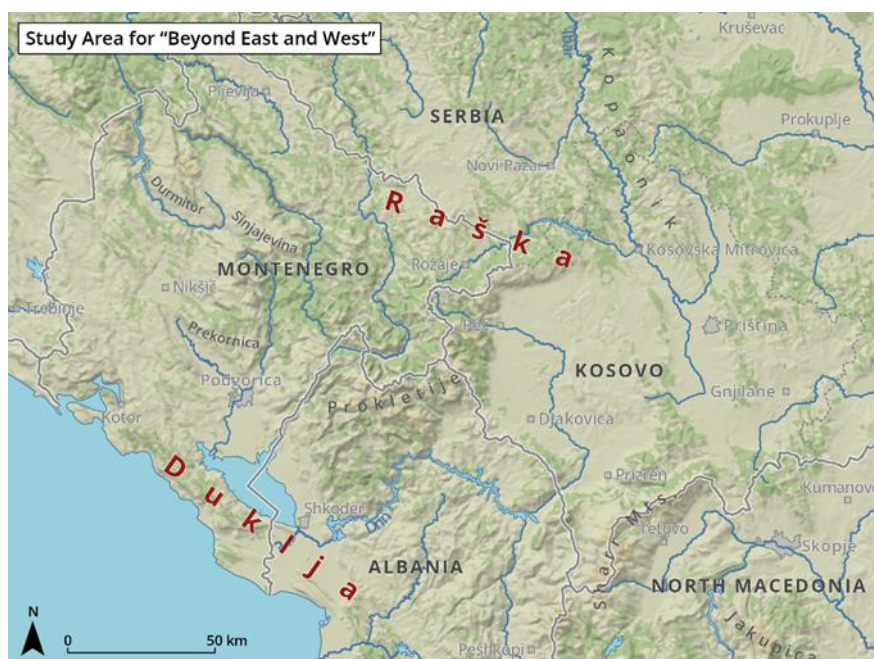


Figure 1. Area of research. Example figure, placement, caption and numbering: the famous ICA logo.

For the team at the University of Vienna, the task of this project is to create a platform that assists historians in their research of the historical landscape. Furthermore, the platform serves as a communication tool to the public. The research results as well as the research process is to be narrated.

The first goal of the application is to provide functionality to allow our fellow researchers to explore relevant places, events, actors, and artifacts and to show them on a custom-created base map. The entities shown can be filtered by several categories. Furthermore, relations between these entities can be shown. All data is stored in a CIDOC-CRM compliant object-oriented database. As the database maps not only the objects, but the relations between them, the data structure is complex. To explore the relations between places, events, actors and artifacts, the users can follow the links between the entities. For more complex queries which include multiple categories (e.g. certain events at a specific place) a query builder is available. This query builder reduces the complexity of the data structure to a more easily manageable degree. In this way, the platform functions as a research tool.

The communication of the historical landscape to the public is the second major goal of the platform. This happens in several ways. First, the interactive map display is the basis of this communication. The contents can be called up and displayed on a base map. There are two versions of the base map. One version without man-made objects, representing only natural features, and another version containing modern cities and borders.

Many historical data are spatially uncertain and for many objects an exact localization is impossible. This uncertainty is taken into account in the data input as well as in the representation. Thus, the viewer does not get the impression of false accuracy, which is especially important for historical issues.

Second, the narrative about the research process is presented in textual form, complemented with images and video footage gathered during a field trip.

To provide an easily accessible starting point to the topic of sacred landscapes for the interested public, “Story Maps” are created for selected core research topics. These are pre-defined views and selections, complemented with explanatory texts, graphic elements, images, and animations. They give an easy but thorough overview of a research topic without the need to dig into the database.

Content created during this project, however, is more than points, lines or polygons which can be displayed on a map. In addition to classic cartographic representations, additional multimedia content is created during the project. Many objects are complemented with images, which are stored in the database. For selected churches and monasteries 3D models are available.

The broader aim beyond the current research project is to provide a flexible and modular framework, which can serve as a platform for similar research projects in historical geography and digital humanities.

Acknowledgements

The international project “Beyond East and West: Geocommunicating the Sacred Landscapes of “Duklja” and “Raška” through Space and Time (11th-14th Cent.)” (I 4330-G) is funded by the Austrian Science Fund (FWF) and the German Research Foundation (DFG). It is conducted under the lead of Mihailo St. Popovic in cooperation with the Austrian Academy of Sciences, Institute for Medieval Research, Division of Byzantine Research (Mihailo St. Popovic) and the Leipzig University of Applied Sciences, Faculty of Computer Science and Media (Johannes Tripps).