

# SEGREGATED BEHIND THE WALLS

## Residential patterns in pre-industrial Copenhagen, 1700-1850

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### READING THE MAPS

The study draws on occupational titles as a proxy for social status, since they were commonly reported in Danish sources from the end of the 17th century. To indicate labour type and socio-economic status, I coded the data with the HISCO- and HISCLASS-schemes [4,5].

HISCO groups occupations in a tree-like structure based on similarity of the materials and practice implied by the title. HISCLASS assigns a score between 1 (highest) and 12 (lowest) based on four dimensions: 1. whether the title indicates manual or non-manual labour, 2. the degree of supervision, 3. the implied level of skill and 4. the economic sector in which the title belongs.

### THE DATA

The rich material on Copenhagen makes it an ideal case for detailed analysis. The earliest property-level records of household members is a tax register from 1711. For later years, the censuses of 1787 and 1845 have been digitized by the National Archives of Denmark. The data was geocoded by digitized historical cadastral maps, the earliest dating from 1689, which were published as part of the Danish Historical GIS.

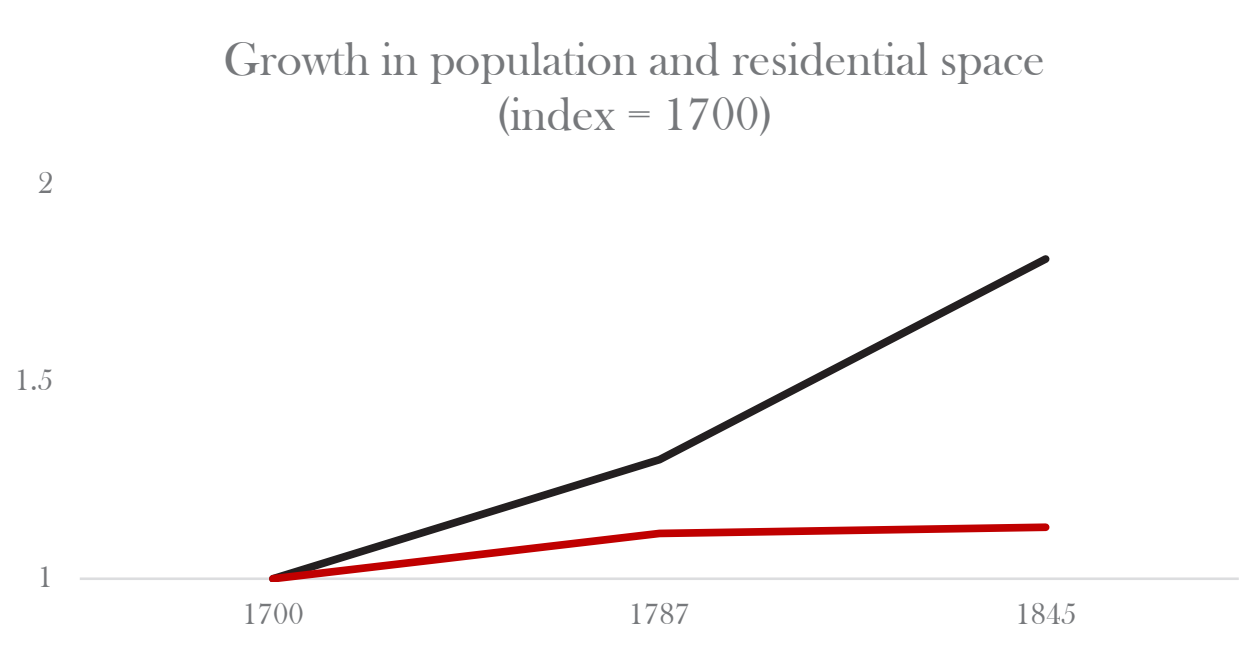


Figure 1  
During the period under study, the population of the city nearly doubled while new residential space was only possible in the area within the ramparts.

### ACKNOWLEDGEMENTS

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### REFERENCES

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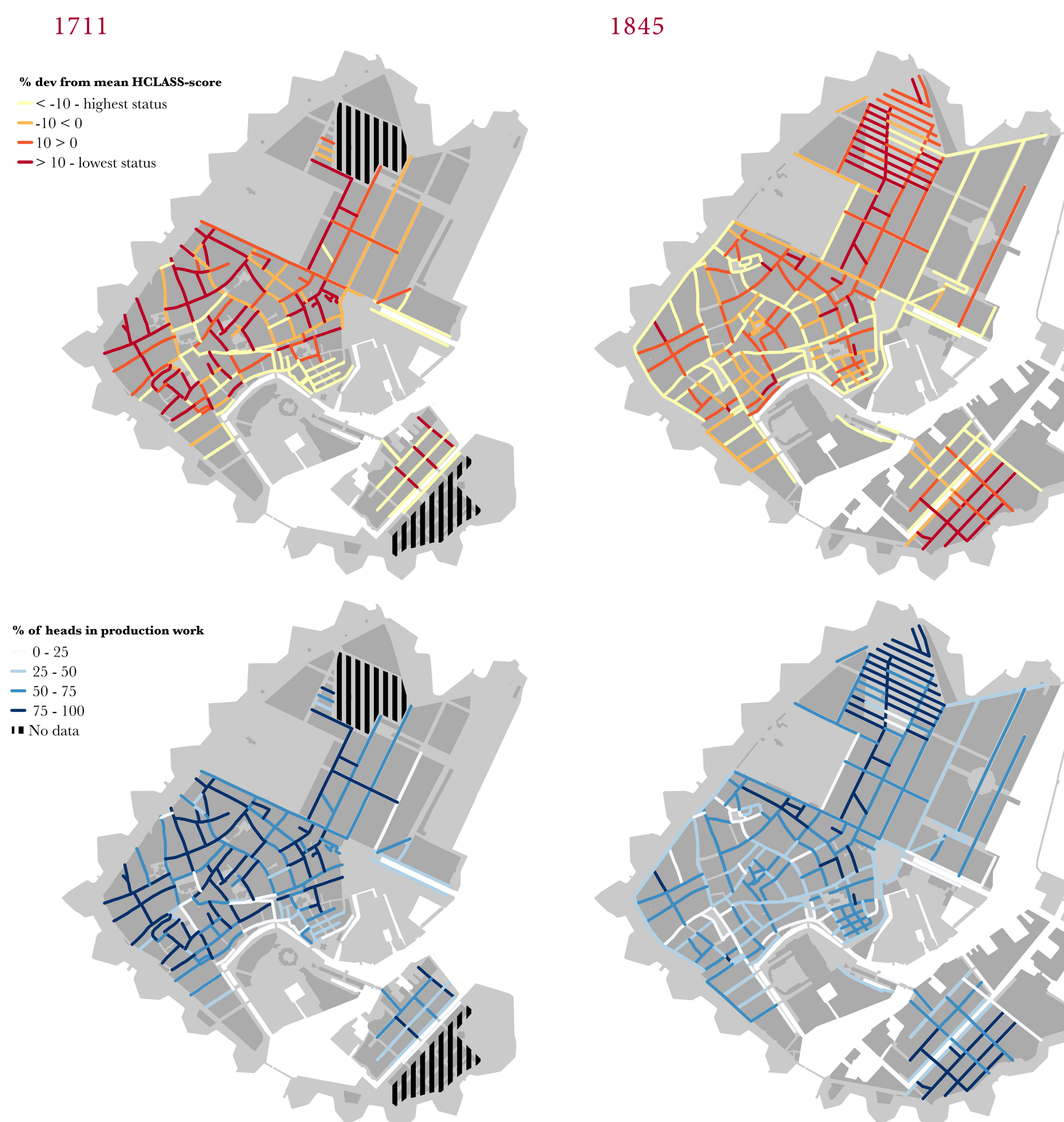


Figure 2  
Top row: HISCLASS-score of heads-of-household in each street, mapped by % deviation from city mean  
Bottom row: % share of heads-of-household in the HISCO group of production and -related workers

In 1711, most high-status streets were located close to the royal palace, by the cathedral and university, and between the most important market squares. There is general a pattern of a high-status centre and a low-status periphery, as Sjoberg's simplistic model would predict [3]. In reality, the social geography was more complicated, with several central low-status streets around the corner from high-status streets. Notably, merchants tended to cluster by the canals, suggesting that it was trade, rather than the royal palace, which fostered the high-status centre.

By 1845, most land plots in the new areas of Sankt Annæ (north-east) and Christianshavn (south-east across the harbour) were densely packed, and the last bits of clear space had been utilised for residence. It is evident the the concentration of production workers in the Old Town was lower in 1845 than in 1711. It seems a reasonable interpretation that many members of this group were pushed away from the centre. Instead, they settled in the outer parts of Christianshavn and in the Y-shaped cluster south of the garden of the King's summer residence. The production-heavy area in the northernmost part of Sankt Annæ consisted mostly of state-owned barracks for the sailors and shipbuilders of the Royal Navy. It is likely that the presence of these barracks influenced the composition of surround streets.

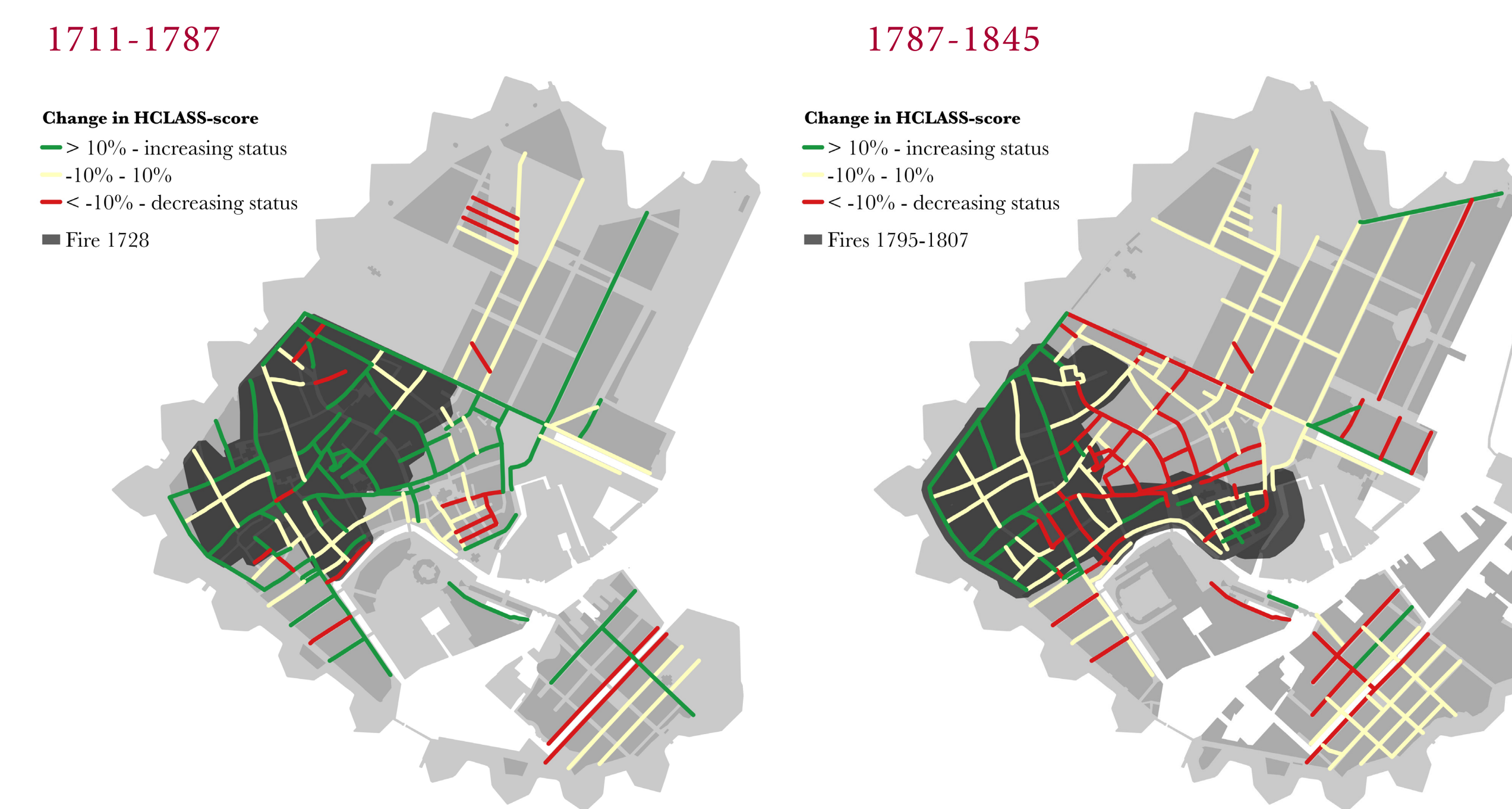


Figure 3  
Shows the change in HISCLASS-score compared to the city mean for each street. Within each period, catastrophic fires burned vast areas in the Old Town and those areas have been outlined with a black background.

Most of the Old Town burned at some point during the period as a consequence of three large fires: those of 1728 and 1795, and the one caused by British bombardment of 1807. The period between 1787 and 1845 displays a significant pattern of change towards higher social status in areas affected by the fire, while the pattern is less clear in the former period. After the latter two fires, plot owners were required to rebuild their houses in stone rather than timber; many could not afford this, and ~75% of burned plots were bought by master builders who built magnificent housing which would bring them the most profit. This is an indication that while disastrous fires were a vehicle for change, it was the premises of reconstruction that determined the extent to which it was possible.

### CONTEXT

When Copenhagen was expanded in the early 17th century, the city's ramparts were updated to withstand modern artillery. With the new fortifications came a new policy, imposed on the immediate hinterlands: buildings could not exceed one story in height; they had to be timber-framed; and they could be demolished by the military in the event of war. In this way, any outward expansion of the city was impossible until 1856, when the ramparts were closed off. During the same period, the population nearly doubled (fig 1).

It is thought that the walled, post-medieval city was horizontally mixed, but vertically segregated; the wealthiest lived on the first floor towards the street, while the deprived poor dwelled in the basement, attic or were housed in the back of the plot [1,2]. Some of these claims, however, have yet to be tested by rigorous empirical analysis. This project, which is built on property-level census data, aims to qualify some of the views held by historians on segregation in the pre-industrial city. It has three components. First, a street-level description of the general patterns of horizontal segregation in Copenhagen throughout the period. Second, an investigation of the role of major fires in reshaping the residential geography of the city. The third component is an examination of vertical segregation in 1845.

### KEY POINTS

There was a **tendency towards horizontal segregation** in Copenhagen. It was **strengthened during the period**, as the lower classes were pushed away from the centre. The fires had the potential to **pave the way for gentrification of central areas**, but it depended on the manner of reconstruction. Vertical segregation was found to follow the general pattern of horizontal segregation.

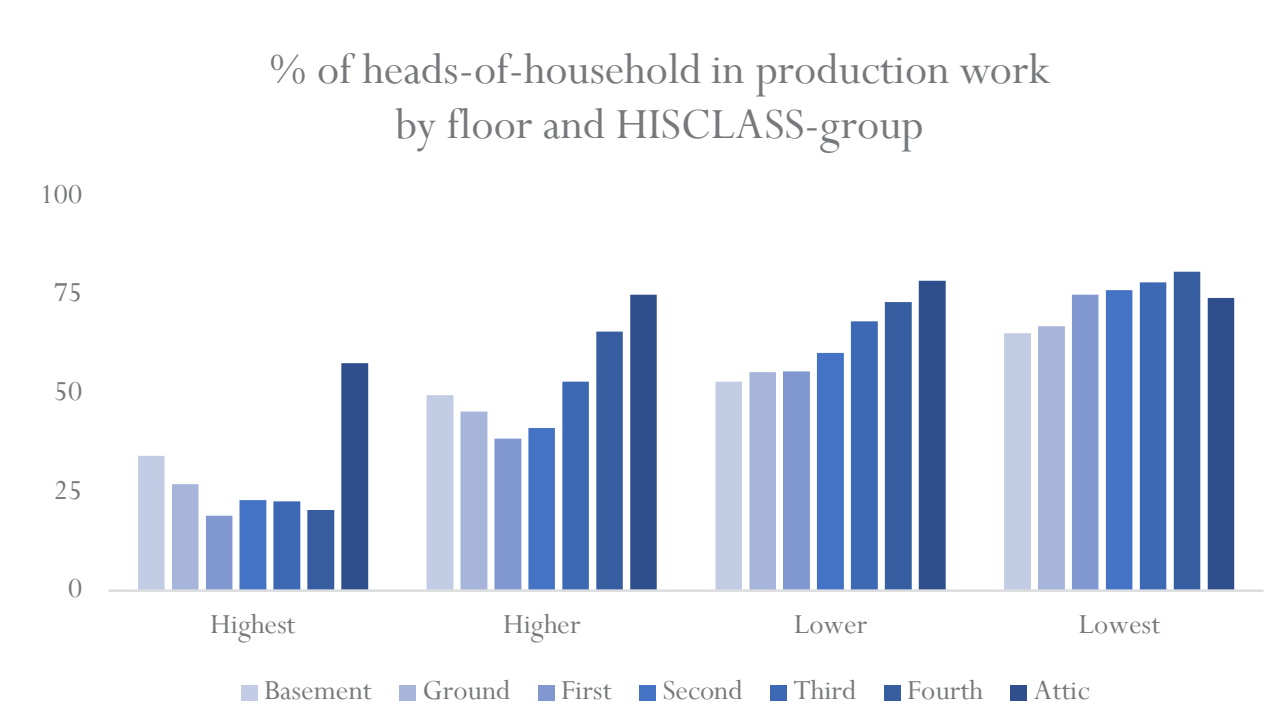


Figure 4  
Shows the % share of heads-of-household in 1845 in the HISCO group of production and -related workers on each floor, grouped by HISCLASS-score (identical to the groups in figure 3).

This confirms, to some degree, the assumption about vertical segregation as a stair-like figure. The ground and first floors were the most attractive with status decreasing the higher, or lower, in the building one looks. However, there is also a spatial dimension: the share of production workers decreases, on all floors, as the HISCLASS-score increases. The attics are an exception to this trend, as they seem to house a large proportion of production workers no matter the social status of the street. It is also worth noting that basements usually housed fewer production workers than the upper floors, and in the lower HISCLASS groups even fewer than the ground and first floors.