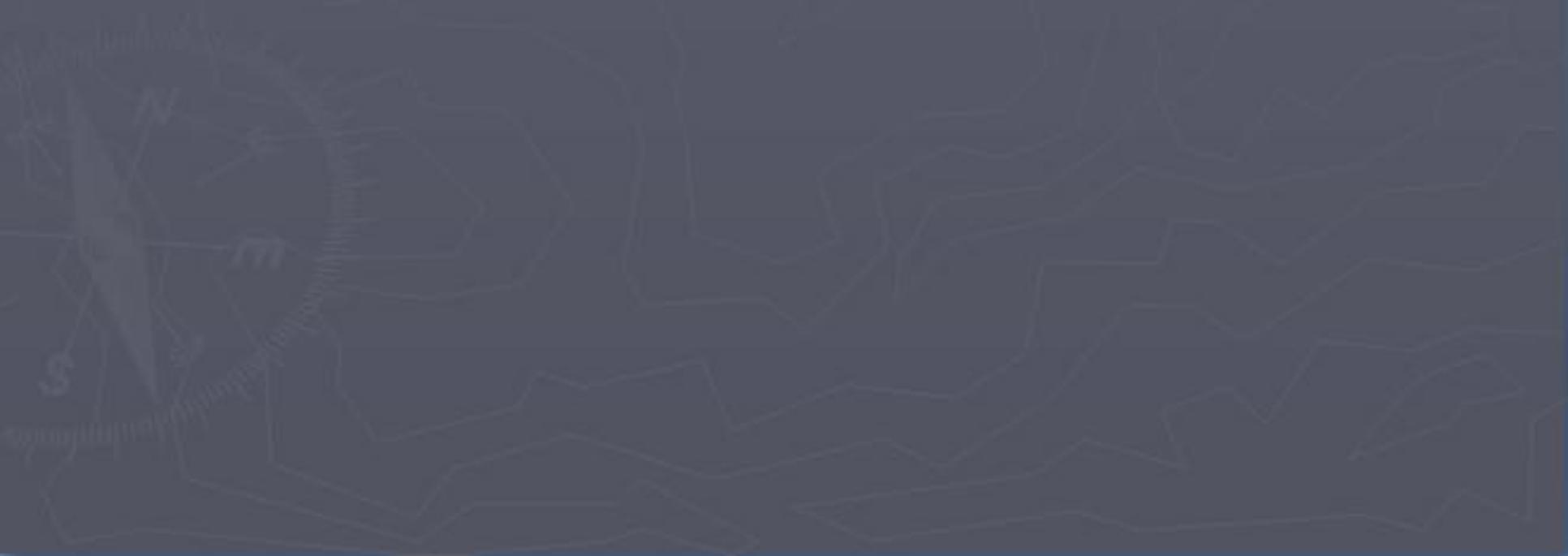


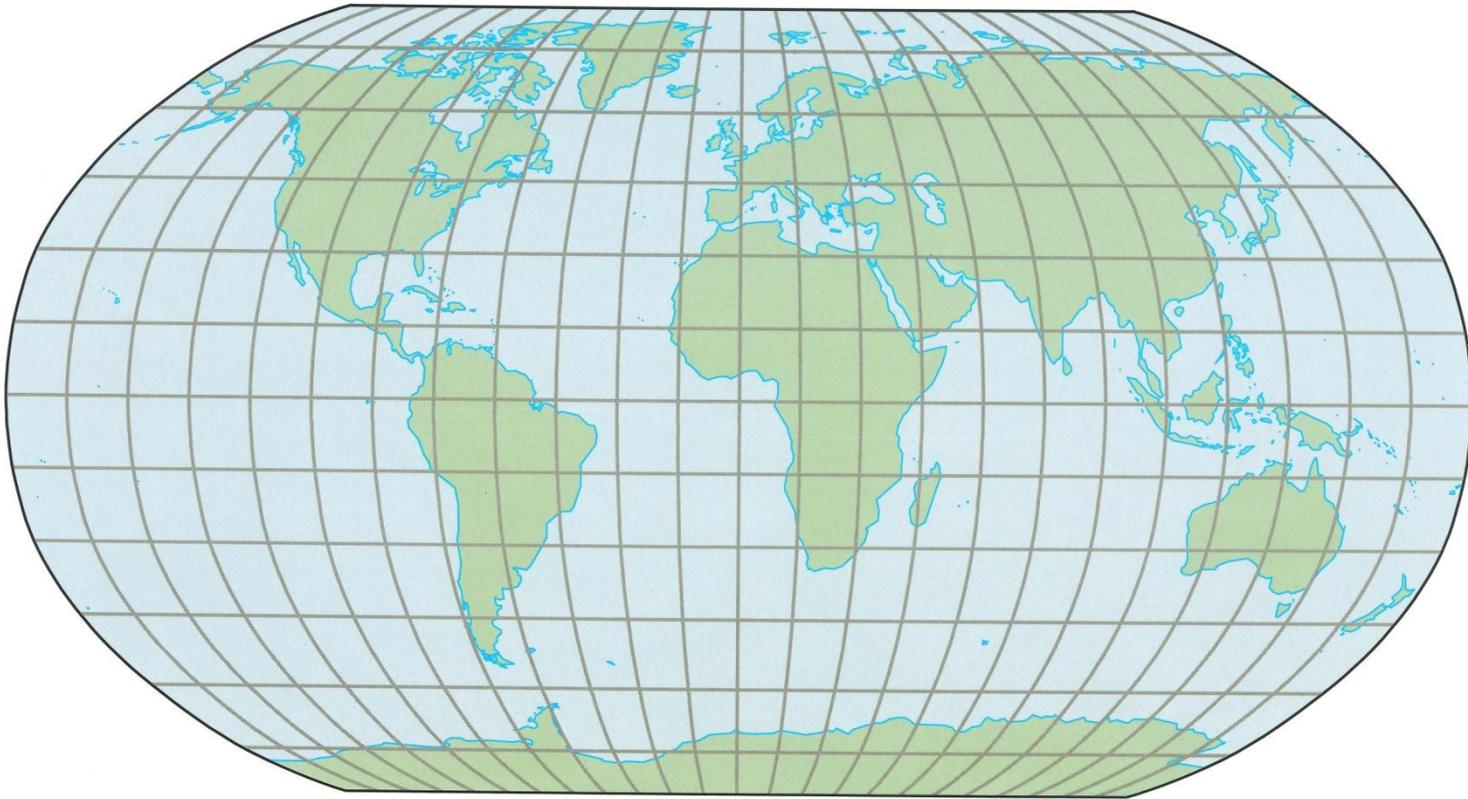
Map Projections and Types of Maps



Map Projections

- Cartographers have to deal with the problem of making maps of a spherical earth onto a flat surface
 - Leads to **distortions**
 - Shape can be distorted
 - Distance between two points can increase or decrease
 - Relative size may be altered, areas can appear much larger than they really are
 - Direction can be distorted

Robinson Projection

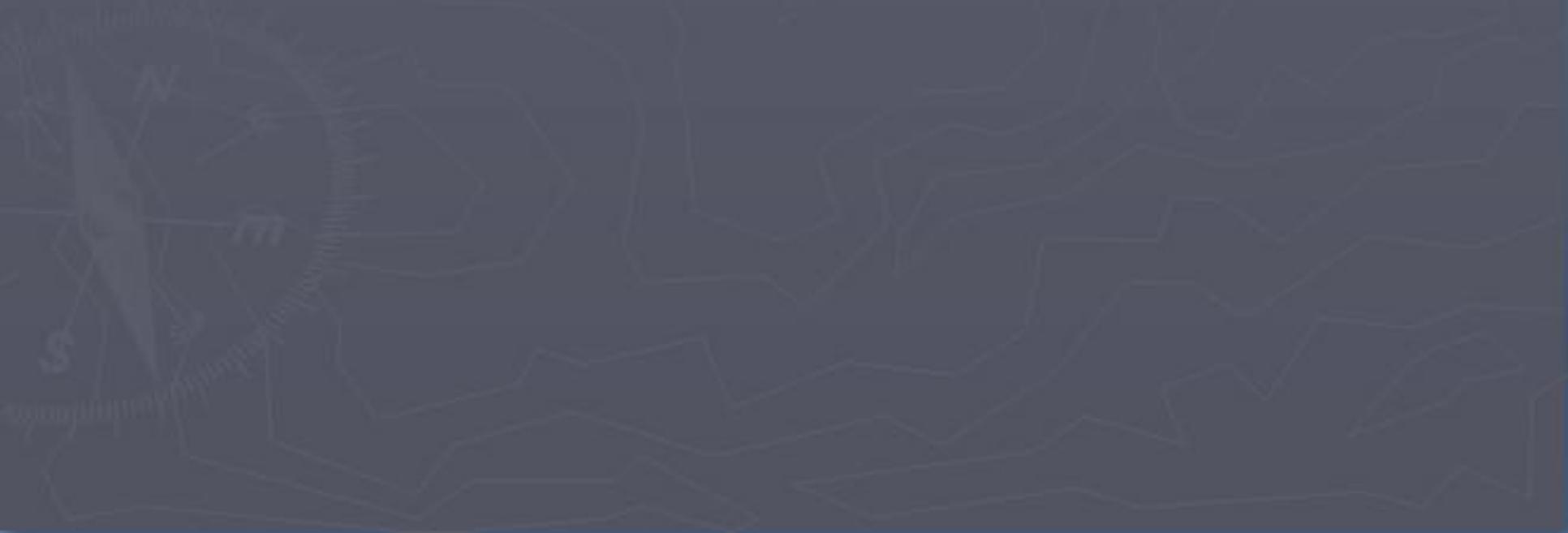


8 The Robinson Projection
Figure 2.7

Getis/Getis/Fellmann, *Introduction to Geography*, 10/e. Copyright
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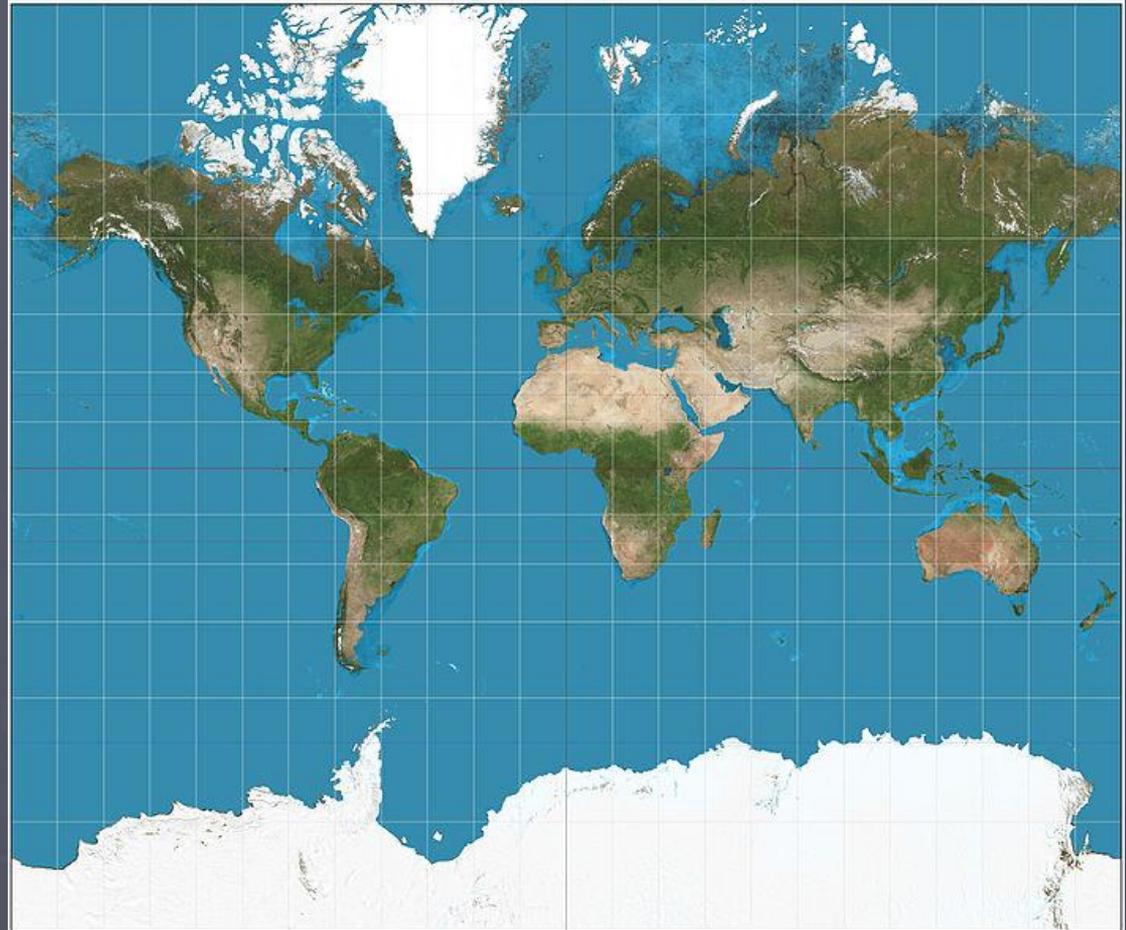
Robinson Projection

- More accurately shows the area near the poles
- Used to show proportions of land to water
- Distorts cardinal directions and distance



Mercator Projection

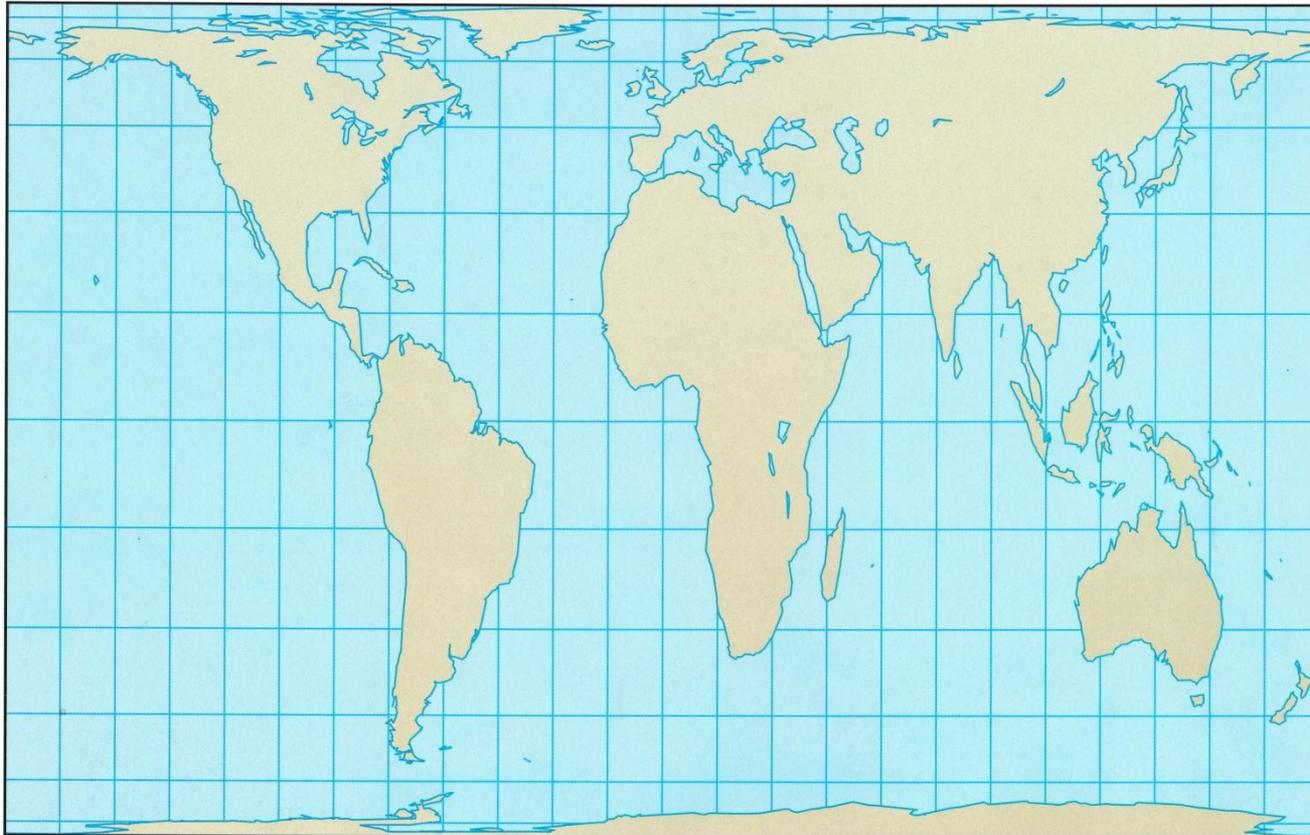
- Used primarily for navigation since it is easiest to plot direction
- Increased distortion the further away from the equator
- Makes the North look much larger



Gall-Peters Projection

T-24

1.3.9 The Peters projection



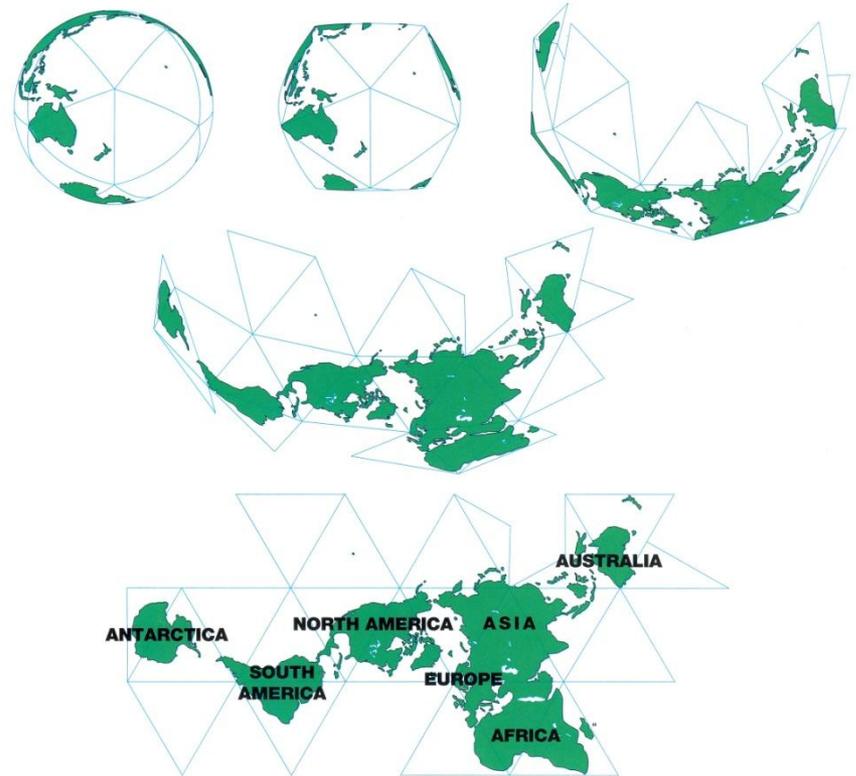
Gall-Peters Projection

- Focuses more on land area accuracy
- Released in 1974, based off a 1800 design
- More accurately shows southern hemisphere as larger than Northern Hemisphere
- Areas near the poles are stretched horizontally

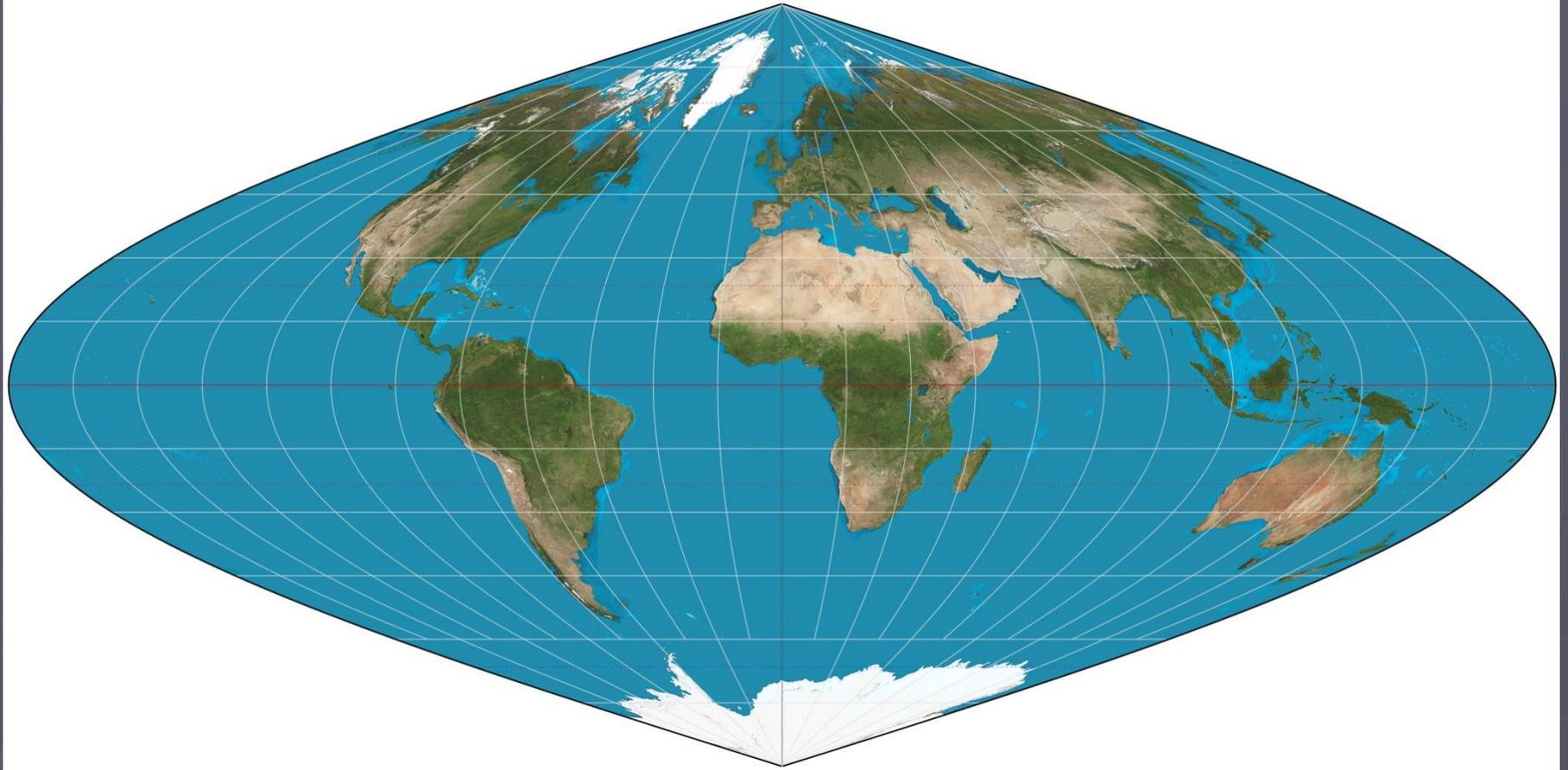
Fuller Projection

T-25

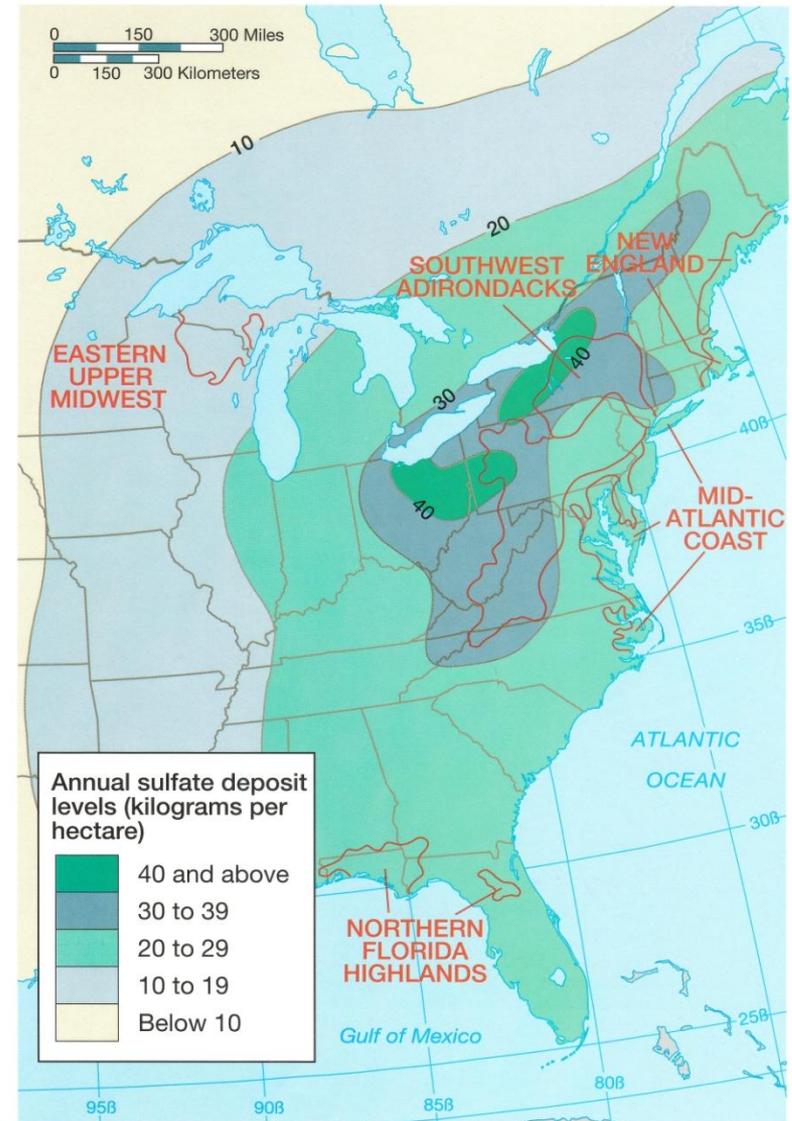
1.3.10 Fuller's Dymaxion projection



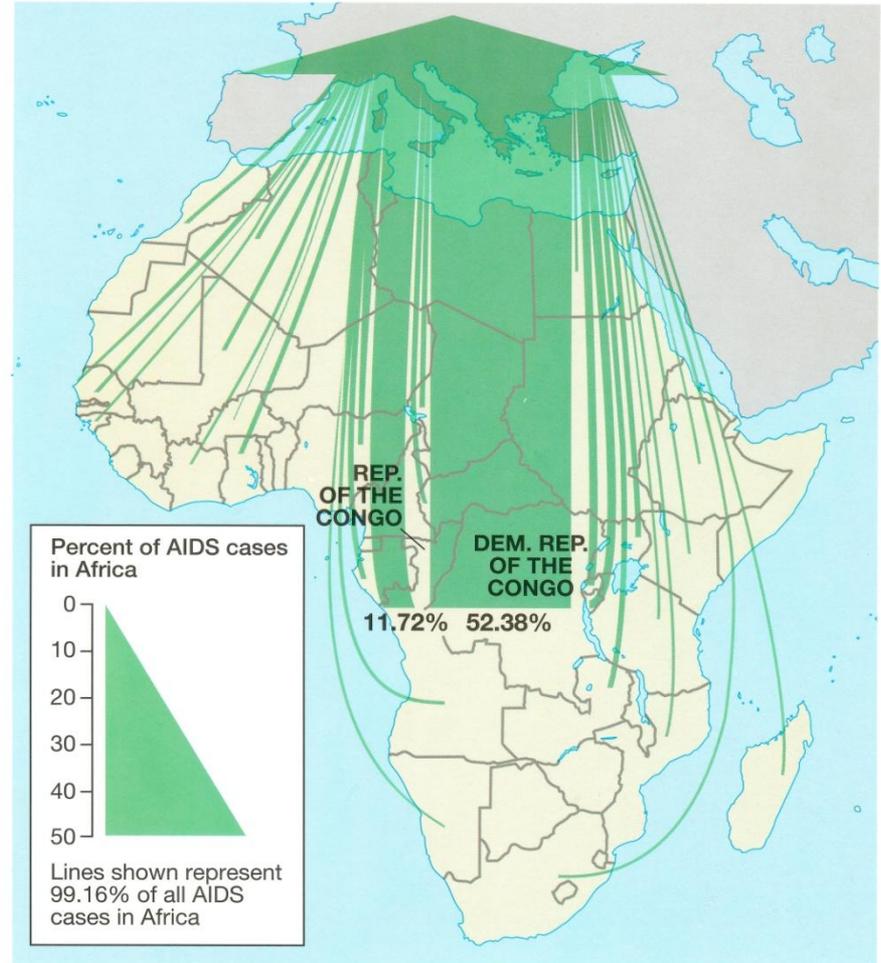
Sinusoidal projection



Types of Maps - Isoline



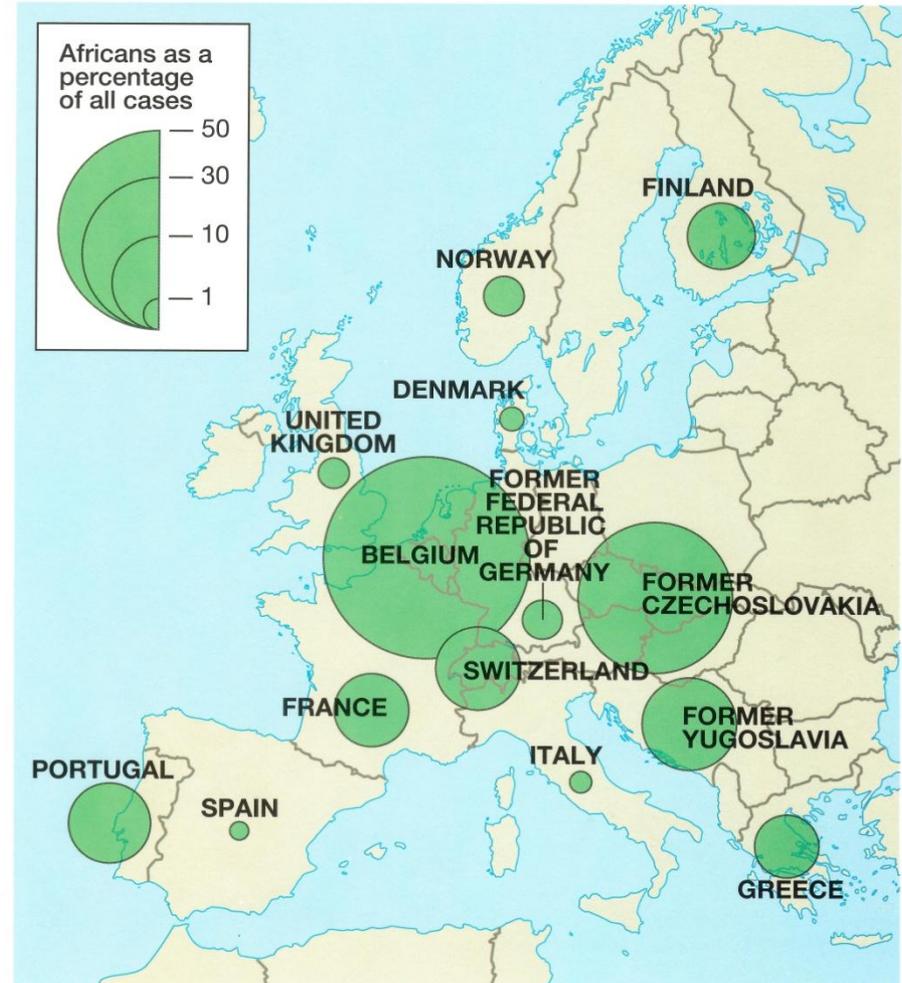
Types of Maps - Thematic



Types of Maps - Thematic

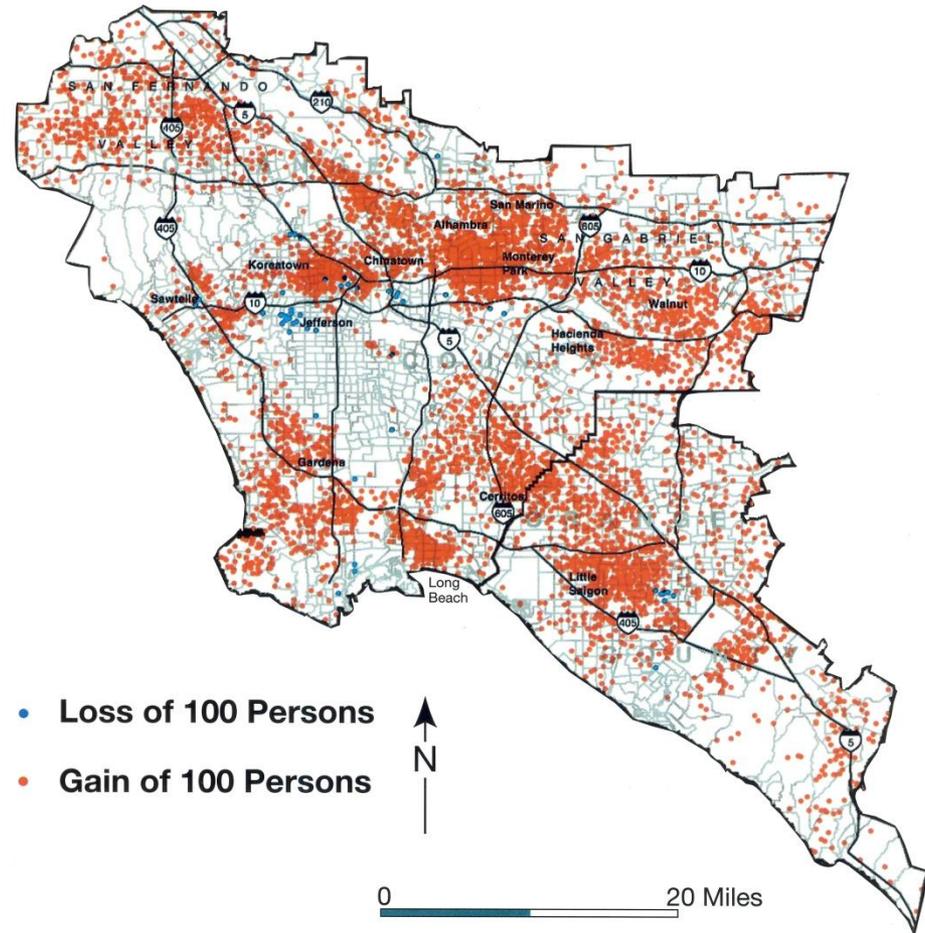
T-15

1.3.3 Two examples of proportional symbols in thematic mapping



Types of Maps

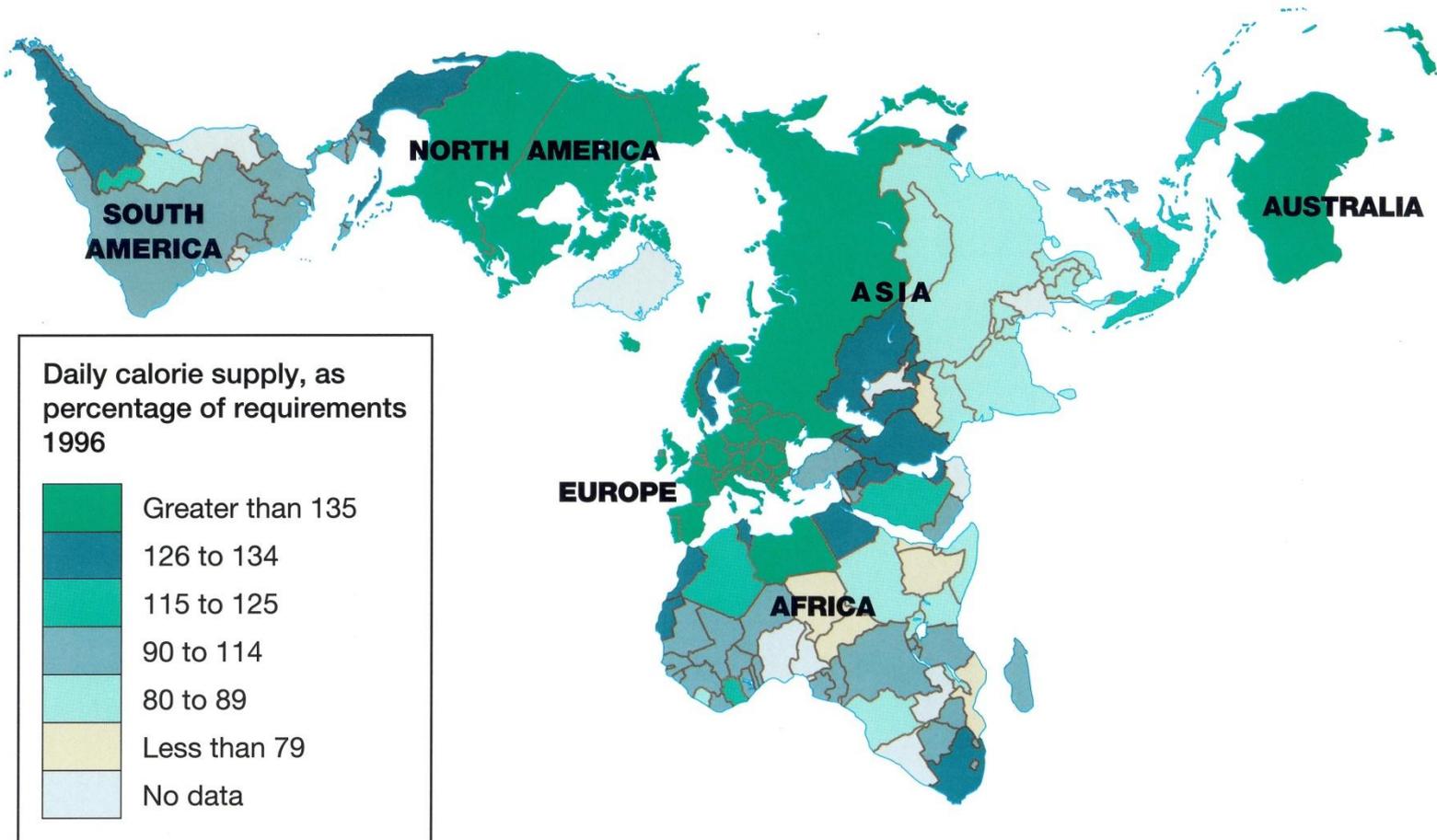
- Dot



Types of Maps - Choropleth

T-17

1.3.5 Choropleth maps



Types of Maps – Located Charts

T-18

1.3.6 Located charts

