

Abstract

Population mobility is a key urban shaping element that shows the functional relationships of the urban environment through the generalization of individual movement. The mutual process whereby the structure of the city determines mobility and is subsequently modelled by it is also important for understanding processes in the suburban or metropolitan zone. The dynamics of this process not only in the Czech environment is mainly due to the developing suburbanization, which in recent decades has been attributed a leading role in the visual and functional transformation of the landscape. In addition to suburbanization, which can be perceived as a process within the urban space, today's society and economy are also influenced by two significant external forces - globalization and technological progress. Technological progress is both materialised in a wide range of physical devices and innovations and manifested in the development of a parallel digital world. Its by-product over the last two decades is the digital footprint. In its broadest sense, it can be defined as a record of activity and interactions in time, space and context. One example of a society's digital footprint is the information extracted about the geographical movement of the population from mobile phone data. The potential of this data for sociogeographic research compared to traditional surveys lies primarily in its area-wide nature and the speed and frequency of collection.

The main objective of the dissertation is to understand the processes of mostly short-term mobility in Prague and its hinterland using both traditional and modern approaches in tracking population movements through commuting data from censuses and location data from mobile operators. The dissertation is designed in two parts. The first one consists of a general introduction of the topic in more general terms. The theoretical framing of the thesis presents the background of the approaches used in the individual publications of the dissertation and at the same time outlines the most important influences on the author's view on the issue of the internal organization of the city, suburbanization, mobility and the importance of time and space in the everyday organization of society in metropolitan areas. Specifically, the tradition of the Albertov school of settlement geography, the Chicago school based on the social ecological approach, time-space geography and the new mobility paradigm that follows it are presented. The introduction of traditional works and basis of the above-mentioned trends is extended in the thesis with selected contemporary themes and concepts.

A significant current research trend that extends into the dissertation methodology is the use of a wide range of data referred to as *big data* to understand current (not only) geographical reality. In the methodology subchapter, selected research relying on a progressive data source on population mobility, namely location data from mobile operators, is presented. And it is the use of several datasets from mobile operators, together with cartographic visualization and analysis of census data that creates the overall analytical-methodological approach with an emphasis on the quantitative approach of the dissertation publications.

The second part includes a total of four publications in which the author participated, which combine the above-mentioned general theoretical and methodological principles. All publications are geographically focused on the Central Bohemia, and their order corresponds to the sequence from the locality, through the metropolitan area to the entire Central Bohemia. In addition, the interconnectedness of the texts is based on a gradual generalization of the processes in the territory, from research on commercial suburbanization in a specific locality, to the tracking of daily rhythms and population mobility, to a comprehensive synthetic assessment of metropolization processes in the definition of the Prague Metropolitan Area.