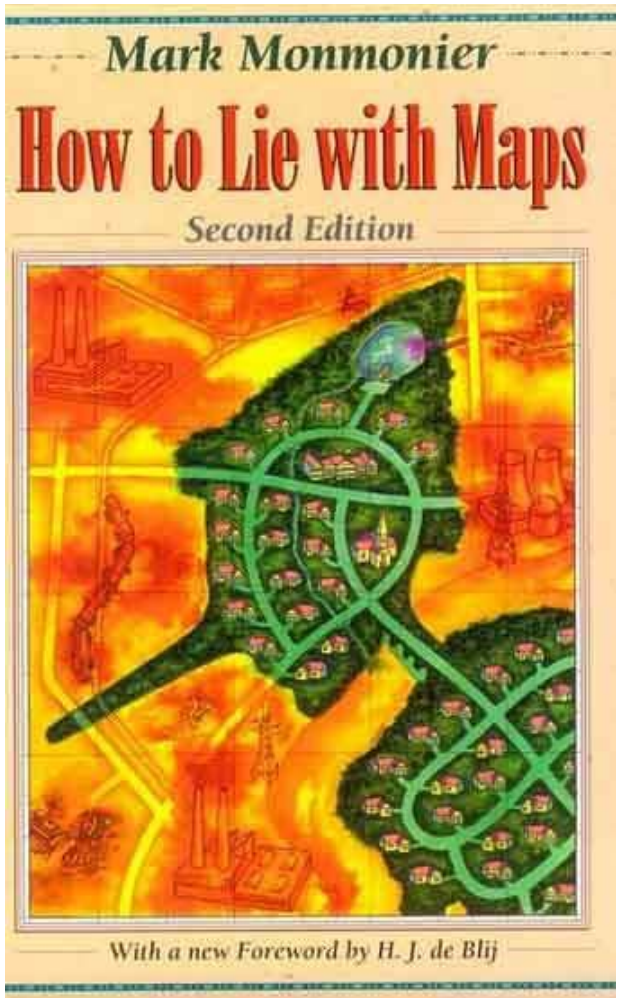
Geog 126: Maps in Science and Society

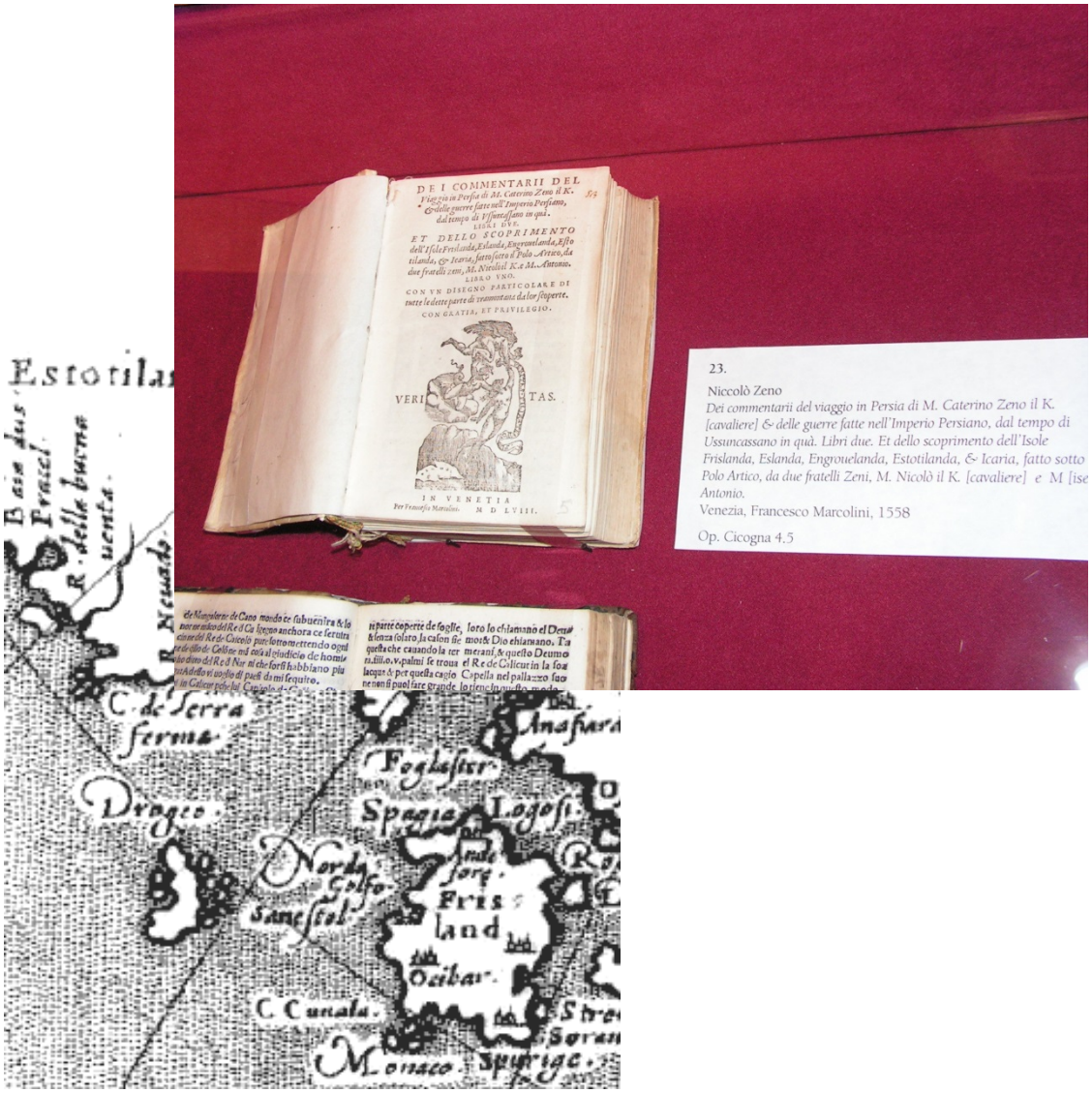
Maps as Propaganda

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


Mark Monmonier
How to Lie with Maps
Second Edition
With a new Foreword by H. J. de Blij


DEI COMMENTARII DEL
Viaggio in Persia di M. Caterino Zeno il K.
& delle guerre fatte nell'Imperio Persiano,
dal tempo di Vssuncassano in quà.
LIBRI DVE.
ET DELLO SCOPRIMENTO
dell'Isole Frislanda, Eslanda, Engrouelanda, Estotilanda, & Icaria, fatto sotto il Polo Artico, da due fratelli zeni, M. Nicolò il K. e M. Antonio.
LIBRO VNO.
CON VN DISEGNO PARTICOLARE DI
tutte le dette parte di tramontana da lor scoperte.
CON GRATIA, ET PRIVILEGIO.
VERITAS.
IN VENETIA
Per Francesco Marcolini. M D LVIII.
23.
Niccolò Zeno
Dei commentarii del viaggio in Persia di M. Caterino Zeno il K. [cavaliere] & delle guerre fatte nell'Imperio Persiano, dal tempo di Ussuncassano in quà. Libri due. Et dello scoprimento dell'Isole Frislanda, Eslanda, Engrouelanda, Estotilanda, & Icaria, fatto sotto Polo Artico, da due fratelli Zeni, M. Nicolò il K. [cavaliere] e M [ise Antonio.
Venezia, Francesco Marcolini, 1558
Op. Cicogna 4.5
Estotilan
Drogeo
Spagia
Logosi
Fris land
Ocibar
C. Cunala
Monaco

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

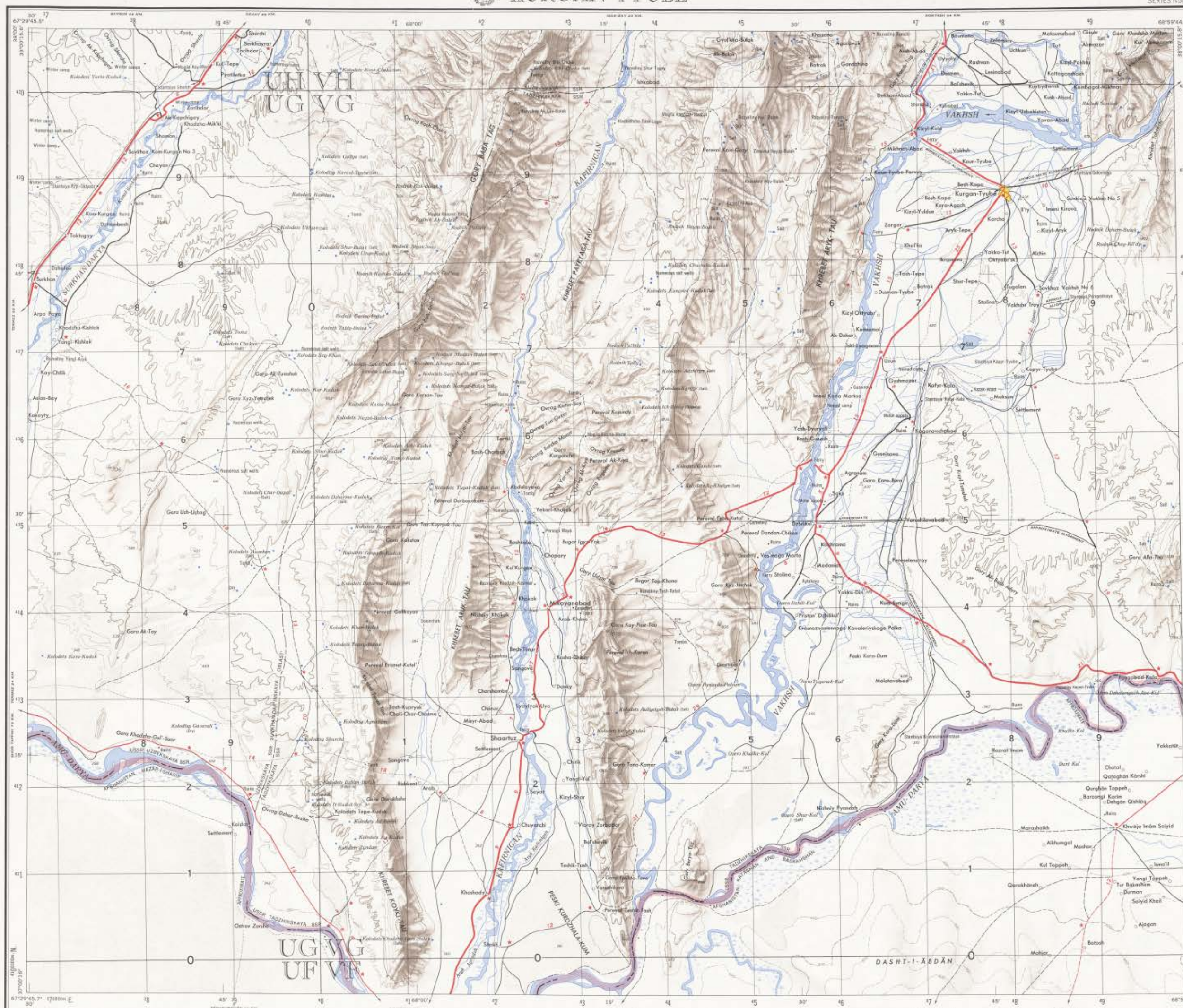
Map Maskirovka

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

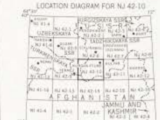
- Deliberate place name changes
- Feature types altered
- Hierarchies inverted
- Artificial places
- Grids and coordinates left out or relabeled
- As Monmonier describes (1996, p. 117), one form of deception useful at all levels of war is disinformation directed at mapping/navigating skills: Soviet cartographic 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.

KURGAN-TYUBE

EDITION 1-AMS



LOCATION DIAGRAM FOR NJ 42-10



LEGEND

Figures in red denote approximate distances in kilometers between dots

POPULATED PLACES

ALMA-ATA
CHIMKENT
FERGANA
Farab
Vonch

ROADS
RAILROADS
BOUNDARIES

N502
Edition 1-AMS (First Printing, 1-56)

Prepared by the Army Map Service (AMOB), Corps of Engineers, U. S. Army, Washington, D. C. Compiled in 1952 from: U.S.S.R., 1:200,000, General Staff of the Red Army, 1931-37 (reliability poor); U.S.S.R. 1:500,000, Chief, Administration of Geodesy and Cartography, General Staff of the Red Army, Sheet J-42-C, 1939 (reliability poor). Names processed in accordance with rules of the U. S. Board of Geographic Names. Road classification should be referred to with caution. No reliable woodland information available for this sheet. No aeronautical data shown in U.S.S.R.

GLOSSARY

Aryk	irrigation ditch
Bugor	hill
Darya	river
Dasht	plain
Gora	mountain
Gory	mountains
Kanal	canal
Khrebet	mountain range
Kladbishche	cemetery
Kol	lake
Kolodets	well
Kolodtsy	wells
Mogila	grave, tomb
Ovrag	ravine
Ostrov	island
Ozero	lake
Pereval	pass
Peski	sands
Pristan'	landing
Razvaliny	ruins
Rodnik	spring
Solonchak	alkali flats, salt marsh
Sovkhoz	state farm
Stantsiya	station
Zimovka	winter quarters, winter camp

Scale 1:250,000

25 Statute Miles
35 Kilometers
15 Nautical Miles

CONTOUR INTERVAL 100 METERS WITH SUPPLEMENTARY CONTOURS AT 50 METER INTERVALS

TRANSVERSE MERCATOR PROJECTION

HORIZONTAL DATUM IS BASED ON APPROXIMATE EUROPEAN DATUM

BLACK NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 42, INTERNATIONAL SPHEROID

THE LAST FOUR DIGITS OF THE GRID NUMBERS ARE OMITTED

1955 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 4°00' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 3°10' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS NEGLIGIBLE.

USERS NOTING ERRORS OR OMISSIONS ON THIS MAP ARE URGED TO MARK HEREON AND FORWARD DIRECTLY TO COMMANDING OFFICER, ARMY MAP SERVICE, WASHINGTON, D. C. MAPS SO FORWARDED WILL BE RETURNED OR REPLACED IF DESIRED.

THE DELINEATION OF INTERNATIONAL BOUNDARIES ON THIS MAP MUST NOT BE CONSIDERED AUTHORITATIVE

PRINTED BY THE ARMY MAP SERVICE, CORPS OF ENGINEERS, 1-56, 785182

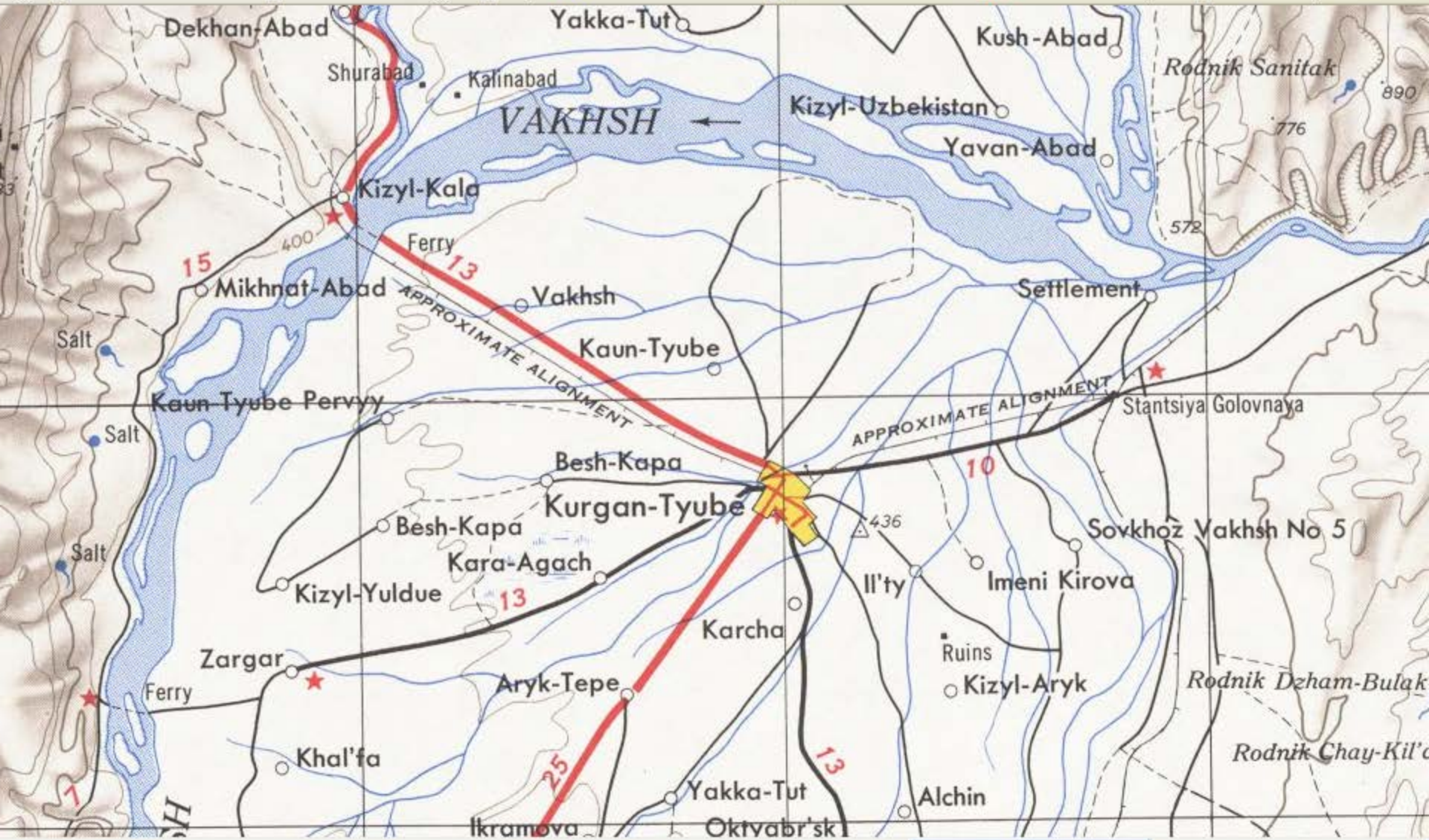
G
7270
5250
U52
NJ
42-10
PCL MAP S

Ганоб
Варзоб
Рамит
Комсомолабад
Новабад
Шахринау
Регар
СТАЛИНАБАД
Гиссар
Ордженикидзеабад
Сары-Хосор
Шугнов
Узун
Нурек
Кокташ
Бальджуан
Дагана-Киик
КУЛЯБСКАЯ
Кзыл-Мазар
Куйбышевск
Муминабад
Вахш
Курган-Тюбе
им. Кирова
Вахшстрой
Колхозабад
Шуроабад
Сары-Чашма
Чубек
Паркар
Калаии-Яван
Ворошиловабад
Джилакуль

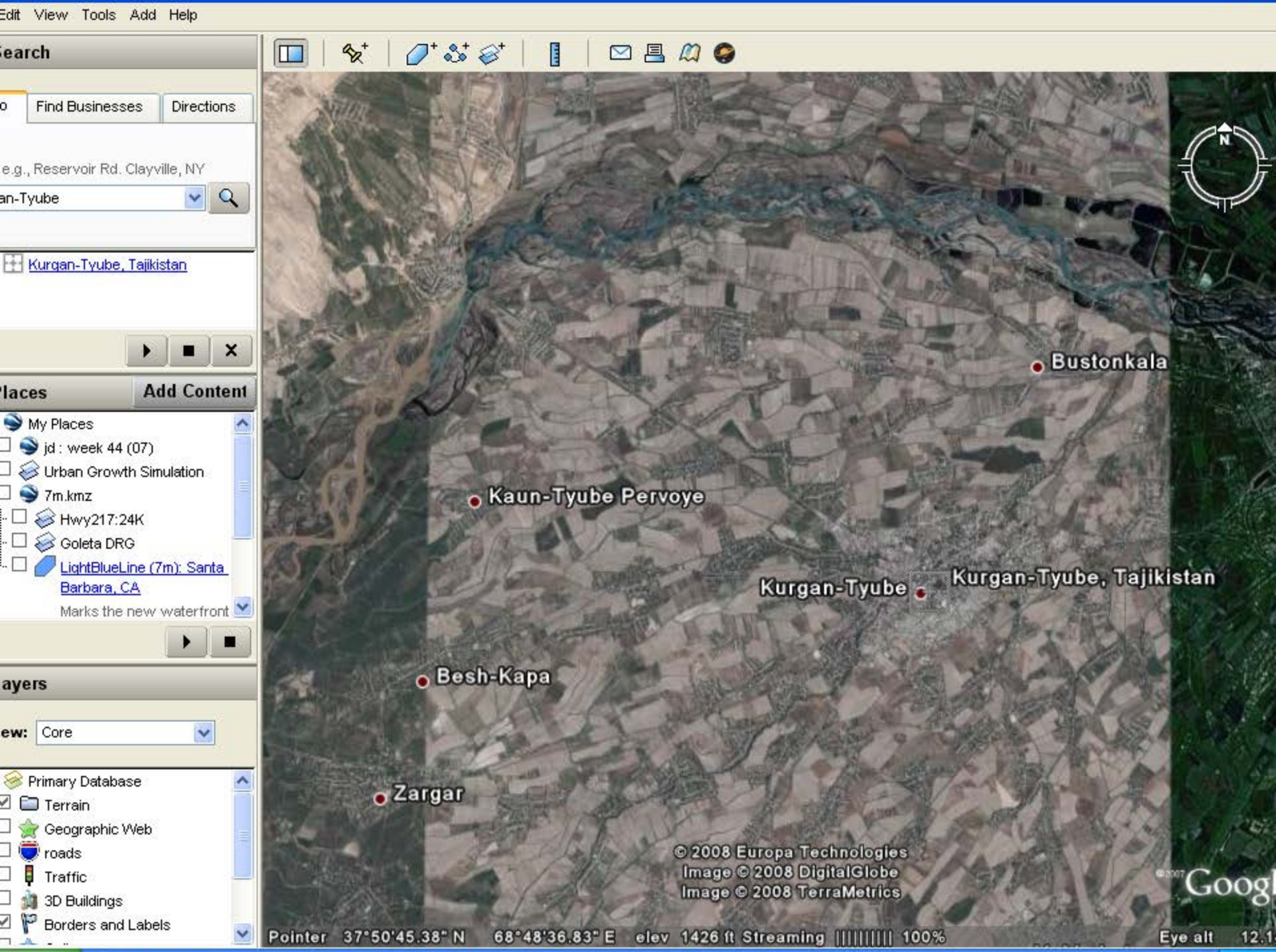
An Example

- Roads that are shown on the map produced by the Army Map Service (AMS), but not on the Soviet map.
- Source: Главное Управлние Геодезии и Картографии, При Совете Министро СССР, Title: Кулябская и Кургар-Тюбинская Области, Sheet: T-10930, Scale: 1:400,000, Date: 1982

Edit View History Bookmarks Tools Help
http://www.lib.utexas.edu/maps/ams/western_siberia/txu-oclc-6559336-nj42-10.jpg
Google
NGS Online Review S... ISI Web of Knowledg... Login NPR : National Public ... COX.net for Santa Ba... CNN.com - Breaking ... Home - MSC_GRS Joh...



Find: Next Previous Highlight all


Edit View Tools Add Help
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Directions
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an-Tyube
Kurgan-Tyube, Tajikistan
Places
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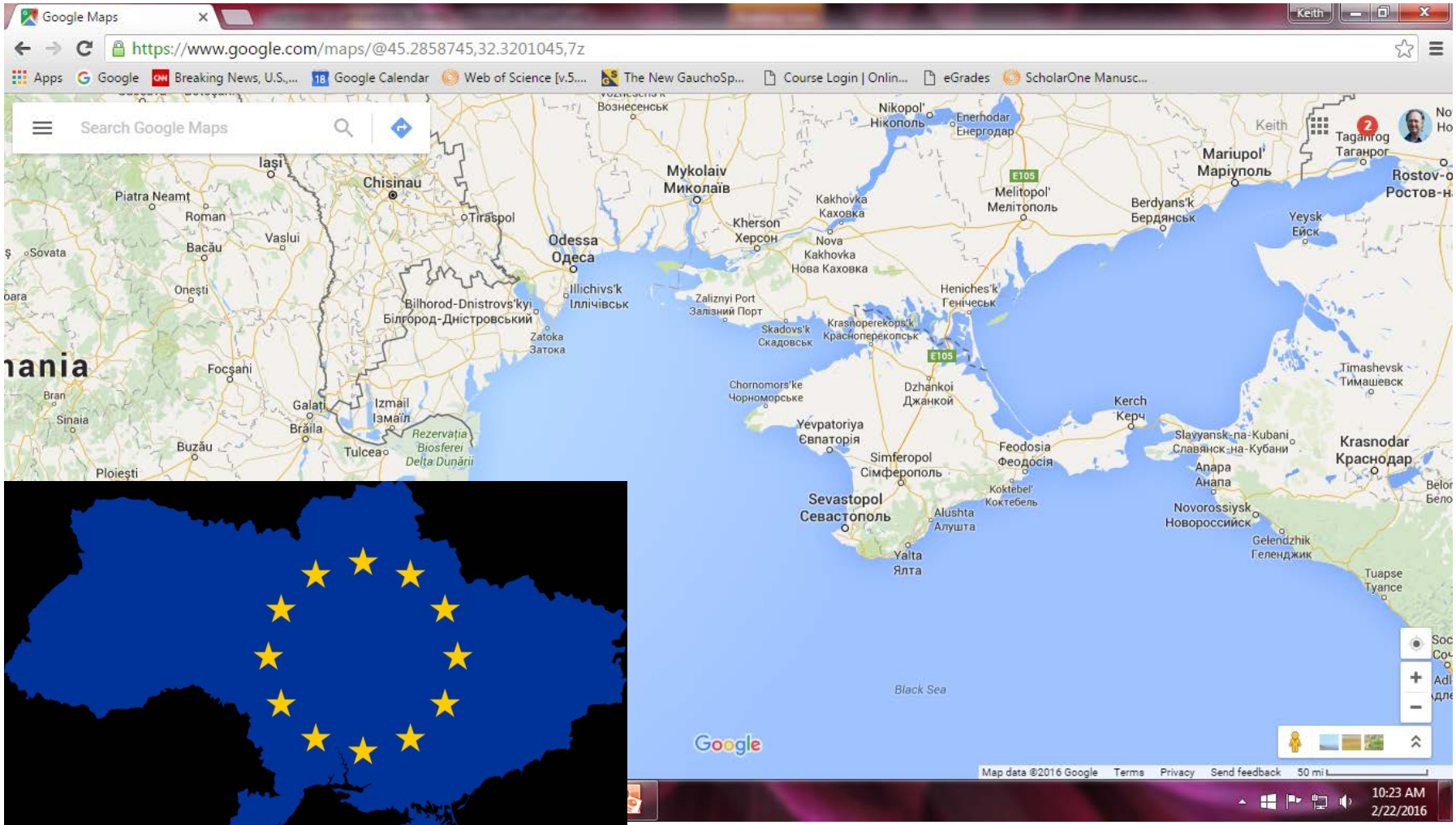
Terrain
Geographic Web
roads
Traffic
3D Buildings
Borders and Labels
Bustonkala
Kaun-Tyube Pervoye
Kurgan-Tyube
Kurgan-Tyube, Tajikistan
Besh-Kapa
Zargar
© 2008 Europa Technologies
Image © 2008 DigitalGlobe
Image © 2008 TerraMetrics
Pointer 37°50'45.38" N 68°48'36.83" E elev 1426 ft Streaming 100%
Eye alt 12.1

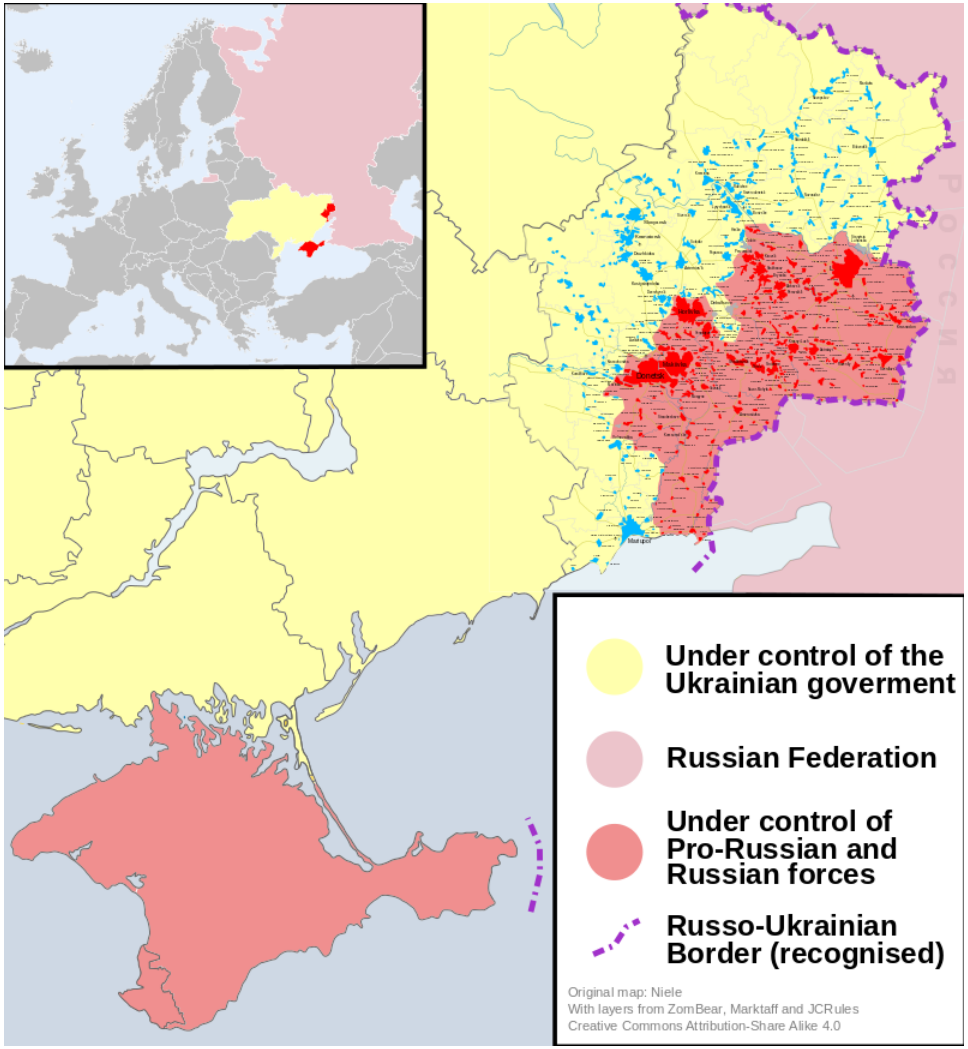
The Bandwagon

Ethnic groups of the Soviet Union

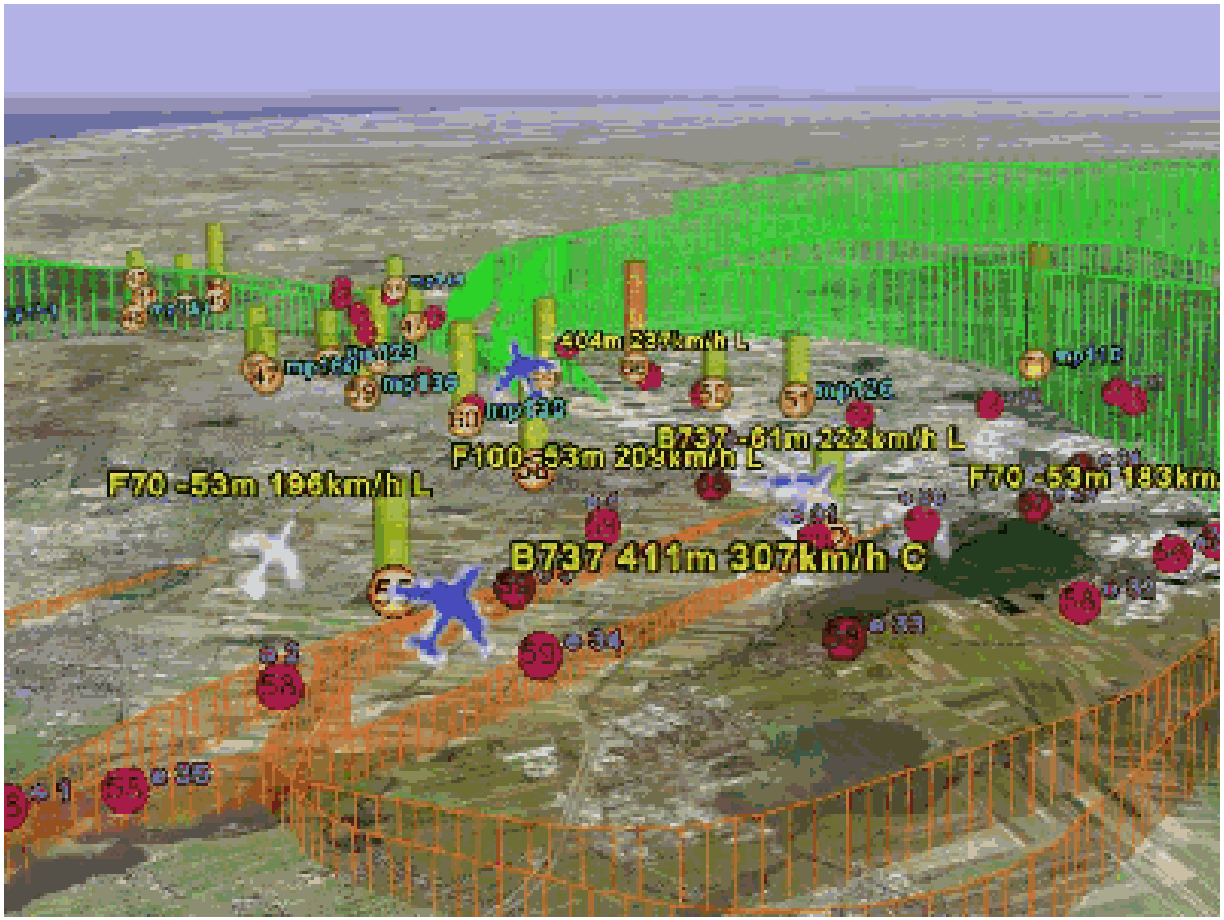
Russian invasion of Crimea



20 February 2014 – ongoing

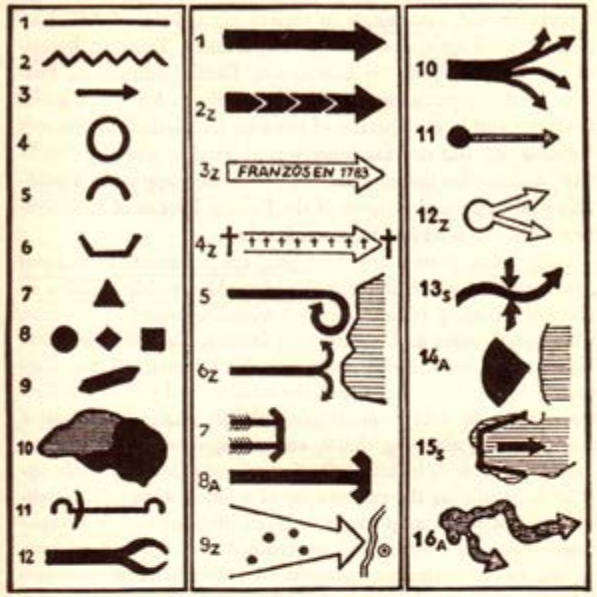


‘Cartographic propaganda can be an effective intellectual weapon against an unresponsive, biased, or corrupt bureaucracy.’ Mark Monmonier



http://www.nederkaart.nl/

Fear



BASIC SYMBOLS

1. The line
2. The zigzag line
3. The arrow
4. The circle
5. The half-circle
6. The demipolygon
7. The wedge
8. The target
9. The peg
10. Crosshatching
11. The clamp
12. The pincers

ATTACK—ADVANCE—STRUGGLE

1. Direct attack
2. Phases of attack
3. Hollow arrow with explanation
4. Symbolic arrow—advance of Christianity
5. Frustrated attack
6. Frustrated attack
7. Frontal attack
8. Frontal attack
9. Attack from several points —from a league of cities
10. Radiating attack from one source
11. Planning arrow — center of the movement
12. Split attack from a particular region
13. Attack intercepted and strangled
14. Mass attack on limited area
15. Natural approach to a given area
16. Routes of attack through channels predetermined by nature

Zeitschrift für Geopolitik, Vol. XII, No. 4 (Apr., 1935).

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.

Symbols for use on propaganda maps

L'ENTENTE CORDIALE ♥

1915

World War One: French

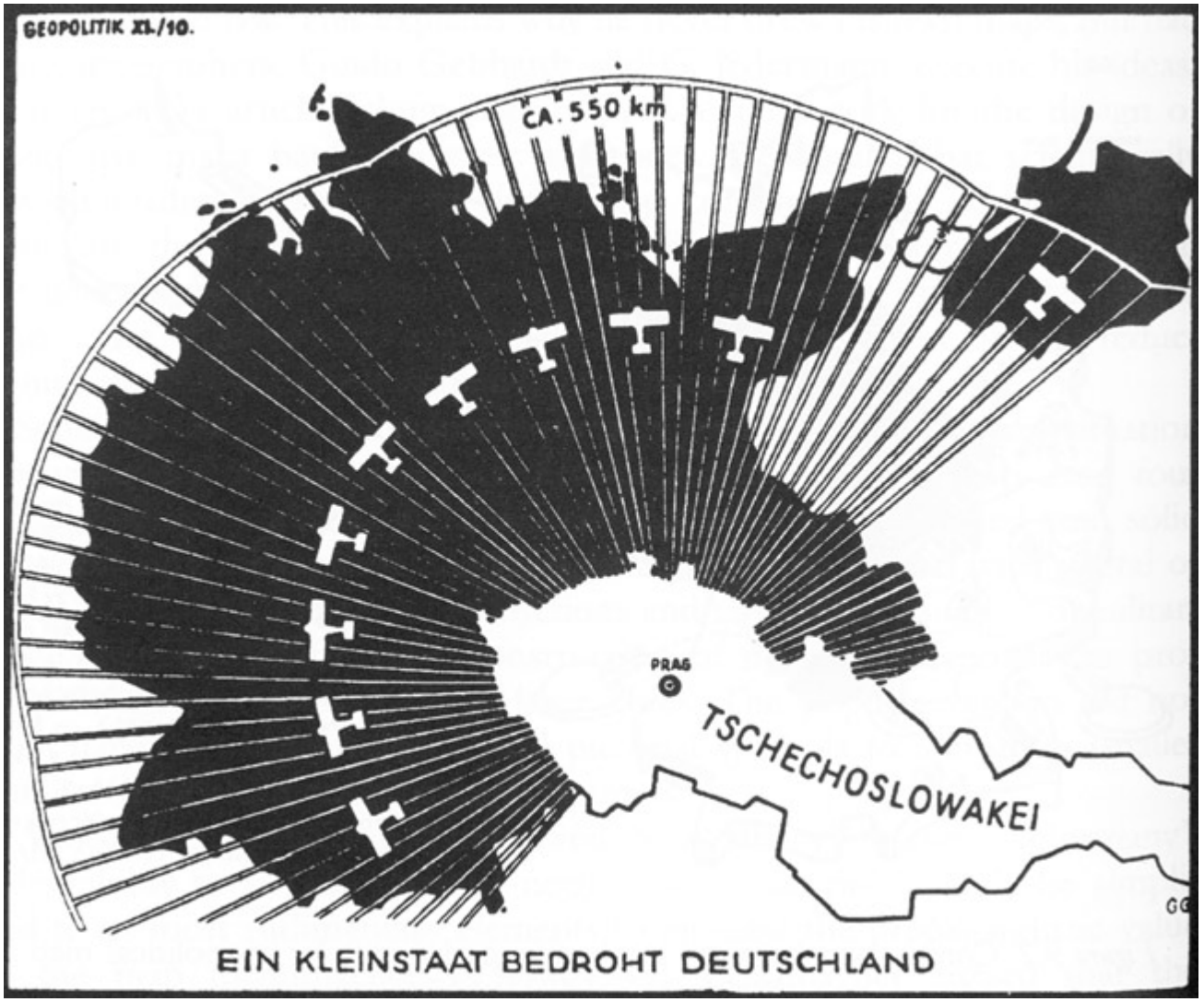
LE RÊVE D'HÉGÉMONIE ALLEMANDE. — Ce que nous aurait coûté la Défaite

Nous publions ci-dessus, d'après le Daily Mail, *une des cartes condensant les projets allemands de remaniement de l'Europe après la guerre, et qui montre ce que nous serions devenus si le coup allemand avait réussi.*

La Belgique, le Luxembourg, la Serbie, le Monténégro disparaissent complètement. La Russie perd toutes ses provinces baltiques avec Pétrograd. La Grande-Bretagne devient une colonie austro-allemande. Quant à la France, elle se trouve réduite au département des Basses-Pyrénées avec Bayonne comme capitale.

Pre-World War Two

Nazi Pre-WWII

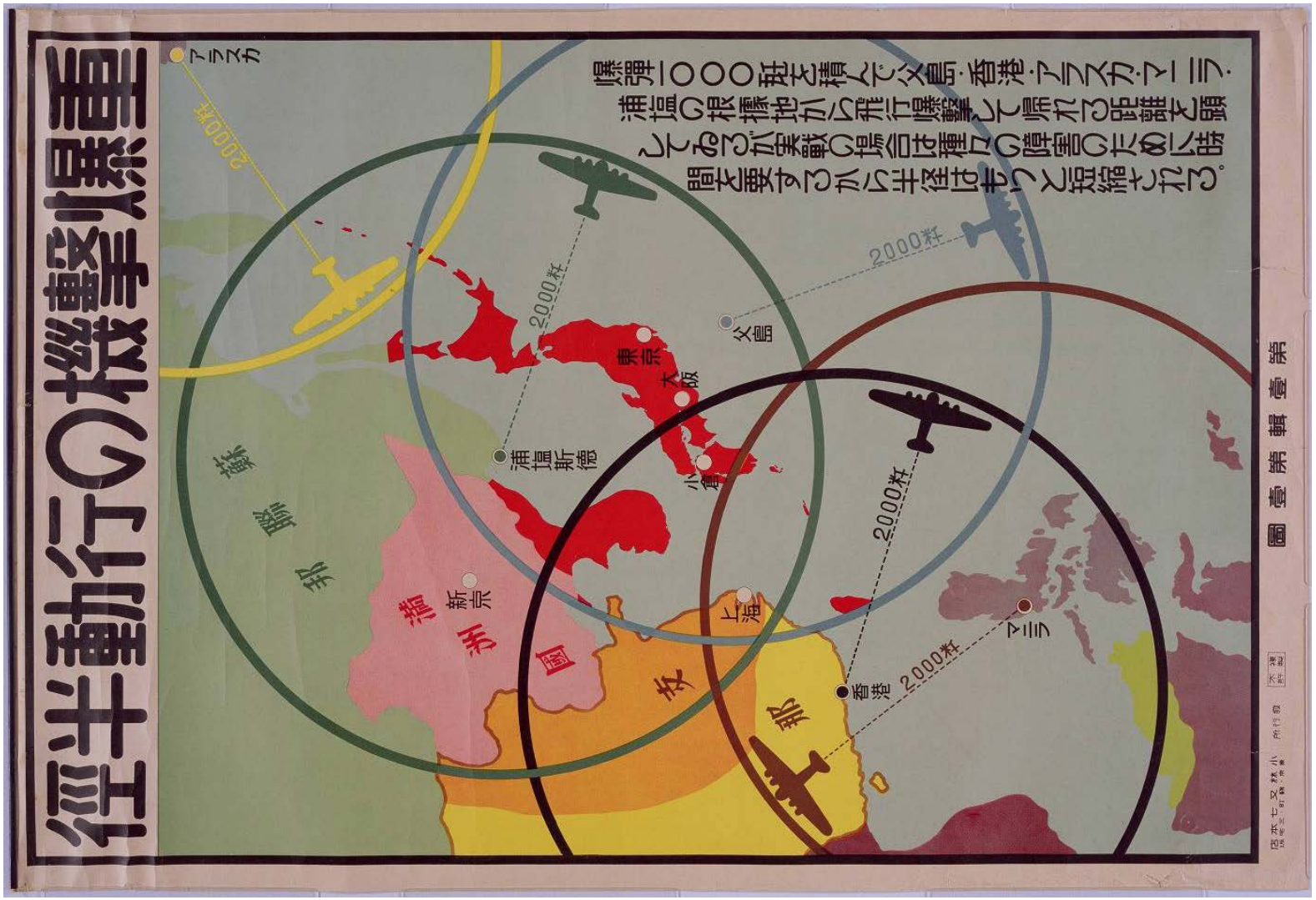


ARCTIC
ICELAND
NORWAY
FINLAND
BRITISH
ISLES
SWEDEN
DENMARK
ATLANTIC
OCEAN
GERMANY
POLAND
CZECHOSLOVAKIA
FRANCE
SWITZ.
AUSTRIA
HUNGARY
RUMANIA
YUGOSLAVIA
Black Sea
Caspian
PORTUGAL
SPAIN
ITALY
ALBANIA
BULGARIA
TURKEY
Dardanelles
GREECE
PERSIA
SYRIA
IRAQ
MOROCCO
ALGERIA
MEDITERRANEAN
PALESTINE
Suez Canal
TRANS-
JORDAN
LIBYA
EGYPT
SOVIET RUSSIA
COUNTRIES IN SOVIET POLITICAL ECONOMIC AND STRATEGIC BLOC
COUNTRIES WITH COMMUNIST OR COMMUNIST INFLUENCED GOVERNMENTS
COUNTRIES UNDER STRONG SOVIET POLITICAL PRESSURE
COUNTRIES NOT YET DECIDED

"Antwerp." In *Life*, 26 January 1953. p.27.

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



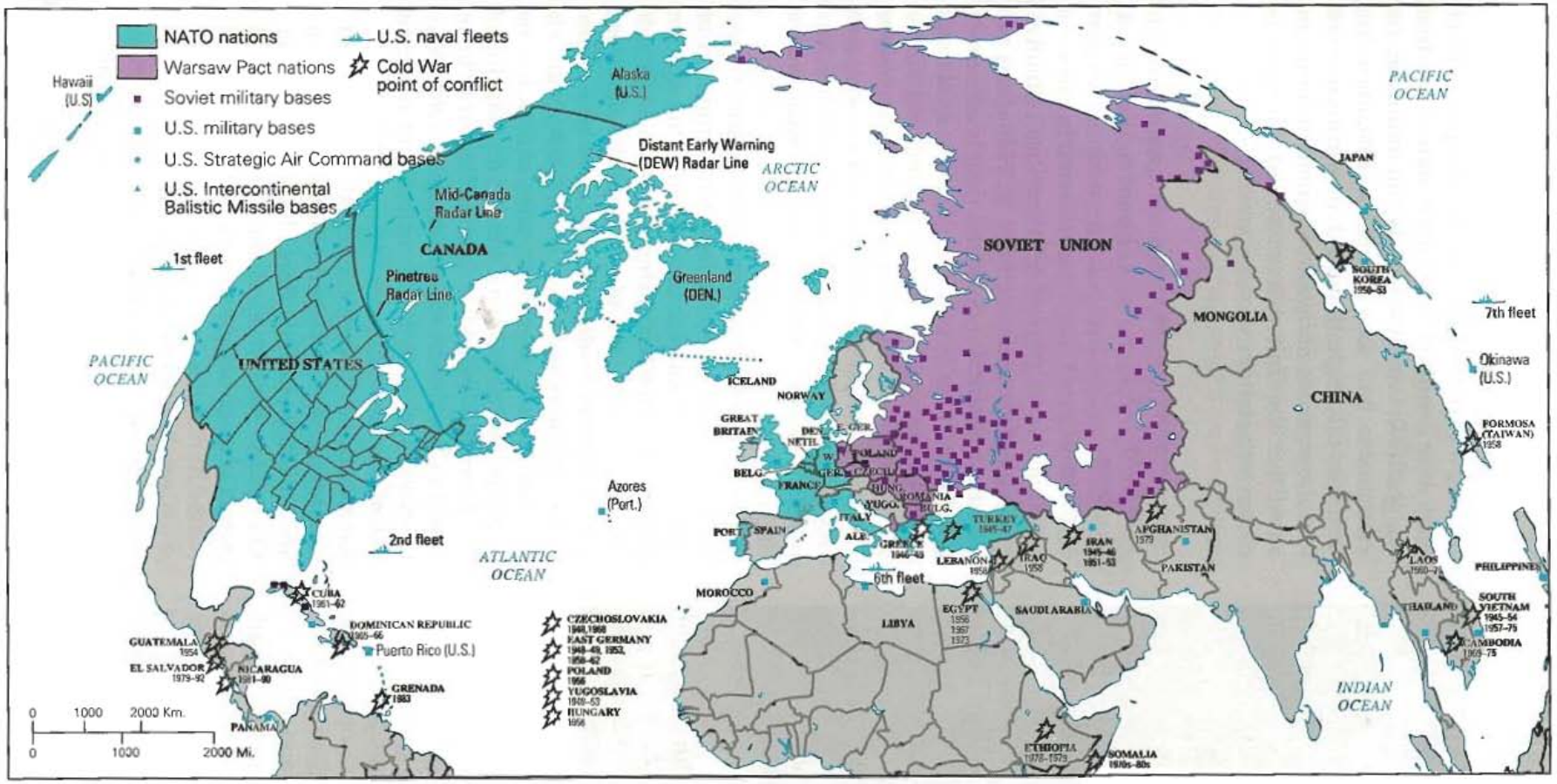
Serio-Comique Map of Europe at War (London 1914)

미본토전역이
우리의 사정권안에 있다!

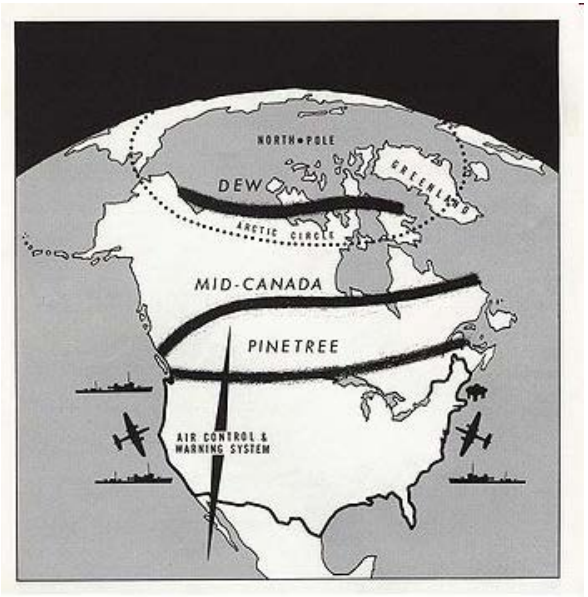
North Korea

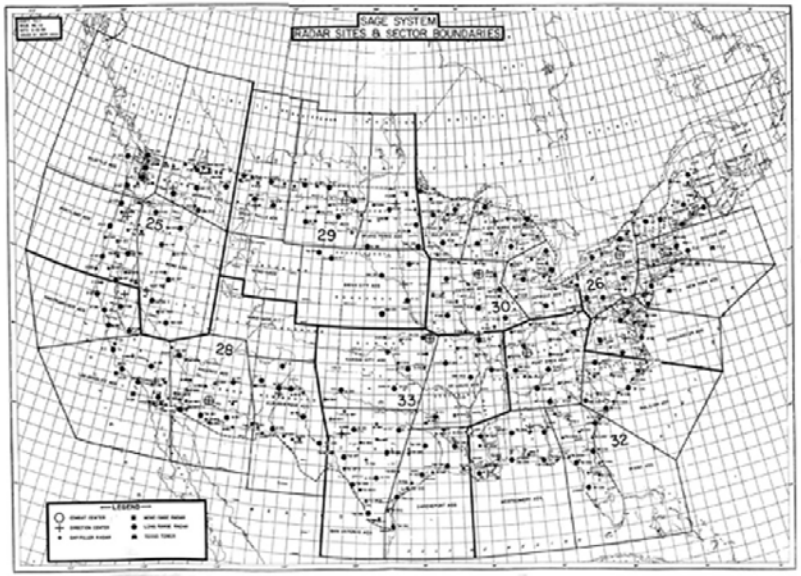
NK*NEWS.ORG
United States
North Pacific Ocean

Cold war Cartography



- SAGE and the Cold War





Developed by MIT Lincoln Laboratory, IBM and others.

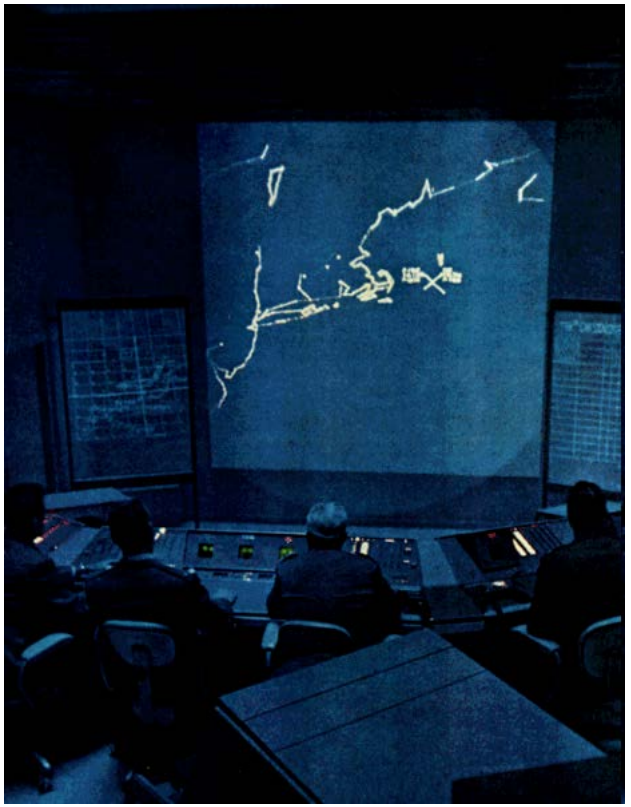
Operational in 1959

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

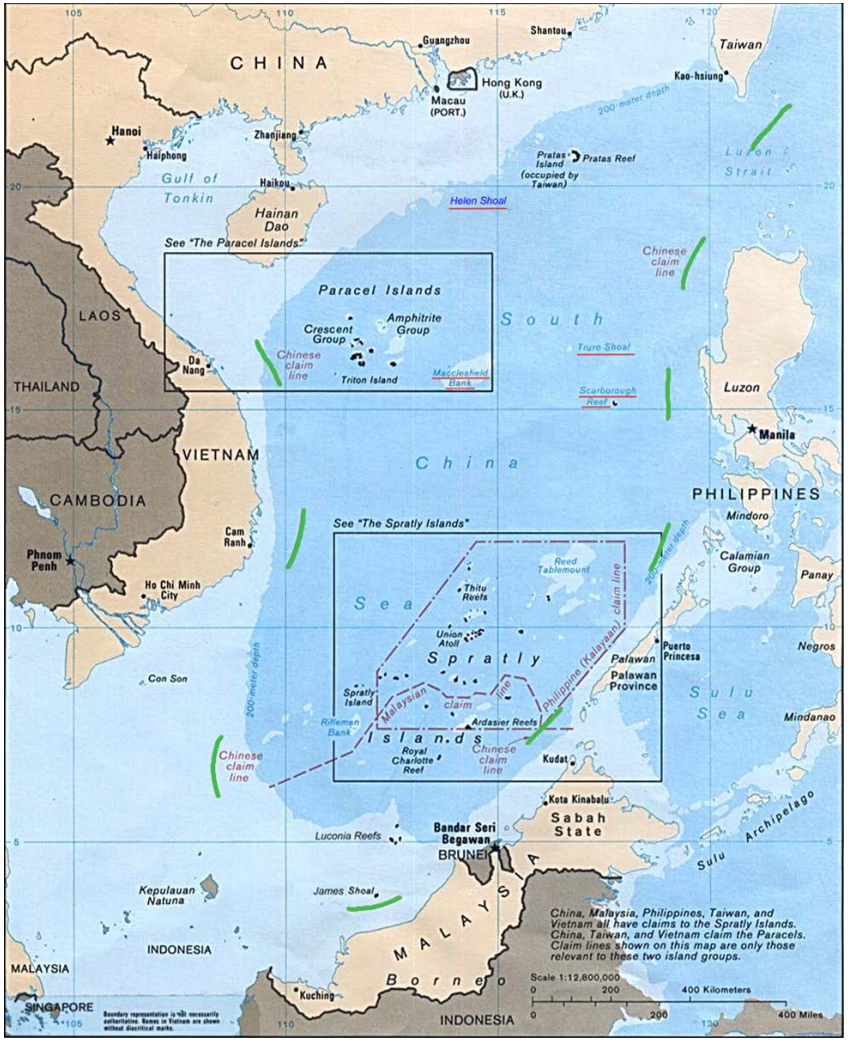


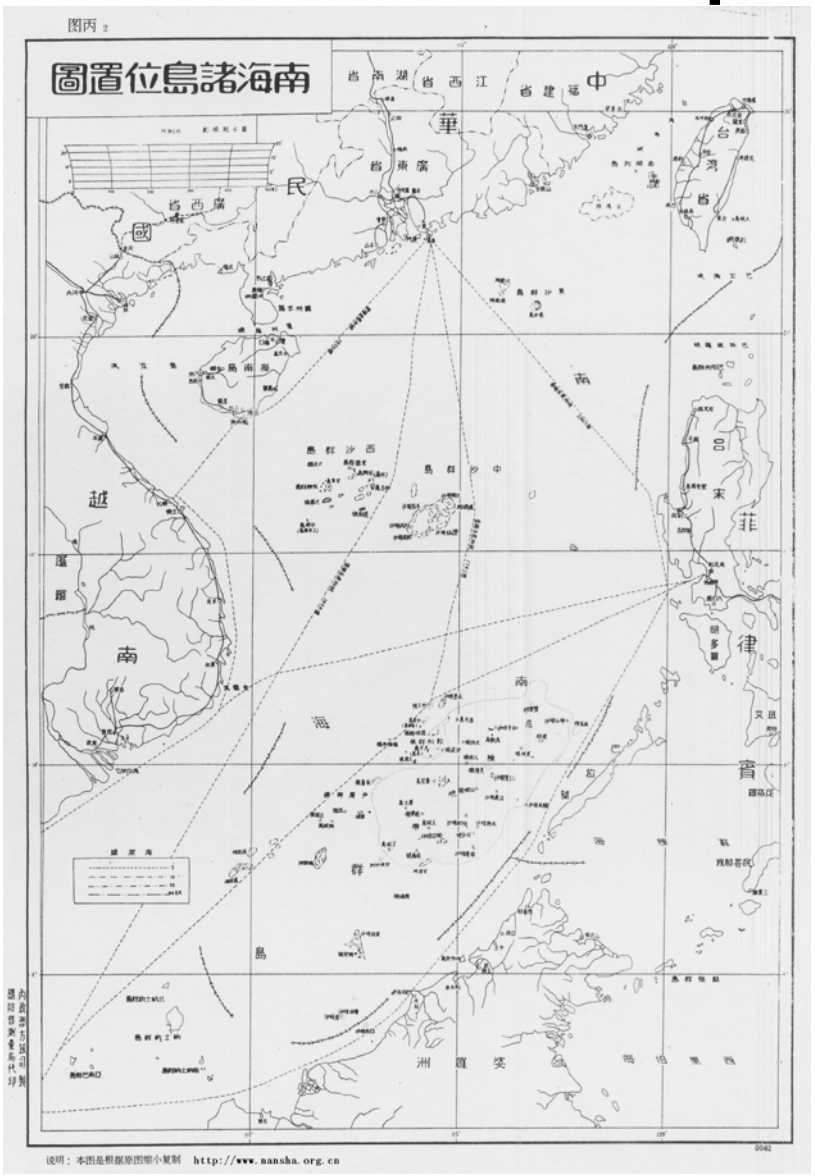
SAGE and Computer Cartography

- 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

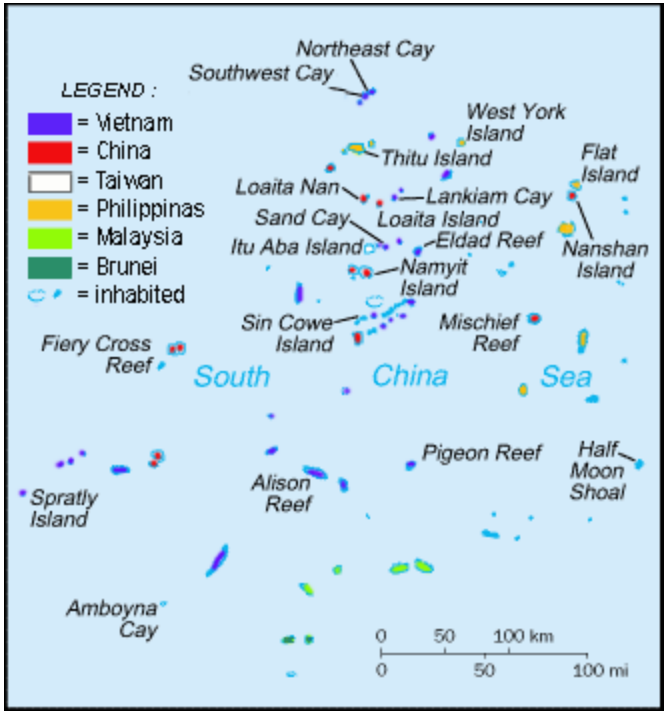
Cheating

The 9 (1947) and 11-dash maps

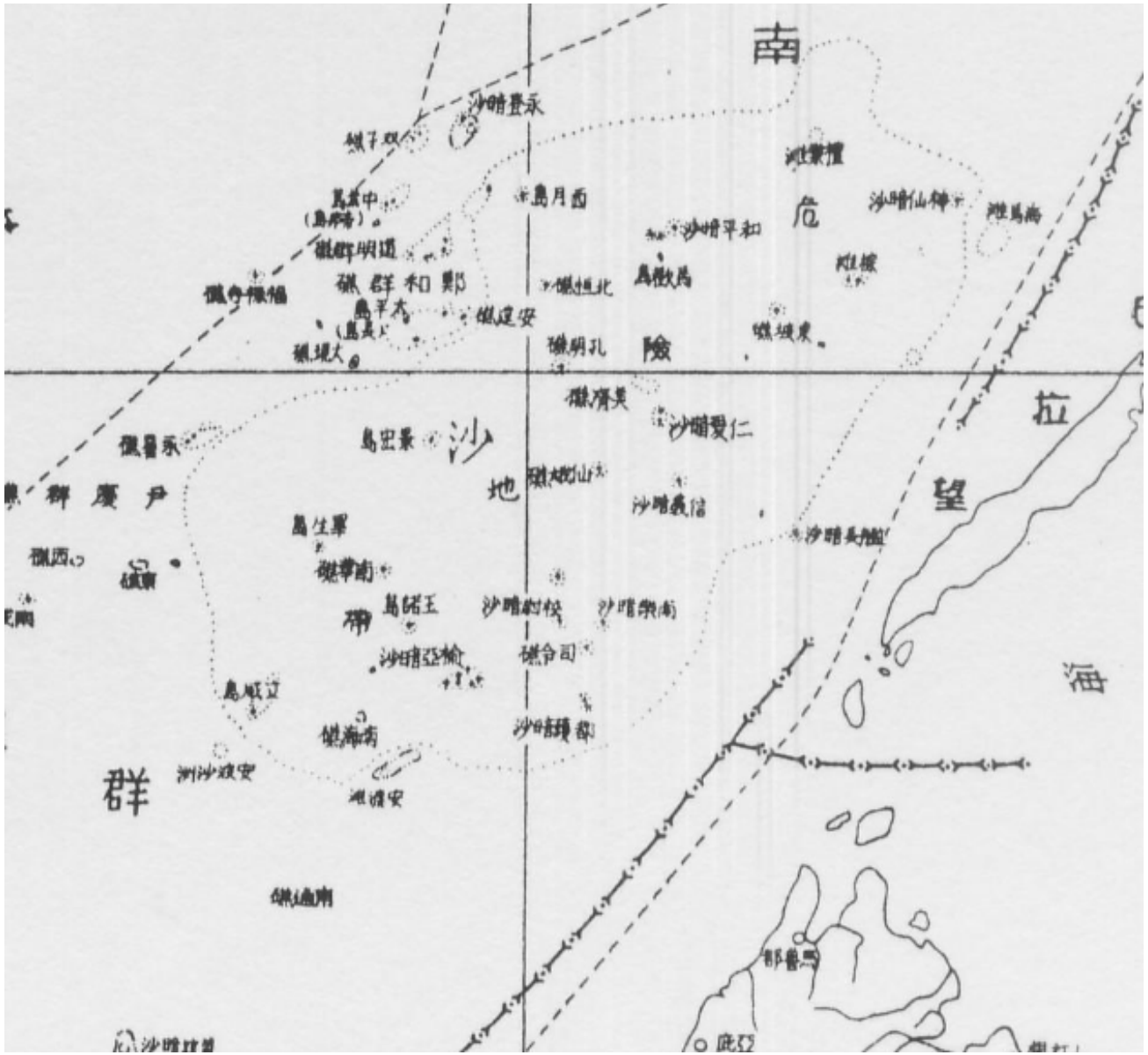




Spratly Islands

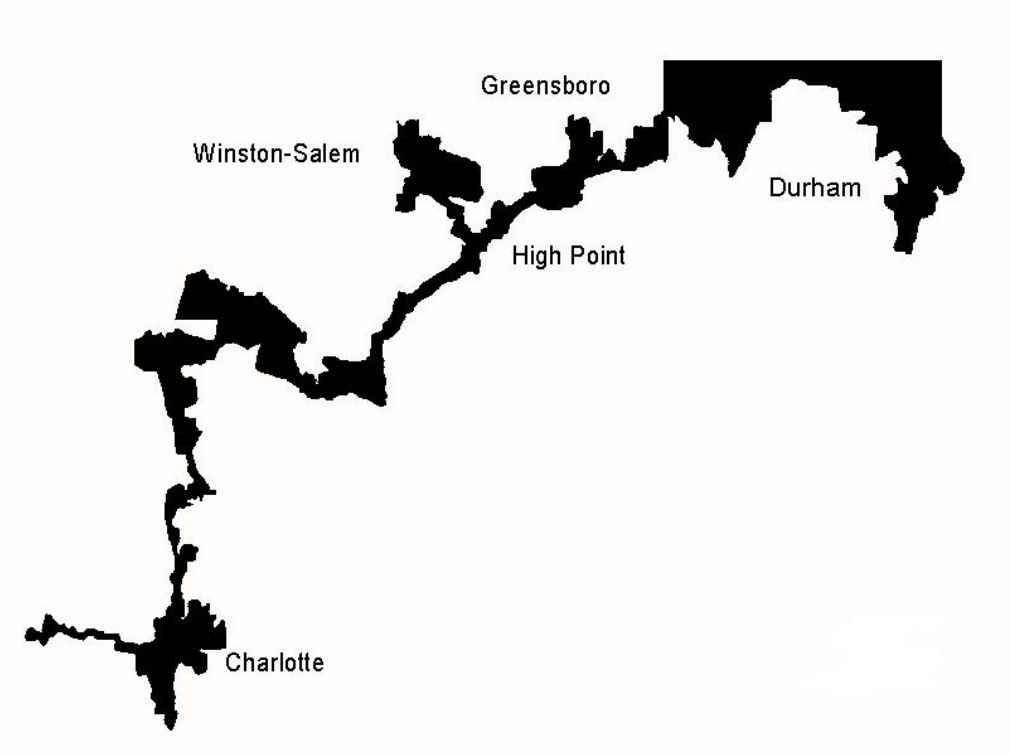


Detail



Gerrymandering

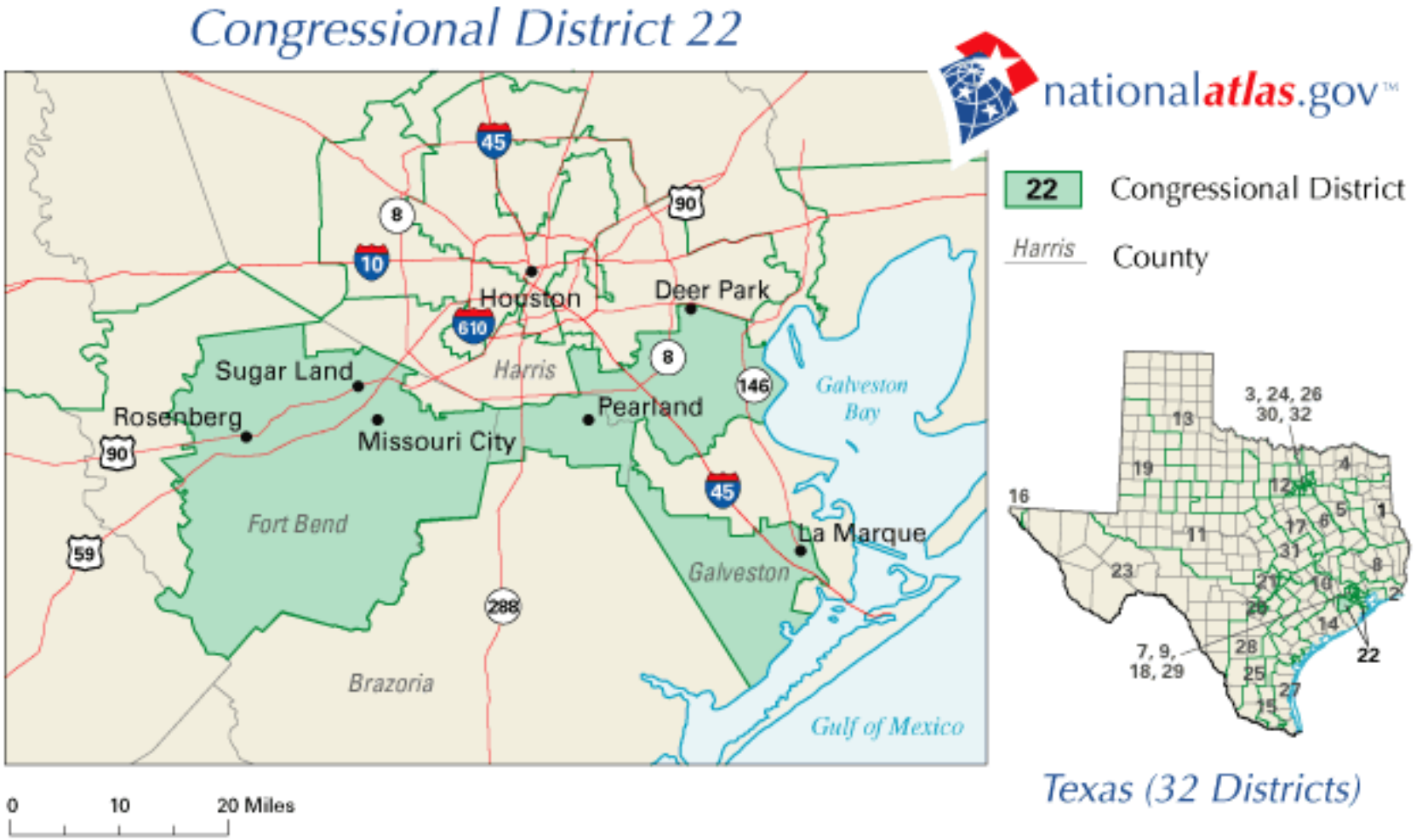
Fig. 6.4. Elkanah Tisdale's original Gerrymander, as it appeared in the Boston *Gazette*, March 26, 1812. (From James Parton, *Caricature and Other Comic Art* [New York: Harper and Brothers, 1877], p. 316.)



NC Congressional District 12 - 1992

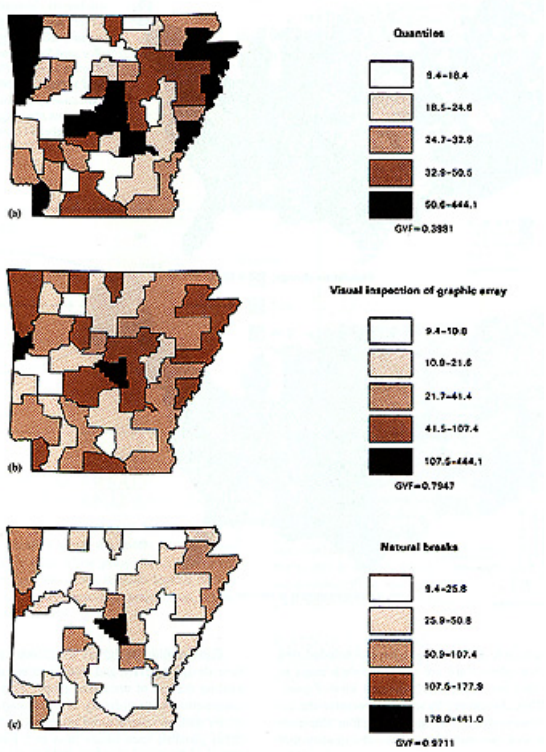
CA district 23 Packing

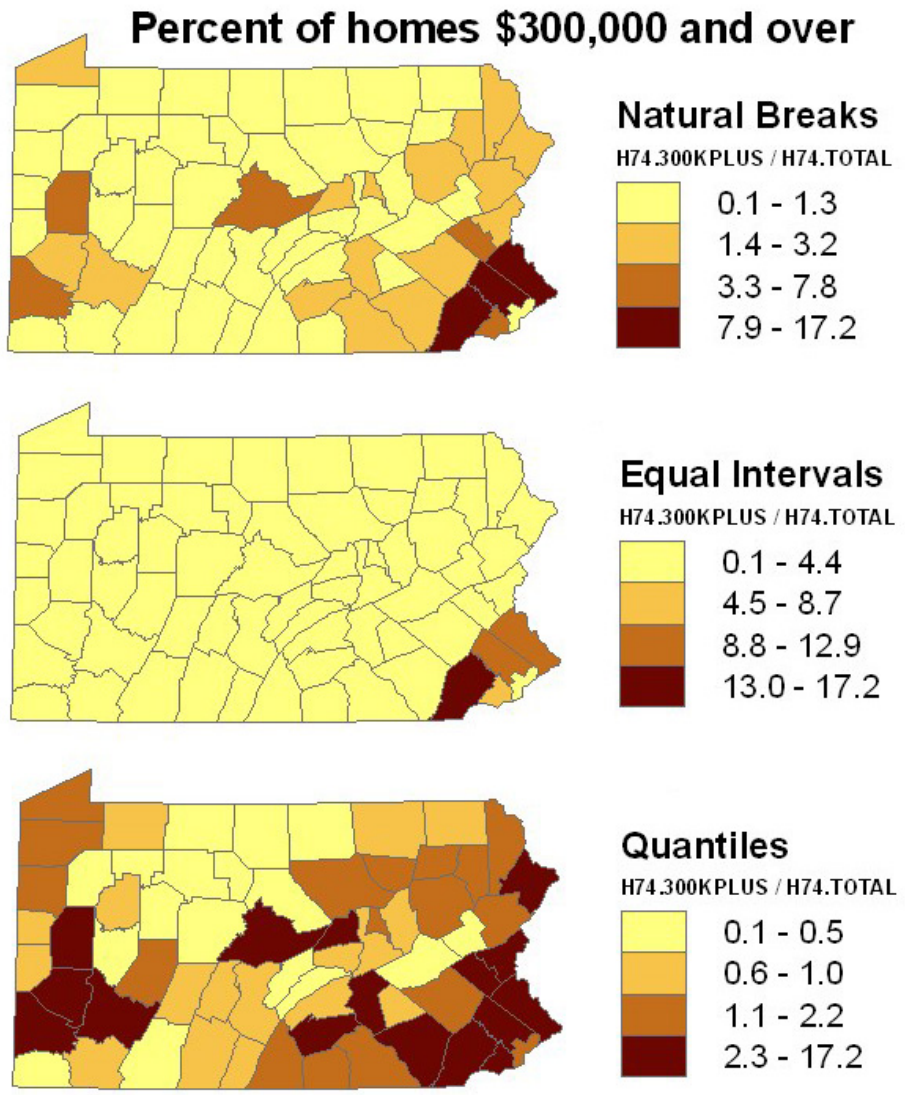
Texas district 22 Cracking



Glittering Generalities

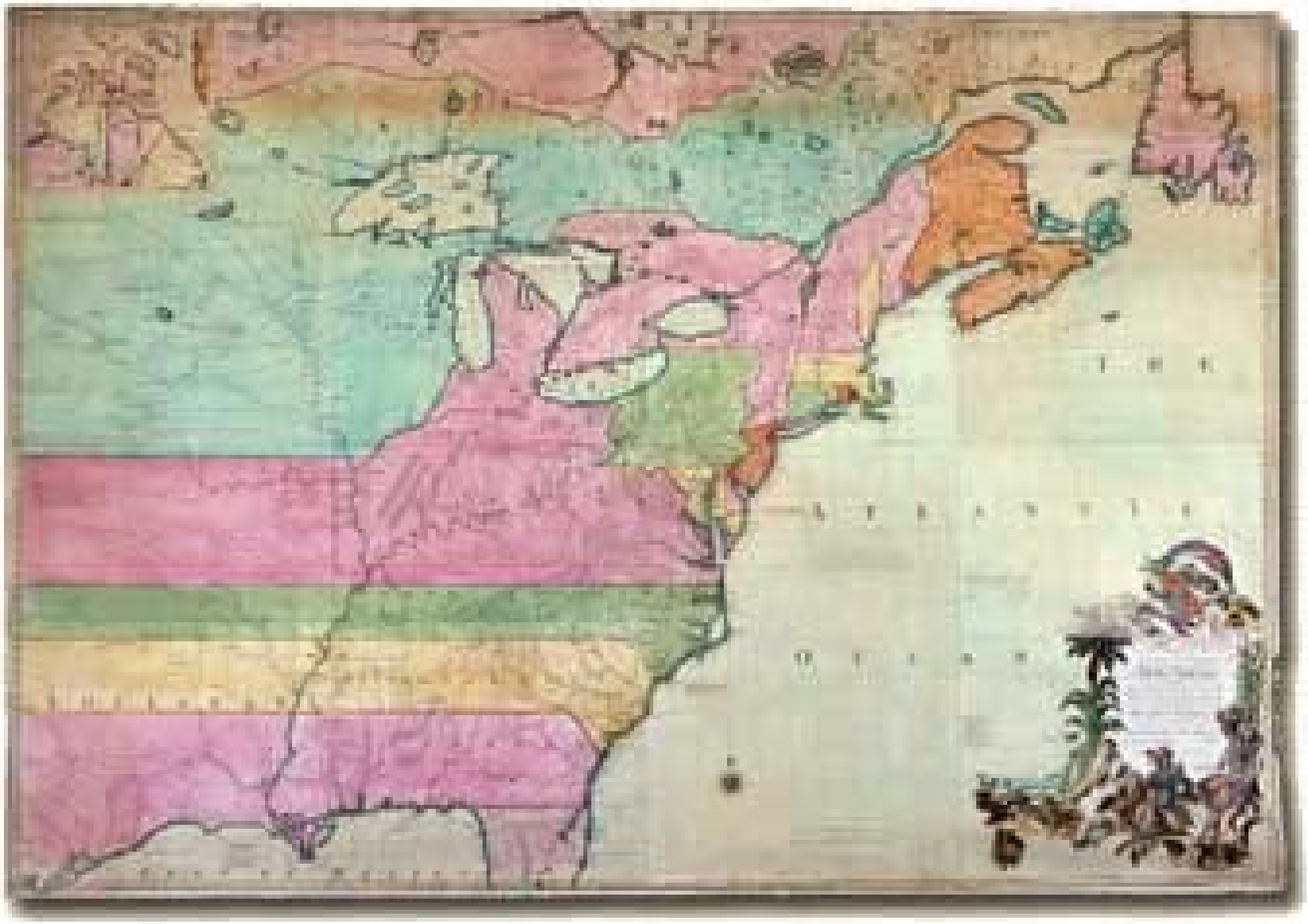
Choropleth classifiation



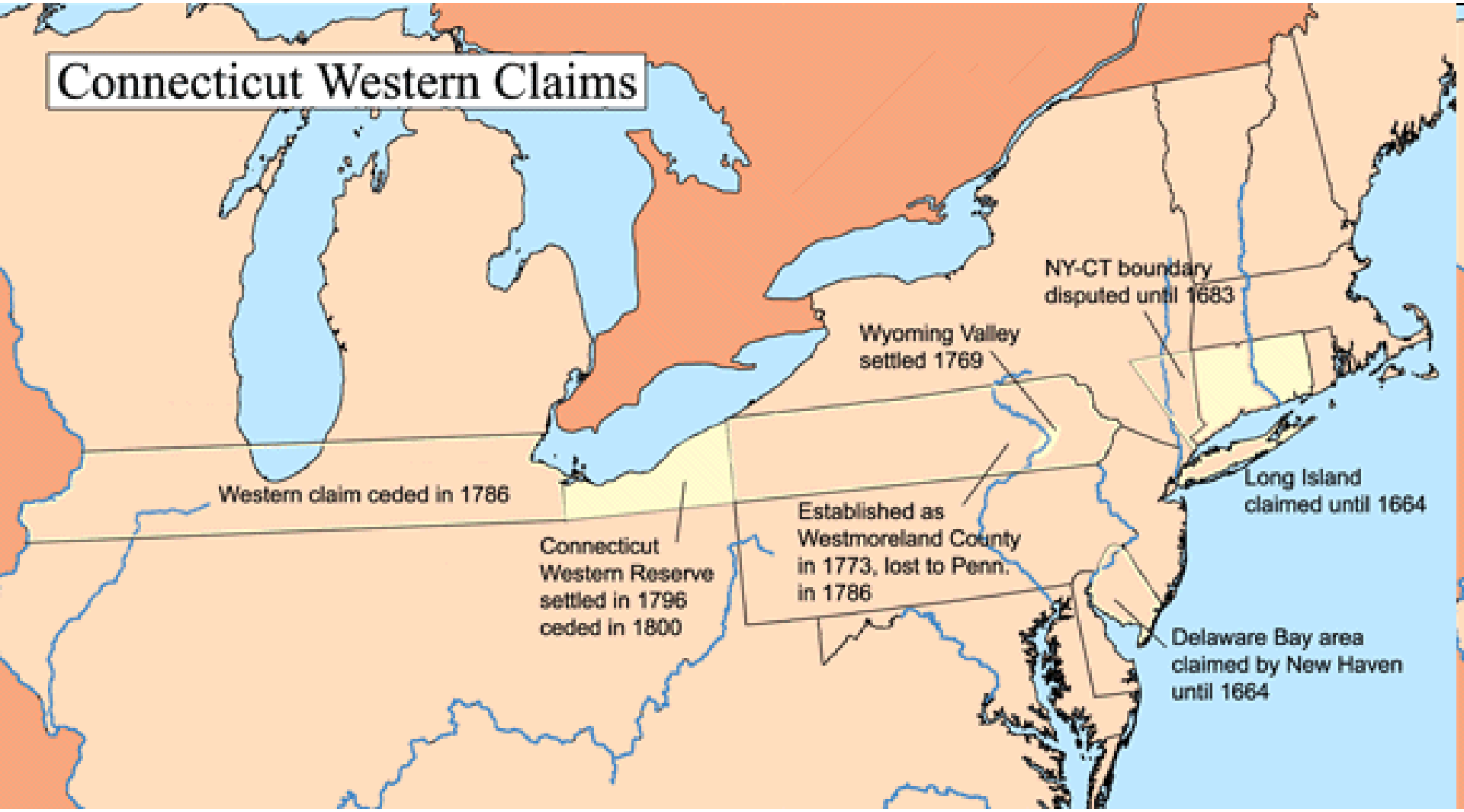


The Sun Never Sets…

John Mitchell 1775

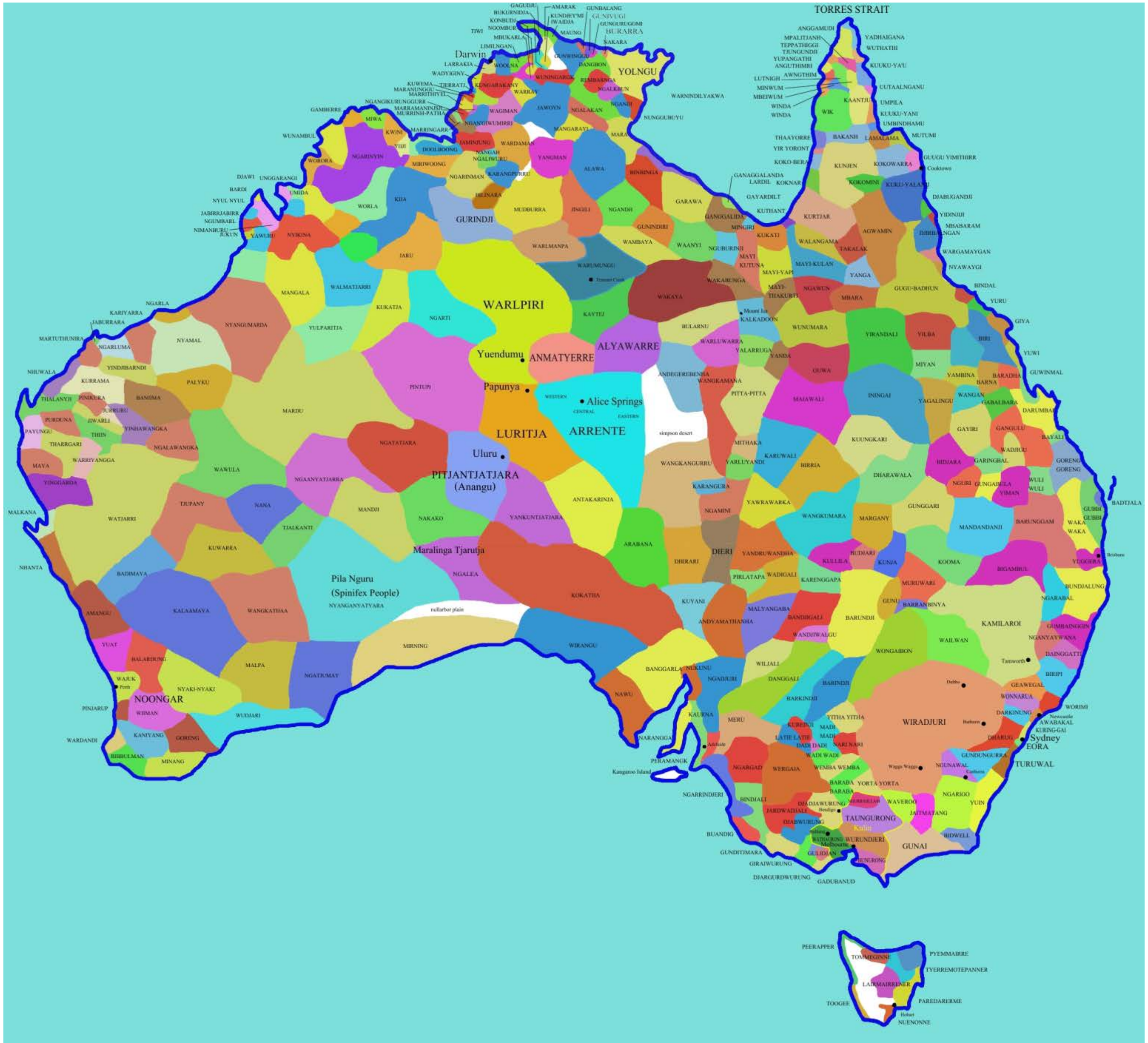


Connecticut's Western Reserve



"We will defeat drought, too!".

Aboriginal Australia



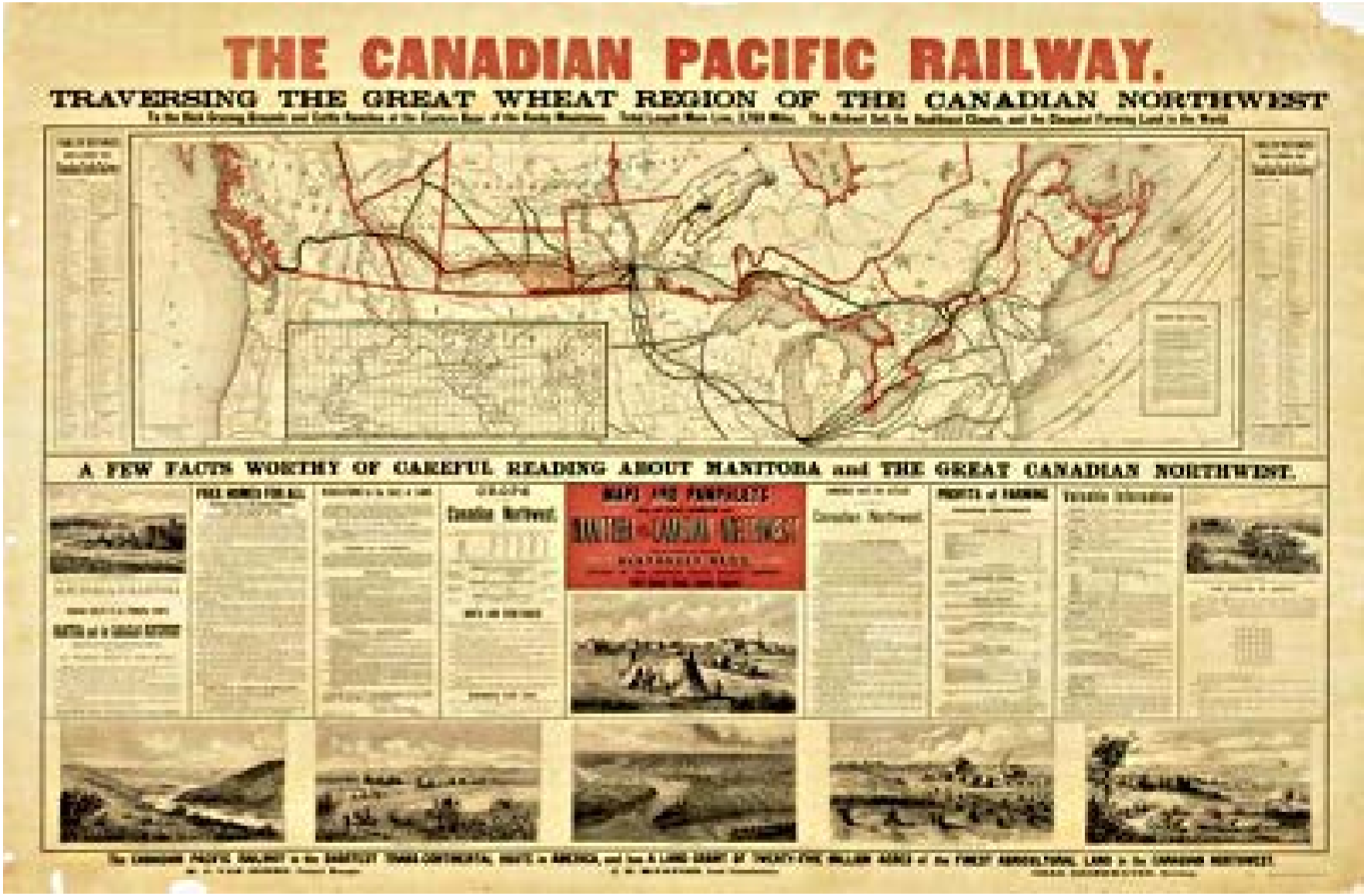
Promotion using maps

Promoting settlement

Promotion: Dubai

Canadian Pacific Railway promotional map (1881)

(Library and Archives Canada, NMC 11868)



Travel promotion

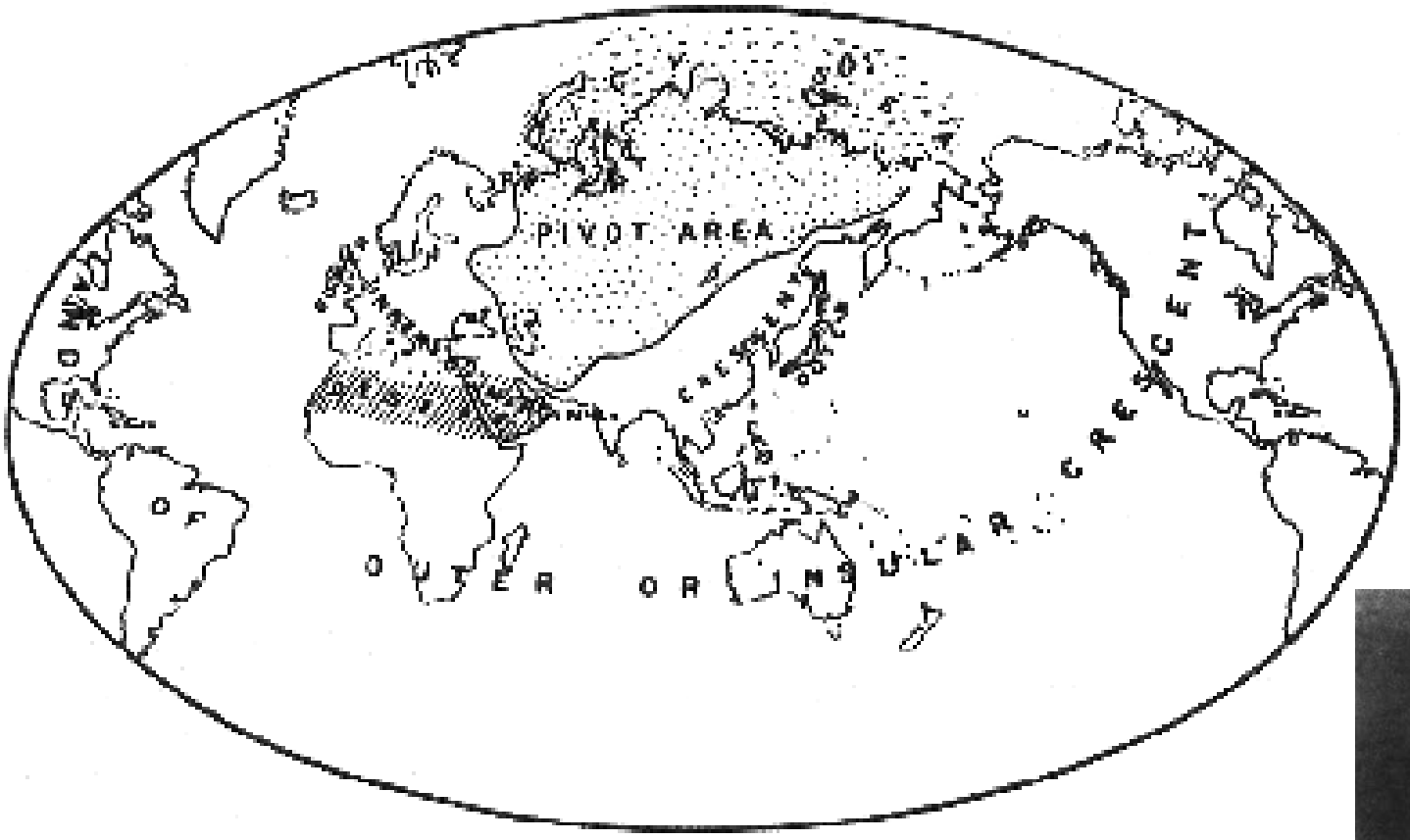
The Château Frontenac in Quebec City.

2213 – Hotel Potter, Santa Barbara, California. Road of a Thousand Wonders.

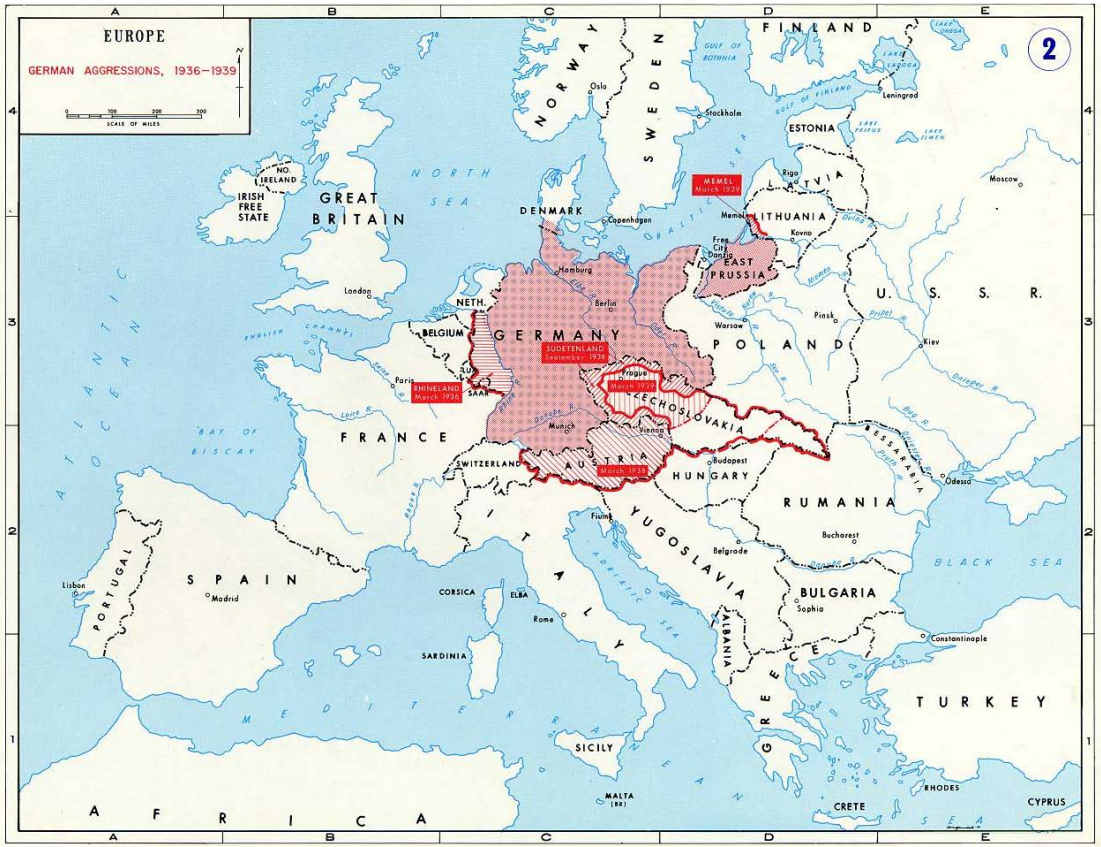
Local Bias?

MENDOCINO
HEALDSBURG & RUSSIAN RIVER
NAPA VALLEY
SONOMA VALLEY
SIERRA FOOTHILLS
SANTA CRUZ MOUNTAINS WINE COUNTRY
MONTEREY & THE WINERIES OF CARMEL
PASO ROBLES
SANTA BARBARA

Halford Mackinder (1861-1947)



Lebensraum

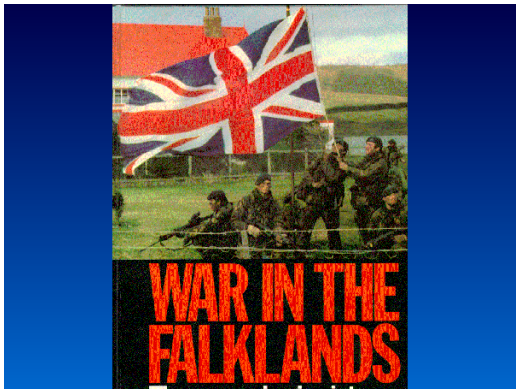

EUROPE
GERMAN AGGRESSIONS, 1936–1939
2
GREAT BRITAIN
IRISH FREE STATE
NO. IRELAND
NORWAY
SWEDEN
FINLAND
DENMARK
ESTONIA
LATVIA
LITHUANIA
MEMEL March 1939
EAST PRUSSIA
GERMANY
NETH.
BELGIUM
SUDETENLAND September 1938
RHINELAND March 1936
SAAR
POLAND
U. S. S. R.
CZECHOSLOVAKIA
Prague March 1939
FRANCE
SWITZERLAND
AUSTRIA March 1938
HUNGARY
RUMANIA
BULGARIA
YUGOSLAVIA
ALBANIA
GREECE
TURKEY
SPAIN
PORTUGAL
ITALY
CORSICA
SARDINIA
SICILY
MALTA
CRETE
RHODES
CYPRUS
AFRICA
Oslo
Stockholm
Leningrad
Moscow
Riga
Kovno
Copenhagen
Hamburg
Berlin
Warsaw
Pinsk
Kiev
London
Paris
Munich
Vienna
Budapest
Odessa
Fiume
Belgrade
Bucharest
Sophia
Constantinople
Lisbon
Madrid
Rome
NORTH SEA
ATLANTIC
ENGLISH CHANNEL
BAY OF BISCAY
MEDITERRANEAN SEA
BLACK SEA
GULF OF BOTHNIA
GULF OF FINLAND
BALTIC SEA

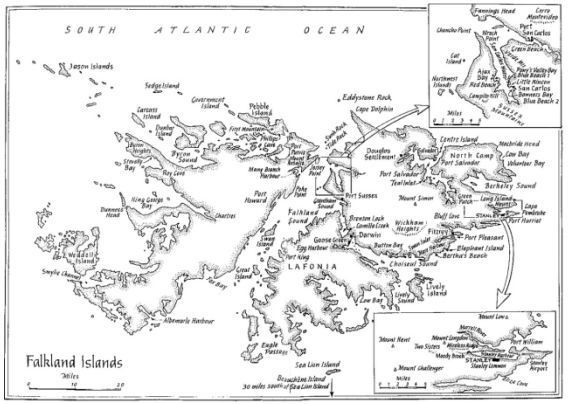
Utopia: The „Greater Germanic Reich of the German Nation“

großzügigste
Umsiedlungsaktion

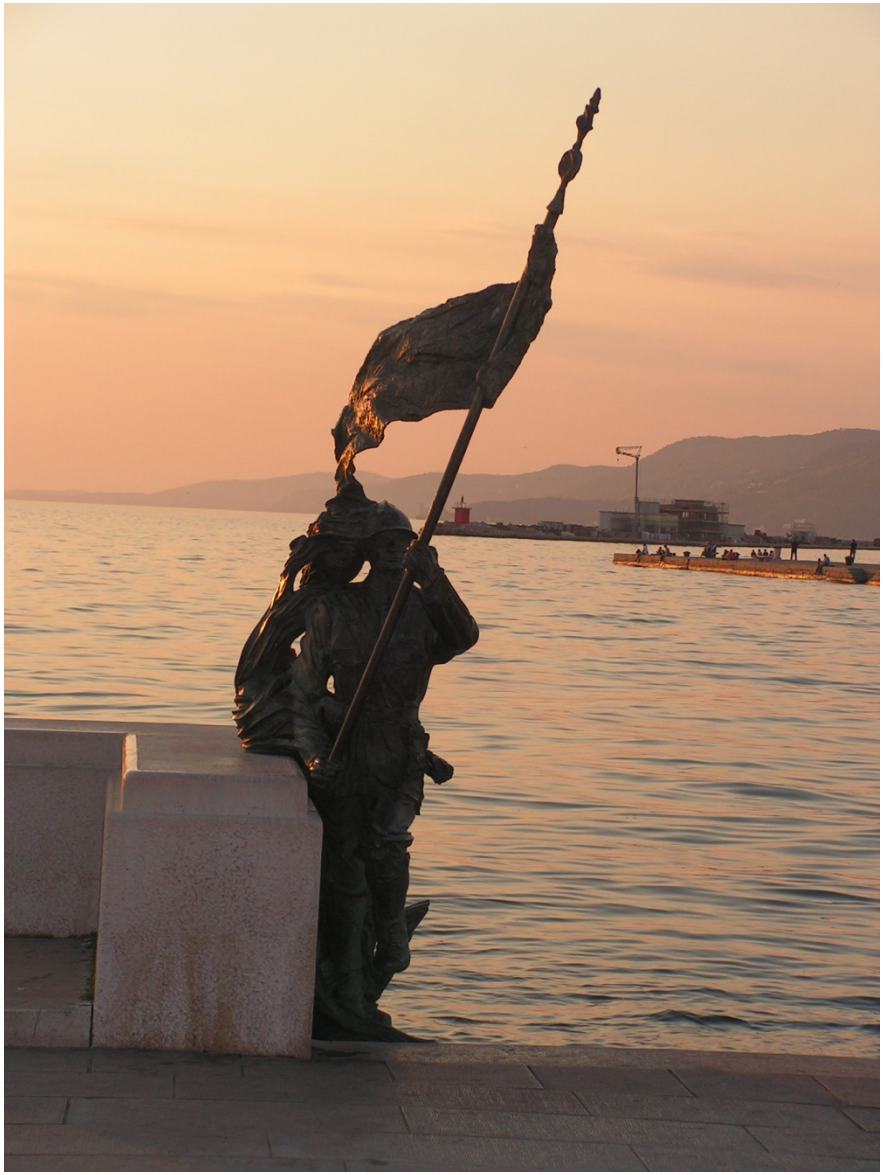
Name Calling

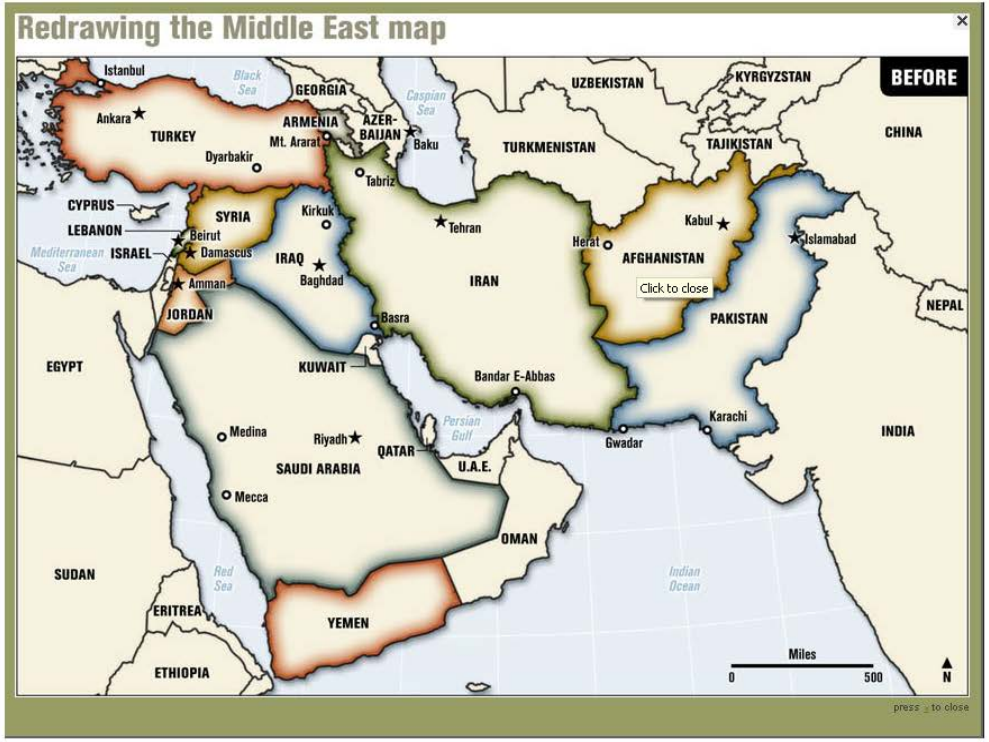
Falkland Islands





"Troubled Trieste." In *Time*, 3 August 1953. p.28. © 1953 Time Inc.





Ralph Peters solution to Mideast (Posted on Wikipedia)

June 2006 "Blood borders: How a better Middle East would look"

Kashmir

Pakistani view

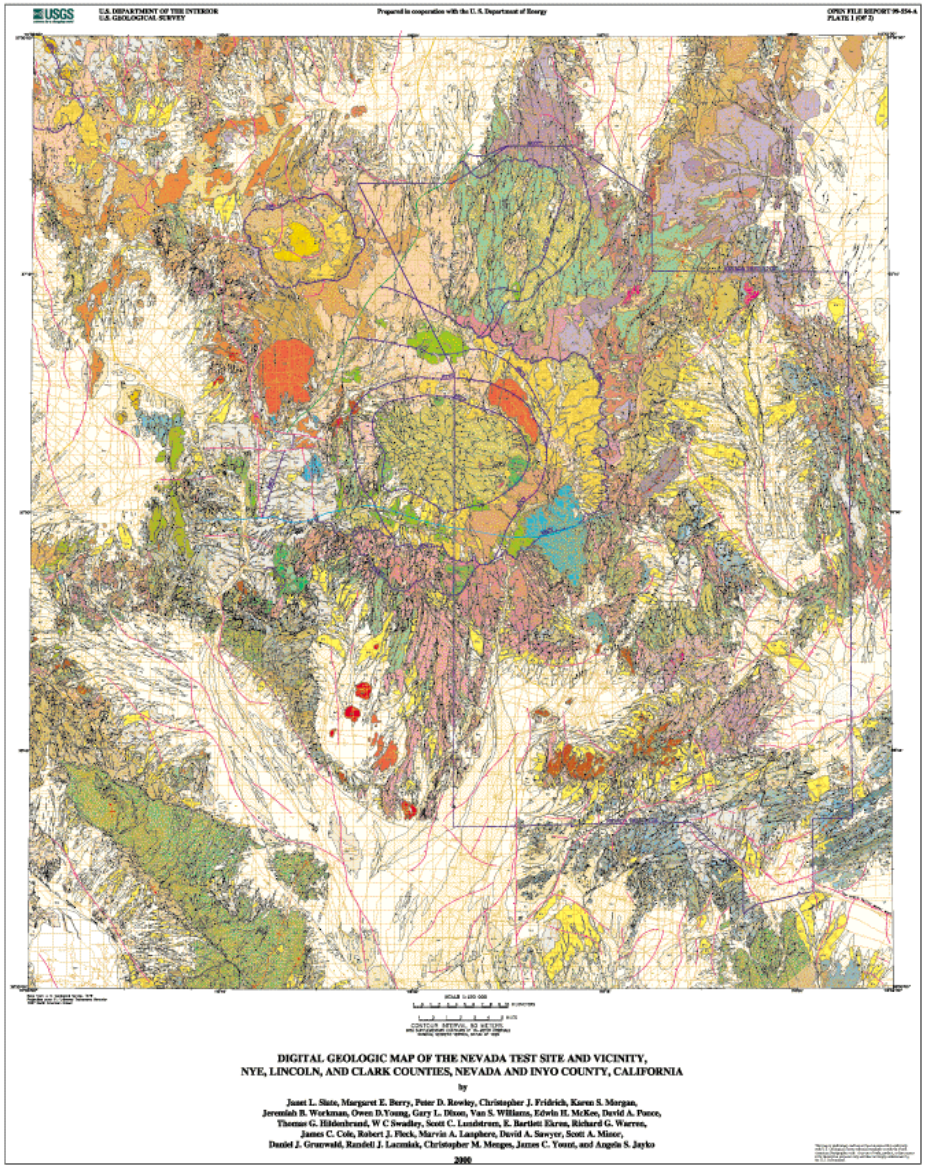
Indian view

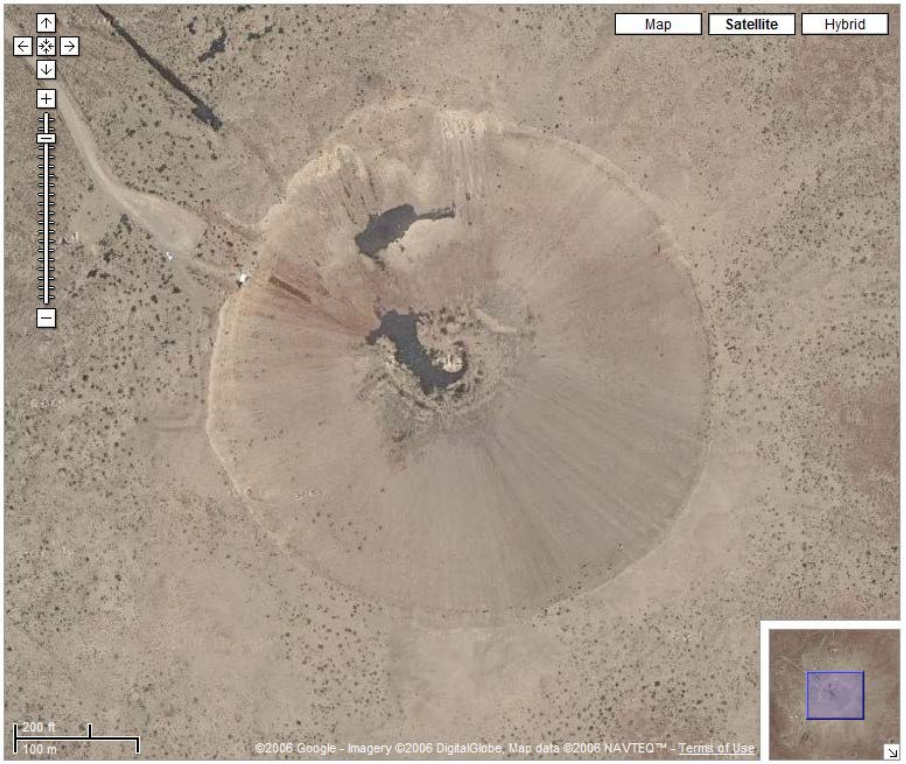
Greece and Kurdistan

Cyprus: 1974

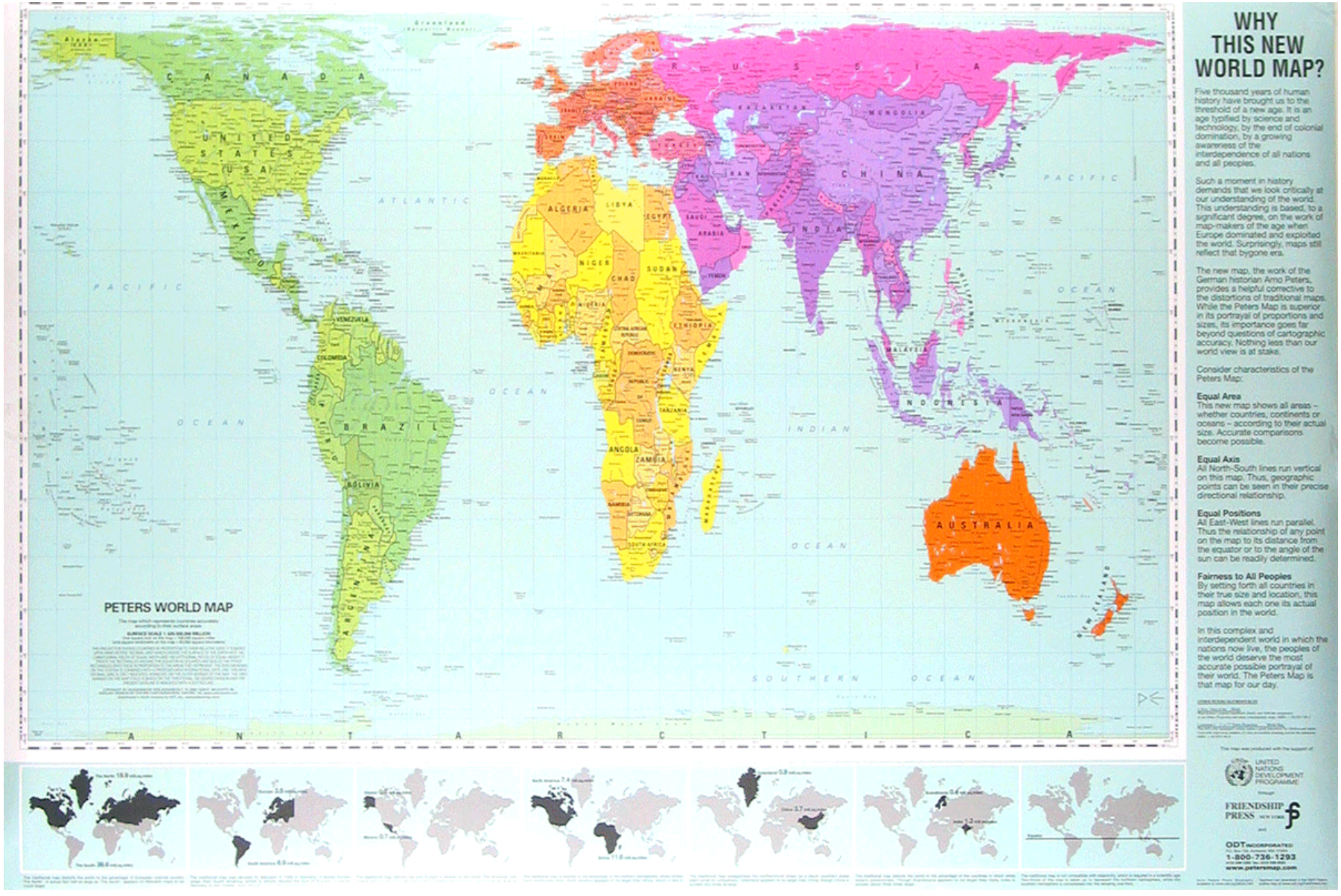
MEDITERRANEAN SEA
C. Andreas
Rizokarpaso
Ayia Trias
Yialousa
Vathylakas
Leonarisso
Ephtakomi
Galatia
Komi Kebir
Akanthou
Ardhana
Boghaz
Trikomo
Trypimeni
FAMAGUSTA
Famagusta Bay
Lefkoniko
Prastio
FAMAGUSTA
Varosha
Dherinia
Athna (Akhna)
Paralimni
Ayia Napa
C. Greco
C. Pyla
DHEKELIA S.B.A.
Larnaca Bay
Kalopsidha
Pergamos
Kondea
Arsos
Athienou
Troulli
Pyla
Lymbia
LARNACA
LARNACA
Scala
Kiti
C. Kiti
Kophinou
Alaminos
A. Theodhoros
Lefkara
Kalavasos
Moni
Mari
Zyyi
LIMASSOL
LIMASSOL
Akrotiri Bay
AKROTIRI S.B.A.
Akrotiri
Episkopi Bay
Episkopi
K. Polemidhia
C. Gata
Mallia
Pano Platres
A. Nikolaos
Troodos
Alona
Palekhori
Pedhoulas
Kakopetria
Evrykhou
Skouriotissa
Astromeritis
Peristerona
Akaki
K. Trimithia
Avlona
P. Zodhia
Philia
Mammari
Morphou
Skylloura
Geunyeli
Kaimakli
NICOSIA
Kythrea
Bey Keuy
Chatos
K. Monastir
Angastina
Tymbou (Ercan)
Kalavasos
Lefka
Xeros
Limnitis
Selemani
Karavastasi
Ambeliko
Morphou Bay
K. Pyrgos
Mansoura
Kokkina
Pomos
C. Arnauti
Khrysokhou Bay
Yialia
Mavroli
Polis
Prodhromi
Peyia
PAPHOS
PAPHOS
Koloni
Stavrokono
Mandria
Kouklia
Kormakiti
Dhiorios
Myrtou
Lapithos
Karavas
KYRENIA
Temblos
Bellapais
Ayios Amvrosios
K. Dhikomo
KYRENIA
C. Kormakiti

Nevada nuclear test site





The Peters controversy



Peters Map - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Peters Map

www.petersmap.com

Secure Search

Google ISI Web of Knowledge... NGS Online Review Sy... Login NPR : National Public ... COX.net for Santa Ba... GauchoSpace Google Calendar CNN.com - Breaking N... BBC - Homepage Geography BBS

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 acurate map.

[How to order the Peters Map] [Table of Contents] [Next]

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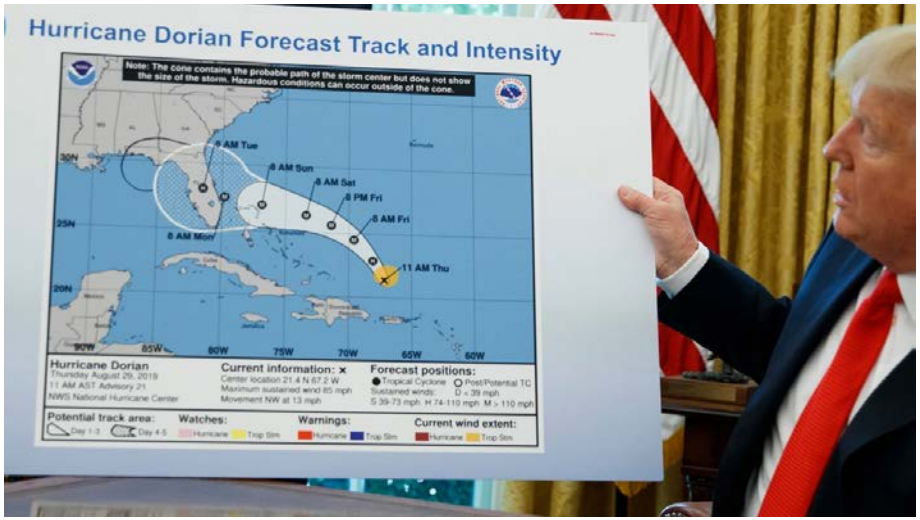
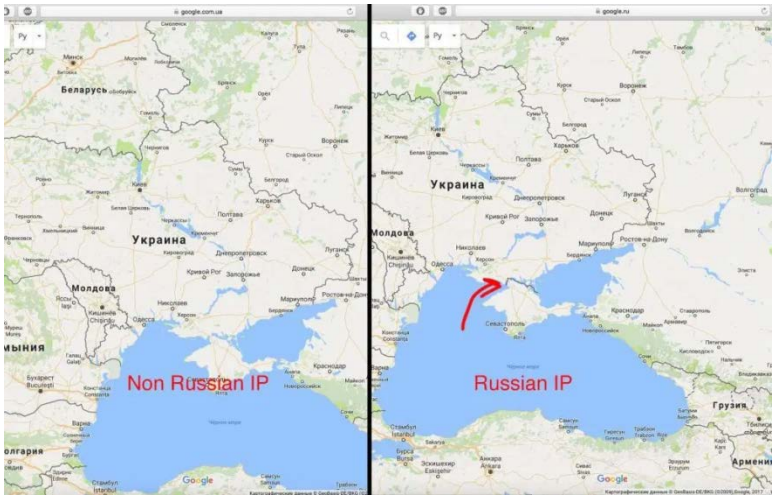
start C:\Documents and Se... Lecture12.ppt Peters Map - Mozilla F... 10:38 AM

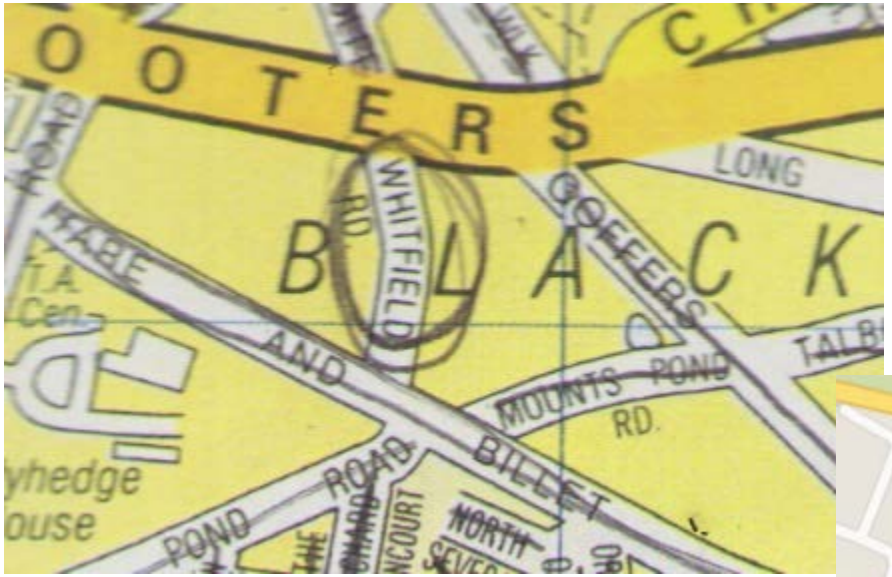
Easter Eggs

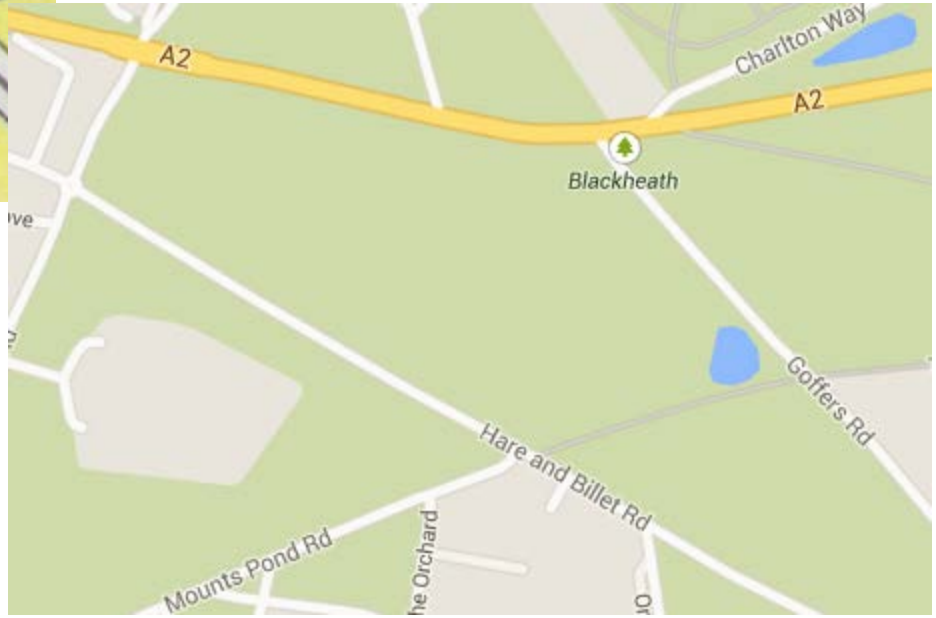
Deliberate Errors



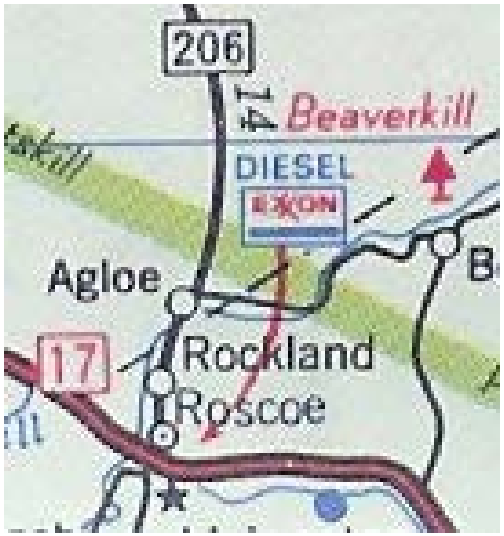


Cartographic Traps





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