

{08} How to read a map

Map Interpretation & GPS
Spring 2010
M. Pesses

Why this matters

- ‡ It is crucial to understand the social side of maps.
 - Maps are not perfect
 - Tools of power and influence.
- ‡ They must be read **critically**.

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Page last updated at 17:00 GMT, Wednesday, 16 September 2009 18:00 UK

Driver fined for sat nav blunder

A driver whose car was left teetering on a cliff edge after he followed his sat nav through a narrow, steep path he was driving on in Todmorden, West Yorkshire, was a road.

Robert Jones, 43, continued to follow the instructions when they told him the narrow, steep path he was driving on in Todmorden, West Yorkshire, was a road.

He nearly plunged down the 100ft (30.5m) cliff in his BMW on 22 March.

Jones, of Doncaster, South Yorkshire, was given a £370 fine and six points on his licence by Calderdale magistrates.

He was also ordered to pay £500 costs and a £15 victim surcharge.

He had denied the charge but was found guilty on Tuesday.

Speaking after the incident earlier this year, Jones, who works as a driver, said he trusted his sat-nav system and relied on it for his job.

He said he continued to follow the instructions when it told him the footpath he was driving on was a road.

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Sunday, December 21, 2008 | The Sacramento Bee | sacbee.com/ourregion

Casino quest mired in misdirection

GPS, INTERNET MAP SEARCH SENDS VISITORS TO RURAL NEIGHBORHOOD WITH NO ACCESS

By DAVID LAUREY

And some of those drivers have ended up in the pathless woods of the rural Nevada neighborhood, which has been the focus of the state's search for the elusive Red Hawk. The search for the elusive Red Hawk is mired in misdirection, according to a state official.

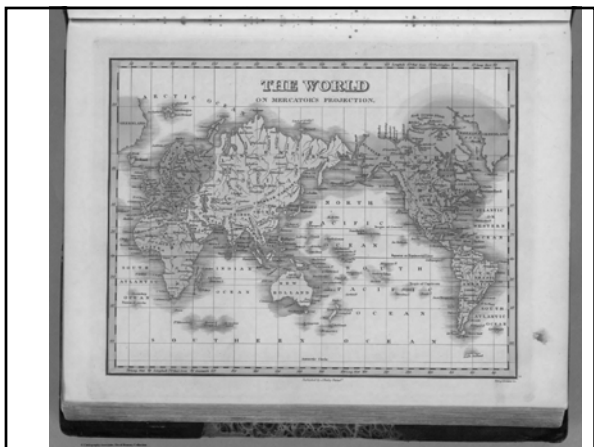
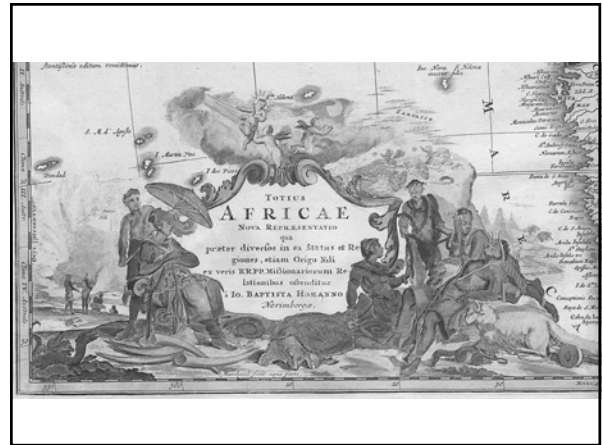
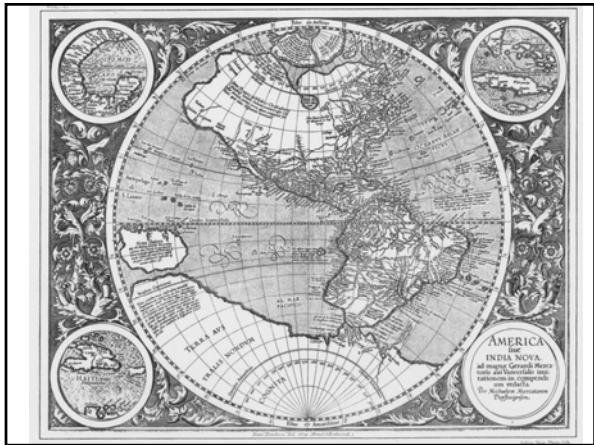
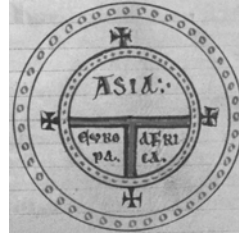
The search for the elusive Red Hawk is mired in misdirection, according to a state official.

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Ancient Cartography



The USGS

United States Geological Survey (USGS)

- Act of Congress, 1879
- Responsible for "classification of the public lands, and examination of the geological structure, mineral resources, and products of the natural domain."

USGS Mission & Vision (2008)

Mission:

The USGS serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

Vision:

USGS has become a world leader in the natural sciences thanks to our scientific excellence and responsiveness to society's needs.

Modern cartography

- ‡ Arthur Robinson, *Elements of Cartography*
- ‡ Post-WWII cartography revolution
 - Function over form
- ‡ Led to the 'map communication model'



Map communication model

1. Clear separation between cartographer and the user
2. The map communicates information to the user from the cartographer
3. **It is necessary to know the abilities of the map user in comprehending the map**

taken from Crampton 2001

The theme of map effectiveness

“The task of the map de-signer is to enhance the map user’s ability to re-trieve information. *The burden of the map user is to understand the mapping process*”

-Robinson et al. 1995, p. 17



The Map User

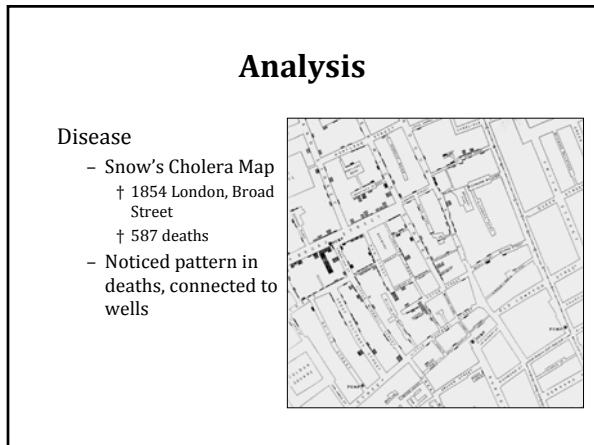
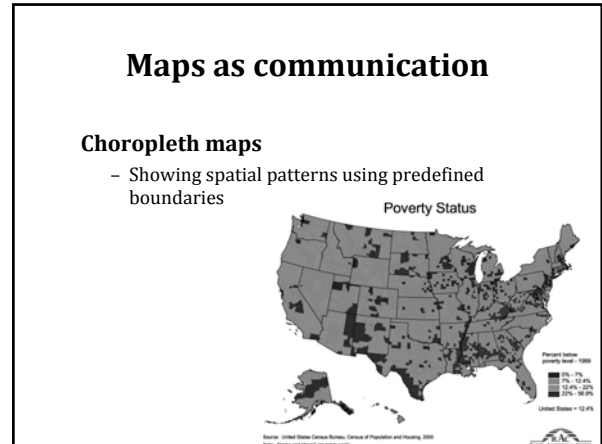
- ‡ Prior to Robinson, cartographers really didn’t care about the map user
- ‡ Post WWII cartography worked to make the ‘best’ map for the intended user
- ‡ The map is a **representation** of reality

Maps as communication

Symbols

- Nominal
- Ordinal
- Graduated





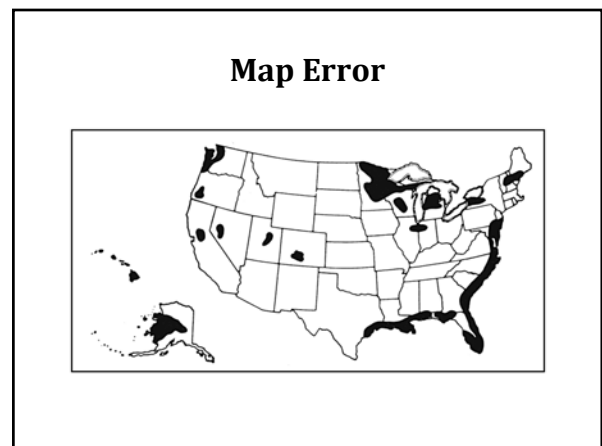
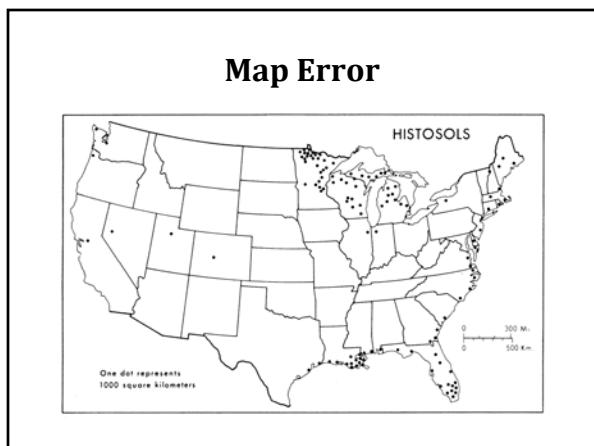
Critical Cartography

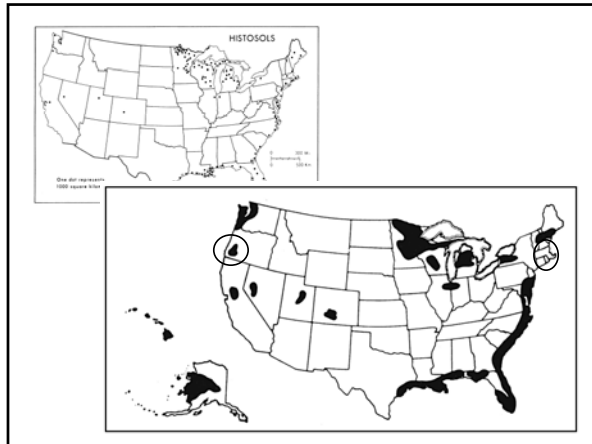
‡ The science of cartography

- Maps seen as *objective depictions* of the landscape.

‡ Remember that *subjective decisions* are made when maps are drawn.

- This doesn't mean maps are evil, just made by humans...

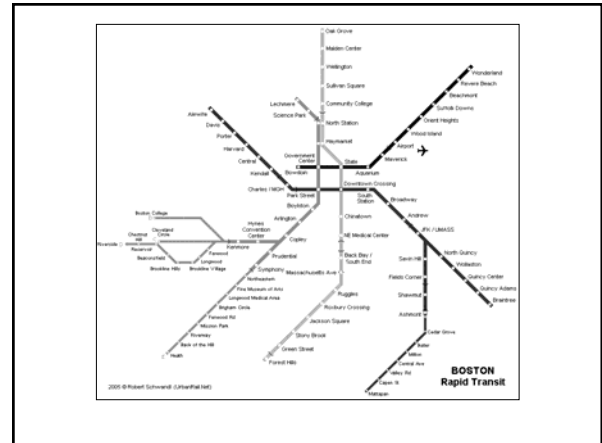




Types of maps

Mental Maps

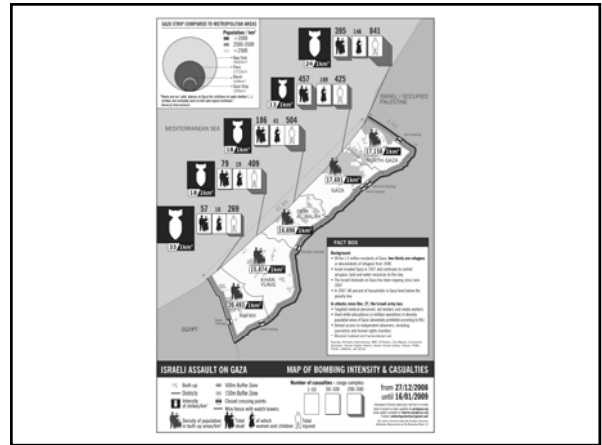
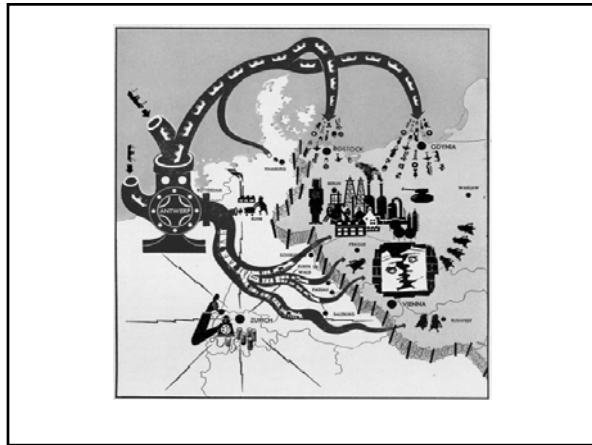
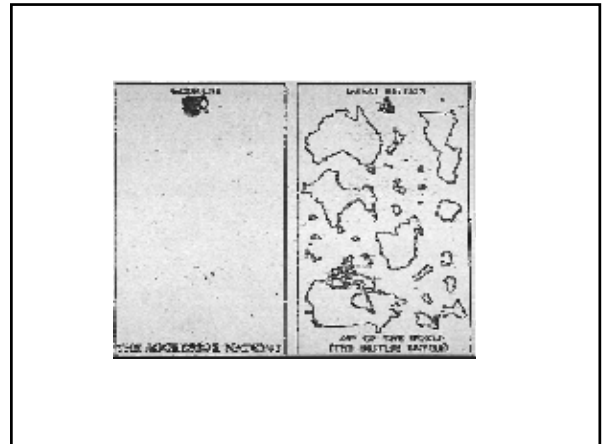
- How do we see the world?
- What biases do we bring when we draw a map?



Propaganda

- ‡ Used to promote a message or product, often by distorting or simplifying the truth
- ‡ Maps are a powerful form

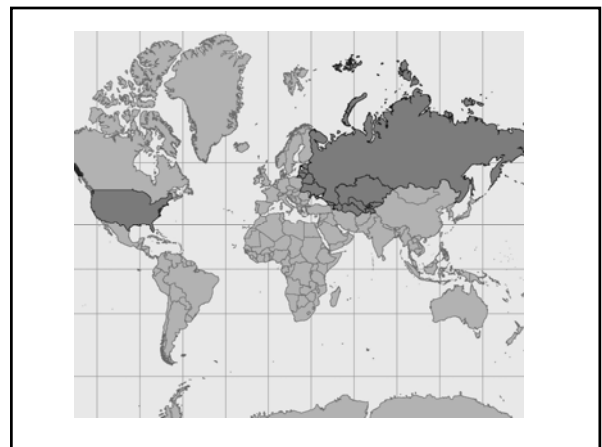


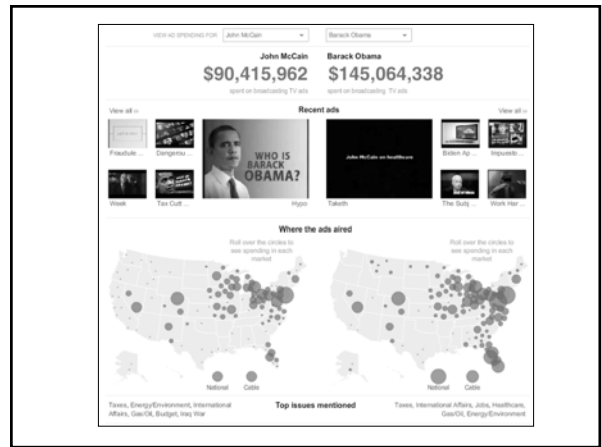
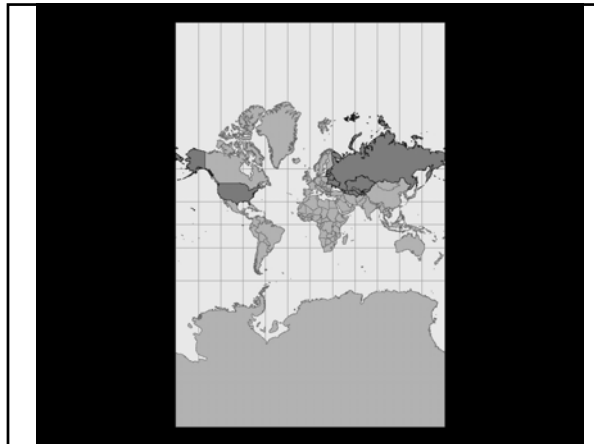


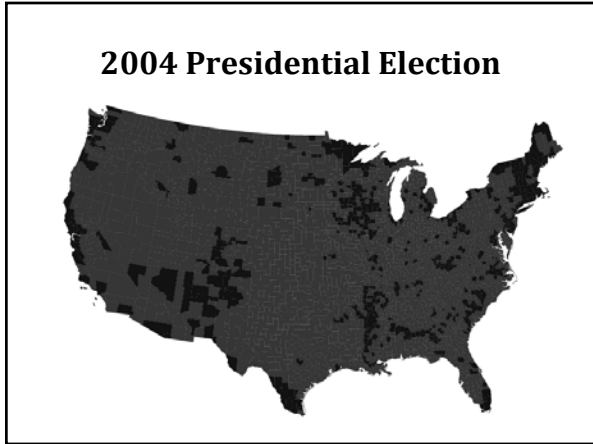
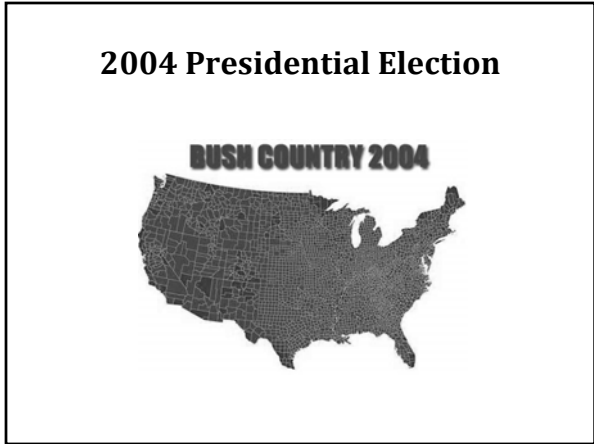
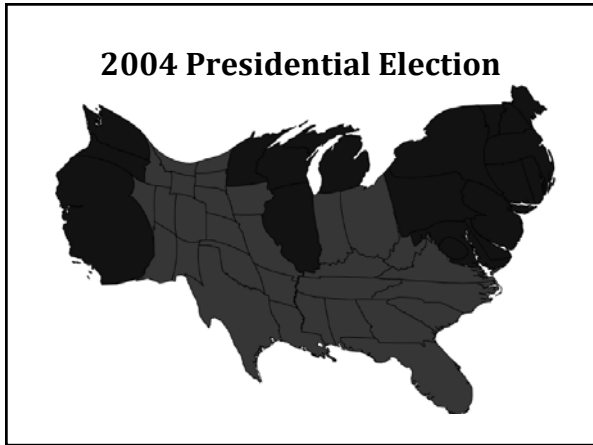
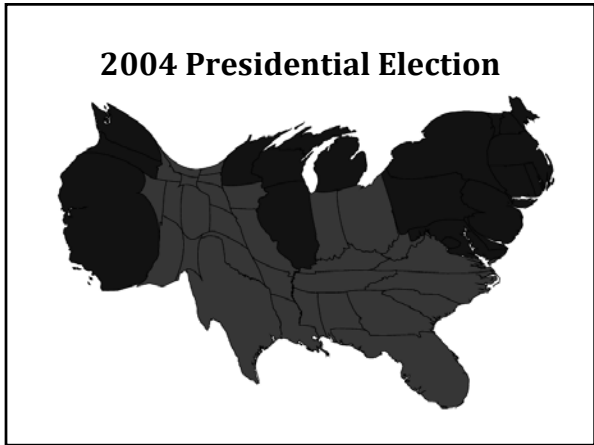
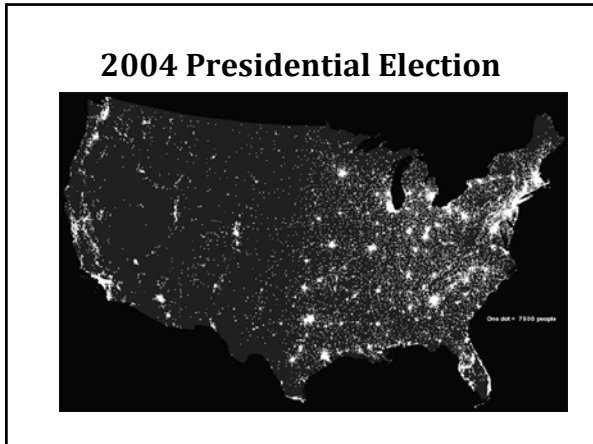
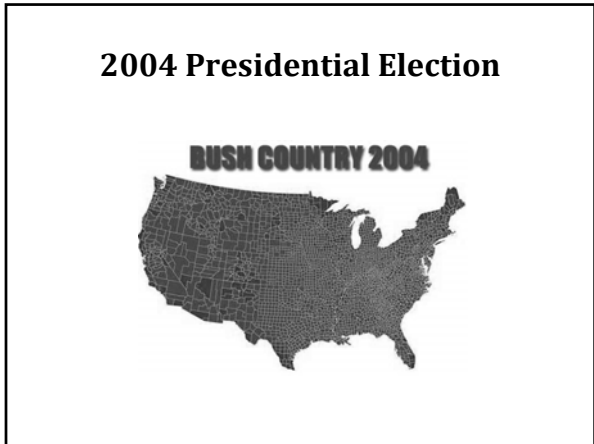
Map Projections

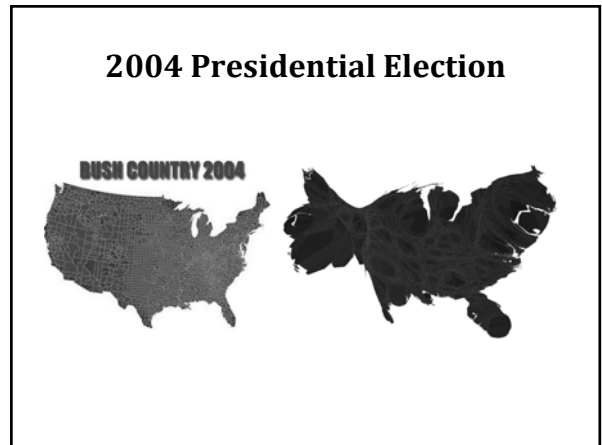
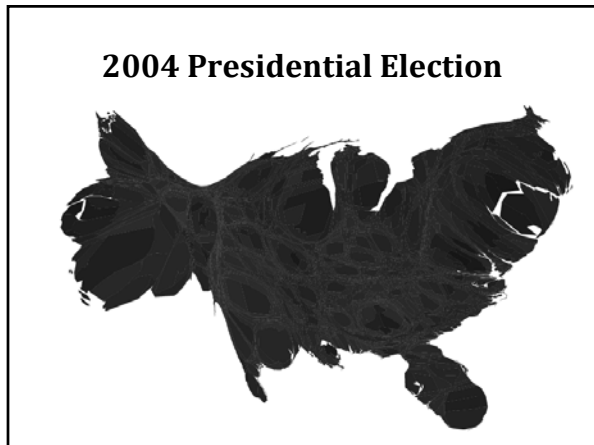
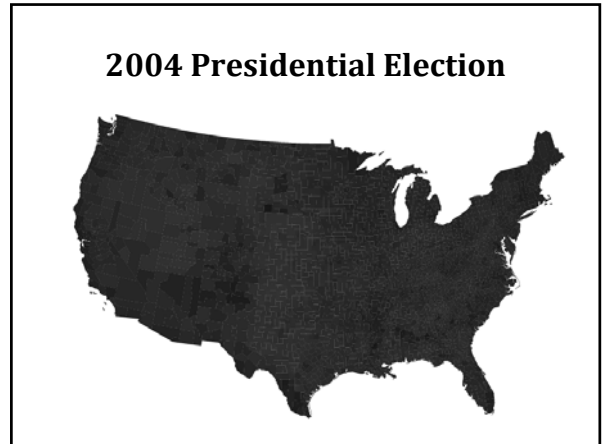
‡ Sometimes the science behind transferring a globe to a map can be used for propaganda...

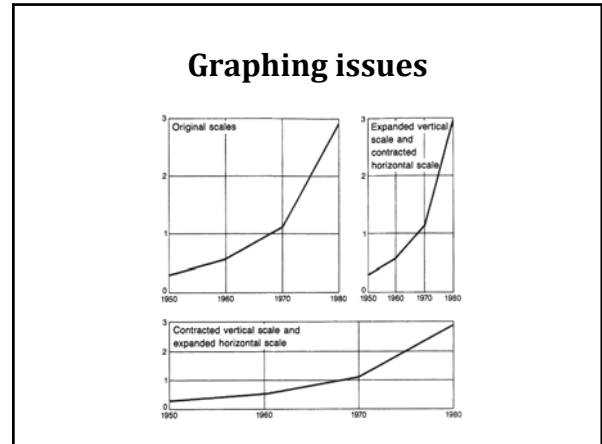
- Mercator projection











Poststructural cartography

- ‡ Led by J.B. Harley in the 1980s-1990s
- ‡ Using Foucault's and Derrida's work to show the power and influence in maps
 - A map is more than an objective representation, it is a political text.
 - There can be no 'best' map

