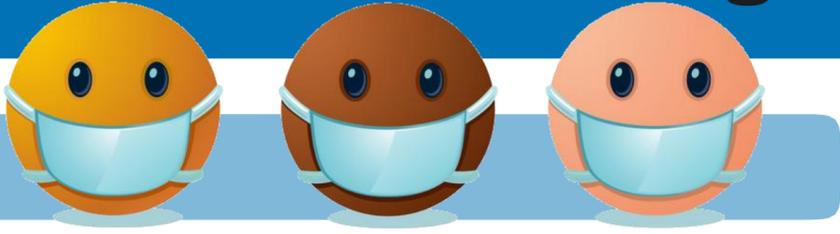# Residential segregation 2012–2018

in Prague and Central Bohemia: a multiscalar approach using individualized neighbourhoods

Aim

This text describes and compares the residential segregation of foreigners in Prague and Central Bohemian region in years 2012–2018. The focus is on (non-)Slavic and (non-)EU migrants in particular and it explores the effects of cultural closeness and legal status on residential segregation.

Method

The distribution of foreigners is measured using a new method of individualized scalable neighbourhoods. This method allows to compare the distribution of minority and majority population on multiple scales and does not depend on the statistical-administrative division of the territory. The analysis is based on detailed data on the foreign population from the records of the Ministry of the Interior.

Figure 1) Individualised neighbourhoods using population grid.

An example of constructing an individualized neighbourhood of 50 nearest neighbours (k = 50) in population grid data, using the EquiPop software.
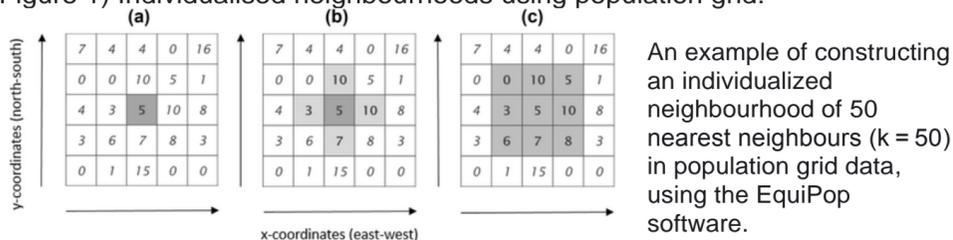
Figure 2) Change in dissimilarity index for individualised scalable neighbourhoods of foreigners in Prague and Central Bohemian Region and city of Prague. Computation grid size is 100 m.
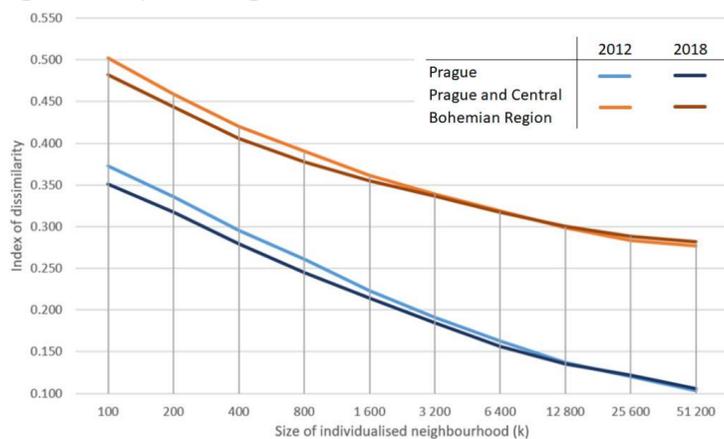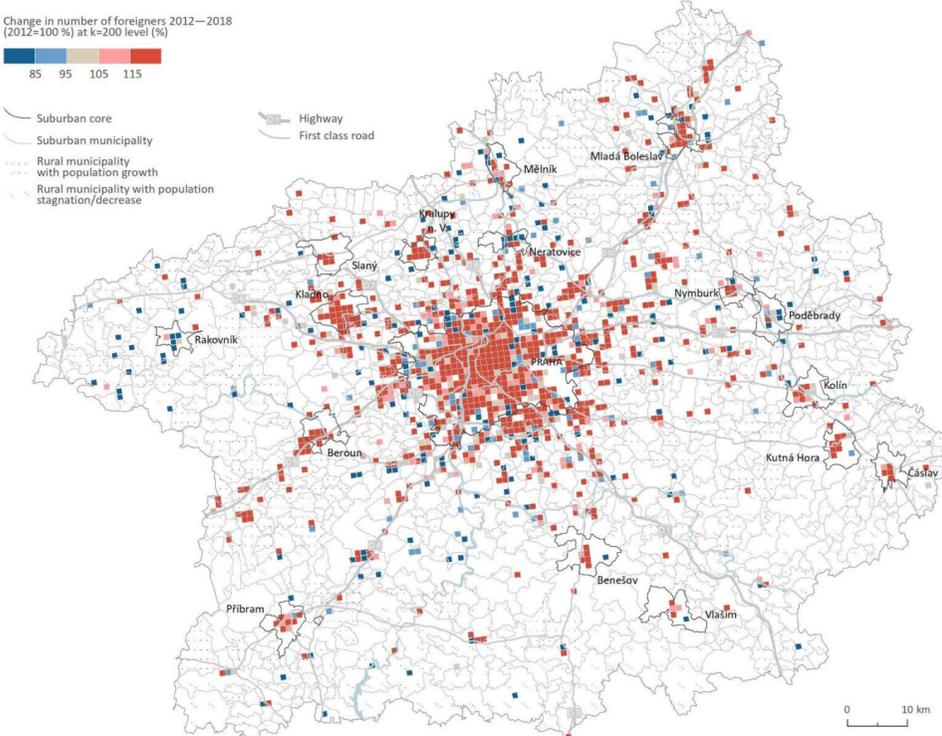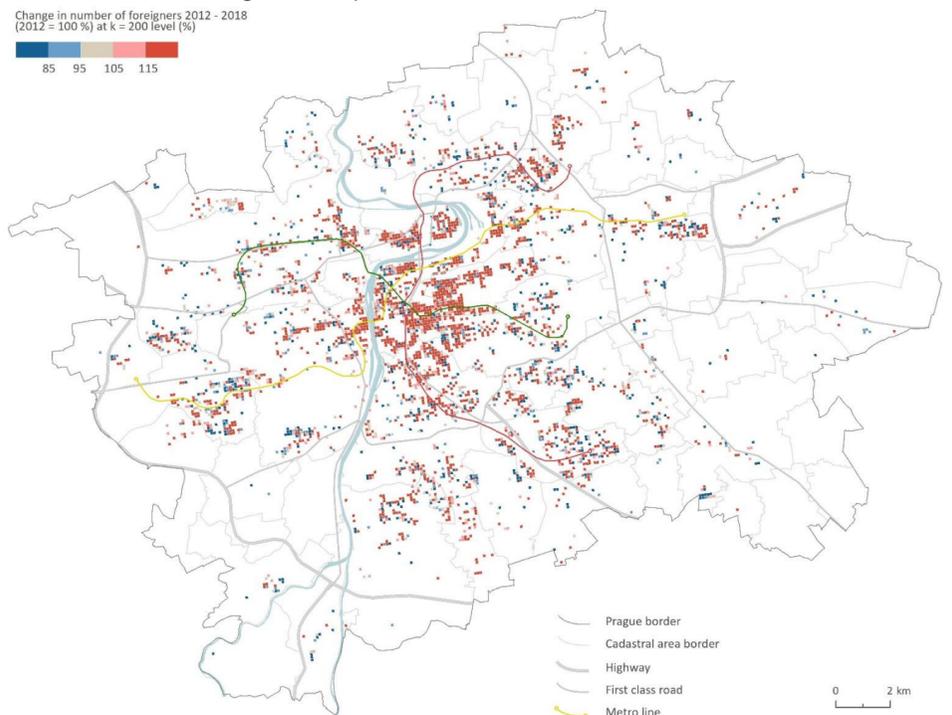

Figure 3) Change in number of foreigners in individualised scalable neighbourhoods at k = 200 level in Prague and Central Bohemian Region 2012–2018. Grid size is 1 000 m.

Following from the assumptions of the spatial assimilation theory, we can hypothesize that:

H1) immigrant residential segregation will decrease in time;

H2) residential segregation of an immigrant group culturally close to the majority of the population will be smaller than that of a culturally distant group;

H3) immigrant groups socio-economically similar to the majority population will be less segregated than groups whose socio-economic status is more distinct.
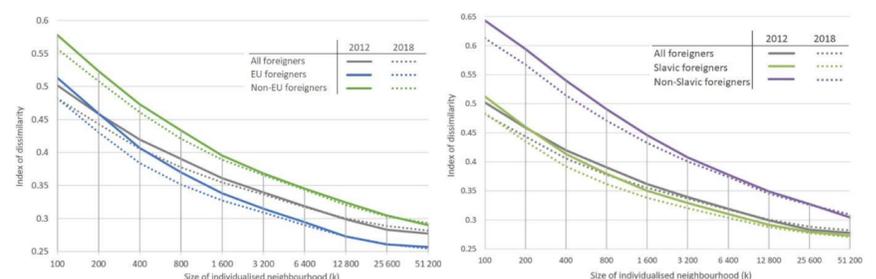
Figure 4) Change in number of foreigners in individualised scalable neighbourhoods at k = 200 level in Prague metropolitan core 2012–2018. Grid size is 100 m.

Results

The study provided an evidence of decreasing segregation between 2012 and 2018. First, it was shown that residential segregation decreases in time for most groups and most neighbourhood sizes. Contrary to this, a moderate rise in residential segregation was measured at the macro scale where the increase is likely to stem from the spatial distribution of jobs available to foreigners. Second, residential segregation of the culturally close group (citizens of Slavic countries) is indeed generally lower than the culturally more distant group (citizens of non-Slavic countries). Third, the legally and socio-economically closer group to the Czech majority (EU citizens) proved to be more equally distributed as opposed to the more dissimilar group (non-EU citizens). All three hypotheses were thus supported by the data. While the merits and shortcomings of this research have to be acknowledged, we believe that our study brings important insights into residential segregation that have not yet been presented in Czechia.

Figure 4) Change in dissimilarity index for individualised scalable neighbourhoods in Prague and Central Bohemian Region 2012 and 2018. Computation grid size is 100 m

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