Geog 126: Maps in Science and Society

Maps as Propaganda
propaganda

• Information, especially of a biased or misleading nature, used to promote or publicize a particular political cause or point of view

• Maps can be altered to serve as propaganda to claim, threaten, falsify, challenge, etc

• Maps often serve critical role as objects for negotiation, justification, legislation
The Source
Monmonier’s Eleven Rules for “polishing the cartographic image”

- Be shrewdly selective
- Frame strategically
- Accentuate the positive
- If caught, have a story ready
- Minimize the negative
- Dazzle with detail
- Persuade with pap
- Distract with aerial photographs and historical maps
- Generalize creatively
- Enchant with elegance
- When all else fails, try bribery
Propaganda Techniques
http://www.propagandacritic.com/

Word games
• Name-calling
• Glittering generalities
• Euphemisms
False connections
• Transfer
• Testimonial

Special Appeals
• Plain Folks
• Bandwagon
• Fear

Victory through Air Power (1942) Disney
Map Maskirovka

A set of procedures designed to confuse, mislead, and camouflage oneself from the enemy.

- Deliberate place name changes
- Feature types altered
- Hierarchies inverted
- Artificial places
- Grids and coordinates left out or relabeled

As Monmonier describes (1996, p. 117), one form of deception useful at all levels of war is disinformation directed at mapping/navigating skills: Soviet cartographic disinformation affected all [publicly available] maps of urban areas. Detailed street maps of Moscow and other Soviet cities often failed to identify principal thoroughfares and usually omitted a scale, so that distances were difficult to estimate. Although local citizens were well aware of its presence, Soviet street maps of Moscow suppressed the imposing KGB building on Dzerzhinski square, as well as other important buildings.
An Example

- Roads that are shown on the map produced by the Army Map Service (AMS), but not on the Soviet map.

- Source: Главное Управление Геодезии и Картографии, При Совете Министро СССР, Title: Кулябская и Кургар-Тюбинская Области, Sheet: T-10930, Scale: 1:400,000, Date: 1982
The Bandwagon
Ethnic groups of the Soviet Union
Russian invasion of Crimea
‘Cartographic propaganda can be an effective intellectual weapon against an unresponsive, biased, or corrupt bureaucracy.’ Mark Monmonier

http://www.nederkaart.nl/
Fear
Symbols for use on propaganda maps

Geography, particularly war geography, became a national preoccupation which influenced and molded public opinion in postwar Germany from elementary school to university seminar, from street corner and bookstore to factory, club, beer-hall, and dinner table. Space, living room, race, land, blood, soil, and Germanic destiny were poured into the intellect and will of the German people by every conceivable publicity channel. Suggestive maps, posters, alarming charts, and manipulated statistics inundated the land. A bizarre collection of geopolitical symbols appeared, paralleling the cartography of military science. The public was first made map-conscious, then introduced to a complicated system of arrows, wedges, crosshatching, clamps, pincers, circles, etc. to indicate geographic advance, racial or economic infiltration, lines of thrust, encirclement, enclosure, alliances, boundaries, and other movements of geopolitical forces.
L'ENTENTE CORDIALE
1915
World War One: French
Pre-World War Two
Nazi Pre-WWII
Japanese propaganda caricature map from around 1941, depicting a U.S. blockade of Japan from the Philippines (then a U.S. possession)
Japan as an Air Target
Serio-Comique Map of Europe at War (London 1914)
North Korea
Cold war Cartography
• **SAGE and the Cold War**

Developed by MIT Lincoln Laboratory, IBM and others.
Operational in 1959
Part of North American Aerospace Defense Command (NORAD) until 1989
Servomechanisms Laboratory, under the direction of Jay Forrester (Systems dynamics)
SAGE: Semi Automatic Ground Environment

- Project cost between 8-12 billion dollars (1964)
- Pushed the limits of computing, networking, and control
- The AN/FSQ-7 computer contained 55,000 vacuum tubes, occupied about 2,000 m² of floor space, weighed 275 tons, and used up to three megawatts of power
- Telecommunications were radio and telephone based
SAGE and Computer Cartography

- RAND in Santa Monica worked on Cathode Ray Tube Display & Workstation
- System included input and output
- Mylar map overlays become on-screen projected displays
- Tobler’s classic “Automation and Cartography” 1959
Cheating
The 9 (1947) and 11-dash maps
Spratly Islands

Legend:
- Vietnam
- Red
- Taiwan
- Yellow
- Philippines
- Green
- Malaysia
- Light Green
- Brunei
- Blue
- Inhabited

Map showing various islands and features in the Spratly Islands region, including existing structures, dredging activities, runway and apron installations, and construction activities.

Maps dated 6 February 2015 and 23 March 2015.
Gerrymandering

NC Congressional District 12 - 1992
Texas district 22 Cracking
Glittering Generalities
Choropleth classification

Percent of homes $300,000 and over

Natural Breaks
\[ \frac{H74.300KPLUS}{H74.TOTAL} \]
- 0.1 - 1.3
- 1.4 - 3.2
- 3.3 - 7.8
- 7.9 - 17.2

Equal Intervals
\[ \frac{H74.300KPLUS}{H74.TOTAL} \]
- 0.1 - 4.4
- 4.5 - 8.7
- 8.8 - 12.9
- 13.0 - 17.2

Quantiles
\[ \frac{H74.300KPLUS}{H74.TOTAL} \]
- 0.1 - 0.5
- 0.6 - 1.0
- 1.1 - 2.2
- 2.3 - 17.2
The Sun Never Sets...
"We will defeat drought, too!". 
Promotion using maps
Promoting settlement
Promotion: Dubai
Canadian Pacific Railway promotional map (1881)

(Library and Archives Canada, NMC 11868)
Travel promotion

The Château Frontenac in Quebec City.
Local Bias?
Halford Mackinder (1861-1947)
Lebensraum
Name Calling
Falkland Islands
June 2006 "Blood borders: How a better Middle East would look"
Greece and Kurdistan
Cyprus: 1974
Nevada nuclear test site
The Peters controversy
THE Peters Projection
AN AREA ACCURATE MAP

The Peters Projection World Map is one of the most stimulating, and controversial, images of the world. When this map was first introduced by historian and cartographer Dr. Arno Peters at a Press Conference in Germany in 1974 it generated a firestorm of debate. The first English version of the map was published in 1983, and it continues to have passionate fans as well as staunch detractors.

The earth is round. The challenge of any world map is to represent a round earth on a flat surface. There are literally thousands of map projections. Each has certain strengths and corresponding weaknesses. Choosing among them is an exercise in values clarification: you have to decide what's important to you. That is generally determined by the way you intend to use the map. The Peters Projection is an area accurate map.

[How to order the Peters Map] [Table of Contents] [Next]
Easter Eggs
Deliberate Errors
Cartographic Traps
US Examples

1978–79 State of Michigan map showing Goblu and Beatosu, OH
US Copyright Law

• Since 1992 trap streets are not copyrightable under the federal law of the United States

• Nester's Map & Guide Corp. vs. Hagstrom Map Co. a United States federal court found that copyright traps are not themselves protectable by copyright

• "[t]o treat 'false' facts interspersed among actual facts and represented as actual facts as fiction would mean that no one could ever reproduce or copy actual facts without risk of reproducing a false fact and thereby violating a copyright ... If such were the law, information could never be reproduced or widely disseminated."
Cartographic ethics

- Producer vs. consumer responsibility
- Editing and error catching
- Cartographic traps
- “Best available data”
- All maps contain uncertainty but hold power
- All map design decisions are partly subjective
- A map is a set of errors that have been agreed upon