Does a bridge close the gap? The role of travel distance to university for inequality in higher education choices using the construction of the Great Belt Link in Denmark as a test case.

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Geographical distance between young adults residence and the nearest university is known be related to enrolment in higher education. At the same time, participation in higher education and the field of study choices depend on students' social origin. We hypothesize that less privileged students more often live further away from institutions offering higher education, and that their enrolment choices are more affected by distance to the nearest university. Previous research has shown that the effect of geographical distance on university choices is indeed related to social origins. In order to investigate these hypotheses, we make use of the opening of a new infrastructure project that changed travel times between different parts of Denmark remarkably and suddenly, the opening of the 18 km long Great Belt (Storebælt) crossing in 1996. With this new crossing, the travel time to a wide range of study opportunities was substantially shortened from one day to the next. Most significantly, higher education institutions in Copenhagen and Roskilde were now in a daily commuting distance for a part of the population on the island Funen, especially for those who are lived on its main city Odense. While regional comparisons are typically plagued by unobserved heterogeneity between regions that may correlate with the choice of universities in other ways than travel and relocation costs, the opening of the crossing changed only the travel times between two regions. Our design allows for an investigation of distance effects on higher education enrolment as well as field of study choices with special focus on social background differentials drawing on an a rich database from Danish administrative registry data. We compare individuals who live on Funen with individuals living within the same travel distance to Copenhagen before the opening of the Great Belt link, while those in the control group were unaffected by the new connection. A difference-in-difference design allows us to estimate the effect of the immediate change in travel times.

Our results show that the new bridge did not seem to have changed enrollment patterns. By contrast, there were changes in the local enrolment on Funen that by far outweigh the small changes in enrollment in Copenhagen. With regard to social origins, changes in the accessibility of higher education opportunities, via shorter travel distances to Copenhagen but especially the extension of local university capacities, has been picked up by children from upper classes and not, as we had expected, by lower class offspring. Sub-group-analyses for the population of the town of Odense point even more strongly into that direction: in this town, the travel distance was cut most drastically due to direct train connection, but it also hosted the main campus of the expanding University of Southern Denmark. Effects on local enrollment were stronger here, while there were hardly any effects of the changes in the travel distance to Copenhagen. It follows that at least for the Danish country case, building a better travel infrastructure to facilitate access to higher education opportunities seems not to be an efficient strategy to reduce inequalities in access to universities.