

Location Sorting and Endogenous Amenities: Evidence from Amsterdam

Based on BFI Working Paper No. 2022-162, “[Location Sorting and Endogenous Amenities: Evidence from Amsterdam](#),” by Milena Almagro, University of Chicago; and Tomás Domínguez-Iino, University of Chicago

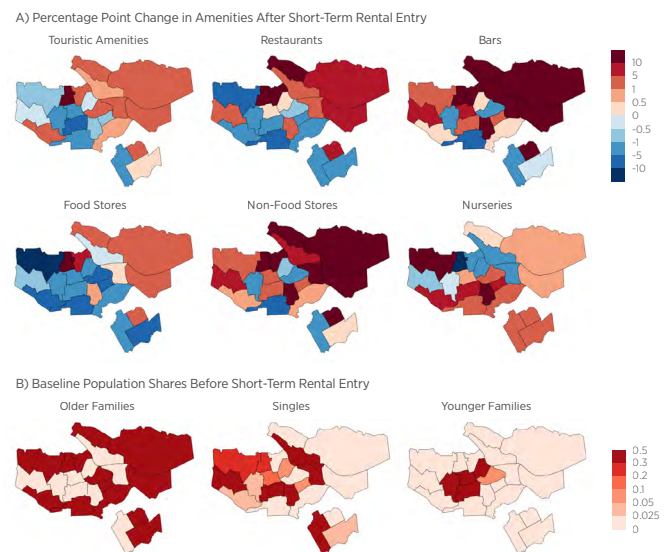
Different demographic groups tend to prefer different types of amenities, and businesses respond by expanding amenities in neighborhoods with greater demand. This pattern reinforces residential sorting, with ambiguous effects on inequality.

There is a rich literature showing that where we live shapes our trajectories in life. But what if our residential choices impact neighborhoods themselves through shaping the amenities they offer? Prior research has shown, for example, that amenities can improve as residential composition changes, reinforcing the desirability of certain locations and amplifying inequality. In this paper, the authors aim to better understand this pattern by studying how varying tastes for different local amenities influence both where people choose to live and, in turn, inequality.

The authors study this question in the context of Amsterdam, which has undergone significant changes due to the impact of mass tourism on local housing and amenity markets. They combine data on residential location choices with information about amenities across space and over time. The authors begin by documenting the following descriptive facts concerning Amsterdam:

- The number of short-term rental (STR) and tourist listings has grown dramatically and sprawled across Amsterdam. Between 2008 and 2017, the number of overnight stays per resident doubled, hotel capacity grew from approximately 22,000 to 31,000 rooms, and STR listings grew from zero to over 25,000.

Figure 1 • Effect of Short-Term Rental Entry on Amenities and Baseline Distribution of Households



Note: This figure shows the changes amenities across space and the baseline exposure of each household type to such changes. Note that touristic amenities and bars expand the most in locations originally populated by older families, who tends to value these amenities the least.

- Rents have increased more in neighborhoods with more STR entry. A 1% increase in a neighborhood's commercial STR listings is associated with a rent increase between 0.06% and 0.11%.

- As tourism grew, amenities catering to tourists—such as restaurants and non-food retail expanded, while amenities catering to locals—such as nurseries—became less common.
- Demographic groups respond differently to these neighborhood changes through their residential choices, suggesting they vary in how they value the changes in amenities.

Building on these results, the authors next show how these patterns shape the effects of tourism. They build a model that allows them to study how residents' preferences for different types of amenities affects the development of those amenities and ultimately, inequality. They find the following:

- Differences in preferences lead to more **spatial sorting**, which is amplified as amenities respond and make neighborhoods more differentiated. Although differences in preferences can lead to greater inequality, they can also reduce inequality: If two demographic groups have different preferences for amenities, then they sort into different locations. This sorting increases the supply of their most preferred amenities, making neighborhoods more differentiated, such that the two groups avoid competing for housing in the same location.

- While all residents lose when rent rises, their losses may be compensated or amplified depending on how they value the changes in amenities associated with increased tourism. Older families lose more because they tend to lose the amenities they value most. On the other hand, singles and younger families obtain welfare gains because they experience an increase in the amenities they like, offsetting losses from higher rent.
- Finally, the authors use their model to compare urban policies that affect amenity and housing markets, including a tax on touristic amenities and a tax on STRs. They show that the impact of each policy depends on differences in both peoples' preferences for amenities, as well as the existing amenity supply.

The results presented here have direct implications for policies aimed at addressing the effects of urban gentrification. While rising housing prices have been studied widely, this research is the first to show how peoples' specific preferences for amenities affect neighborhood inequality. For example, low-income residents living in gentrifying neighborhoods may not only suffer from higher housing prices, but also from the changes in neighborhood characteristics associated with higher-income households moving in. The authors' model provides a new framework for evaluating policies in these and similar situations.

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Spatial sorting: the phenomenon where individuals arrange themselves across a geographic area based on preferences or characteristics, often influenced by factors like socioeconomic status or amenities

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