Dissertation projects

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Overall my main areas of interest relate to:

1. defining urban boundaries at different scales, these can be based on infrastructure, but also on economic functional areas
2. clustering of economic activity at different scales
3. scaling of urban indicators
4. changes in accessibility due to interventions

Methodology: framework based on complexity science. Main tools are networks, spatial clustering and spatial interaction models.

Projects:

Methodology: **networks and spatial clustering**

For UK datasets:

1. Explore the regional dependencies on industries in the UK, through a longitudinal dataset on ownership links of firms in the UK (Fame dataset).
2. Explore the future changes and dependencies on innovation based on patent datasets.
3. Look at the role of clustering of firms for innovation.
4. Explore segregation in London based on infrastructure and transport, and find whether these communities have an identity defined through demographic characteristics, or whether they also correspond to digital communities.

For EU context:

1. Find a proxy for language or cultural similarity in Europe, and observe whether the communities that can be identified through this proxy, can also be characterised by their spatial connectivity.

Any of these projects can be adapted to a different city or country if the data is available. Note also that these are a few examples, but details can be discussed, and different methods could be employed.