thematic maps

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this version: Friday 3rd October, 2025 09:05

outline

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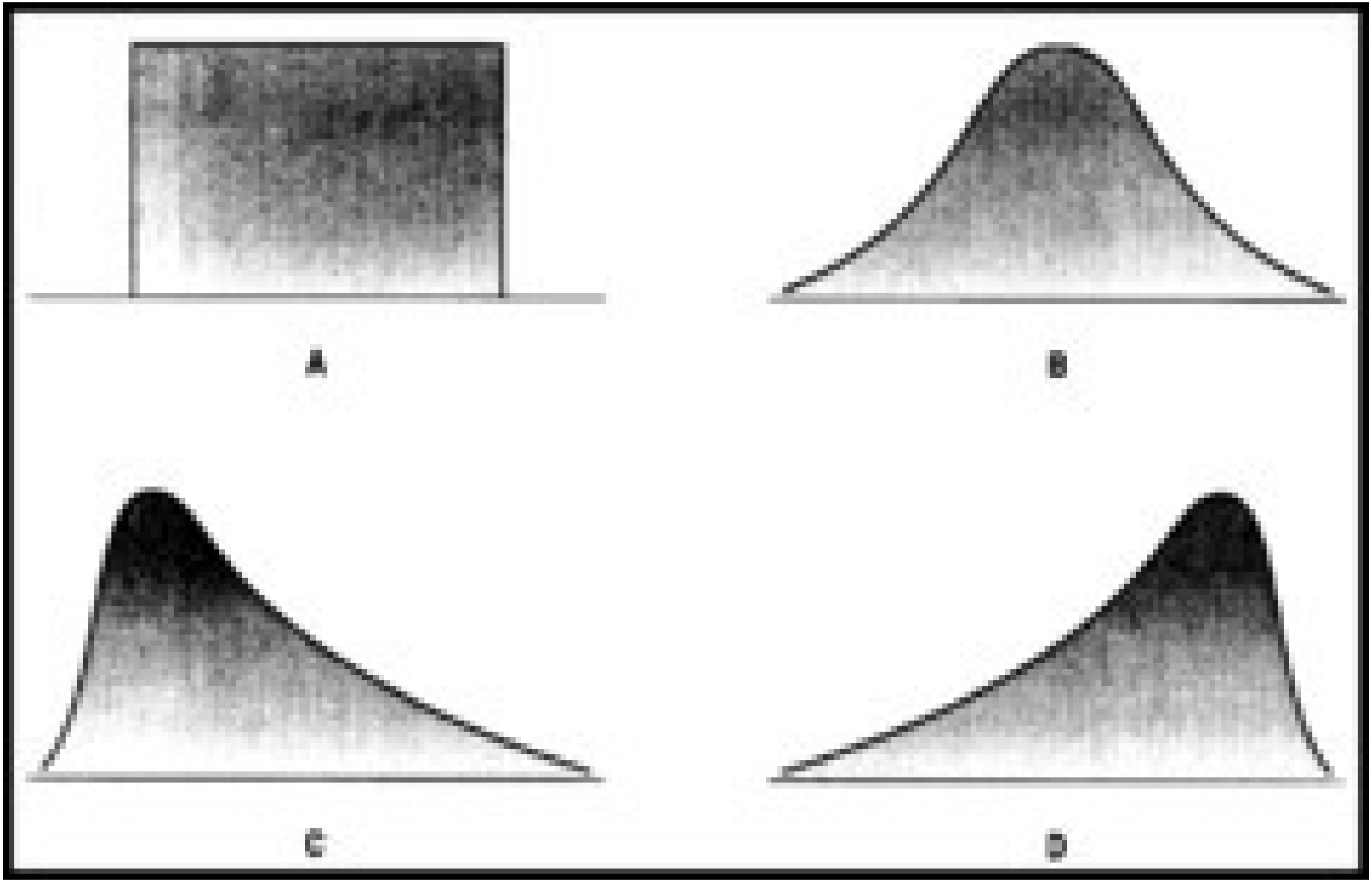
outline

distribution/histogram



reference

- pdf start p4: maup
  - https://theaok.github.io/gisPy/thematic_map_design.pdf

classification methods

- always understand the distribution–use hist!
  - think about it, discuss and motivate classification
  - (at least of main var; otherwhise i cut points)
- i like NATURAL BREAKS/JENKS, maybe QUANTILES
- usually more "truthful" than equal intervals
- start with many like 9 or 7
  - then shrink to 5 or 3 without loosing too much detail
- make it as clean and simple as possible
- still, to get there, in notebook explore the distribution and play with it, categorize differently
- always let the data speak! do not force your story

outline

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variable definitions

- be very clear about measurement
  - elaborate on measurement in caption, interpretation, appendix, etc–have to have it somewhere!
  - eg how exactly is brewery defined?
    small breweries at some bars count as breweries?
  - or what exactly is a bike lane–paths in park?
    does it have to be designated for bikes only?
    and paths not for bikes but used by bikes?
- ideally triangulate and map them all!

map labeling: clarity and simplicity!

- always have a self explanatory title/caption and legend
- a random person will understand what it's about
- must pass "grandma test"
  - give it to your grandma and she'll get it
  - if she doesn't, then it isn't clear enough, and your fault

always think about the meaning; interpret!

- always interpret the map, think about what it means
  - usually want to standardize to get meaningful
  - standardize by area "per sq km" or pop "per capita"
- even specific (eg habitable) area; specific (eg disadvantaged) pop
  - eg may be water or forest, so hydrants/(inhabited sq km)
  - similar with populations-they may only work or sleep in some area, eg Cherry Hill is a bedroom city
  - eg Cape May many liquor stores per capita
  - (just because nobody lives there)

let the data speak, but you pick the story!

- data have always many stories to tell
  - and you choose which one you want to present
- say may emphasize exteremes with dramatic colors
  - eg purple for values way different from everything else
  - (for intervention, disaster response, etc)
- or paint the gradient
- or id clusters, eg `https://link.springer.com/content/pdf/10.1007/s11205-010-9671-y.pdf`
  - (still using alt classifications for sensitivity/robustness)
  - (and std dev in addition to levels)