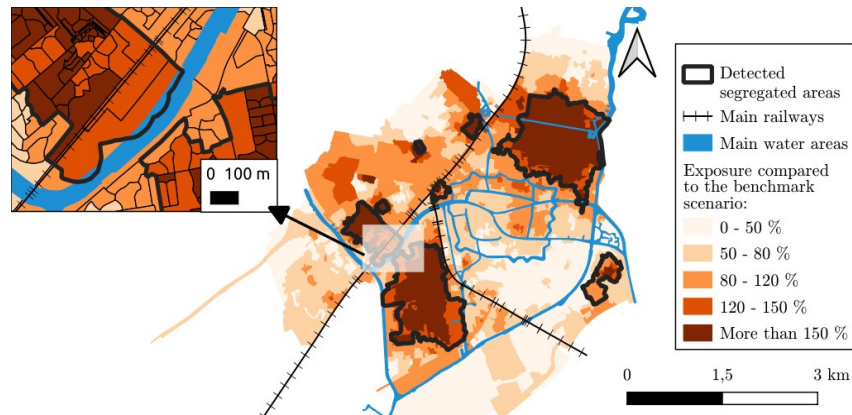


Investigating the Spatial Scale of Segregation in Cities



Problem description

Spatial segregation is a persisting issue in many cities in the world. It can occur along several social dimensions, such as income, education, or migration background, and often leads to inequality between groups, especially if segregation happens at a large spatial scale. Identifying the geographic, demographic, transport and urban factors affecting the spatial scale of segregation is therefore key to designing more inclusive cities.

Assignment

In this project, you will investigate the spatial scale of segregation in a set of cities and possibly the role of public transport therein. This consists of measuring segregation at a fine-grain resolution level, applying a regionalization method to aggregate spatial units into larger areas of similar segregation levels, and measuring the size of these areas. Then, you will analyze the size distribution of these segregated areas, and compare various cities. Finally, you will explore the geographic, demographic and urban factors relating to the spatial scale of segregation in the set of cities considered.

You may choose a country of preference, in which census data is openly available at a high spatial resolution ($\sim 1\text{km}^2$). The United Kingdom and Finland are possible case studies.

Candidate

- Must have a strong background in statistics and data analysis
- Must have experience in Python
- Knowledge in GIS is a plus
- Knowledge in machine learning is a plus

Research group

Smart Public Transport Lab at T&P

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