

# GIB Lecture Series: Geospatial Big Data and Societal Transformations

Tuesday 10.05.2022 | 16:15 - 17:45 | via ZOOM

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## Linear regression, model specification errors, and the modifiable areal unit problem

Spatially aggregated data sets are very commonly adopted by geographers and experts from other nearby disciplines. This way of organizing the observations provides many amenities including facilitating statistical works, protecting privacy, and cooperating smoothly with the administration, but comes with a price: the modifiable areal unit problem (MAUP). The MAUP refers to the sensitivities or inconsistencies of analysis results brought by the different spatial configurations of the same study area. Many empirical studies have documented the extensive impacts brought by the MAUP; however, the mechanism it reshapes the analysis results is not as straightforward as one may anticipate. Sometimes, it does not cause the trouble directly, but leverage the aftermath of other imperfections. In this talk, I will share some findings of how the MAUP will affect the regression results through the channel of model specification errors, and the opportunities that how we can possibly benefit from this 'problem' in alternative scenarios.

### Further information:

[www.geographie.uni-bayreuth.de/de/Veranstaltungen/GIB-Lecture-Series/index.html](http://www.geographie.uni-bayreuth.de/de/Veranstaltungen/GIB-Lecture-Series/index.html)

