

The Use of Methods of Cartography and GIS Tools in Cultural Anthropology Research: Pilot Study in Localities Yawan and Toweth (Papua New Guinea)

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Extended Abstract

While cartography and geoinformatics technologies and tools were originally interconnected mainly with technical and science oriented fields of human activity, these methods and tools have also been entering applications within social and human oriented disciplines more frequently in recent years. An example of this could be the large amount of research into archaeologists and historians.

It is astonishing that in the past maps and other cartographic works have been and often still are accompanying anthropological research only in the form of locating cultural communities and cultural phenomena or in the form of simple spatial schemas. However, all the social and cultural phenomena involve, in addition to the historical content, a spatial aspect, too, including categorization, changes and behaviour of cultural communities and phenomena. Not only for this reason, cartography, geography, and GIS tools should therefore be closely related particularly to anthropology.

Nowadays, however, methods of cartography, geography and geoinformatics have been confronted with methods of sociological and anthropological research, which are known in the form of questionnaires and interviews (sociology), and also in the form of extensive, intensive, and comparative field research (cultural anthropology).

In this contribution, the authors will introduce the first output of a pilot study, which was carried out from April to June 2015 by the Nungon people in the villages of Yawan, Toweth and Kotet (Uruwa Valley, Morobe prov-

ince, Papua New Guinea). Considering that the Nungon people live in the mountains of the Saruwaged Range, relatively far away from large cities, there was no actual detailed spatial data available and the whole mapping had to be carried out in combination with the local coordinate system with the connection to WGS-84 via GPS. Therefore, besides using methods of cultural anthropology within the field research, terrestrial and GPS methods of data collection were used, too. Quality control of the data was thus carried out directly in the mapped locations using mobile GIS mapping applications, and subsequent processing and data analysis run in software ArcGIS for Desktop upon arrival in Czechia. The research output should then be, among others, a dataset and a series of maps showing cultural specifics and phenomena of the Nungon people in the locations of Yawan and Toweth.

The combination of methodological approaches mentioned above has proved to be very useful. It is obvious now that GIS tools could considerably change the form of cultural anthropology field research. The authors are convinced that this connection has potential for the future and it might not be at all unique in time. Therefore they are preparing rather extensive research, based on the pilot study, with the possibility of using a comparative method in other communities and locations, not only in the macroregion Oceania. The use of distance methods of data collection is expected, too.