## The changing role and importance of the built environment for daily travel in Sweden

by

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## ABSTRACT

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Geography, in terms of the built environment and location patterns, was traditionally, and still is, emphasized by many scholars, policymakers, and planners as greatly influencing people's daily travel behaviour. However, taking recent decades of rapidly increasing mobility capabilities (physical as well as virtual) into account, and the related increase in individual choice opportunities, others argue that the importance of geographic factors has gradually dissolved. Starting from this discussion, the overall aim of this thesis is to examine the current role and relative significance of the built environment for the geographical extension of individuals' daily travel in Sweden. The thesis is based on three empirical studies in which particular attention is paid to detailing the impact of geographic factors on various daily travel activities (paper I); exploring possible changes over time in the importance of the built environment for home–work distances (paper II); and the potential relaxing of the relationships between locational structures and travel behaviour when people regularly use ICTs and telework (paper III). All three papers apply multivariate quantitative approaches to a unique combination of detailed, high spatially resolved micro-data, including the national travel surveys and register data of the total population.

An overall conclusion of the thesis is that the proximity of various aspects of the built environment to home still plays an important role in how far people in Sweden travel daily. However, the analyses, informed by theory emphasizing everyday spatiotemporal constraints, reveal that these relationships have become relaxed in several important respects. First, the specific time-spatial constraints associated with different daily activities that motivate trips and travel are key and also differentiating factors. When considering trips taken during holidays and for everyday leisure purposes, the built environment is less important for the observed daily travelled distance. Whereas service trips to a greater extent is associated with the built environment surrounding home, and work trips even more. Second, important changes occur over time, here examined in the case of work trips. Workers living in the same neighbourhood increasingly travel divergent distances between home and work. This suggests a continued decrease in the influence of the built environment on work related travel. Third, in terms of time-spatial relaxation, a rapid increase of telework lately is an important case. The built environment influences teleworkers' daily travel to a lesser extent than it does regular workers' daily travel since telework allows for the freer scheduling of daily activities in time and space. Conclusively, the results confirm the importance of considering spatiotemporal constraints related to daily activities when exploring the role of the built environment and its importance for daily travel. More generally, the thesis also remind us that the importance of the built environment changes as an integral part of larger societal transformations connected with development of mobility technologies and profound socio-economic and demographic changes.

Keywords: built environment, travel, distance, daily, commuting, telework, residential location, Sweden, activities, mobility, spatiotemporal constraints

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