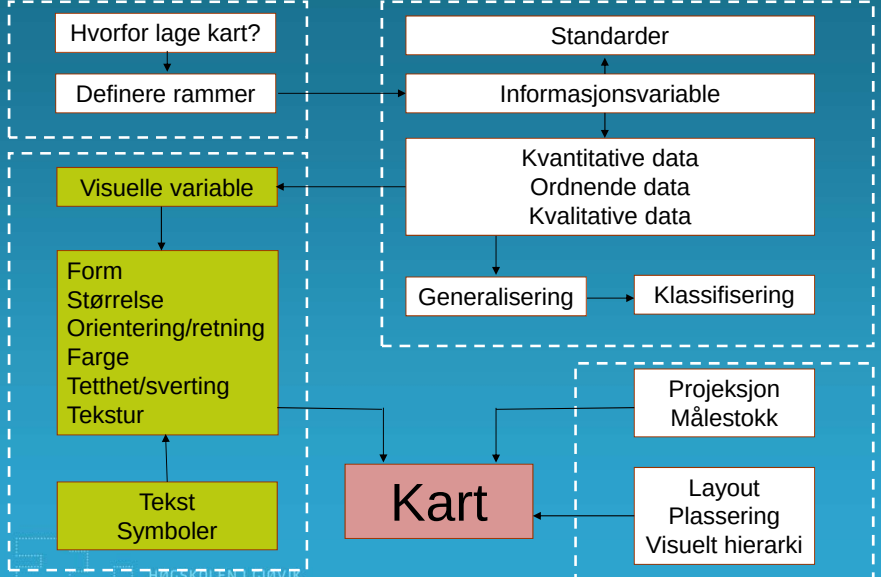
HØGSKOLEN I GJØVIK

Geografisk Informasjonsbehandling

Kartografi – Visuelle variable

Rune Strand Ødegård

VIKTIGE BEGREPER - KARTOGRAFI



VISUELLE VARIABLE

- De visuelle variable er et virkemiddel for å få fram budskapet i kartet.
- Før dette virkemiddel brukes må utvalg, glatting, flytting og budskap være avklart.

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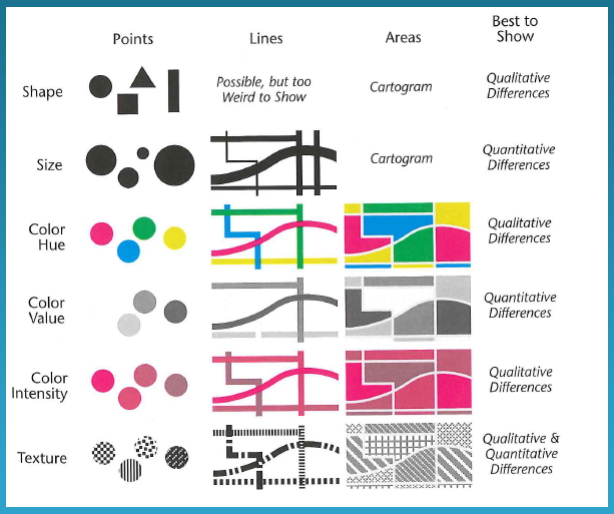
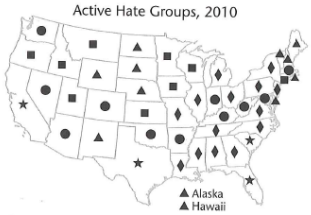


Shape

Map symbols with different shapes imply differences in quality. A square is not more or less than a circle, but is different in kind. Map symbol shapes can be pictorial or abstract.

use of shape



★ 41 – 84
♦ 21 – 40
● 11 – 20
■ 5 – 10
▲ 0 – 5

Shape is a poor choice for showing *quantitative* data. Using shape makes it hard to see the patterns on the map, as the symbols do not suggest the order (low to high) in the data.

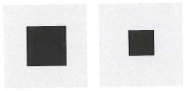
use of shape

KKK
Neo-Nazi
Black Separatist
Neo-Confederate
Christian Identity
Racist Skinhead

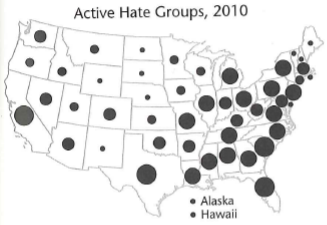
Shape is a good choice for showing *qualitative* data. Different shapes suggest the qualitatively different groups.

Size

Map symbols with different sizes imply differences in quantity. A larger square implies greater quantity than a smaller square.



use of size



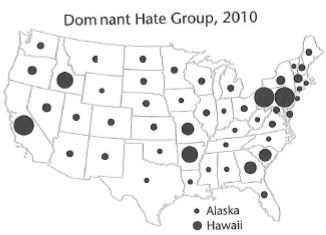
41 – 84
21 – 40
11 – 20
5 – 10
0 – 5

Size is a good choice for showing *quantitative* data. The use of one symbol varying in size parallels the order in the data.

use of size

KKK
Neo-Nazi
Black Separatist
Neo-Confederate
Christian Identity
Racist Skinhead

Size is a poor choice for showing *qualitative* data. Different sizes suggest order in the data rather than the qualitatively different groups.

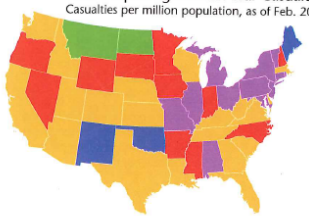


Color Hue

Color hue refers to different colors such as red and green. Symbols with different hues readily imply differences in quality. Red is not more or less than green, but is different in kind.

use of color hue

Total Iraq & Afghanistan War Casualties
Casualties per million population, as of Feb. 2010



80 – 230
42 – 79
26 – 41
13 – 25
16 – 12

Hue is a poor choice for showing *quantitative* data. Using hue makes it difficult to see the patterns on the map, as the colors do not suggest the order (low to high) in the data.

use of color hue

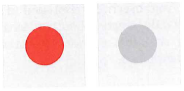
McCain Win
Obama Win

Color hue is a good choice for showing *qualitative* data. Qualitatively different hues parallel the qualitatively different data.

Presidential Election, 2008

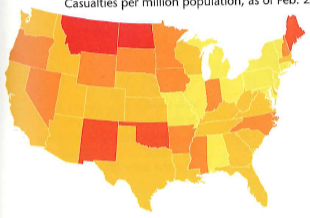
Color Value

Color value refers to different shades of one hue, such as dark and light red. Map symbols with different values readily imply differences in quantity. Dark red is more than light red.



use of color value

Total Iraq & Afghanistan War Casualties
Casualties per million population, as of Feb. 2010



80 – 230
42 – 79
26 – 41
13 – 25
16 – 12

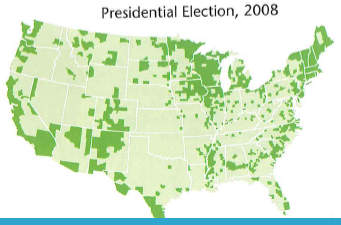
Value is a good choice for showing *quantitative* data. The use of one hue varying in value parallels the order in the data.

use of color value

McCain Win
Obama Win

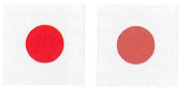
Color value is a poor choice for showing *qualitative* data. Values suggest an ordered difference, which is not appropriate for these data.

Presidential Election, 2008



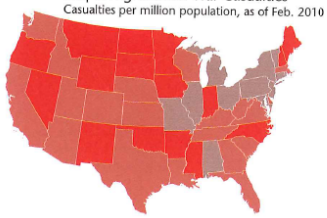
Color Intensity

Color intensity (or saturation) is a subtle visual variable that is best used to show subtle data variations, such as binary (yes or no) data that are not really qualitative or quantitative.



☹ use of color intensity

Iraq & Afghanistan War Casualties
Casualties per million population, as of Feb. 2010



80 – 230
42 – 79
26 – 41
13 – 25
16 – 12

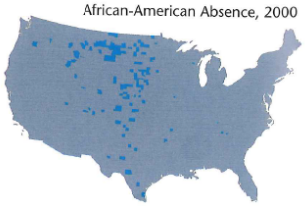
Intensity is a poor choice for showing *quantitative* data. Intensity may suggest order, but due to the lack of variation in value the sense of order is weak.

☺ use of color intensity

No African Americans
One or More African Americans

Intensity is a good choice for showing *binary* (yes/no) data. Intensity, like binary data, is neither qualitative nor quantitative.

African-American Absence, 2000

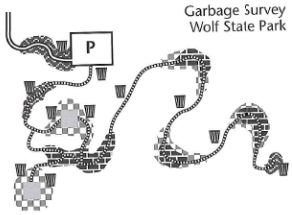


Texture

Texture (pattern) can imply both qualitative (brick vs. cloth) and quantitative (coarse vs. fine) differences. Select textures so that they suggest the qualitative or quantitative character of your data.

☹ use of texture

Garbage Survey
Wolf State Park



Cigarette Butts
Paper Debris
Glass & Cans

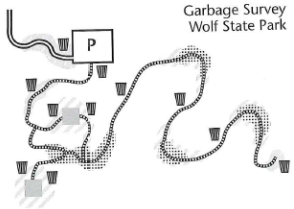
Textures can be visually noisy and imply ordered differences. Be careful with textures that look like something: glass and cans are shown with a brick pattern, which does not make sense.

☺ use of texture

Cigarette Butts
Paper Debris
Glass & Cans

Texture can be good for showing qualitative data. Select textures that are not visually noisy and that suggest the qualitative differences in the data.

Garbage Survey
Wolf State Park



VISUELLE VARIABLE

1. Form
2. Størrelse
3. Farge (type)
4. Farge tone (lys-mørk)
5. Farge metning
6. Tekstur – mønster
7. Tekstur – vinkel
8. Orientering/retning
9. Posisjon (projeksjon, datum, koordinatsystem)

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