Too Simple Maps

Karel Jedlička, Otakar Čerba

University of West Bohemia, Plzeň, Czech Republic

Abstract. During their existence, maps have had many various roles. They have been used as works of arts, educational materials, object of propaganda expressing power (visualizing controlled and claimed territories) or results of research (e.g. various thematic maps). But the orientation and way findings have been considered the one of key and the most important role of maps and similar cartographic products. This role interconnects all main functions of maps - cognitive, communication, decision support and social functions.

The various maps in map clients, mobile applications for tourism and navigations systems using GNSS represent the contemporary version of maps focused on orientation or way finding. These products are very frequently criticized by cartographers that they do not respect cartographic rules and principles which have been developed and used for many centuries. Abovementioned maps do not usually contain essential compositional element (e.g. scale or legend) or they use these elements in any unconventional way.

The paper introduces the research (work in progress) focused on cartographic evaluation of successful product exploiting maps (e.g. maps in browser, products of data journalism, mobile applications for tourism or navigation systems). The goal of our research is to find an answer (or answers) on the question "Why are above mentioned products successful (within the meaning of business and number of users), even though they usually do not respect essential cartographic rules and principles".

The particular sections of this paper are focused mainly on finding, description and comparison of historical parallels of map simplification. In history, there were eras with important changes of map composition and content in history, which are usually related to elimination of redundant map components (e.g. reduction of decorative map symbols). Authors want to show that contemporary map simplification does not represent any exceptional



Published in "Proceedings of the 11th International Symposium on Location-Based Services", edited by Georg Gartner and Haosheng Huang, LBS 2014, 26–28 November 2014, Vienna, Austria.

changes or threat for cartography, but it is in compliance with the evolution of cartography and maps.

The maps used for orientation or way finding are emphasized because they usually were more simple than other cartographic products in all historical eras.

But there are also mentioned changes connected with a commencement of positioning devices, small-display devices and multi-layered maps (using background maps), because these factors have also contributed to map changes and simplification.

Keywords. Map, simplification, history of cartography, navigation system, web map.