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**Comparative Analysis of the Cartographical Works
of László Magyar**

Doctoral Dissertation Theses

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I. Purposes

The geographical discoveries are the best known aspects of the scientific activity of László Magyar. The present dissertation provides a comparative analysis of his cartographical works.

The principal purpose of the research is the cartographical study of the maps of the Hungarian traveler. It demonstrates what cartographical information he built on to produce these maps. It is also supplemented by a thorough bibliographic research concerning the works of the contemporary travelers. In addition to the works already known, these provide information on the location of some of the lost documents of László Magyar.

The structure of the dissertation is threefold. The first part gives an overview of the history of South Africa from the European explorations until the end of the nineteenth century. This overview especially stresses the tendencies that influenced the colonization as well as the geographical discoveries in Africa. The consideration of imperial efforts, in the guise of scientific endeavors characteristic of the time, helps to understand how European travelers accepted or rejected commissions by European rulers. One cannot neglect the question of financing and the methods of the explorers either. The political events treated in this part provide

a solid basis to define the scope of study in terms of geography and chronology.

The second part (3–5 chapters) discusses the scientific career of László Magyar on the basis of the available documents. Different from the biographic descriptions produced so far, the main emphasis is on his correspondence with the European scientific circles. The quotations and references in the text originate from primary sources. They also feature letters that come to light here for the first time. These original documents support the theory on Magyar's insufficient scientific training; based on his previous achievements, however, the Portuguese government would have appreciated cooperating with him. His descriptions of scientific value and his manuscript maps date from this period. These documents serve as points of departure for the cartographical analysis, one of the main aspects of the research.

The chapter entitled Bibliography on László Magyar and Contemporary Travelers in Africa is apparently separate from the main discourse of the dissertation; it is nevertheless closely supplementing the preceding chapters. The bibliography features every publication, from the contemporaries until today, which can be related to the activities of László Magyar. A dry catalog at first sight, but it is more than a simple list of publications. It also indicates the cross-references to individual entries, thus permitting

to trace down the tradition of important discoveries in geographical thinking.

The maps provided in the Appendix complement the textual section of the dissertation. They help to understand the observations described through the cartographical analyses.

II. Precedents

Among the biographies of László Magyar, the 1937 monograph by Gusztáv Thirring should be mentioned: it gives an accurate introduction by professional standards on the basis of the documents known at the time. Subsequently, the surviving textual documents of Magyar were studied by István Fodor from a linguistic point of view and by László Krizsán from the aspects of the history of discoveries and those of ethnography.

One can observe that while Magyar was represented more as a neglected explorer in Hungary, his works have always been seen as points of reference for researchers in African and related fields of studies abroad. The itineraries he covered regularly appear on the maps displaying the discovery of Africa in the nineteenth century. Studies dedicated to the tendencies in Angola and the colonies have referred to his descriptions until today.

The above aspects clearly demonstrate that the activity of László Magyar has already invited inquiries from several disciplines. Maybe, the most substantial analyses concern linguistics and ethnography. However, his scientific achievements have never been examined from the point of view of cartography. It is to be noted in addition that all the previous studies have depended on the sources that had been available before. Therefore, the research into the relevant source material and the compilation of the bibliography regarding the contemporary travelers are new contributions.

III. Methods

In order to define the scope of study in regional and chronology, one had to explore the historical and social trends that influenced Magyar's career. With the changes in the methodology of historiography, the representation of Africa has been transformed substantially. Earlier, the continent without history became a subject of interest on the basis of the records by travelers relying on oral sources. This helps to understand how the process of colonization influenced the discoveries of Magyar.

The developments of the methods of GIS applications led to a radical change in cartographical analysis. The selected manuscript

and printed maps therefore had to be digitalized which resulted in a raster data when displayed graphically and in alphanumeric files when displayed as textual sources. During the research, the maps I have examined by quantity and quality analysis well as by cartometrical tools and I have compared with modern maps of drainage networks.

The illustration in the Appendix, featuring the georefered manuscript map, is a novel element.

In compiling the bibliography, the previously extant documents served as points of departure. Various fields of interest had to be designated to explore additional sources. The search criteria could be further divided on the basis of authors, titles, geographical names, dates, or technical terms. The research has covered all the available Hungarian, Portuguese, German, and British collections where related significant documents could be detected. Some of the institutions did not provide me the admission to research personally. Online catalogs were used in these cases.

The footnotes, the bibliography, and the list of works consulted at the end of the dissertation equally reflect the format developed in cartography. The major concern has been the production of a consistent and searchable set of bibliographical data of the respective entries, with a special emphasis on manuscripts, books,

and maps published in foreign languages during the nineteenth century.

The provision of the cross-references may not be finished in spite of all the attempts made. The references only feature the connections that are relevant from the present field of study.

IV. Results

1. I have reviewed the external and internal tendencies determining the colonization of South Africa, as well as the discoveries of the contemporary travelers. This shed a new light on the career of László Magyar as an explorer. Based on his correspondence, I described his scientific activity as well his relationship to the Hungarian Academy of Sciences and the Portuguese colonial authorities. I have summarized the background information he acquired to assist him during his expeditions and also his deficiencies that occasionally detracted from the value of his achievements.

2. In order to discover the missing documents, I have studied the collections of the Hungarian and European institutions that could be logically inferred from his works. I have proved that the map from the Cholnoky bequest is actually the manuscript map of László Magyar produced in 1858, a copy of which was also

published in 1860. I described the provenance through which the original map traveled to Kolozsvár where it turned up in April, 2007.

3. I have compared the manuscript maps made in 1857 and 1858, along with the spatial information to be found in the textual sources, to the works of the contemporary travelers. The cartographical analysis demonstrated that László Magyar did not provide as much of inaccurate results as it was spread in the bibliography.

4. I have compiled a bibliography, indispensable for this research, which never existed before; it also includes the findings of the contemporary travelers. In order to achieve this goal, I have conducted an in-depth study of sources in the collections of Hungarian, Portuguese, German, and British libraries and archives, as well as geographic institutions. After the thorough examination of nearly three thousand documents, I have compiled the bibliography consisting of more than six hundred entries; it provides a solid register of sources not only for research in cartography but also for studies carried on in other disciplines. On the basis of the selected documents, I have provided in the bibliography the cross-references that are significant in scientific research.

5. I have edited maps displaying the travels of László Magyar and contemporary travelers. With the assistance of the methods of GIS applications, I have produced the georeferenced versions of the manuscript maps – supplemented with the modern maps of drainage networks. To support the cartographical analysis, I collected the geographical names from the major descriptions and manuscript maps of László Magyar, which are indispensable for further research of toponyms and ethnography.

V. Publications

The following publications have appeared in the subject of the doctoral dissertation:

- Nemerkenyi, Zsombor: László Magyar's Maps and Their Analysis and Comparison with Other Travellers' Works. 3rd International Conference of PhD Students, Natural Sciences, Miskolc, 2001. pp. 33–41.
- Nemerkenyi, Zsombor: Magyar László utazásai Afrika ismeretlen királyságaiban (The travels of László Magyar in the unknown kingdoms of Africa). In: A Földgömb 2001. 6, pp. 20–31.
- Klinghammer, István et al: Magyar László munkásságának értékelése, térképészeti, földrajzi és kulturális-antropológiai elemzés alapján. OTKA pályázati jelentés

(The assessment of the works of László Magyar on the basis of cartographical, geographical, and cultural-anthropological analysis. OTKA research report), Budapest, 2002. reg. n.: T 025842

- Nemerkenyi, Zsombor: Magyar térképész az Afrika-kutatásban (A Hungarian cartographer in African studies). In: Studia Cartologica 2002. 12, pp. 99–106.
- Nemerkenyi, Zsombor: Magyar László szerepe a 19. századi Afrika-kutatásban (The role of László Magyar in nineteenth-century African studies). Hungeo 2002, Magyar Földtudományi Szakemberek Világtalálkozója. Sopron, 2002. p. 13.
- Nemerkenyi, Zsombor: The Discoveries and the Maps of László Magyar: A Comparison to the Reports of Contemporary Travelers. 21st International Conference on the History of Cartography. Budapest, 2005. p. 71.
- Nemerkenyi, Zsombor: Magyar László megkerült régi-új kéziratos térképe (The old and new manuscript map of László Magyar rediscovered). In: Geodézia és Kartográfia 2007. 8–9, pp. 52–55.
- Nemerkenyi, Zsombor: Van új a – dél-afrikai – nap alatt! (New under the – South African – Sun!) In: A Földgömb 2007. 7, pp. 52–55.