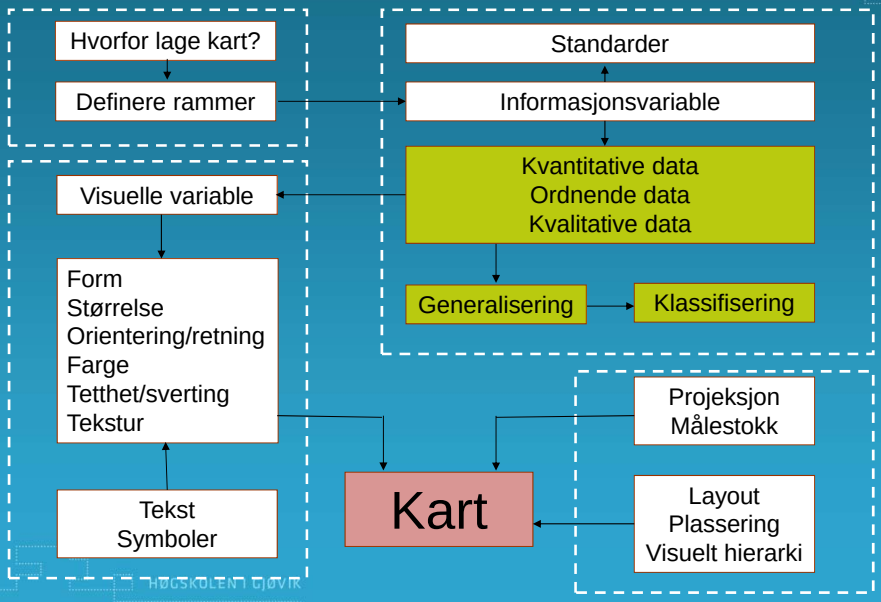
HØGSKOLEN I GJØVIK

Geografisk Informasjonsbehandling

Kartografi – Generalisering og klassifisering

Rune Strand Ødegård

VIKTIGE BEGREPER - KARTOGRAFI



GENERALISERING

- HUSK at et kart er en modell av virkligheten!
- Velge riktig datamodell – hva har betydning?
- Bruk SOSI-objektkatalog når det gjelder standard kartserier.
- Gjør eventuelt utvalg basert på egenskaper eller lokalisering.
- En avveiing mellom informasjonsvolum og klarhet i kommunikasjon (hva er strengt tatt nødvendig!!!)
- Overdrive den viktige informasjonen (visuelle variable).

HØGSKOLEN I GJØVIK

GENERALISERING – INNHOLD OG GRAFIKK

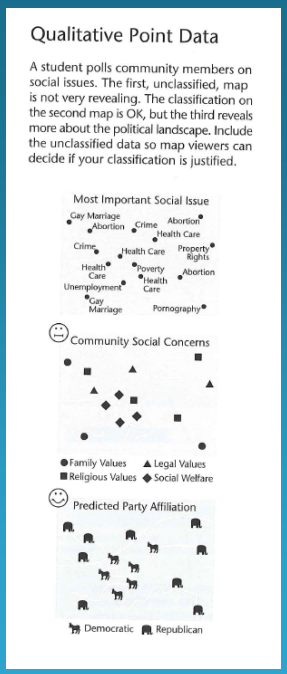
- Innholdsmessige generalisering:
  Utvalg, klassifiser i forhold til type målenivå (kvalitativ, ordnende, kvantitativ,
  forenkle/klassifisere i forhold til punkt, linje eller flate
- Forenkling eller glatting av linje- og flate symboler.
- Flytting av objekter !!!
- Bruk av visuelle variable for å framheve viktig informasjon.

HØGSKOLEN I GJØVIK

GENERALISERING – KJØREREGLER

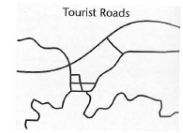
1.Prøv å behold hovedstrukturen i formene så langt som mulig.
2.Bevar topologi (sammenknytning av objekter).
3.Legg vekt på det vesentlige, slett eller reduser. betydningen av mindre viktige objekter.
4.Slå sammen grupper som ligner hverandre.
5.Bruk flatesymboler når enkeltobjekter ikke kan vises. (f.eks. tettbebyggelse).

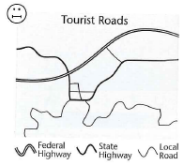
HØGSKOLEN I GJØVIK

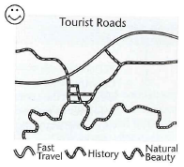


Qualitative Line Data

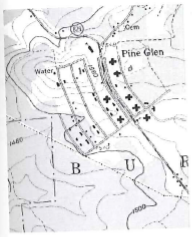
Roads are often classified in terms of who builds and maintains them (federal, state, local). However, this classification is not the best if your map is for tourists. Your goal for the map (tourism) should shape your data classification. Choose tourism-based classes for the roads.

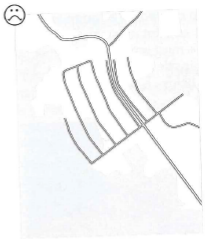






Qualitative Area Data



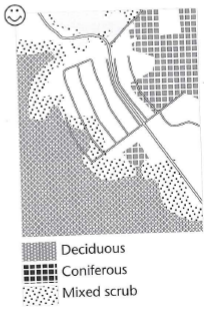


Be aware that qualitative data on maps has been classified. Determine the criteria for classification. A map may classify data based upon criteria suitable for one purpose but not necessarily for others.

For ecology projects, U.S. Geological Survey (USGS) topographic maps (above left and right) are often consulted. They classify vegetation into two categories: vegetation (gray areas) or no vegetation. One might assume that the classification is based on ecological criteria.

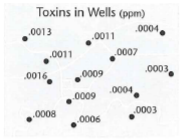
Alas, vegetation areas are actually classified based on military criteria. Vegetation areas are those with tree cover at least 6 feet tall that can hide military troops. It is a classification for army guys, not ecologists!

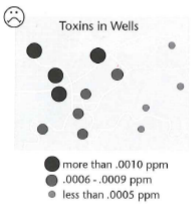
Instead, find a vegetation map (right) with a classification based on ecological criteria.

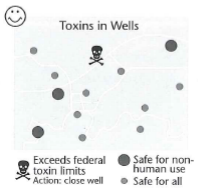


Quantitative Point Data

A map created for a community meeting about well test results should clearly show what is most important: whether the well water is safe for humans or not. The third map, below, is best for that goal.

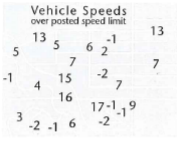


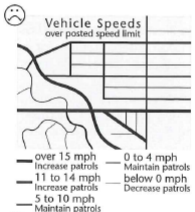


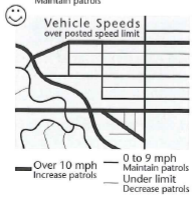


Quantitative Line Data

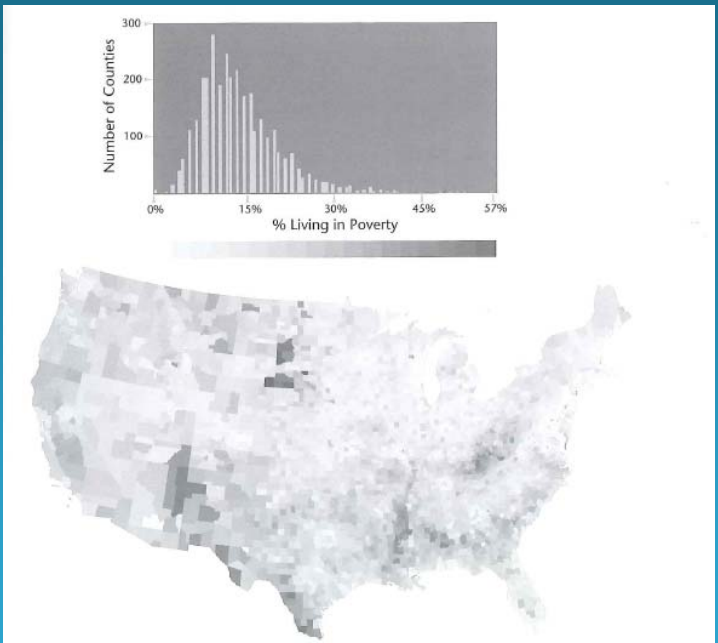
A map intended to help guide the restructuring of police patrol routes should classify data, in this case average vehicle speeds, in categories appropriate to the task: increase, maintain, or decrease patrols.



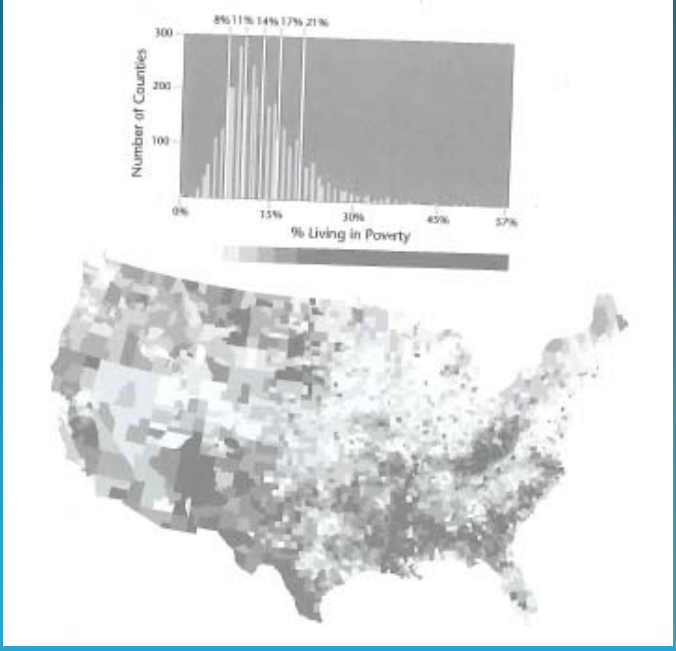




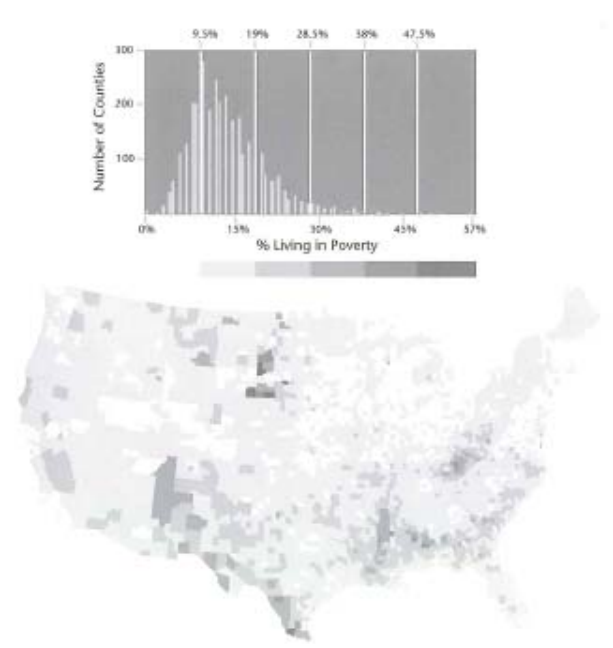
Datasett



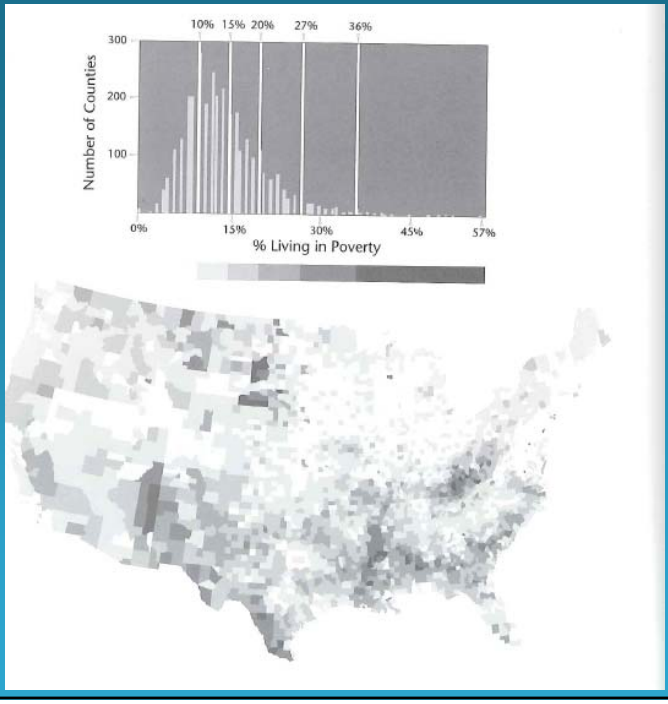
Kvantiler



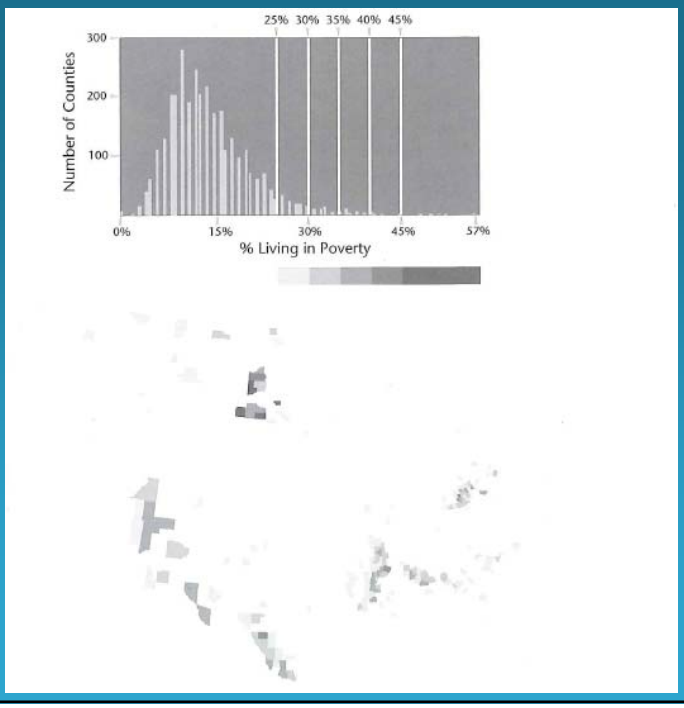
Faste intervaller



Naturlige intervaller

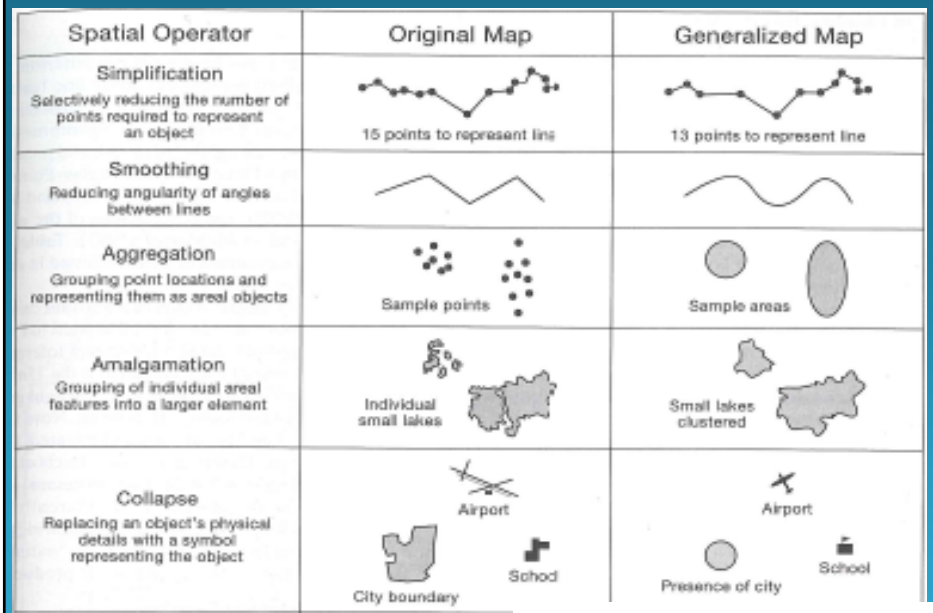


Unike intervaller

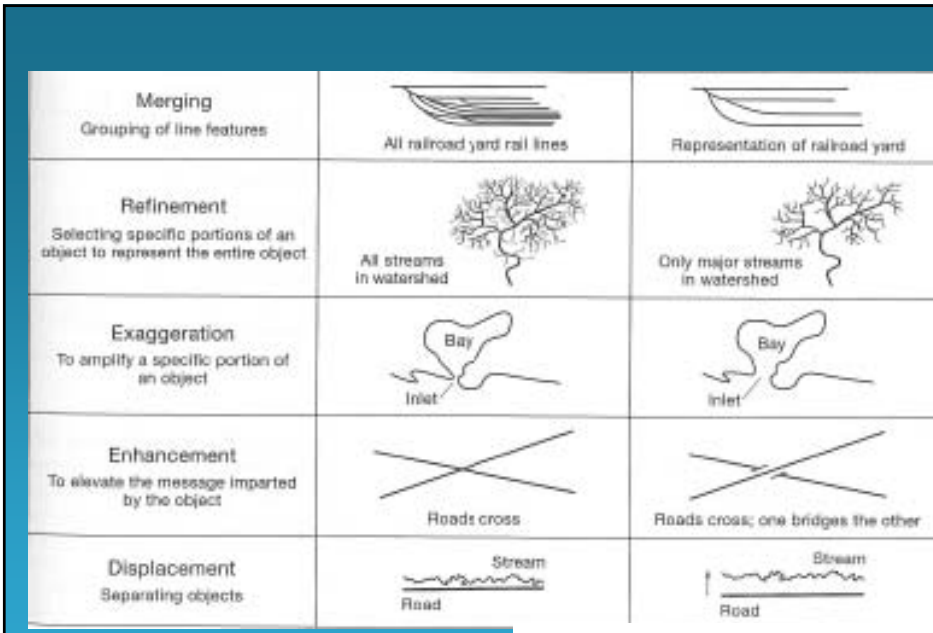


GENERALISERING – KLASSIFISERING AV KVANTITATIVE DATA

1. Analyser datasettet (histogram, plott).
2. Like intervaller
3. Kvantiler
4. Naturlig intervaller
5. Like intervaller
6. Unike (deler av datasettet)



Slocum, McMaster, Kessler, Howard: Thematic Cartography and Geographic Visualization



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