

Geographic Data Science

Non-spatial clustering

Dani Arribas-Bel

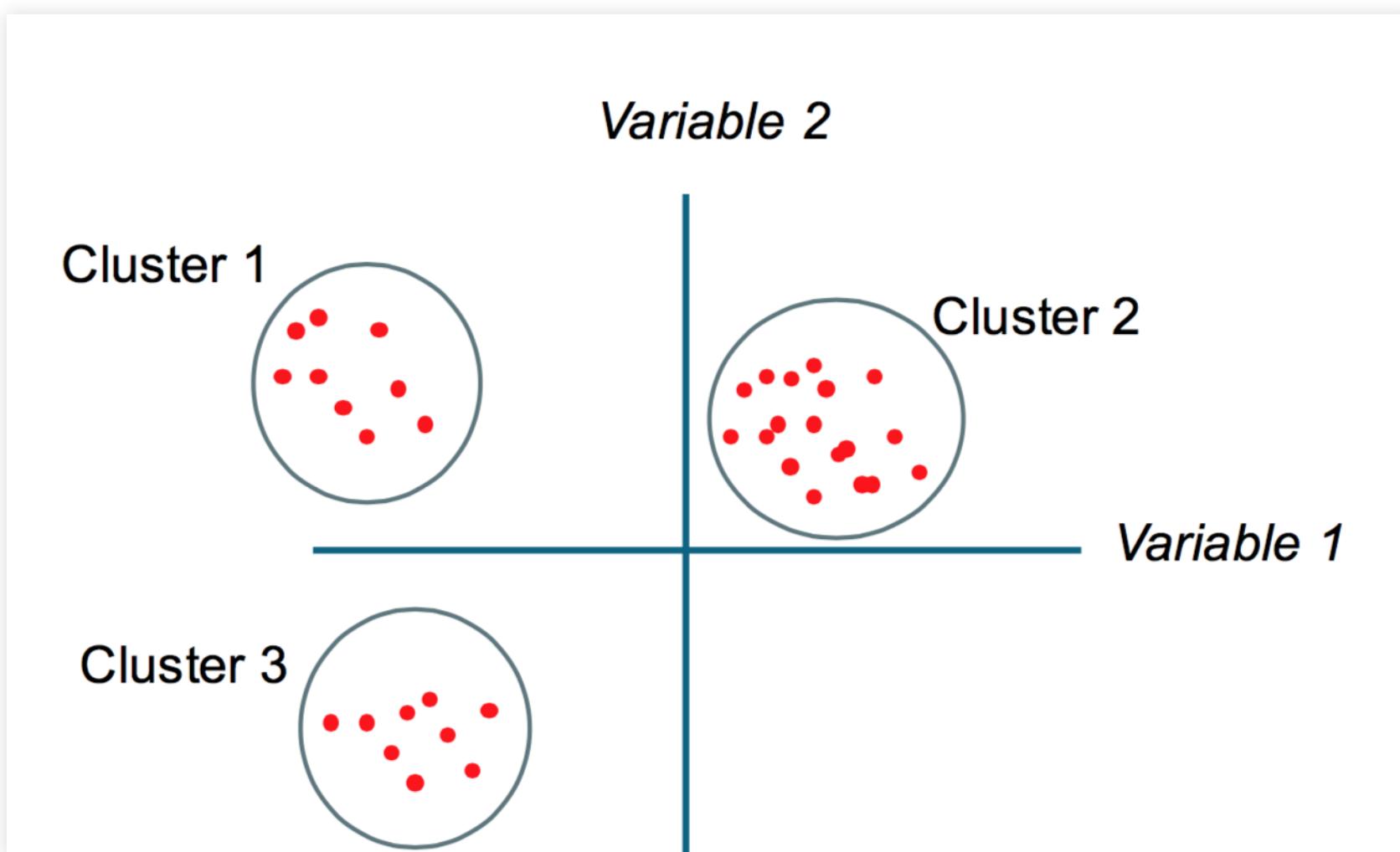
Non-spatial clustering

Split a dataset into groups of observations that are similar within the group and dissimilar between groups, based on a series of attributes

Machine learning

Unsupervised

Intuition



K-means

- Most popular clustering algorithm
- Good but not perfect
- Watch video for int

More clustering...

- Hierarchical clustering
- Agglomerative clustering
- Spectral clustering
- Neural networks (e.g. Self-Organizing Maps)
- DBSCAN
- ...

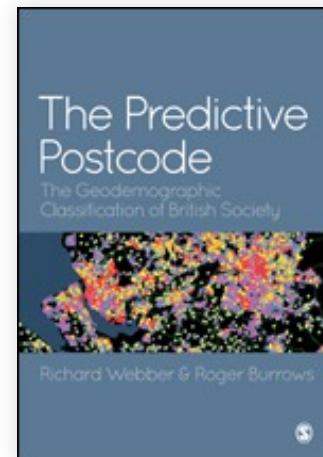
Different properties, different best usecases

See [interesting comparison](#) table

Geodemographic analysis

Geodemographic analysis

- 1970's, Richard Webber
- Identify similar neighborhoods
 - Target urban deprivation funding
- Public Sector (policy) →
Private sector (marketing and business intelligence)



CDRC Maps

DATA CHOOSEN

Classifications Retail

Select a map:
2011 Area Classif/n of OAs

[Download this data](#)

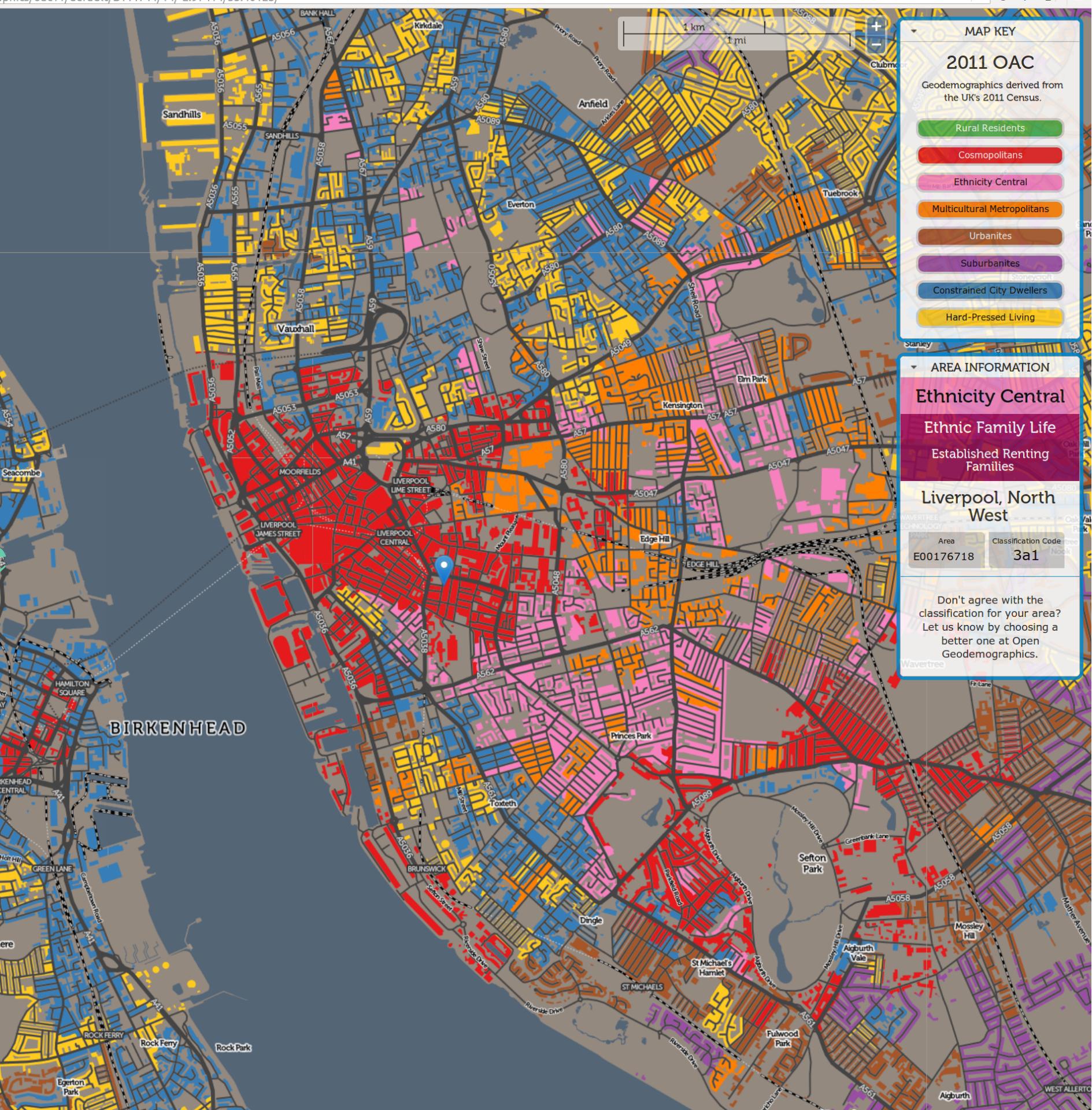
MAP OPTIONS

Layers: Land Labels

Toggle: Retail Centres

Download: retail centre locations

Postcode: L19dw | Go



Source



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