

Introduction to Geography

GEH 101/GEH 501

Lehman College

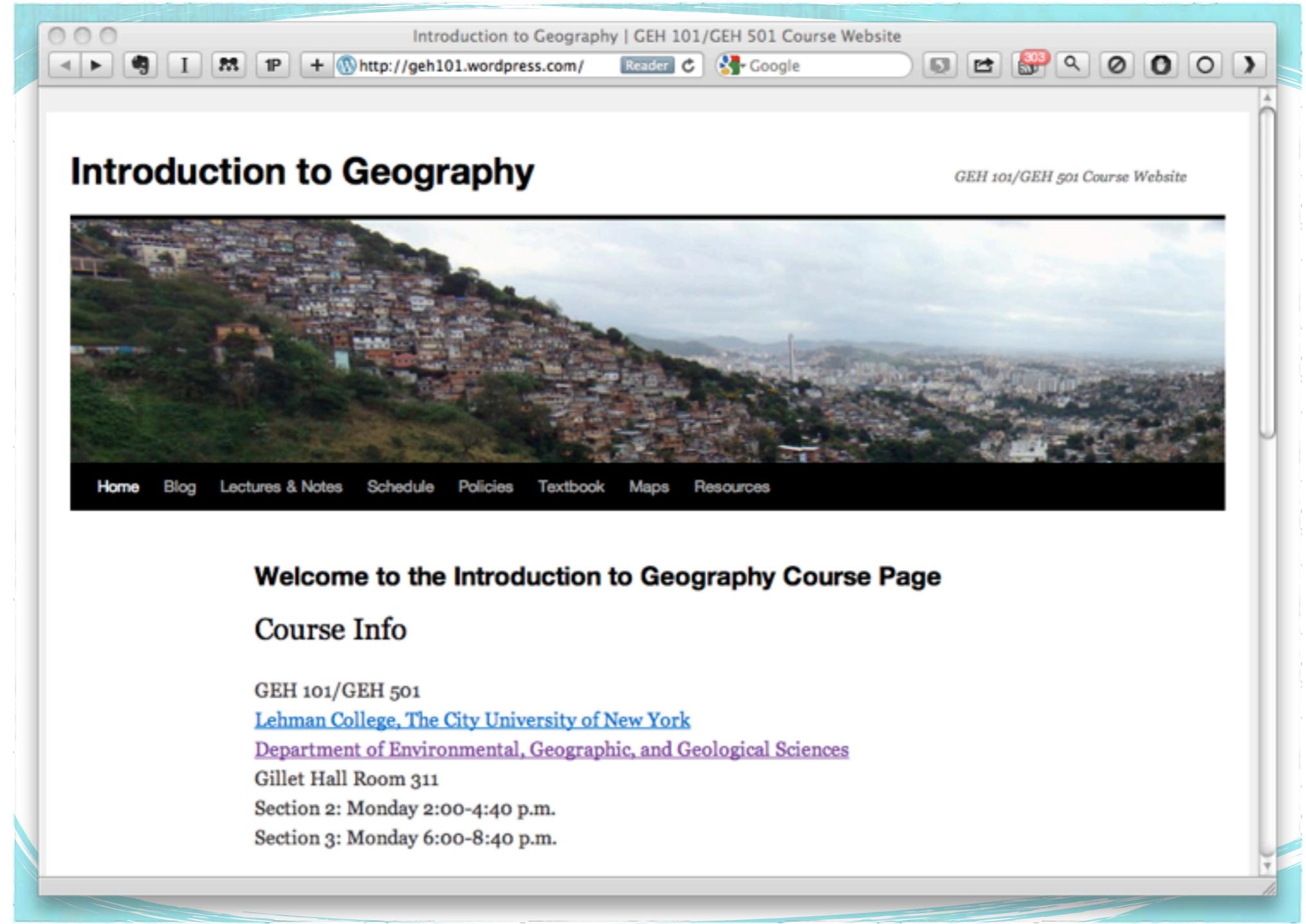
Spring 2011

Keith Miyake

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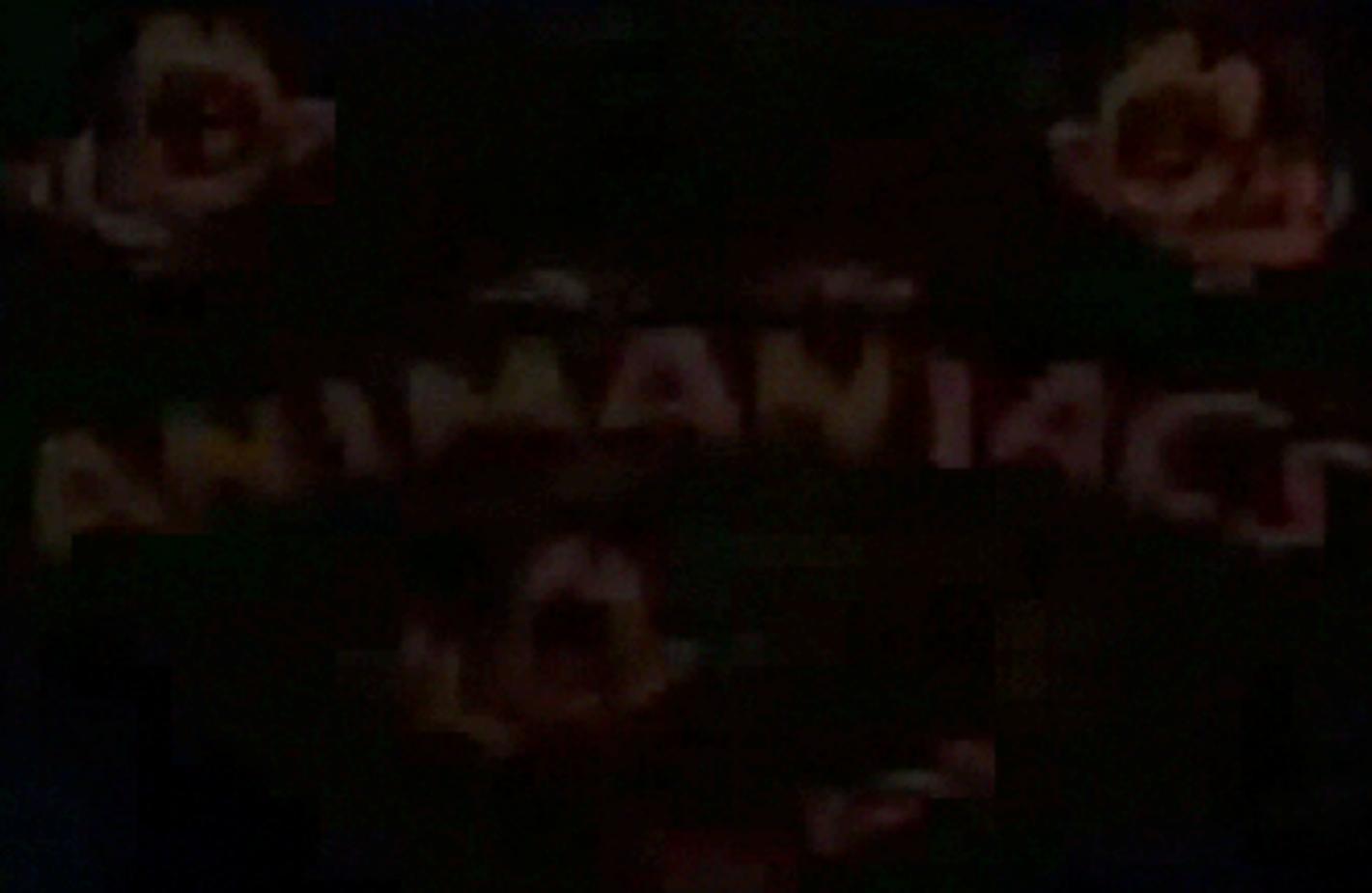
- * Geography grad student at CUNY Grad Center
- * Educational background
- * Research interests:
 - * Environmental justice & political ecology
 - * Race, space, & place
 - * Feminist and queer theory
 - * Co-research & radical pedagogy

Housekeeping



<http://geh101.wordpress.com>
(it's on the syllabus)

Is This Geography?



<http://www.youtube.com/watch?v=tYwyODsQ7do>

What is Geography?

- * Study of “spatial-temporal variation”
- * How and why things differ from place to place on the surface of the earth
- * How observable spatial patterns evolved through time
- * Focus on the interaction of people and social groups with their environment and with each other
- * Geography is the study of space and the content of space

Spatial Science

- * Geography's Space = Earth's surface to the sky
- * Spatial science is the study of:
 - * The way things are distributed (e.g., patterns)
 - * The extent to which things are distributed
 - * The way movements occur
 - * The processes through which things move through space

Why Geography Matters

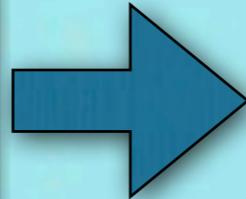
- * Uniquely attempts to understand human and environmental phenomena situated within the dynamics of place and time
- * Helps us to better understand and change our world (and history, economics, politics, language, music, sports, etc.)
- * Geographic knowledge and thinking is widely applicable

How Do We Think Geographically?

- * Start with the relationships between systems, people, things, and places.

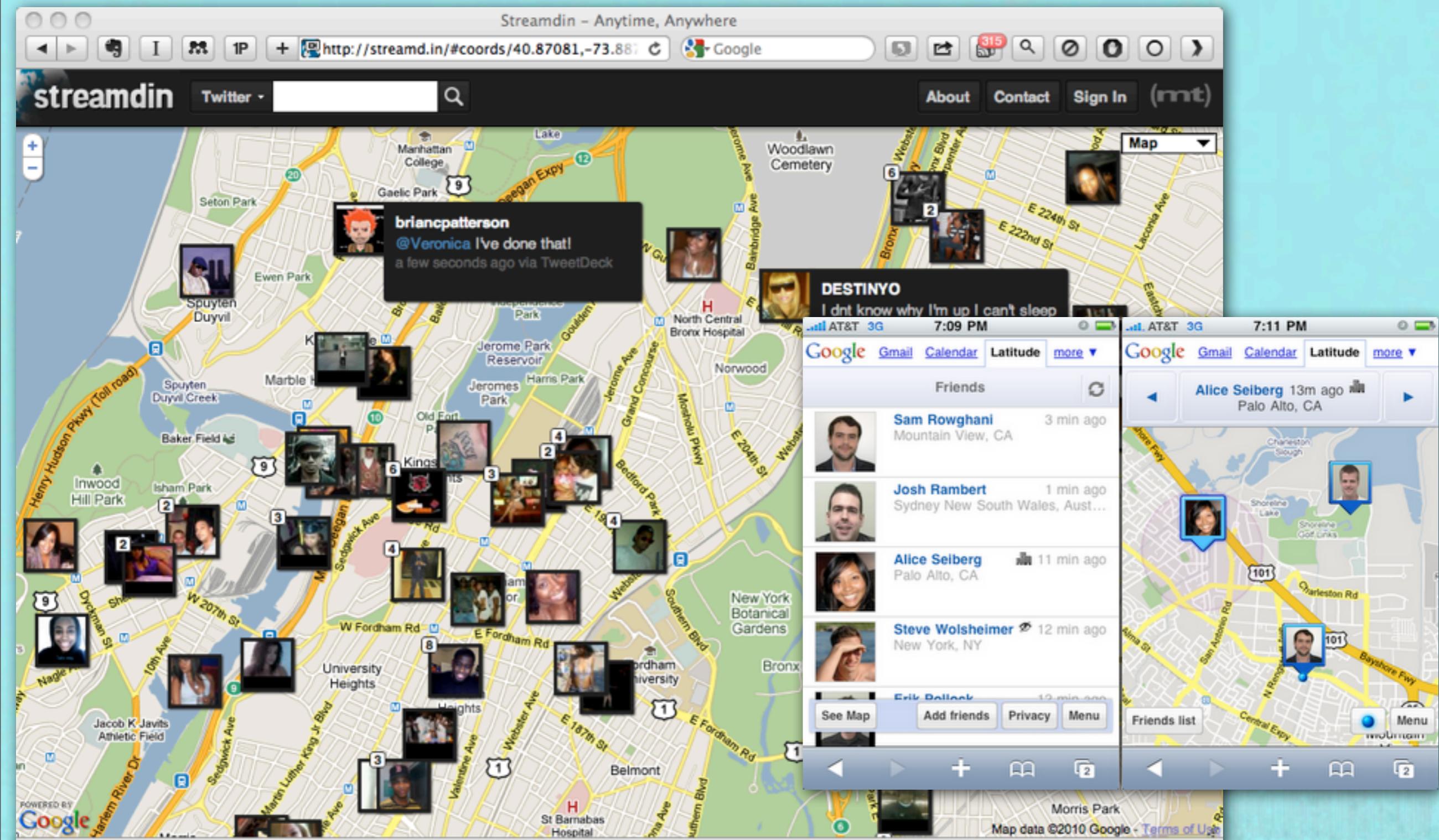
Geography is...

Places that are shaped by their inhabitants



Geography is...

Networked interactions between people across space

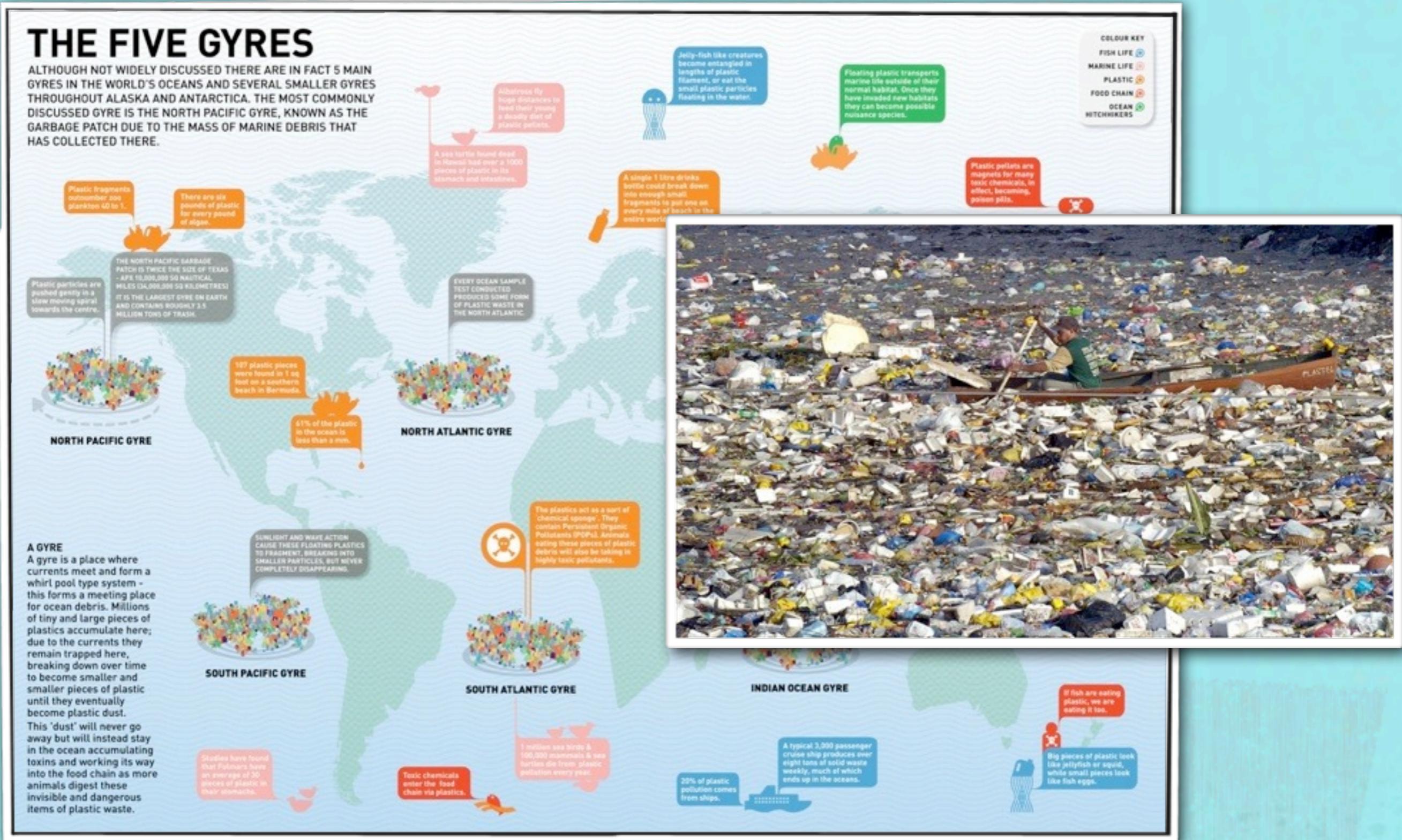


Geography is...

Spatial Patterns and Flows

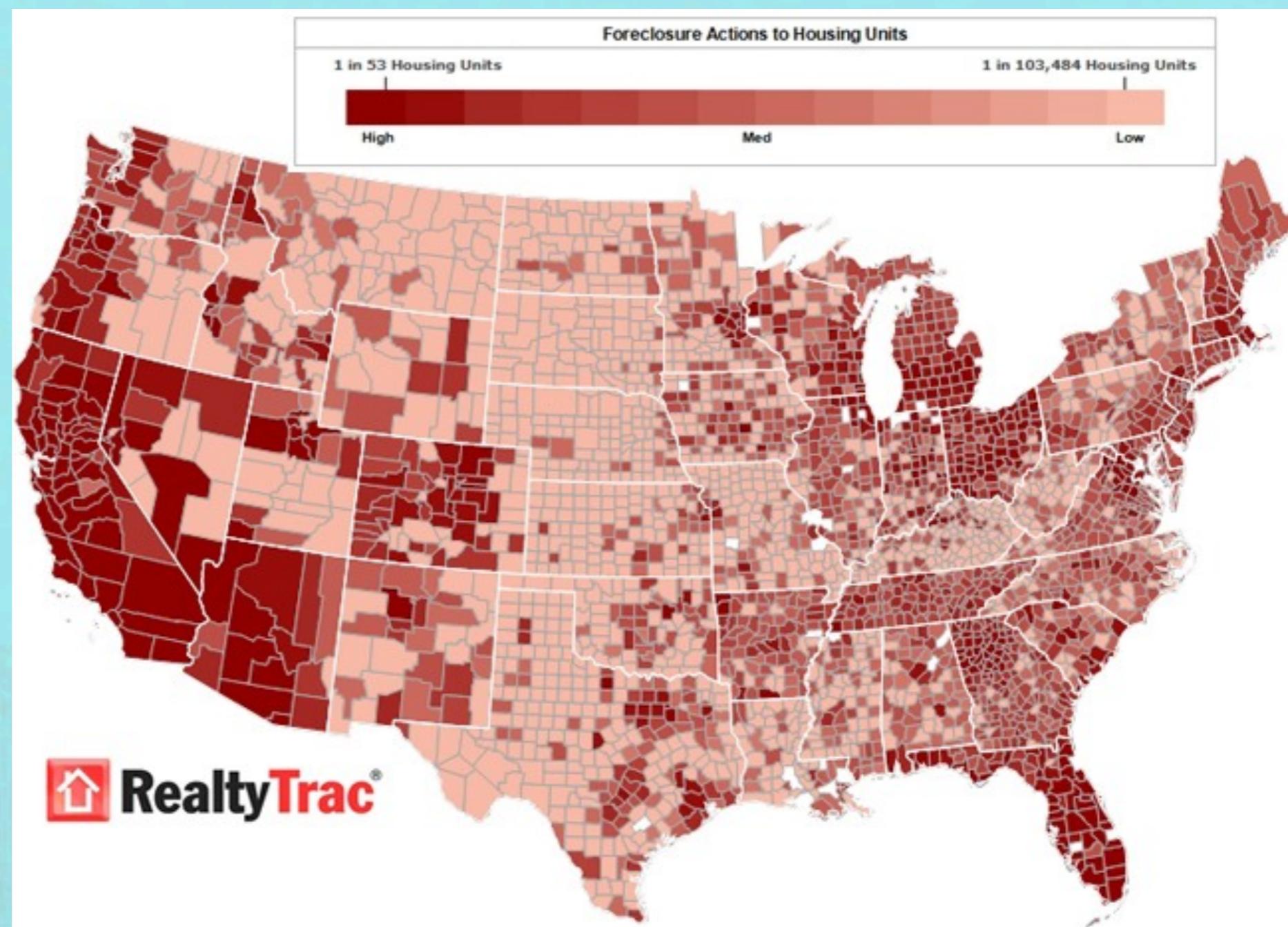
THE FIVE GYRES

ALTHOUGH NOT WIDELY DISCUSSED THERE ARE IN FACT 5 MAIN GYRES IN THE WORLD'S OCEANS AND SEVERAL SMALLER GYRES THROUGHOUT ALASKA AND ANTARCTICA. THE MOST COMMONLY DISCUSSED GYRE IS THE NORTH PACIFIC GYRE, KNOWN AS THE GARBAGE PATCH DUE TO THE MASS OF MARINE DEBRIS THAT HAS COLLECTED THERE.



Geography is...

Spatial Distribution: Concentration, Density, Pattern



Geography is...

Uneven Development and Empire



Geographic Thinking

- * How are things distributed across space: resources, risks, populations, wealth, poverty, health, industry, information, technology, knowledge?
- * Why do we have the spatial-social patterns that we see in the world today?
- * What can be done to achieve more equitable distributions in the future?
- * Places have specific relationships to power, and these are all key geographical questions.

Geographic Questions

- * Why did the 2004 Indian Ocean earthquake cause different sized tsunamis across South and Southeast Asia?
- * Why do giant garbage patches form in the middle of the oceans and why should we care?
- * What impact would there be to climate change and the economy if the U.S. attempted to reduce greenhouse gas emissions by 50%?
- * Why are air pollution sources more abundant in neighborhoods with greater concentrations of people of color?

This is Geography...



<http://www.youtube.com/watch?v=FCWfRs1frYE>

Geographic Traditions and Approaches

- * Four historical traditions:
- * Earth science
- * Cultural
- * Locational (spatial)
- * Regional
- * Four approaches:
- * Regional
- * Systematic
- * Physical
- * Human

**Geography is both a physical science and a social science--
the different approaches use different methods**

Main Geographic Subfields

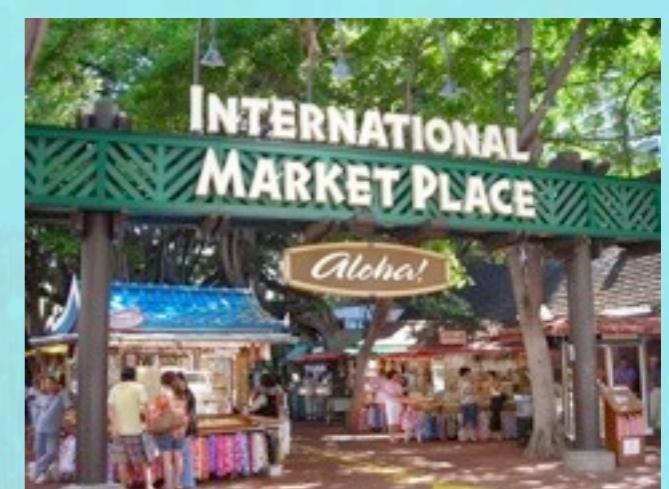
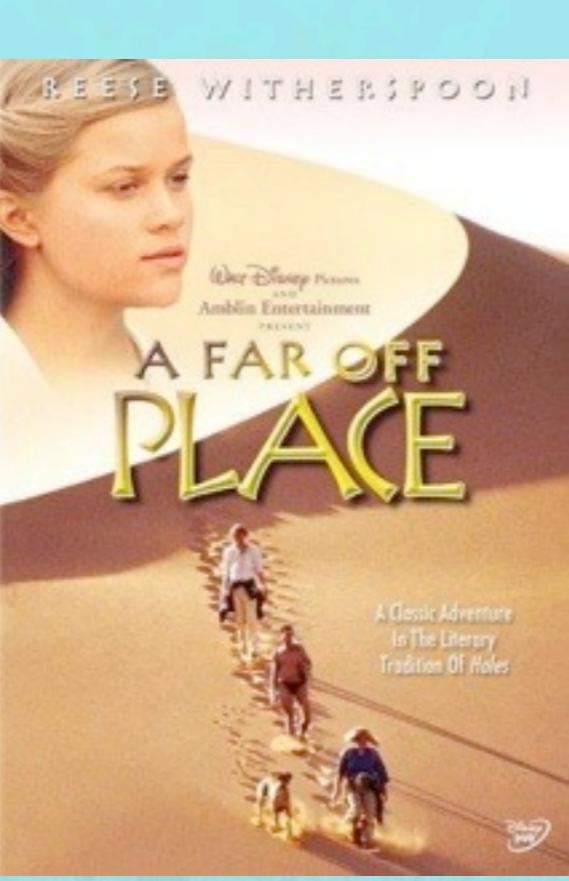
- * Physical
 - * Earth Cycles: Water, Carbon, Seasonal and other Cycles
 - * Geology: Landforms, Rock Types, Tectonic Systems
 - * Biological systems: Ecosystems, Diversity and distribution of living things
- * Human
 - * Cultural: Religions, Languages, Customs and Traditions
 - * Political: Political systems, Geopolitical Conflicts
 - * Economic: Production and distribution of goods and services

Space and Place

Space and Place

- * **Space** (where is it?): refers to the relationship between things in terms of distance and location. Space can also be understood as a constantly changing product of the interactions between people, places, and environments.

What is a place?



Space and Place

- * **Place** (what is it like there?): A portion of geographic space with **distinct features and characteristics**. People give places meaning through physical, informational, and emotional relationships with the world.

Features of Places

- * Location, direction, distance with respect to other places
- * Size
- * Physical and social attributes
- * Dynamic
- * Structure
- * Related to other places
- * Generalizable into regions

Places: Location, Direction, Distance

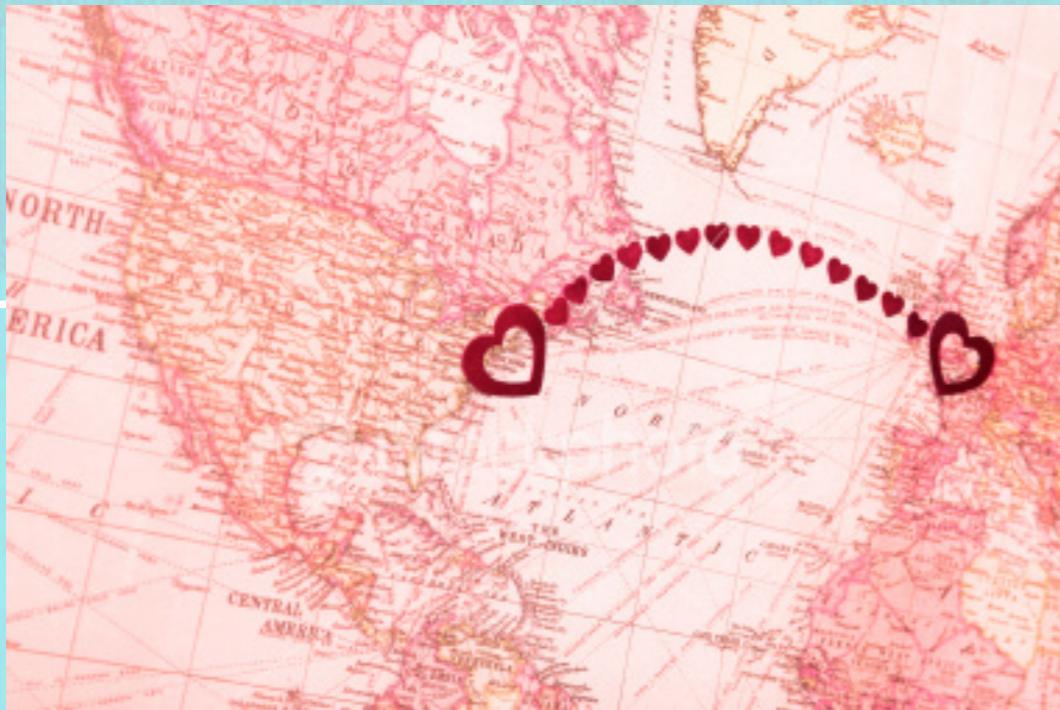
- * Location: Absolute and Relative
- * Site/Situation
- * Direction
- * Distance connects location and direction

Places: Location, Direction, Distance

- * Absolute Location:
 - * Site
 - * Precise, and often mathematical
 - * Latitude/longitude
 - * This location does not change over time

Places: Location, Direction, Distance

- * Relative Location (i.e., to another place) - indicates relationships
- * Situation
- * Can change over time
- * Involves some type of interaction between more than one thing
- * Can be influenced by transportation routes, proximity to other countries, access to materials and resources, etc.

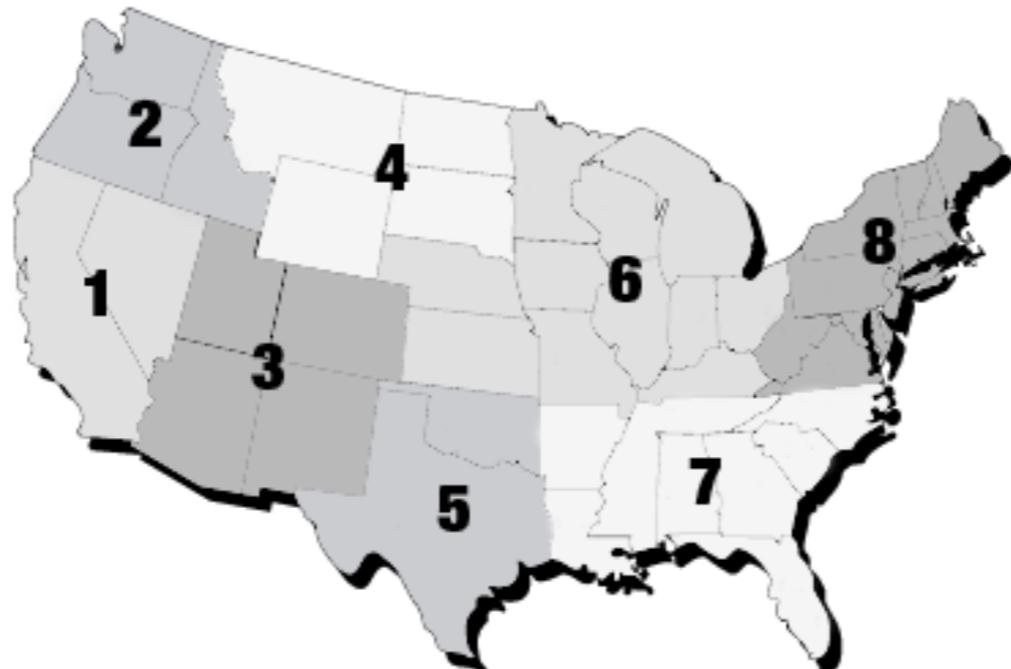


Distance

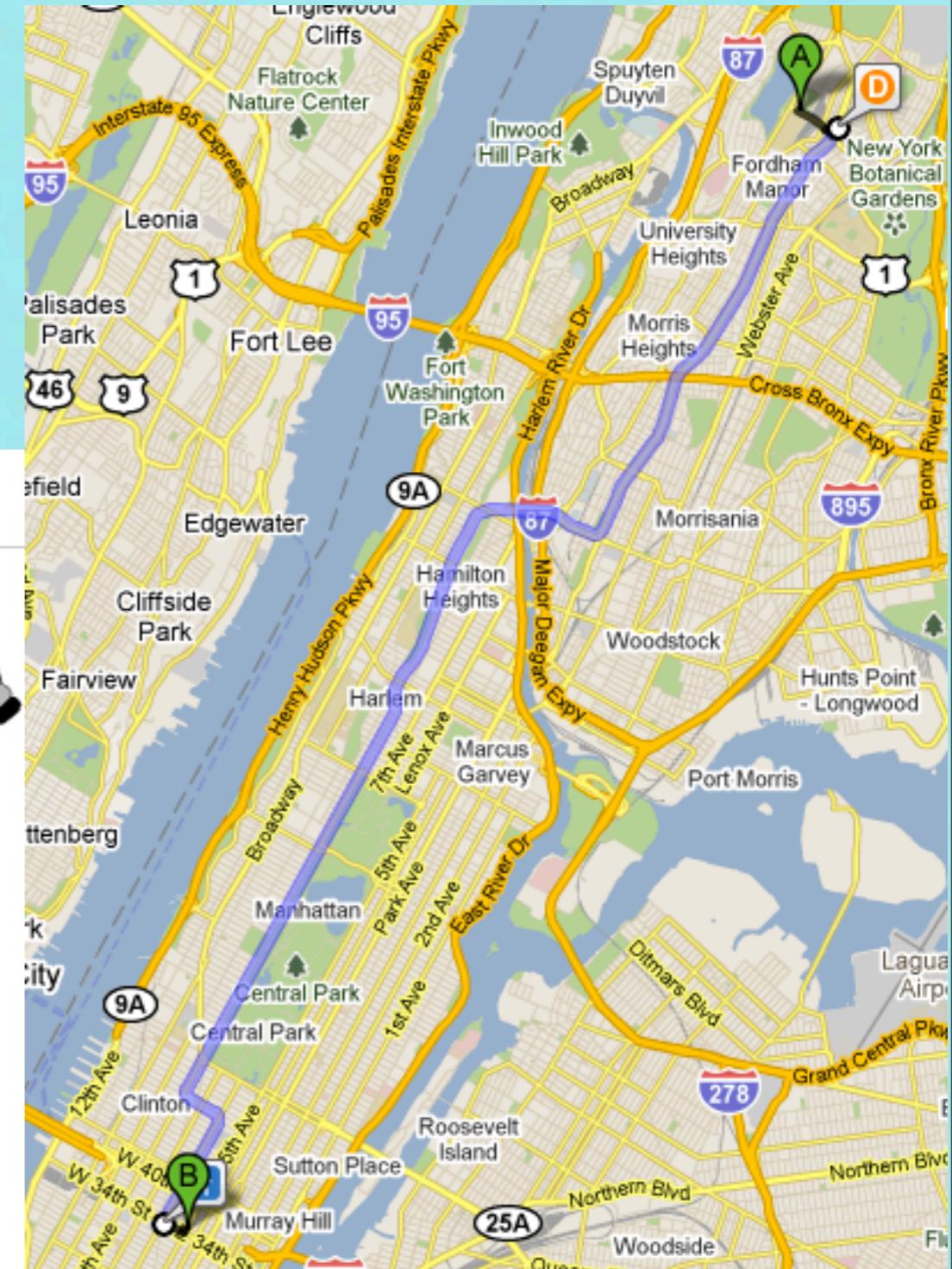
Oversized shipping chart

This is an oversized item. Listed prices do not include shipping costs. You will receive a shipping quote the following business day from the original purchase date. Please refer to the shipping chart here for an approximate shipping quote.

Shipping Zone 1 - \$200.00
Shipping Zone 2 - \$250.00
Shipping Zone 3 - \$250.00
Shipping Zone 4 - \$275.00
Shipping Zone 5 - \$300.00
Shipping Zone 6 - \$300.00
Shipping Zone 7 - \$325.00
Shipping Zone 8 - \$325.00



The approximate shipping charges are for business/commercial delivery. Additional fees may apply for residential addresses.



Distance

Travel time to major cities

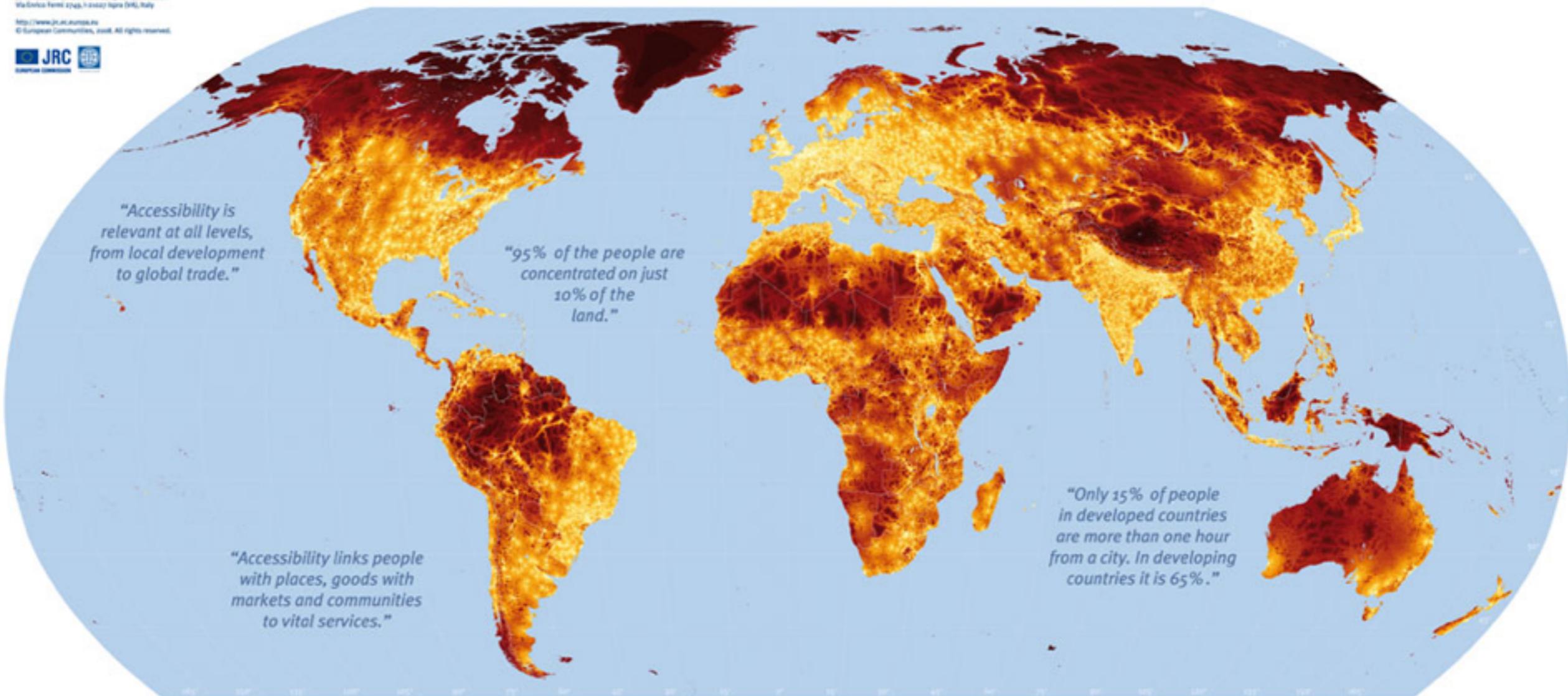
Travel time map and accessibility model by Andrew Nelson. Agglomeration Index by Helge von Thünen (The World Bank, JRC) and Andrew Nelson. Land cover data from the Global Land Cover 2000 Project, <http://www.globus.jrc.ec.europa.eu/glc2000>. UN urban population data from the United Nations World Urbanization Prospects, <http://esa.un.org/unpop>.

Global Environment Monitoring Unit
Institute for Environment and Sustainability
Joint Research Centre of the European Commission
Via Eraldo Fermi 27/29, I-21012 Ispra (MI), Italy

<http://www.jrc.ec.europa.eu>
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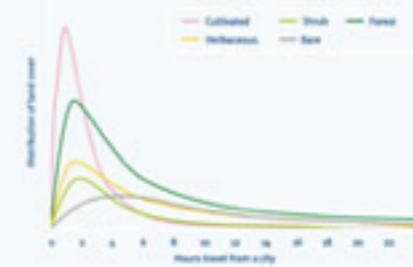


Working title: Travel time to major cities A global map of Accessibility
JRC-2008-00000000000
ISBN 978-92-9190-071-3
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Language: EN
DOI: 10.2788/95975



Land cover patterns around cities

Travel time zones around a city can be used to define regions where particular economic activities are likely to take place. Almost 60% of all cultivated land is within two hours of a city. As urban areas expand, there is huge pressure to convert agricultural land to urban uses, and to convert more distant forests, grasslands and shrublands to agriculture. These patterns of land use around urban areas mirror one of the most important models of economic geography, Johann Heinrich von Thünen's model of The Isolated State, which links transport costs to land value.



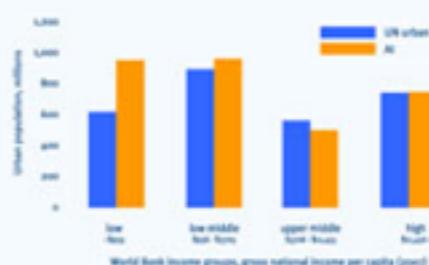
Travel time to major cities: A global map of Accessibility

Developed by the European Commission's Joint Research Centre for the World Bank's World Development Report 2009 "Reshaping Economic Geography".

Map colours represent travel time to the nearest city (8,518 cities with 50,000 or more people in the year 2000). Modes of travel are land and water based. The data resolution is 30 arc seconds. The map projection is Robinson. Digital datasets, the accessibility model, input data and more information at <http://www.tem.jrc.ec.europa.eu/accessibility>. The World Development Report is available at <http://econ.worldbank.org>. The delineation of national boundaries must not be considered authoritative.

Agglomeration Index (AI): A new measure of urban concentration and a more urbanised world

There is no standard definition of 'urban'. A new Agglomeration Index (World Bank & JRC), based on this Accessibility map, suggests that the global urban population in 2000 was 3.21 billion compared to the UN's total of 2.85 billion (53%, compared to 47% of the world). Most of the difference is in the developing world. This alternative definition of urbanisation suggests that the world may have passed the urbanisation tipping point – more people living in urban areas than in rural areas – much earlier than the 2007/8 estimate.



Places: Size and Scale

- * Size: physical, perceptual
- * Scale: size of units
- * local scale vs. global scale
- * small-scale map vs. large scale map



Places: Physical and Social Attributes

- * What are some examples of:
 - * Physical attributes?
 - * Social attributes?

Physical and Cultural Landscapes

- * Physical Landscape:
 - * Physical characteristics of landforms
 - * Includes geological formations, soil types, hydrology, climate, etc.
- * Cultural Landscape:
 - * The result of human impacts on physical landforms
 - * Reflect specific cultural values and uses of land, air, and water
 - * E.g., Gowanus canal, Central Park

Places: Dynamics

- * Places are always changing--but why?
- * Natural processes
- * Anthropogenic processes (human-caused)



NET
PARK

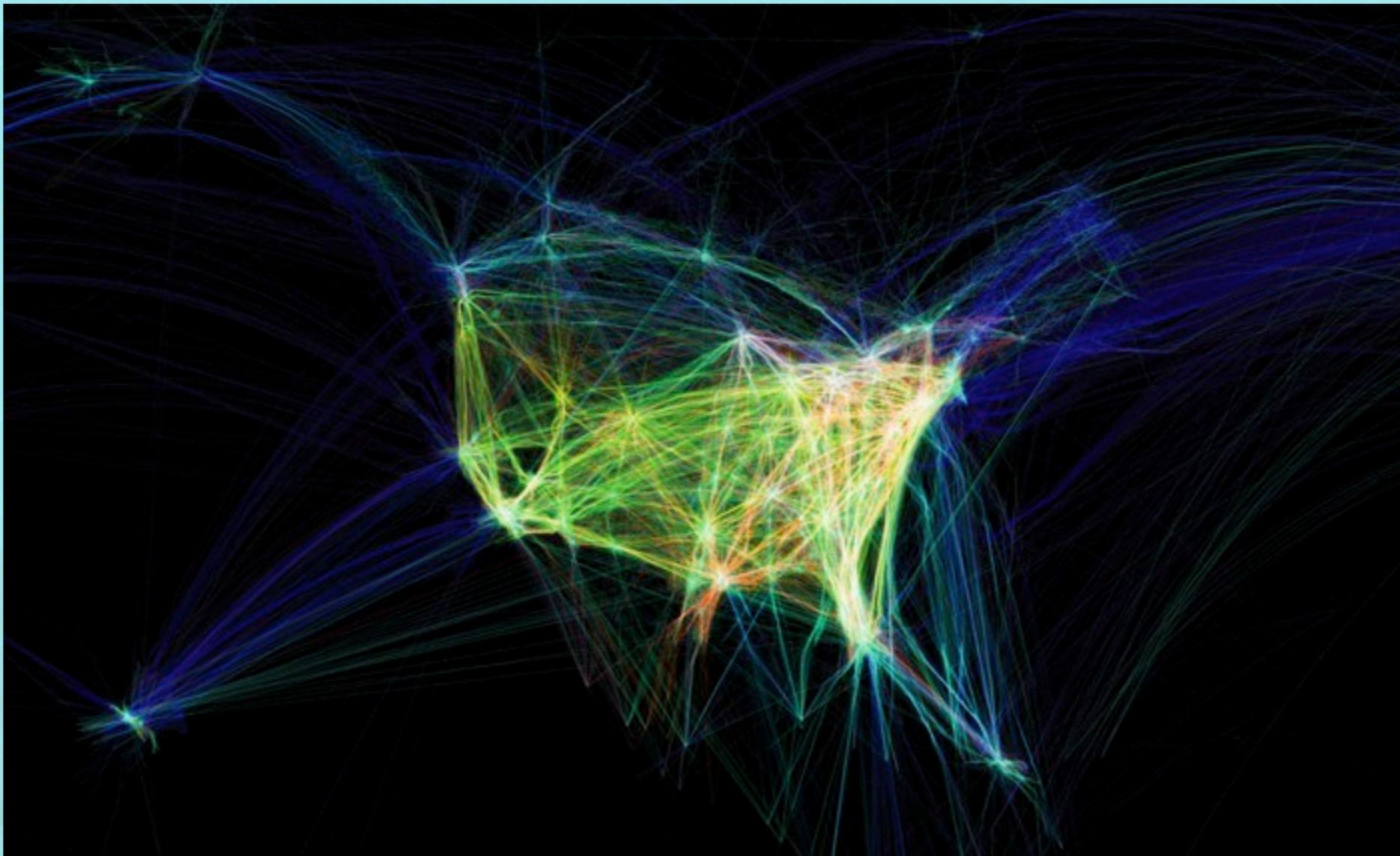
**Franklin Avenue
Station**

**2 3 4 5
shuttle**



Interaction Between Places

- * Spatial interaction
- * Accessibility
- * Connectivity
- * Spatial diffusion
- * Globalization...



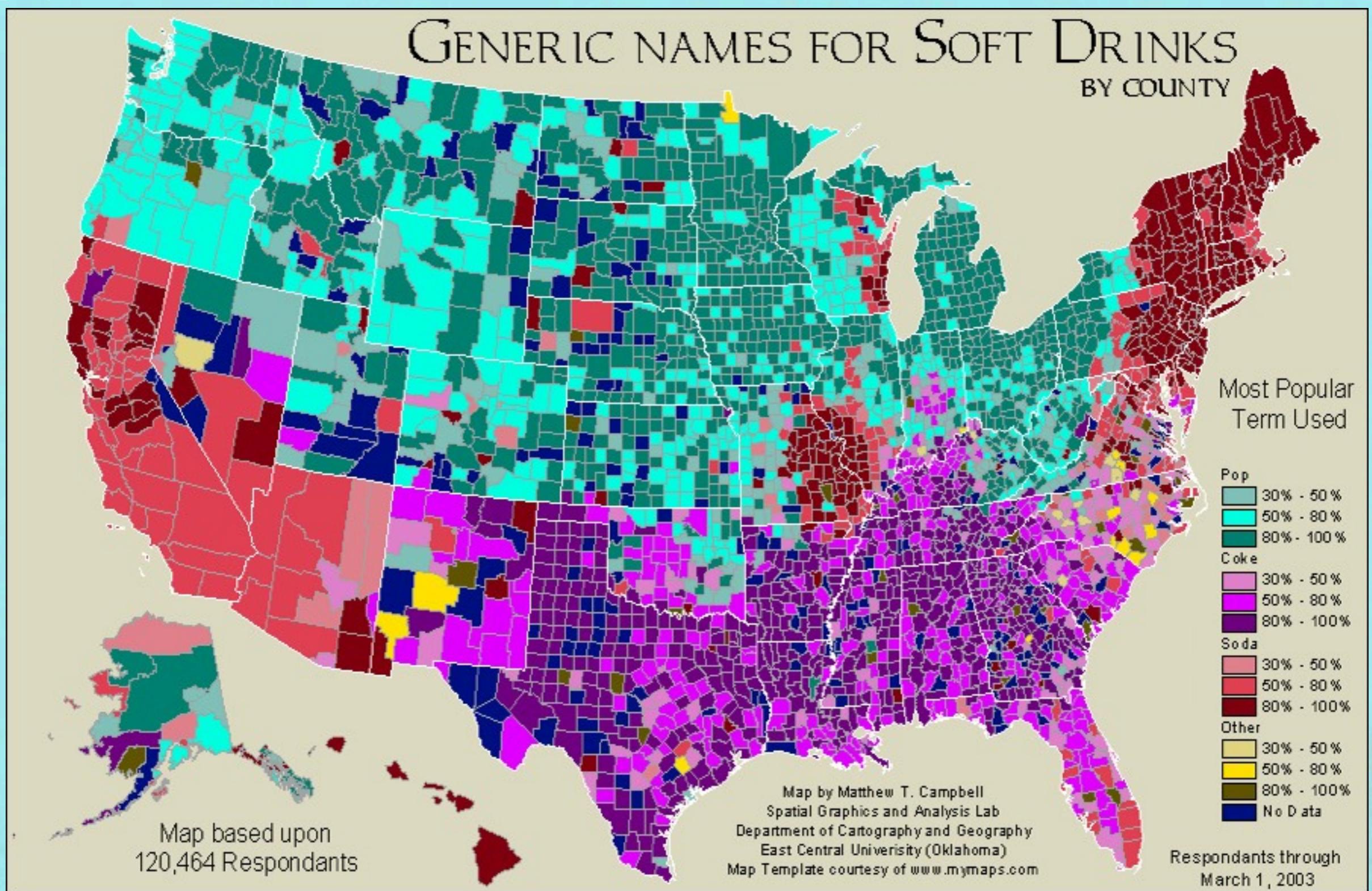
Globalization...

NO LOGO
BRANDS GLOBALIZATION RESISTANCE

Place Similarity and Regions

- * Places are unique
- * Similarities and patterns may exist...
- * Regions
 - * Exhibit uniformity within, differentiated from surroundings
 - * Used for classification and ease of studying

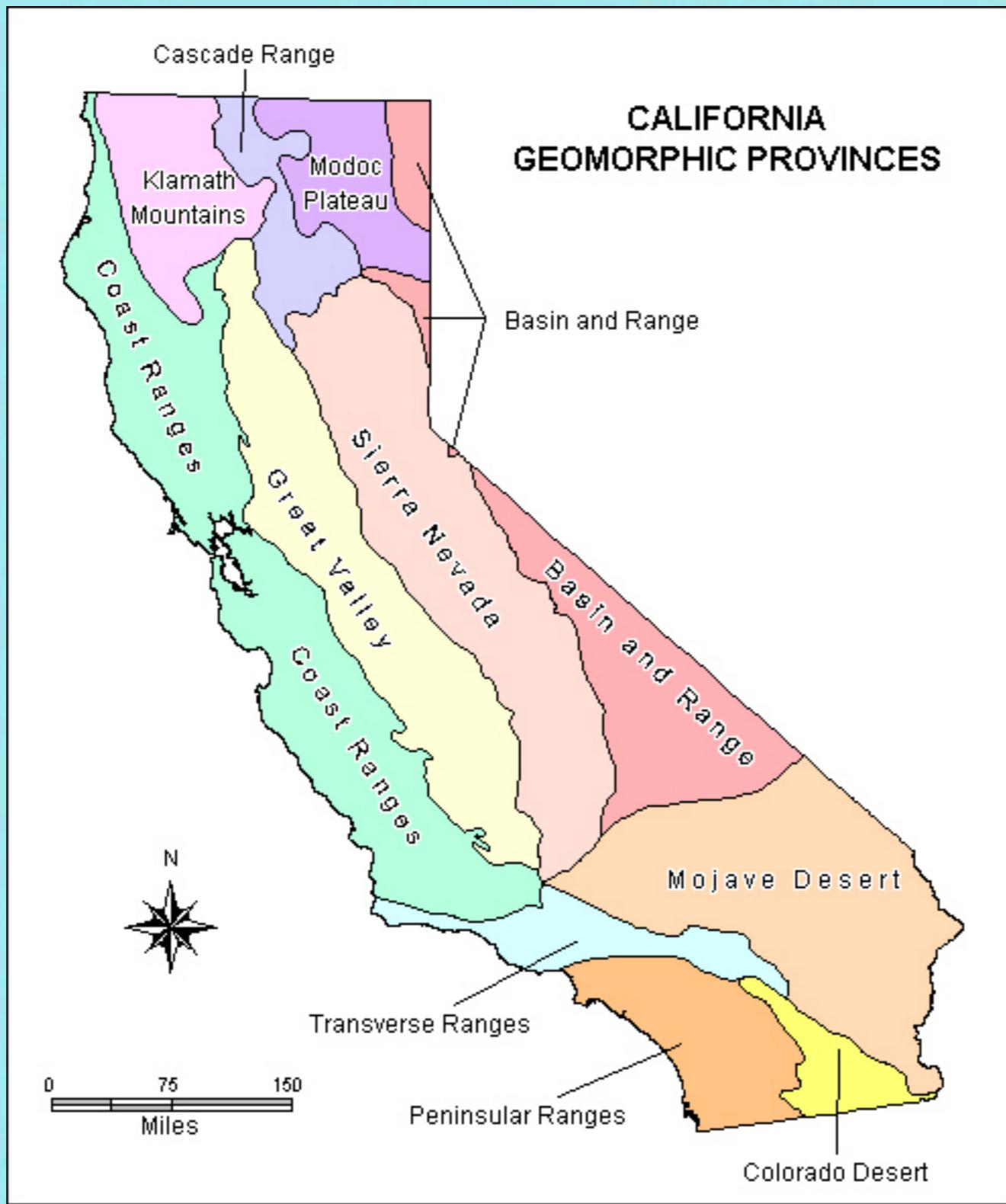
Regions



Regions

- * **Formal** (uniform)
 - * common physical or cultural features
- * Functional (nodal)
 - * gears in a machine - interdependent parts function as a whole
- * Perceptual (popular)
 - * defined by inhabitants or broader society
 - * reflect feelings and emotions, not quantifiable similarities

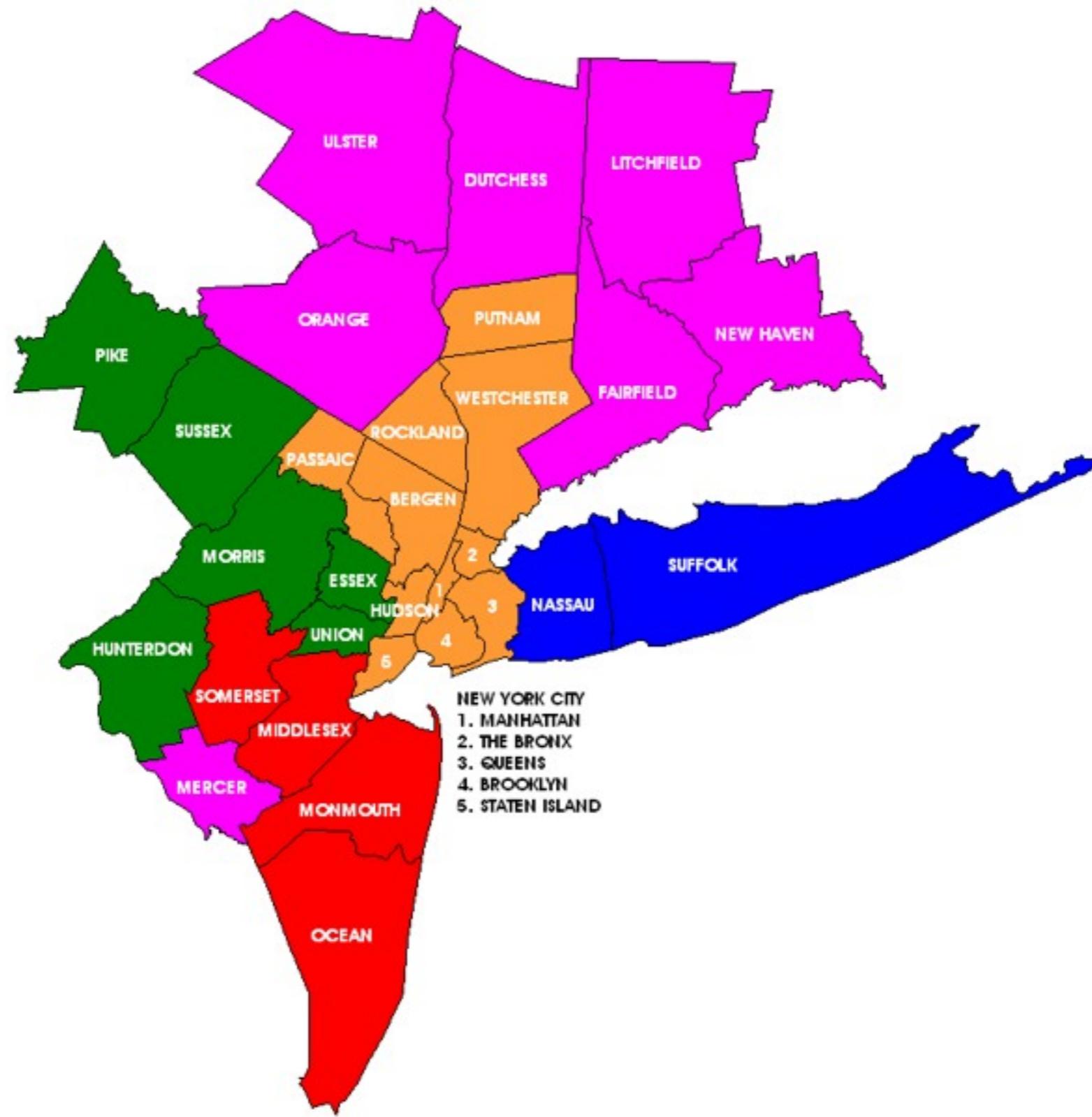
Formal Regions



Regions

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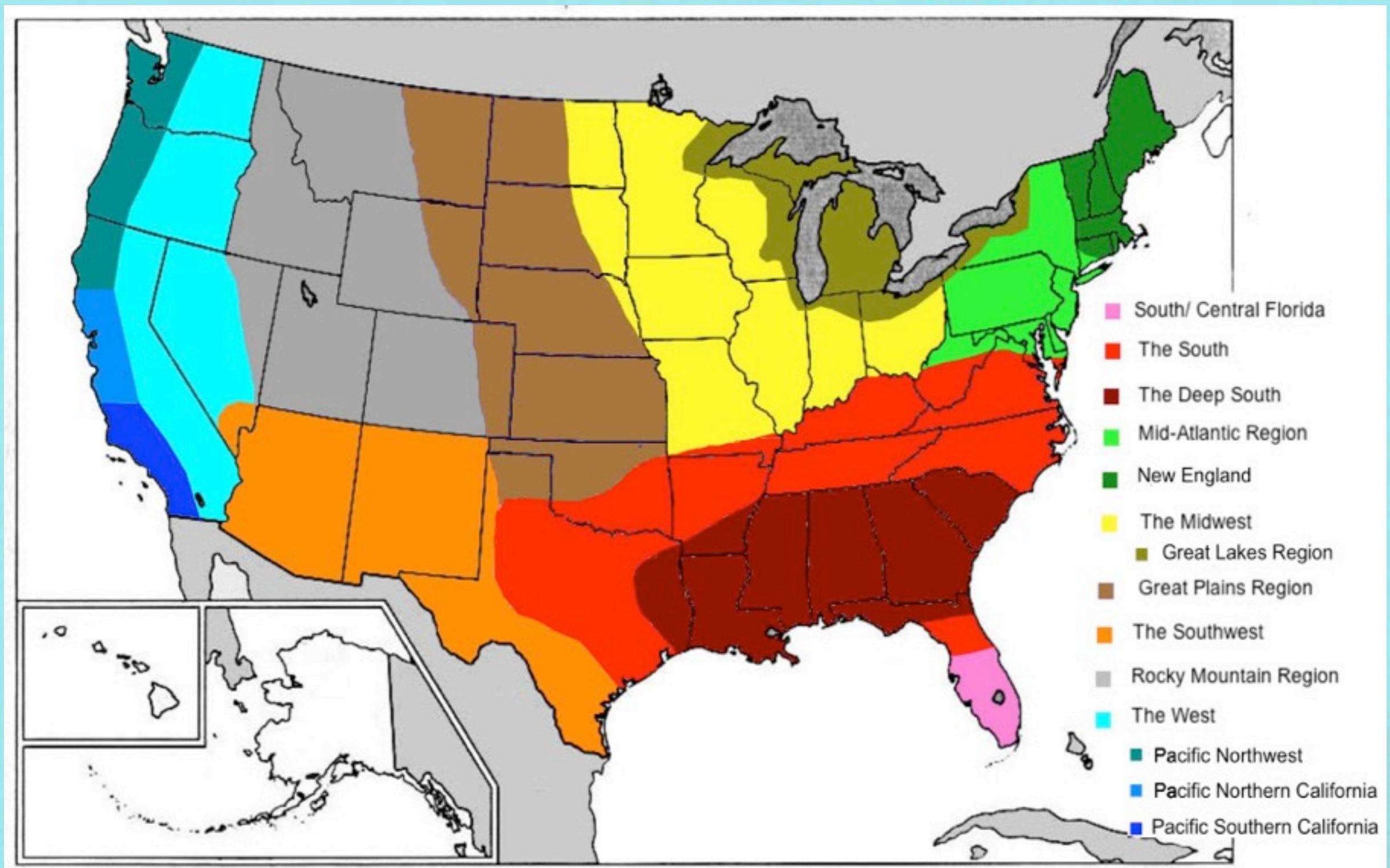
Functional Regions



Regions

- * Formal (uniform)
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- * gears in a machine - interdependent parts function as a whole
- * **Perceptual** (popular)
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Perceptual Regions



The Meaning of Place

- * Describe the characteristics and “personality” of someplace you consider your home in terms of the different features of places just discussed (i.e., location, size, physical and social attributes).
- * Characterize the situation of this place relative to other places in terms of distance/direction, spatial interactions, connectivity, political and economic relationships, etc.

Summary

- * What is geography and why is it important?
- * Geography is a spatial science
- * Places are what geographers study
- * Places have lots of attributes that link them to one another and to the people who live in them
- * Regions are groupings of smaller places with some sort of commonality