

## HISTORISCHE GEOGRAPHIE

Peter Soustal and Mihailo Popović

The so to speak classical project for the historical Geography of the Byzantine Empire is the *Tabula Imperii Byzantini*, the *TIB* founded in 1966 by the late Herbert HUNGER and now conducted by Johannes KODER and one of the main projects of the Institute for Byzantine Studies of the Austrian Academy of Sciences. The aim of the project in a few words is: to reconstruct the aspects of Byzantine history which can be presented by means of cartography on the basis of written sources, monuments and archaeological data, placenames (toponymy) and the preconditions of natural spaces. Each region of the Byzantine Empire is assigned an alphabetic catalogue of historical names of places as well as of modern toponyms with Byzantine remains, an introduction containing chapters about history, church history, geography, routes of communication and so on and some historical maps. As for the chronological limits, the monuments and the written sources from Late Antiquity and the Early Ottoman Period are included in the *Tabula Imperii Byzantini*.

In the last years the following two volumes were published: In 2004 Hansgerd HELLENKEMPER and Friedrich HILD presented volume 8 containing the regions Lycia and Pamphylia. More than 1 000 pages and about 450 illustrations. In 2008 volume TIB 12 containing Eastern Thrace, the western hinterland of Constantinople, composed by Andreas KÜLZER, was published.

Work is going on for preparing volumes about the following regions:

Klaus-Peter TODT and Bernd-Andreas VEST, the former a Byzantinist, the latter an Arabist, both working in Germany, are the authors of an important forthcoming work about the northern part of the historical region of Syria (Syrien: Syria prote, Syria deutra, Syria Euphratesia). The text and the maps are almost completed. For the future they plan to continue with research on the southern part of the region.

In an advanced stage of preparation is Bithynia and Hellespont (Bithynien und Hellespont), the author is Klaus BELKE. The historical region of Macedonia is divided between Mihailo POPOVIĆ and Peter SOUSTAL. The former is dealing with the northern part, the latter with the southern part. Andreas KÜLZER is preparing the province of Lydia and the province Asia, which is the neighboring region of Lydia in the West.

Friedrich HILD is dealing with the province of Caria in southwestern Turkey with a special focus on the regional historical road system and the coastline.

A volume on the Peloponnesos is being prepared by a team of scholars of the Institute for Byzantine Research of the National Greek Research Foundation.

The general issues of digital modelling in relation to medieval logistics were discussed in a meeting held within the European Science Foundation at the University of Birmingham in 2003, directed by John HALDON and Vince GAFFNEY, in which participated also researchers of the TIB. It was agreed to continue the cooperation. The

proceedings of the seminar were published by John HALDON (General issues in the study of medieval logistics: sources, problems and methodologies, *History of Warfare* 36, Leiden and Boston 2006).

According to the agreement current research on methodology and on sources of historical geography – for instance nature and climatic conditions, toponyms and hydronyms, the terminology of water, road systems, agricultural lands and their boundaries – were the topic of an international symposium in Vienna organised by the TIB and the Institute of Byzantine and Modern Greek Studies of the University of Vienna. In particular Johannes Koder and John Haldon raised questions on current problems and current research (Johannes KODER, Commodities and Traffic Routes: Problems, Sources, Methods, and John HALDON, Commodities and Traffic Routes: Results and Prospects. Current Problems and Current Research, in: *Handelsgüter und Verkehrswege / Commodities and Traffic Routes. Aspekte der Warenversorgung im östlichen Mittelmeerraum*, hrsg. von E. KISLINGER – J. KODER – A. KÜLZER. *Veröffentlichungen zur Byzanzforschung* 18. Wien 2010, 13–24 and 289–294).

The primary topics of the contributions to this symposium in Vienna were: Means and time of travel and transportation (cf. Klaus BELKE, *Verkehrsmittel und Reise- bzw. Transportgeschwindigkeit zu Lande im Byzantinischen Reich*, 45–58) – Supply of markets with various products – Transport routes by land and sea – Regional and long-distance trade – the social-administrative framework within which these activities took place – Archaeological evidence for inter-regional exchange (of for instance metal goods or ceramics). The contribution of Vince and Helen GAFFNEY was devoted to the theme “Modelling routes and Communications” (79–91). The Gaffneys inter alia reflected on the basis of digital modelling on the route used by the emperor Romanos IV in 1071 for his military expedition, which ended with the battle of Mantzikert (83–91).

To summarize the essentials of current and future projects in historical geography, which make use of modern technology, interdisciplinarity and multi-disciplinarity, I quote John Haldon, who emphasizes that interdisciplinarity is necessary for further progress:

Many of the arising questions “can only be answered by bringing together into the picture a range of other specialisms, such as palaeoenvironmental study of landscapes, as is very evident from current projects – at Sagalassos, the Konya plain, the Gök Su region and at a number of other sites in both Anatolia and the Balkans. **Integrating** traditional archaeological investigation with regional surveys, landscape studies and palaeoenvironmental work, **combining** the results of such work with those from the analysis of texts, epigraphy, sigillography and so forth, and **inputting** the data thus harvested into an appropriate computer model employing GIS and related technologies, **offers** a radically different perspective for future research in understanding pre-modern

landscapes, land-use and patterns of consumption, settlement and communications” (291).

And again John HALDON: “The computer modelling of several of the key features of the medieval landscape and its resources, communications and means of transport, settlement pattern and demography became relevant, for given the complexity of the material and the multilayered, intersecting character of both questions and data, it has to be recognised that to obtain a full picture from any single perspective is impossible, and that only through the complex modelling of these features can we hope to generate either an adequate database for an analysis of the issues at stake or a satisfactory analytical framework. But computer models cannot generate answers without an appropriate context and without the necessary data, so that research into and interrogation of the various sources, whether literary and textual or material-cultural, remains an essential, if not the essential, prerequisite. Yet computer models ... do not interpret the evidence, they offer a means of interpretation” (290).

An example of such a multi-disciplinary project which integrates many different types of material and approach is the Euchaïta Project of Princeton University, operated by the *Universities of Birmingham* and *Princeton* under the direction of Vince GAFFNEY and John HALDON. It consists in “a regional survey based around the site of ancient and medieval Euchaïta, more recently Avkat, ... accompanied – it is hoped – by a detailed survey and excavation of the site itself” (291).

During the past decade we observe an increasing interest in thematically related topics, in publications, like Neil CHRISTIE’s collected studies, published 2004 under the title “Landscapes of Change. Rural Evolutions in Late Antiquity and the Early Middle Ages”, but also other symposia for example: The Dumbarton Oaks Spring Symposium of 2005 entitled “Urban and Rural Settlement in Anatolia and the Levant 500–1000 AD: New Evidence from Archaeology” organised by Clive FOSS and Johannes KODER as well as the Dumbarton Oaks Spring Symposium of 2008 entitled “Trade and Markets in Byzantium” organised by Cécile MORRISSON.

Finally, I draw your attention to a few other projects and publications. The selection of the examples is absolutely arbitrary and makes no claim to completeness.

The Multilingual Illustrated Dictionary of Byzantine Architecture and Sculpture Terminology, composed by Sophia KALOPISE-BERTE and Maria PANAGIOTIDE (Πολύγλωσσο εικονογραφημένο λεξικό όρων βυζαντινής αρχιτεκτονικής και γλυπτικής), an important progress toward standardization of terminology also in topography and settlement pattern (Iraklio 2010)

As for placenames I mention the etymological Lexicon of Modern Greek names of settlements composed by Charalampos SYMEONIDES: Ετυμολογικό Λεξικό των νεοελληνικών οικονυμιών. 2 Volumes. Leukosia – Thessaloniki 2010.

A standard work on climate in Byzantium is Ioannes TELELIS’ documentation Μετεωρολογικά φαινόμενα και κλίμα στο Βυζάντιο. 2 Volumes. 2004. See in this context also

TELELIS' article: Climatic Fluctuations in the Eastern Mediterranean and the Middle East AD 300–1500 from Byzantine Documentary and Proxy Physical Paleoclimatic Evidence – A Comparison, *JÖB* 58 (2008) 167–207.

Mainly based on written sources is the Lexicon of towns and market places in the medieval Serbian lands, edited by Siniša MIŠIĆ (in Serbian language). Belgrade 2010.

On the basis of coin, seal and pottery finds is the research on settlement patterns of the Bulgarian Black Sea coast 8<sup>th</sup> to 12<sup>th</sup> century, conducted by Rosina KOSTOVA (Space and Power on the West Black Sea Coast Late 10<sup>th</sup> to 12<sup>th</sup> c. The sigillographic evidence, in: *Sto godini ot roždenieto na Dr. Vasil Haralanov (1907–2007)*. Šumen 2008, 207–223; R. KOSTOVA, Changing settlement patterns on the Byzantino-Bulgarian periphery: North part of the West Black Sea coast 8<sup>th</sup> to 12<sup>th</sup> c.”, *Temporis Signa. Arheologia della tarda antichità e del medioevo* (Spoleto), III (2008), 15–37; R. KOSTOVA, Medieval monastic topography of the West Black Sea littoral: the southern part, in: *Ecclesiastical topography in East-Central Europe. Methods, problems and possibilities*. Károli Gáspár Calvinist University/ Central European University. Budapest (in print).

Phlora KARAGIANNE has presented the Byzantine settlements on the basis of archaeological data in the Greek part of Macedonia: *Οι Βυζαντινοί οικισμοί στη Μακεδονία μέσα από τα αρχαιολογικά δεδομένα (4ος–15ος αιώνας)*. Thessaloniki 2010.

Juanita VROOM gained new insights in the history of settlements and historical topography on the basis of researches in pottery (in the Aegean and especially in Boeotia). Cf. Juanita VROOM, *Byzantine to Modern Greek Pottery in the Aegean. An Introduction and Field Guide*, Utrecht 2005.

Jelena MRGIĆ conducts historical geographic research on the settlement pattern in Northern Bosnia making use of interdisciplinarity to a high degree. J. MRGIĆ, *Severna Bosna 13–16. vek*. Beograd 2008. J. MRGIĆ, Transition from Late Medieval to Early Ottoman Settlement Pattern. A Case Study on Northern Bosnia, *Südostforschungen* 65/66 (2006/2007) 50–86.

Efthymios RIZOS focused his archaeological and historical studies on urban architecture and on the transformation of urban culture and society in his thesis entitled “Cities, Architecture and Society in the Eastern and Central Balkans during Late Antiquity (ca AD 250–600)”. The thesis was submitted to the Committee for Archaeology, University of Oxford (supervisor: Bryan Ward-Perkins) in 2010.

Peter Soustal

Since the *21st International Congress of Byzantine Studies* in London in 2006 the worldwide scholarly community of Byzantinists has become witness to the most interesting and fascinating developments between historical geography and geoinformatics, i.e. in the field of applications deriving from Geographic Information Systems (GIS), of project-related online presentations as well as databases and of computer-based models.

In the following short overview I would like to highlight some of the various scholarly initiatives and results from our Byzantine Commonwealth between 2006 and today. Apart from the above-mentioned essential publications by Professors John HALDON and Vincent GAFFNEY it has to be mentioned that Professor Haldon participated at the *Forty-sixth International Congress on Medieval Studies* at the University of Western Michigan in May 2011 and gave a paper on “Medieval Logistics and Byzantium: The Case of Manzikert (1071)” (<http://www.wmich.edu/medieval/Assets/pdf/congress/Schedule11.pdf>; accessed 20 November 2011).

A project named *Pleiades*, which is based in the United States of America, gives scholars, students, and enthusiasts worldwide the opportunity to use, create, and share historical geographic information about the Greek and Roman World in digital form (<http://pleiades.stoa.org/>; accessed 20 November 2011).

By shifting the view from the New to the Old Continent, the scholarly journey leads us to the United Kingdom, and here to a trend-setting project named *HESTIA: the Herodotus Encoded Space-Text-Imaging Archive*, which might be of interest to Byzantinists working in the field of historical geography as well as the field of literature (<http://www.open.ac.uk/Arts/hestia/>; accessed 20 November 2011). *HESTIA* provides a new approach towards conceptions of space in the ancient world. Herodotus’ narrative is ‘marked-up’ intending to capture spatial information, including place names and regions.

The next point of interest is France, which has two very exciting projects to offer to the Byzantine scholarly community. The first is conducted by the *International Center for the Study of the Ancient Roads* and by a team of the *National School of Architecture Paris Val de Seine* in order to create an inventory of caravanserais which span from China in the East to Spain in the West and to elaborate a Geographic Information System of roads connecting them. One part of this project comprises wayside caravanserais and road networks in medieval Syria from the 12th to the 16th century, on which Cinzia TAVERNARI is accomplishing her PhD-thesis at the moment (<http://www.archatlas.org/workshop09/works09-tavernari.php>; accessed 20 November 2011).

The second French project is called *CartoMundi*. It encourages the exchange and gathering of cartographic knowledge on an international scale and facilitates smoother relations between map users and institutions which hold them. The portal of *CartoMundi* allows the user to select institutions preserving maps in the geographic area selected on the world map (<http://www.cartomundi.fr/site/>; accessed 20 November 2011).

A very interesting German web site entitled *Omnes Viae: Roman Routeplanner* combines the *Tabula Peutingeriana* with internet technology (<http://omnesviae.org/>; accessed 20 November 2011). Continuing this overview, I would like to highlight some aspects of Austrian research on the historical geography of the Eastern Mediterranean.

Apart from the above-mentioned concise report on the activities of the project *Tabula Imperii Byzantini* of the Austrian Academy of Sciences I am adding some personal

perspectives, thoughts and scientific results, which are connected directly to my area of research.

In February 2009 I took part in a workshop entitled *Mapping Different Geographies*, which was organised by Professors Karel KRIZ and William CARTWRIGHT in Puchberg am Schneeberg in Austria. Two papers concerning Byzantine Studies were published in the Proceedings of the workshop by the Springer publishing house. The first is on “DiFaB – A Databased Visual Archive of Byzantium and the Challenges of Indexing Historical Material Culture” by Fani GARGOVA, Sarah TEETOR, Daniel TERKL and Ulrike UNTERWEGER, the second is mine on “Mapping Byzantium – The Project “Macedonia, Northern Part” in the Series Tabula Imperii Byzantini (TIB) of the Austrian Academy of Sciences”.

Since then I am actively engaged in intertwining Byzantine Studies with Historical Geographic Information System (HGIS). My research and publications on the historical region of Macedonia include the modified Central Place Theory, the computer-modelling of “least-cost paths”, the history of Cartography in South-East Europe, the georeferencing of respective maps in order to analyse areas of settlement and loss of settlement structure throughout the centuries, the Historic Landscape Characterisation (HLC), network analysis to calculate factors of centrality as well as betweenness in medieval settlement patterns and last but not least the programming of timelines in order to animate and to comprehend the development and degradation of medieval settlements through time and space via the Internet. Furthermore, I succeeded to unite my efforts in a professorial dissertation entitled “Von den Quellen zum Visuellen in der historischen Geographie. Zentrale Orte, Siedlungstheorien und Geoinformatik, angewendet auf die historische Landschaft Makedonien (13. bis 16. Jahrhundert)”. Further information on all above-mentioned topics can be found via my profile on the online platform Academia (<http://oeaw.academia.edu/MihailoPopovic>; accessed 20 November 2011).

The next aim of this overview is Serbia. Remarkable is the monograph written by Siniša MIŠIĆ on the waterways and the use of water in medieval Serbia (Siniša MIŠIĆ, *Korišćenje unutrašnjih voda u srpskim zemljama srednjeg veka*. Beograd 2007).

Moreover, a Serbian translation of the fundamental book “Der Lebensraum der Byzantiner. Historisch-geographischer Abriß ihres mittelalterlichen Staates im östlichen Mittelmeerraum“ by Professor Johannes KODER was published in Belgrade in 2011 (Johannes KODER, *Vizantijski svet. Uvod u istorijsku geografiju istočnog Mediterana tokom vizantijske epohe*. Beograd 2011).

In preparation are the proceedings of the *Fifth National Conference of Byzantinists of Serbia* entitled “Vizantijski svet na Balkanu / The Byzantine World in the Balkans”, which will be edited under the supervision of Professor Ljubomir MAKSIMOVIĆ at the Serbian Academy of Sciences and Arts and which will also contain articles on the historical geography of Byzantium as well as of Serbia.

With regard to Greek scholarly projects on the historical geography of the Byzantine Empire an initiative by Professor Myron MYRIDIS has to be highlighted. He works at the

Department of Cartography of the Aristotle University of Thessaloniki and develops an electronic atlas of Greek monasticism, of which a pilot application exists so far. In the application the user will have access to photographs, historical facts, maps of routes to the monasteries, along with all the information collected about the monasteries themselves.

In her article entitled “*Rural Towns and In-Between or Third Spaces Settlement Patterns in Byzantine Epirus (7<sup>th</sup>–11th Centuries) from an Interdisciplinary Approach*” and published in 2009 Myrto Veikou is re-evaluating existing settlement theories and comes to the conclusion that Byzantine space was to a certain extent “rurban space” by combining the “rural” and the “urban” areas (*Archeologia Medievale* 36, 2009, 43–54).

This short outline clearly testifies to the vividness as well as the innovation in the field of historical geography of the Byzantine Empire, which should be continued with the same enthusiasm in the years to come.

Mihailo Popović