The Integrative interpretation of old maps and other source of spatial information for researching and presenting phenomena from economic history

Dariusz Lorek *

* Department of Cartography and Geomatics, Adam Mickiewicz University in Poznan, Poland

Extended Abstract

The issues touched in the project are connected with an interdisciplinary approach to research about the changing development and management of space in Central Europe. This interdisciplinarity follows from the fact that the historical approach is intertwined with the geographical to research ancient reality written down on unique cartographic sources.

The research object is to elaborate a method of utilising cartographic sources and to adapt other sources of spatial information for researching and presenting phenomena from the economic history.

An image of pre-industrial Central Europe has been preserved in the folios of Prussian topographical maps *Urmesstischblätter*, which were published in the first half of the 19th century (Schroeder-Hohenwarth 1958). *Urmesstischblätter* were drawn up on a scale of 1:25,000. The folios for the analysed region were made circa 1822-33 on the basis of a table photograph taken after the first triangulation was performed (Jankowska 1993). *Urmesstischblätter* were drawn up only as manuscripts, which have survived



Published in "Proceedings of the 1st ICA European Symposium on Cartography", edited by Georg Gartner and Haosheng Huang, EuroCarto 2015, 10-12 November 2015, Vienna, Austria in excellent condition to the present day in the collections of the State Library in Berlin (Engelmann 1968).

To capture changes in the studied area maps made after 1876 were issued. The second basic cartographic material is the *Messtischblätter* map. The folios constituting the basis of the comparative analysis were drawn up during the period of economic change (Krauss 1969). This work is excellent for a comparative analysis with *Urmesstischblätter* due to the conformity of scale and the division into folios. The *Messtischblätter* was made based on the corrected second triangulation, and lithography was used as the printing technology (Lindner 2003).

Other sources of spatial information are: descriptions of landscape and space, retained statistical data, documents, inventories, or public registers. Another, important group consists of photographs, postcards and other figures and drawings relating to the former economic space. In addition, an important material comprises data collected during field work: data from GPS and photographs taken in selected areas of research.

The value of the proposed research approach lies in the connection of the specificity of the aforementioned disciplines, their tools, approved theoretical foundations, and research methods. The common denominator is the period of history of economic development preceding the Industrial Revolution (Klemp 2000). We may consider the construction of railway lines as the primary spatial determinant (Shirley 2012).

Integrative interpretation of old maps and other source of spatial information was presented on examples of small town situated in the central part of Wielkopolska region. The developed method allows to interpret integrated topographic and economic elements. As a result of these actions it becomes possible to create a multimedia visualization with integrated sources of spatial information.

References

- Engelmann G. (1968) Kartengeschichte und Kartenbearbeitung der Preuβischen Urmesstischblätter. In: Festschrift für Wilhelm Bonacher. Bad Godesberg
- Jankowska M. (1993) *Okoliczności powstania i sposób opracowania pruskiej mapy topograficznej z I połowy XIX wieku w skali 1:25 000*.Rocz. AR Pozn. 240. Melior. Inż. Środ. 11. 70 lat Katedry Geodezji

- Klemp E. (2000) *Preussische Urmesstischblätter, Zeugnisse vorindustriellen Landschaftszustandes.* In: 8. Kartographiehistorisches Colloquium Bern. 3-5 Oktober 1996
- Krauss G. (1969) *150 Jahre Preussische Messtischblätter*. Zeitschrift für Vermessungswesen. 94 Jahrgang. Heft 4
- Lindner K. (2003) Landesaufnahmen deutscher Territorien In: Geschichtsdeutung auf alten Karten : Archäologie und Geschichte. von Dagmar Unverhau. Wiesbaden
- Schroeder-Hohenwarth J. (1958) *Die Preussische Landesaufnahme 1816-1875*. Nachrichten aus dem Karten und Vermessungswesen. Reihe 1. Heft 5
- Shirley R. (2012) The Printed Maps of Norfolk 1574–1840: A Carto-Bibliography. By Raymond Frostick, *Imago Mundi* 64:2