NYT: 7/18 The Maps That Show That City vs. Country Is Not Our Political Fault Line

Midlands
Culturally pluralistic, founded by English Quakers. Ethnic and religious purity were never priorities; community-oriented and distrustful of government intervention.

Left Coast
New Englanders (by ship) and farmers, prospectors and fur traders from Appalachian Midwest (by wagon). Yankee utopianism meets individual self-expression and exploration.

Far West
Settlement largely controlled by corporations or government via deployment of railroads, dams, irrigation, mines; exploited as an internal colony, to the lasting resentment of its people.

Yankedoom
Puritan legacy; perfect earthly society with social engineering, individual denial for common good; assimilate outsiders; vigorous government to thwart would-be tyrants.

New Netherland
Dutch-founded; retains traits of 17th-century Amsterdam: a global trading culture; materialistic; multicultural; committed to tolerance and freedom of inquiry and conscience.

Tidewater
17th-century gentry recreated semi-feudal manorial society of English countryside. Conservative; respect for authority and tradition, not equality or political participation.

Deep South
Established by slave lords from English Barbados as a West Indies-style slave society. Modeled on slave states of the ancient world — democracy was the privilege of the few. Fights for rollbacks of federal power, taxes on capital and the wealthy, and environmental, labor and consumer protections.

El Norte
Borderlands of Spanish-American empire, far enough from Mexico City and Madrid to develop its own characteristics: independent, self-sufficient, adaptable and work-centered.

Greater Appalachia
Settlers from war-ravaged Ulster, northern England, lowland Scotland. Deep commitment to personal sovereignty and individual liberty; intense suspicion of external authority.

New France
Folkways of French peasantry blended with traditions of Algonquin-speaking people of what is now Eastern Canada. Down-to-earth, egalitarian, consensus-driven.

Spanish Caribbean
Legacy of the maritime component of Spain's New World empire with hub in Havana. Includes Puerto Rico and other territories in Caribbean basin.
The Partisan Landscape

2016 presidential vote by region.

Compare this with the map on the previous page and observe the correlations.
LANDMARKS & PATHS
LANDMARKS & PATHS
LINEDRIVE (2001)
AUTOMATIC GENERATION OF TOURIST MAPS (2008)
STREETSIDE VIEW (2010)
STREET LIGHT VIEW (2010)

Illumination of two apartments (above) compared with *illumination thumbnails* (below)

The difference in lighting is apparent on the thumbnail

- the first apartment area suffers from light occlusion at around noon, and again toward the evening
- the second apartment area is occluded only toward the evening, nearing 3pm

The buyer’s daily routine and preferences will decide which apartment to choose.

Elevation (topographic) map
CHOROPLETH MAPS

- Use colors/shadings to show data
- Based on Greek words meaning "area/region" and "multitude"
- First in 1826 (by Charles Dupin)
  - Illiteracy in France
  - Darker regions mean higher illiteracy
- Perception problems?
notice any spatial correlation in terms of illiteracy?
KERRY VS. BUSH (2004)

2004 Popular Vote

Bush: 62 million
Kerry: 59 million

Amount of red and blue shown on map

Bush: 2,500,000 mi²
Kerry: 525,000 mi²

Hence the maps do not convey voter representation well
Ideally the amount of colors would stand for the amount of votes
The deep red down the center of this map highlights the president's support in sparsely populated areas.
KERRY VS. BUSH (2004) CORRECTED FOR POPULATION DENSITY

This map removes mostly uninhabited areas, revealing Mr. Bush's suburban and rural support in the East and South.
KERRY VS. BUSH (2004) BY STATE

geographically accurate

geography scaled by population gives a seemingly fairer visual representation of the “one man, one vote” principle
KERRY VS. BUSH (2004) BY COUNTY

geographically accurate

geography scaled by population gives a seemingly fairer visual representation of the “one man, one vote” principle
KERRY VS. BUSH (2004) COUNTY LEVEL BY % MARGIN

geographically accurate

geography scaled by population gives a seemingly fairer visual representation of the “one man, one vote’ principle
KERRY VS. BUSH (2004) COUNTY LEVEL BY % MARGIN

seemingly even fairer visual in terms of ‘one man, one vote’

Michael Gastner,
Cosma Shalizi, and
Mark Newman

University of Michigan
COLOR IS POWERFUL

MASK WEARING DISCIPLINE

Chance all five people are wearing masks in five random encounters (New York Times)
COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at JH...
UNFOLDING THE EARTH: MYRIAHEDRAL PROJECTIONS

https://www.youtube.com/watch?v=TMKaxQvJQp4

Unfolding the Earth: Myriahedral Projections

Jarke J. van Wijk
TU Eindhoven
The next slides use population-based distortion for various national parameters.
Spending on healthcare
Energy consumption
Figure 1.8  Airlines’ view of the United States.
Maps can be scaled to units other than distance. In this case, airline fares are used instead of miles or other linear units.

(Map copyright by the author.)
RECTANGULAR CARTOGRAMS

Makes it easier to compare sizes
RECMAP (2004)

Makes it easier to compare sizes
GRID MAP

States with bans on same-sex marriage:

- AK
- MT
- ND
- SD
- MN
- WI
- MI
- WA
- OR
- ID
- WY
- NE
- IA
- IL
- IN
- OH
- PA
- NC
- VA
- TN
- AR
- OK
- NM
- TX
- LA
- MS
- AL
- GA
- SC

States that allow civil unions or broad domestic partnerships, but not marriage:

- CA
- NV
- UT
- CO
- KS
- MO
- KY
- WV
- DC
- MD
- DE
- AZ
- NM
- OK
- AR
- TN
- VA
- NC
- TX
- LA
- MS
- AL
- GA
- SC

Makes it easier to compare spatial entities (here states) in terms of a binary variable.
Hexagonal shape allows for better (state) neighborhood encoding (has more sides)
Obama 243 Needs 27 to win
Romney 206 Needs 64 to win

270 needed to win

States sized by number of electoral votes

Maine and Nebraska give two electoral votes to the statewide winner and allocate the rest by congressional district.

Geographic View
COVID-19 DEATH RATE TRENDS
What's in a Surname?
Mapping America: Every City, Every Block

Browse local data from the Census Bureau’s American Community Survey, based on samples from 2005 to 2009. Because these figures are based on samples, they are subject to a margin of error, particularly in places with a low population, and are best regarded as estimates.

Distribution of racial and ethnic groups

MAP KEY
- One dot = 200 people
- White
- Black
- Hispanic
- Asian
- Other
FLOW MAPS

➤ First in 1837

➤ Transportation of Passengers in Ireland
Carte Figurative des pertes successives en hommes de l'Armée Française dans la Compagnie de Russie 1812-1813.

Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont répartis par des lignes courbes à raison d'une millième pour dix mille hommes ; ils sont de plus écrits en lettres des gènes. Le rouge désigne les hommes qui entrèrent en Russie, le noir ceux qui en sortirent. Les renouvellements qui ont cours à devenir la carte on été guidés dans les environs de M. M. Chiraz, de Sèvres, de Château de Chambly et de la cour de Saint-Pétersbourg. Les soldats de la Compagnie de Russie depuis le 23 Octobre.

Le nombre de morts et de blessés, sera le plus élevé de toutes les guerres. Les soldats de la Compagnie de Russie depuis le 23 Octobre.

Les soldats de la Compagnie de Russie depuis le 23 Octobre.

TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessus de zéro.
FLOW MAP LAYOUT (2005)
TIME-VARYING MAPS

12 a.m. Sunday

Penn Station
One of the busiest train stations in the world, and the busiest cab stand in the city.

Columbus Circle
Central Park, Whole Foods and Lincoln Center nearby.

Lower East Side
Comes alive after work, and throbs until well after midnight.

Bloomingdale's
Midday center for shopping.

Grand Central Terminal

Meatpacking District
Some Say New Wal-Mart Intrudes on Historic Mexican Pyramids
Oct 5, 2004, Mexico

The multinational retailer is building a discount supermarket 28 miles from one of Mexico's most treasured ruins. The pre-Columbian city's mighty pyramids, dedicated to the sun and moon, tower within view of the Bodega Aurrera, a Wal-Mart subsidiary.

User location: San Jose (37.338208, -121.886328) Seattle (47.603961, -122.329887)
THIS ALWAYS BUGGED ME.
FOR YOUR DASHBOARD

➤ Use the leaflet map js. API

➤ https://leafletjs.com/

➤ temporarily moved to https://leafletjs.com/SlavaUkraini/