

Improving the concept of dialect maps based on geoinformatization of Czech dialectologic research

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Keywords: dialect maps; cartographic synthesis; systematic cartography; linguistic atlas; language mapping

Abstract:

Dialects as a traditional research subject of linguists requires collecting and analysing data from both linguistic and spatial perspectives. Detailed research on the distribution of Czech dialects and their specifics during last 50 years provides a vast sources for preserving the nation's cultural heritage. Dialect mapping contributes for the preservation of cultural heritage. While a few decades ago it was possible to hear the local dialect at every turn in the villages, the current generation of teenagers speaks the dialect only very rarely. The dialect thus actually disappears, and while material things remain at least in collections and museums, preserving the language is not that simple. Dialectologists of the Institute for the Czech Language of the Academy of Sciences of the Czech Republic actively address this issue and collect data on dialects. Due to the spatial nature of dialectological data, their geoinformatics processing and their visualization in the form of maps is also suitable. The advanced social research frequently utilises maps and multimedia presentations of selected dialect phenomena and a complex of publicly available tools for the managing dialect data and studying dialect phenomena. However, dialect mapping is still hard to understand for nonlinguistics and researchers have not explored whether the same techniques that have been used on production data by geolinguists so successfully might be as useful for understanding regional variation in perception.

Joint research by dialectologists and cartographers has developed algorithms, software tools and digital databases that have made it possible to create a new concept for digital dialectology maps. Thanks to this, selected maps from the Czech Language Atlas [1] have already been reworked and new analytical and synthetic dialectological maps have been compiled. The original maps were prepared by the linguists themselves, so it is a great challenge to create these maps so that they are accepted by this group of experts and at the same time cartographically correct and use the latest knowledge in the field, for example in terms of symbology or user aspects.

The paper describes the progress of improving the concept of dialect map which came from based on implementation of GI technologies. The progress starts at the 6volume Czech Linguistic Atlas (from 2000's) which expresses the data only in a very simple form from a cartographic point of view. Applying of advanced geovisualization two new concept of dialect maps has been applied [2]. Both concept [3] were implemented in two new atlases. The same data for all three atlases are visualize in different concept and in three atlases, including the Czech Linguistic Atlas. Two new atlases from 2020 and 2022 corresponds to the cartographic atlas theory as a system and contains both analytical and synthetic maps. Synthetic maps show areas with similar combinations of evaluated attributes.

Acknowledgements

This paper was compiled within the project No. DG20P02OVV029 „Czech dialects in an interactive view. Documentation and ways to the accessibility of the disappearing linguistic heritage as an integral part of regional identities“; support provider: Ministry of Culture of the Czech Republic, NAKI II Program.

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