Geographic Data Science

Non-spatial clustering

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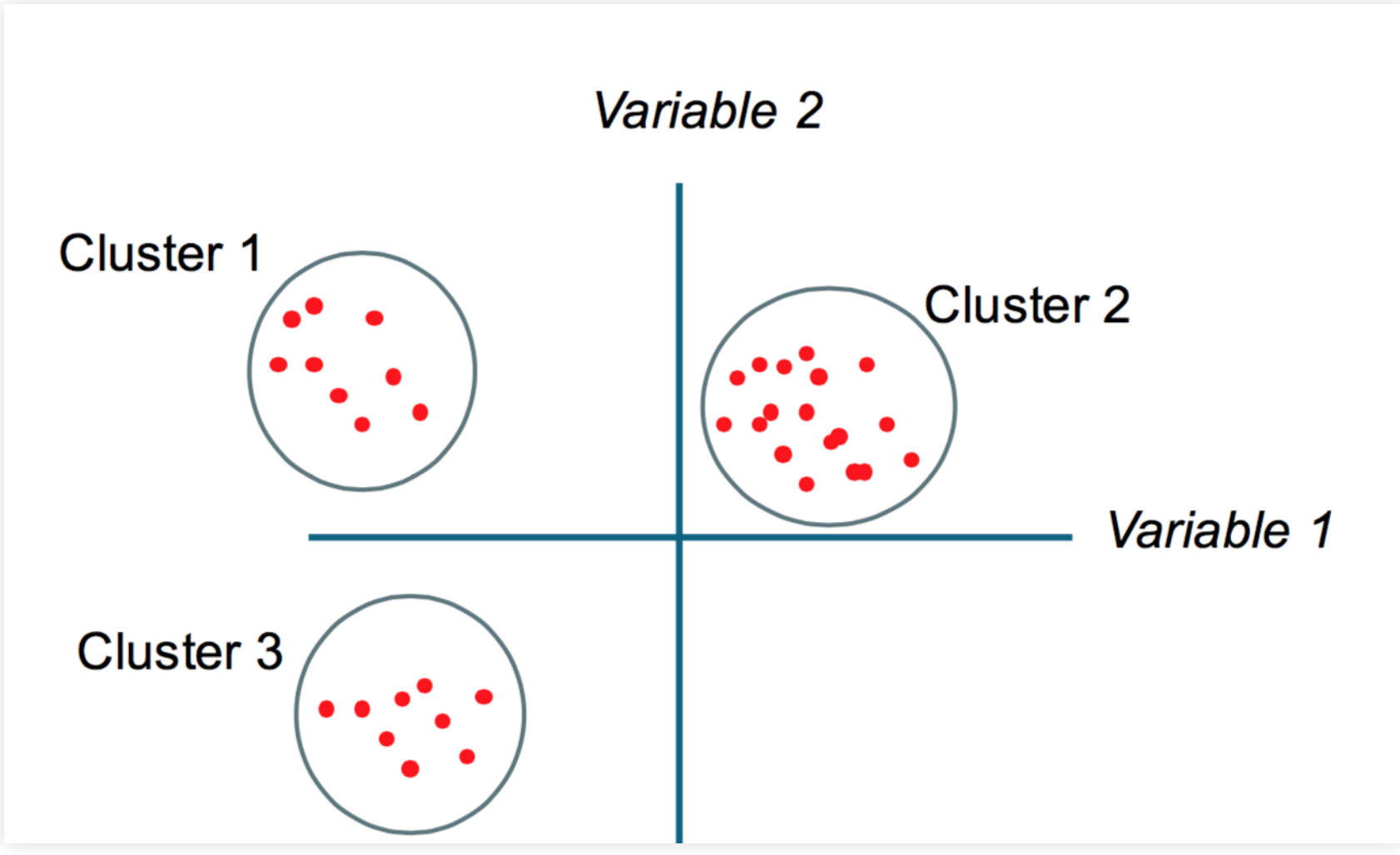
Non-spatial clustering

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)

Source

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