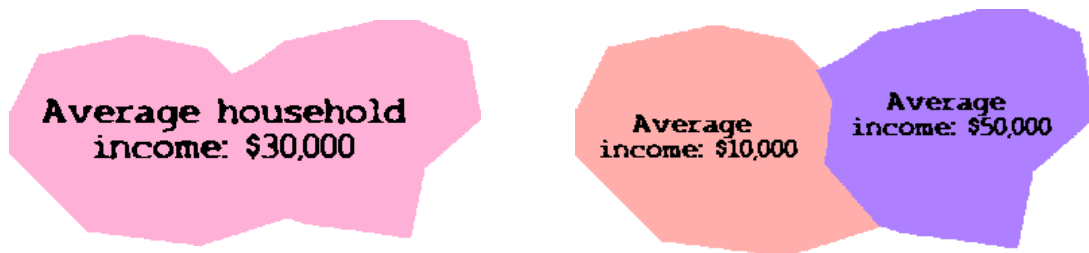


ecological fallacy

- “The dubious inference of individual level characteristics from aggregated [group-level] data.” [Kitchin R & Tate N 2000 177]
- the assumption that an “average” individual within any given geographical area actually represents any given individual within that area (let alone all individuals within that area)

“The average household income of this neighborhood is \$30,000”



Can we still speak of a “low income” or “high income” neighborhood?

spatial autocorrelation

- “a measure of the similarity or interdependence of an object with surrounding objects in space”
- high spatial autocorrelation suggests that “events or circumstances at one location are not independent of conditions at surrounding locations.” [Kitchin R & Tate N 2000]
- Eg. property values, neighborhood homogeneity

MAUP

- Modifiable Areal Unit Problem
- When dealing with a set of areas which vary in both their form (shape) and scale (size), “changes in the form of a set of zones will alter the resulting pattern of aggregated observations.” [Kitchin R & Tate N 2000 177]

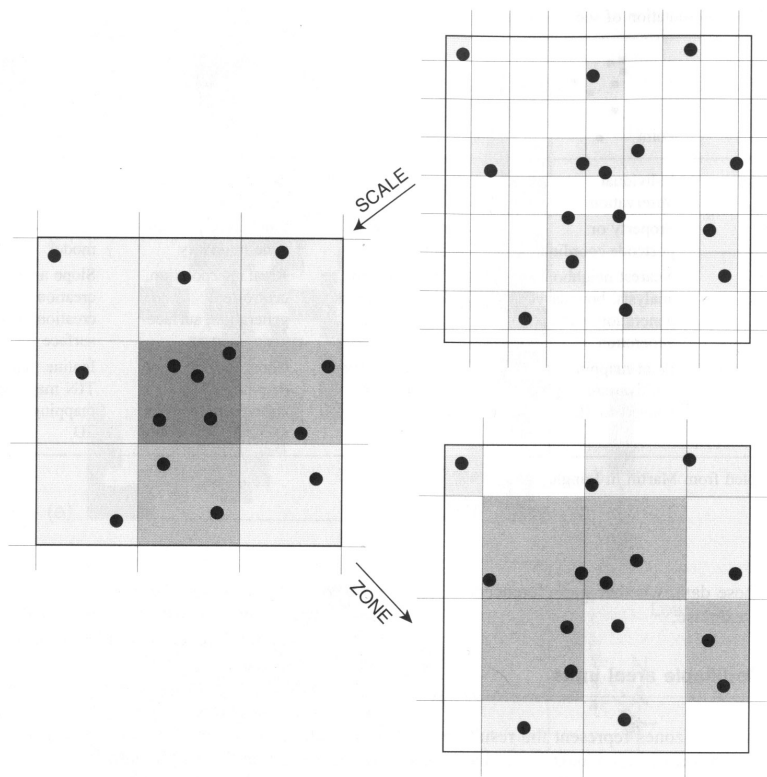


Figure 6.21 The scale and zoning elements of the modifiable areal unit problem.