

**SEMESTER 2 GEOGRAPHY (H)
STUDENTS**

PAPER - CC3 (THEORY)

TOPIC : 1

**INTRODUCTION TO HUMAN
GEOGRAPHY AND ELEMENTS OF
HUMAN GEOGRAPHY**

COMPILED BY

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Questions that “Geography” addresses:

- Where are things located?
- Why are they important?
- How are places related?
- How are places connected?
- How are humans affected by these locations?

Definition of Geography

- Scientific and systematic study of both the physical and cultural features of the earth's surface. It is a spatial perspective looking at patterns and distributions on the earth's surface
- The word geography was invented by the Greek scholar Eratosthenes. It is based on 2 Greek words:
 - Geo – “Earth”
 - graphy – “to write”

Difference between “Physical Geography” and “Human or Cultural Geography:

- Physical Geography is the study of the four spheres (Lithosphere, Atmosphere, Hydrosphere, and Biosphere)
- Human (or Cultural) Geography is the study of the spatial differentiation and organization of human activity on the earth's surface.

Approaches to the Study of Geography



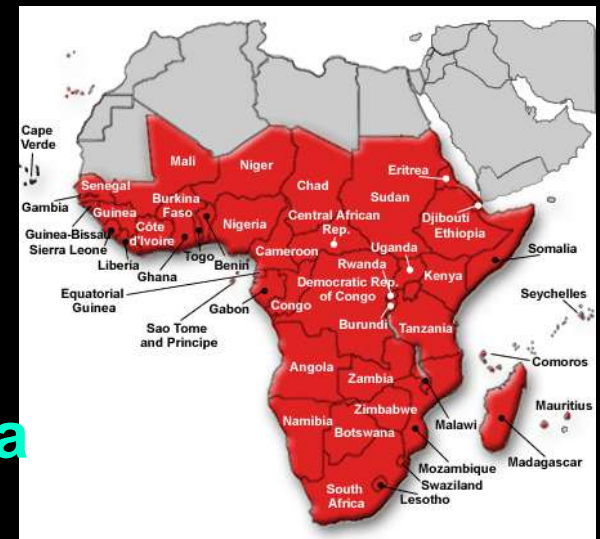
Latin America

- Regional (Latin America, Sub-Saharan Africa, Southeast Asia)
- Systematic (Human Geography, Physical Geography, Historical Geography)

Southeast Asia



Sub-Saharan Africa



More specific!

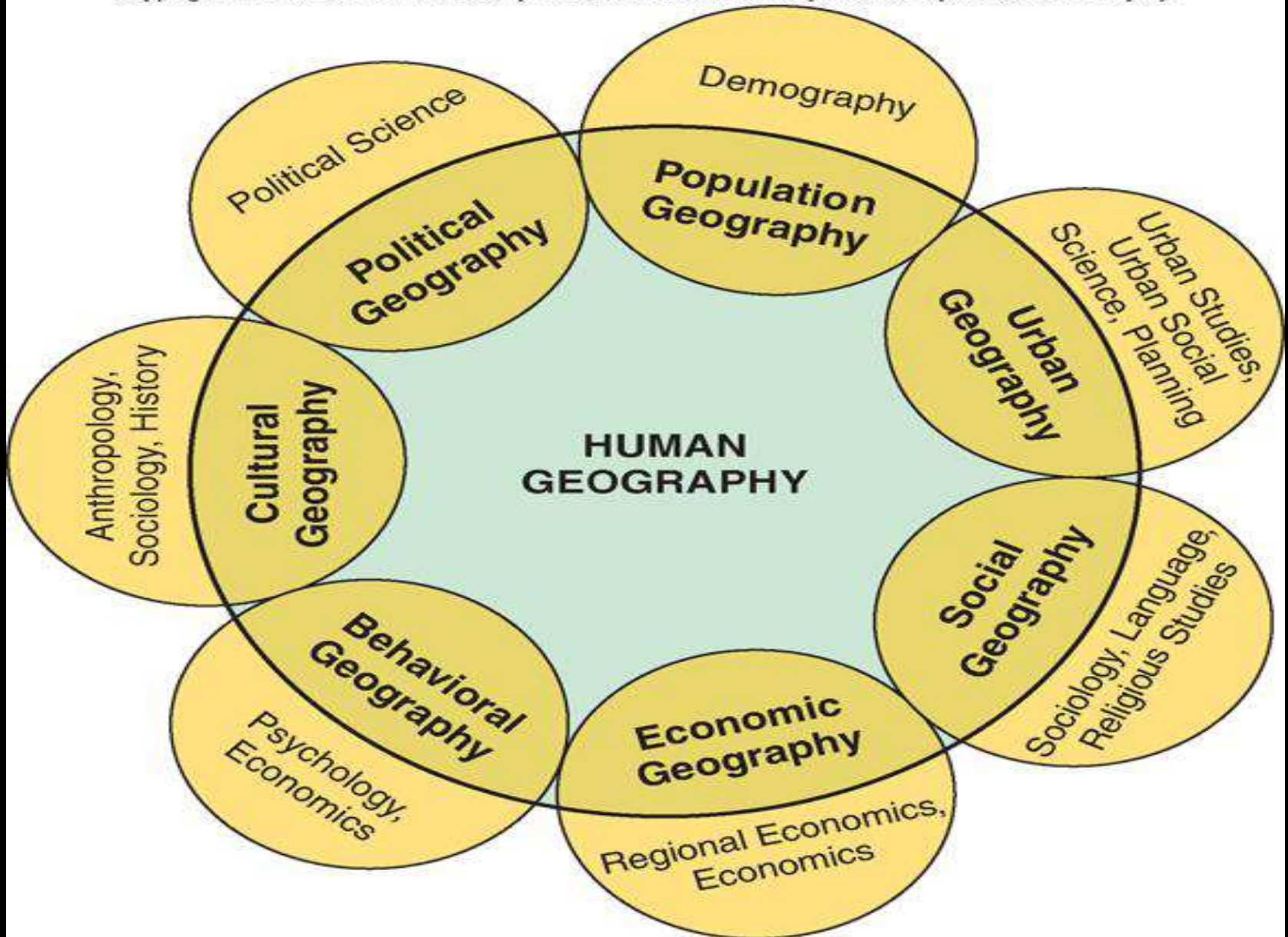
What is Physical Geography?

The Different Disciplines In Physical Geography

- **Geomorphology:** studies the form and structure of the surface of the earth
- **Climatology:** involves the study of long term weather conditions on the earth
- **Hydrography:** concerns the distribution of water (oceans, rivers, lakes, and their uses)
- **Biogeography:** studies the flora (plant life) and the fauna (animal life)
- **Pedology:** study of the soils
- **Ecology:** studies the interactions between life forms and the environment
- **Geology:** study of rocks and the earth's interior

Key Question!

What is Human Geography?



Human Geography (Definitions)

- The study of how people make places, how we organize space and society, how we interact with each other in places and across space, and how we make sense of others and ourselves in our locality, region, and world. (*De Blij*)
- The scientific study of the location of people & activities on the Earth's surface, where & why human activities are located where they are, reasons geographers look at the world from a spatial perspective & interaction, and diffusion of people & ideas. (*Rubenstein*)

What we study in Human Geography?

- Historical Geography
- Demography and Population Geography
- Political Geography: nations, boundaries, geopolitics, military movements, treaties, devolution, choke points, and imperialism
- Geography of Religions
- Geography of Languages
- Urban Geography: settlements, cities, and transportation systems
- Economic Geography: industries, economic development, and manufacturing regions
- Agricultural Geography
- Medical geography
- Social Geography
- Environmental Geography

HG Topic Example: Globalization

A set of processes that are:

- increasing interactions
- deepening relationships
- heightening interdependence

without regard to country borders.

A set of outcomes that are:

- unevenly distributed
- varying across scales
- differently manifested

throughout the world.

Affect of Communication and Transportation

- We are more interconnected as modes of communication and transportations become more advanced.
- The advances in the these two things have made us more interconnected.

Buggy's are slow and cars can travel at higher speeds. Therefore, information and goods can reach destinations faster.

Example:

Buggy's ----> Cars

Sailboats ----> Steamboats

Postal mail ----> e-mail

The advances in technology make our world more interconnected.

1st – Hyperglobalization view

- Open markets and Free Trade are good for everyone in the long run and will allow everyone to share in economic prosperity
- Work will eventually become borderless as national governments become meaningless, government's only role will be to foster trade.

2nd – Skeptical View

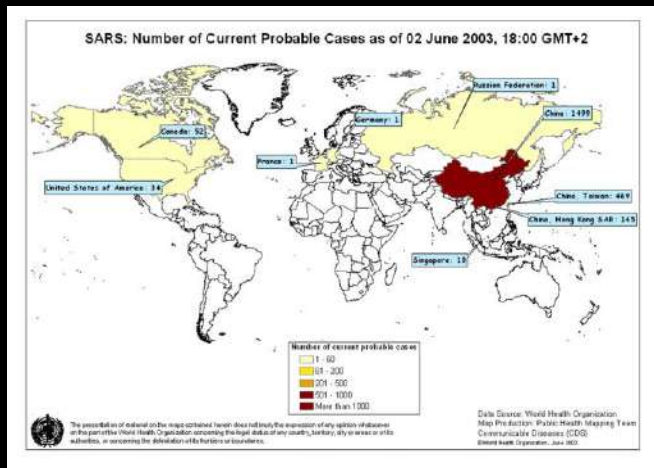
- Globalization is “much ado about nothing”
- Globalization is exaggerated
- The world has been to this point before = Gold Standard
- Accentuate Regionalization (Europe, N. America, Japan)

3rd – Transformationalist View

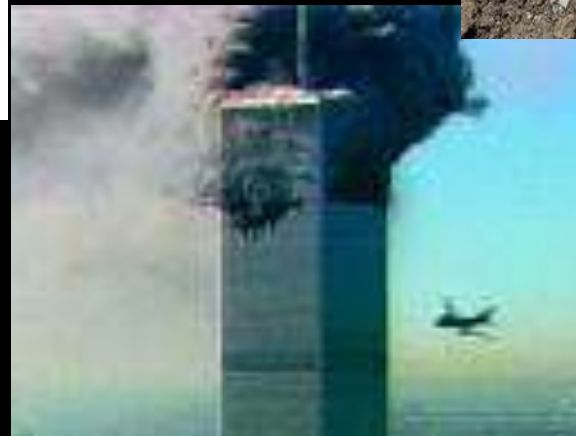
- View globalization as a powerful force that is changing the world not just a repeat of the 19th Century. However, they make no assumptions to the effect of globalization on the nation state

Negative Issues Associated with Globalization

- Environmental
- Health Issues (HIV/AIDS, SARS)



- Security (9/11)



Remember your summer reading.....

Imagine and describe the most remote place on Earth you can think of 100 years ago. Now, describe how globalization has changed this place and how the people there continue to shape the place – to make it the place it is today.

Geographic Thought

Five Themes of Geography

- Location
- Place
- Region
- Movement
- Human-Environment

Location

Location-position on the earth's surface

- **Absolute Location:** use of grids – (i.e. latitude and longitude)
- **Relative Location:** a way of expressing a location in relation to another site

Site and Situation

- **Site**—the physical character of a place. (climate, water sources, topography, soil, vegetation, latitude, elevation) the combination of physical features gives each place distinctive character.
- **Situation**— the location of a place relative to other places.



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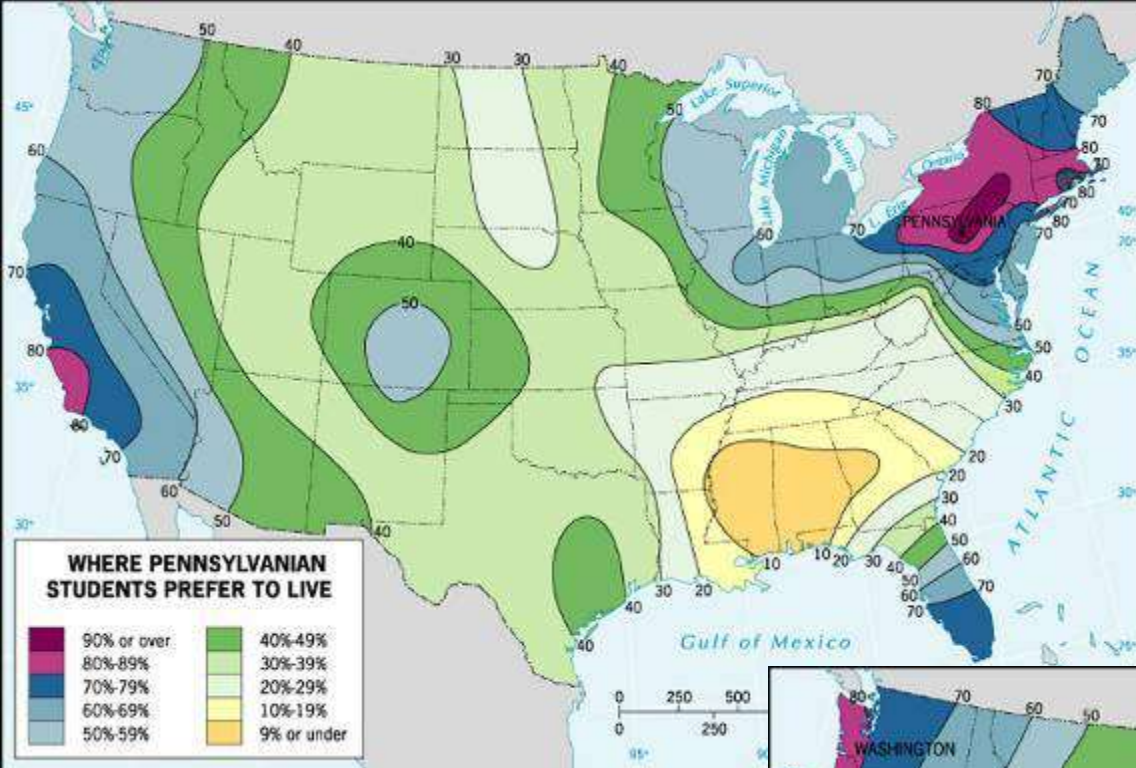
Place

Place – specific geographic settings with distinctive physical, social, and cultural attributes

- **Sense of place:** infusing a place with meaning and emotion.
- **Perception of place:** belief or understanding of what a place is like, often based on books, movies, stories, or pictures.

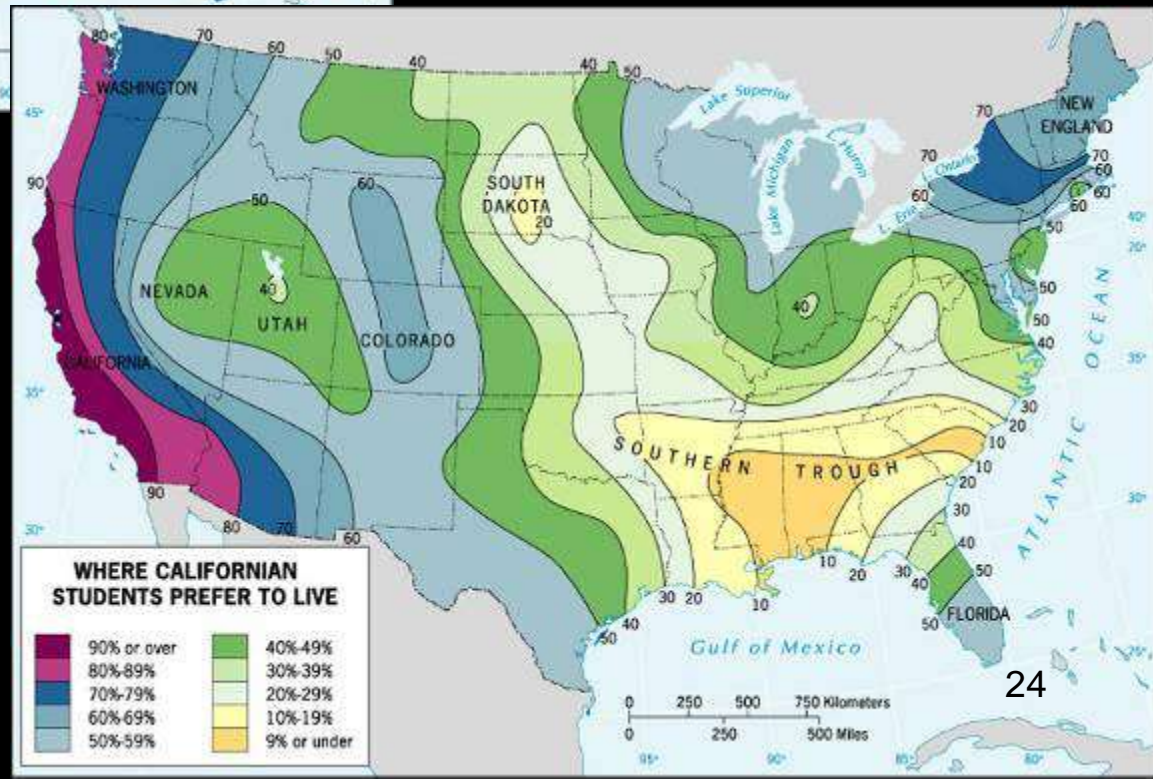


Perception of Place



Where Pennsylvanian students prefer to live

Where Californian students prefer to live



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The Cultural Landscape

- The visible expression of human activity
- The natural landscape as modified by human activities and bearing the imprint of a culture group
- Can also be called the “Built Environment”

Religion and cremation practices diffuse with Hindu migrants from India to Kenya.



Sequent Occupance

Dar es Salaam, Tanzania

African, Arab, German, British, and Indian layers to the city.

Apartment in Mumbai, India

Apartment in Dar es Salaam, Tanzania



Movement

Spatial analysis: the study of geography phenomena on the earth's surface

- how are things organized on Earth?
- how do they appear on the landscape?
- Why of where? and so what?

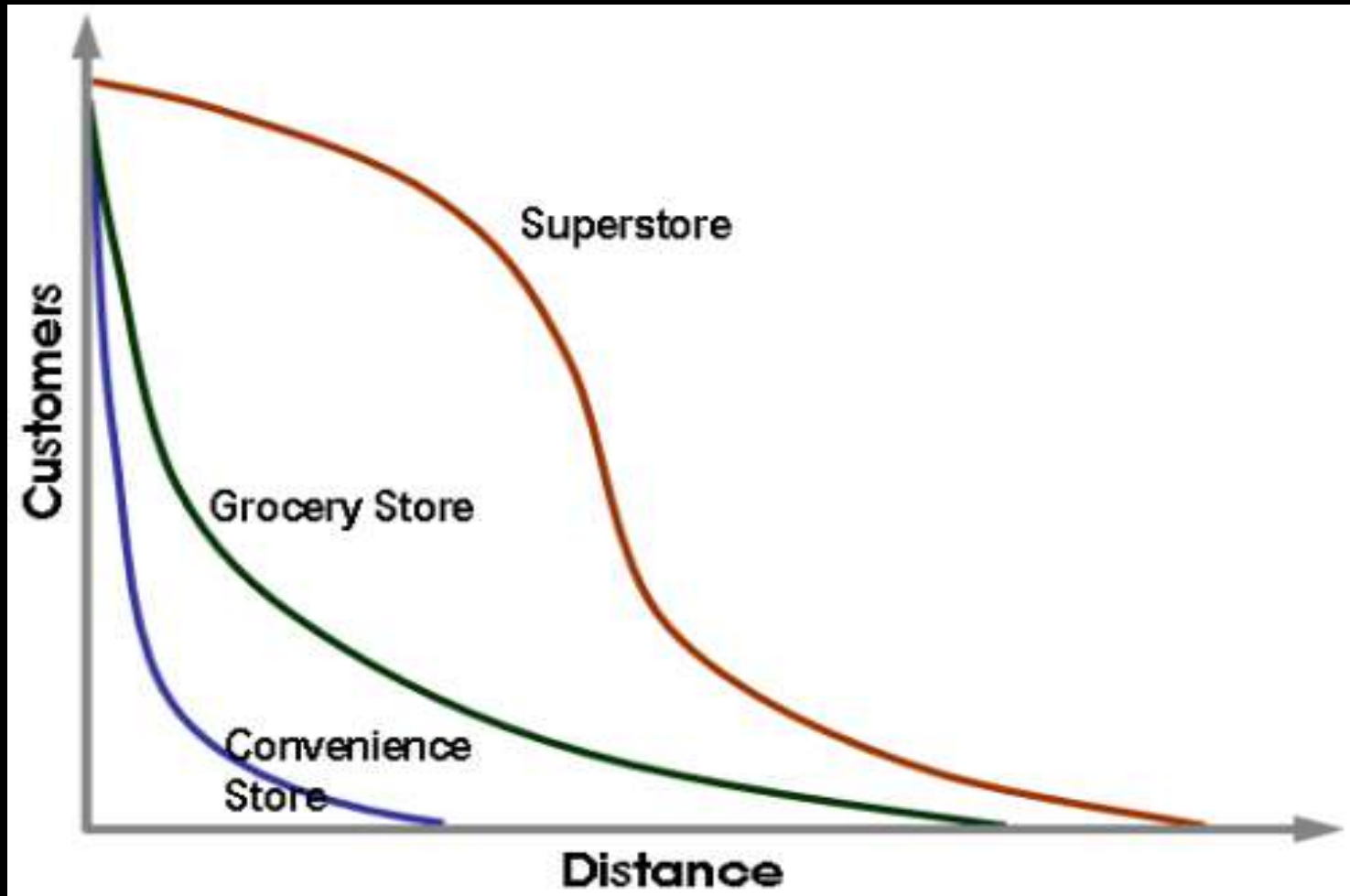
Geographic inquiry focuses on the SPATIAL:

1. Distance
2. Accessibility
3. Connectivity

Distance Decay

- Tobler's First law of geography:
Everything is related to everything else,
but near things are more related than
distant things.
- Therefore the interaction between places
diminishes in intensity and frequency as
distance between them increases

Distance Decay



Friction of distance

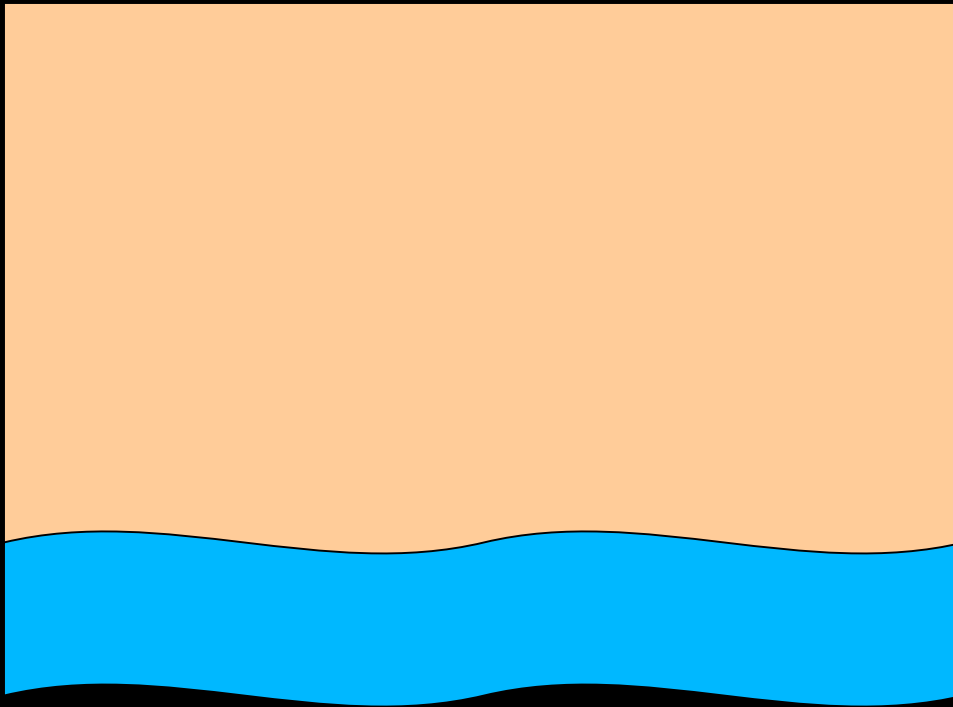
- **The deterrent or inhibitory effects of distance on human activity**
 - The farther people have to travel, the less likely they are to do so.
 - Examples?

Utility

- **Utility: refers to a place's usefulness to a particular person or group.**
 1. Maximize the overall utility of places at minimum effort
 2. Maximize connections between places at minimum cost
 3. Locate related activities as close together as possible

Utility

- 1 Beach
- 2 Ice Cream stands



Accessibility

- The opportunity for contact or interaction from a given point in relation to other points
 - “How easy or difficult is it to overcome the friction of distance?”
 - Is the “Place” isolated or easily accessible?
- Levels of Accessibility have changed throughout time

Connectivity

- Contact or interaction depends on channels of communication and transportation
- The tangible and intangible ways in which places are connected

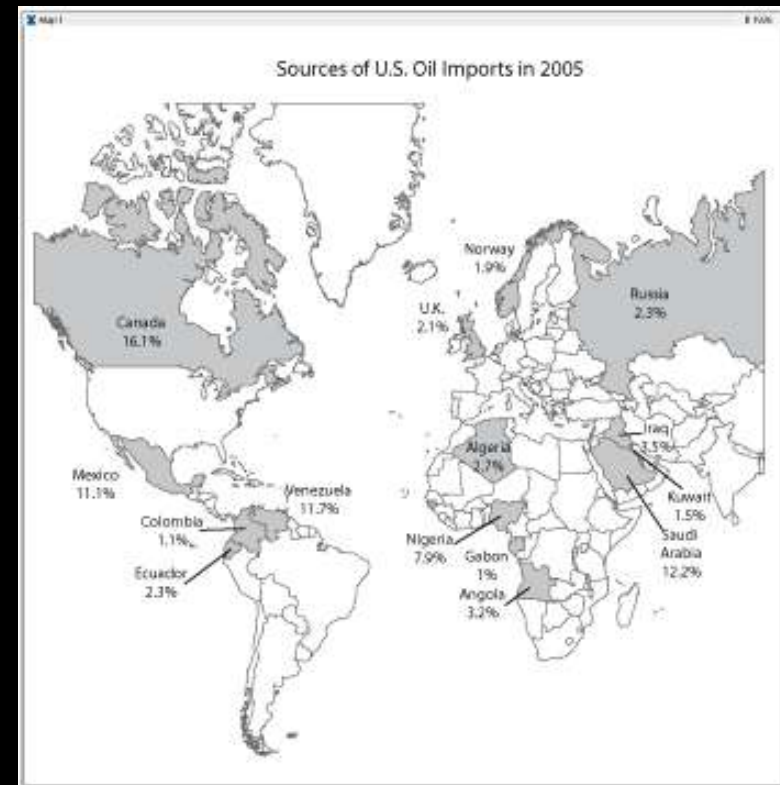


Ex: Telephone Lines, streets, pipelines, radio and TV broadcast

4 Basic Concepts of Spatial Interaction

1. Complementarity: There must be some form of Supply and Demand that match between places

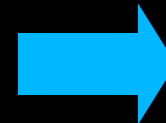
- world resources:
oil, division of labor



4 Basic Concepts of Spatial Interaction

2. Transferability: Factors = the Cost of moving a particular item and the ability of the item to bear the cost

- coal, fruits/vegetables, information
- changes over time



4 Basic Concepts of Spatial Interaction

3. Intervening Opportunity: Alternative origins and destinations that arise between two points

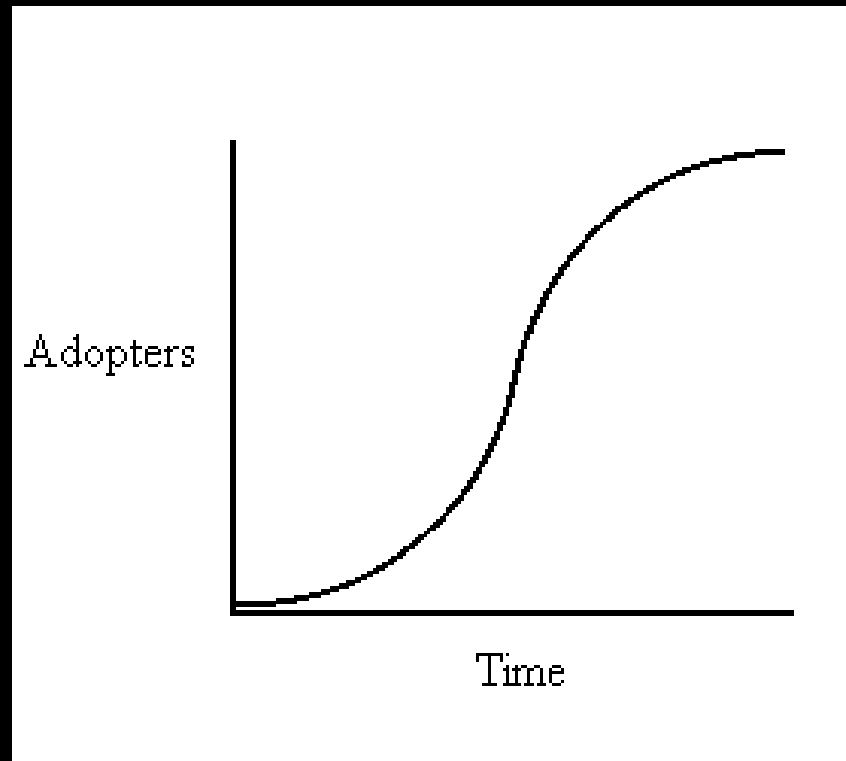
- **Principle of Intervening Opportunity**

“Spatial Interaction between an origin and a destination will be proportional to the number of opportunities at that destination and inversely proportional to the number of opportunities at alternative destinations”

4 Basic Concepts of Spatial Interaction

4. **Spatial Diffusion: the way that things spread through space and over time**
- **Diffusion occurs as a function of statistical probability, based on principles of distance and movement**
 - **Typically follows an S-curve:**
Slow Build, Rapid Spread, and Leveling Off

S-Curve for Diffusion



Culture

Culture is an all-encompassing term that identifies not only the whole tangible lifestyle of peoples, but also their prevailing values and beliefs.

- cultural trait
- cultural complex
- cultural hearth

Diffusion

- the process of dissemination, the spread of an idea or innovation from its hearth to other areas.

What slows/prevents diffusion?

- time-distance decay
- cultural barriers

Two Types of Diffusion

1. **Expansion Diffusion** – idea or innovation spreads outward from the heart.

Expansion Diffusion

a. Contagious

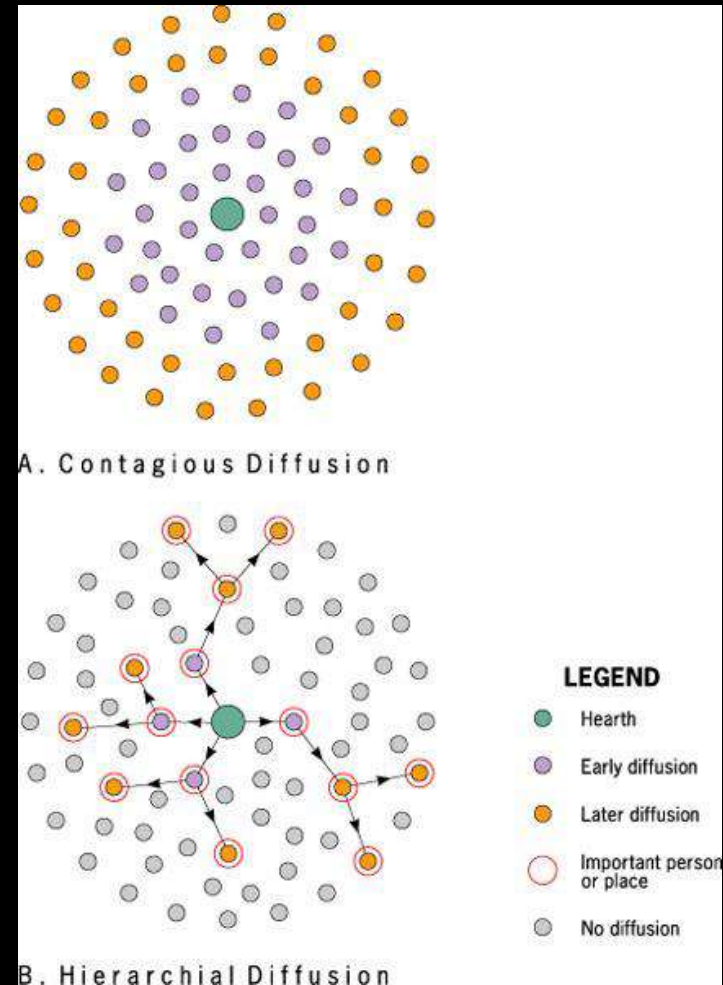
– spreads adjacently

b. Hierarchical

– spreads to most linked people or places first.

c. Stimulus

– idea promotes a local experiment or change in the way people do things.



Stimulus Diffusion



Example:

Because Hindus believe cows are holy, cows often roam the streets in villages and towns. The McDonalds restaurants in India feature veggie burgers.

Types of Diffusion

2. Relocation Diffusion – movement of individuals who carry an idea or innovation with them to a new, perhaps distant locale.

Kenya

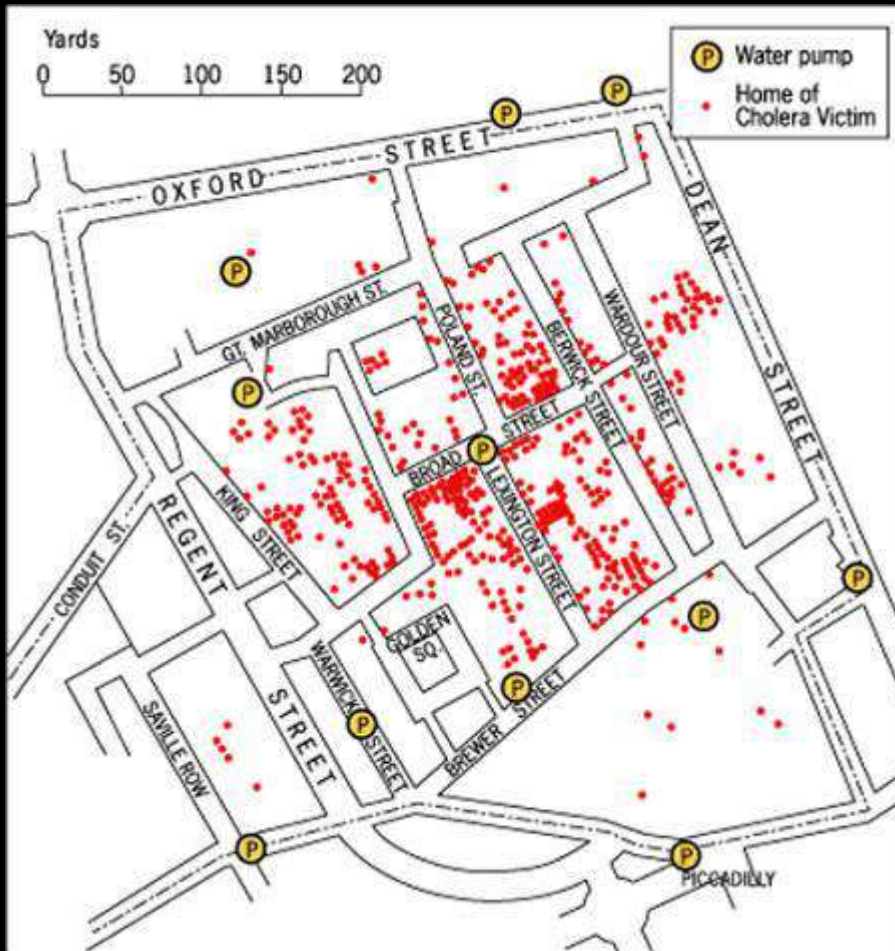


Paris, France



Example: Spatial distribution

What processes create and sustain the pattern of a distribution?



Map of Cholera Victims
in London's Soho District
in 1854.

The patterns of victim's
homes and water pump
locations helped uncover
the source of the disease.

Spatial Distribution

- The arrangement of items on the earth's surface
- Analyzed by the elements common to all spatial distributions
- Density, Dispersion, and Pattern

Density

- The measure of the number or quantity of anything within a defined unit of area
- Always number in relation to area
- Normally used comparatively

Density

- GA pop. Density = 141 per/sq mi
- Is that a high density?
- Who knows... we must look comparatively
 - Ohio = 277, Michigan = 175,
New Jersey = 1134
- Therefore GA has a low Density
- Wyoming = 6
- Gwinnett? **1360**

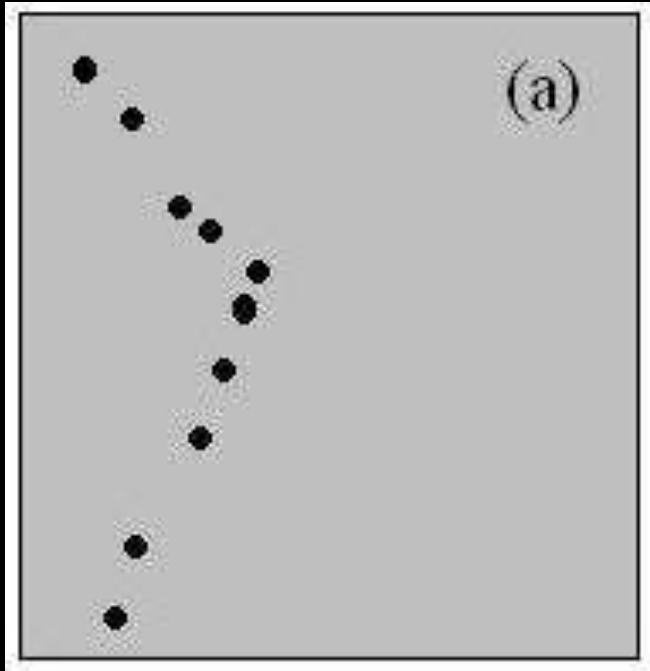
Dispersion

- Spread of a phenomenon over an area
 - Not how many or how much but how far things are spread out
1. Clustered/Agglomerated = spatially close together
 2. Dispersed/Scattered = spread out
 - Dispersion can change depending on scale

Pattern

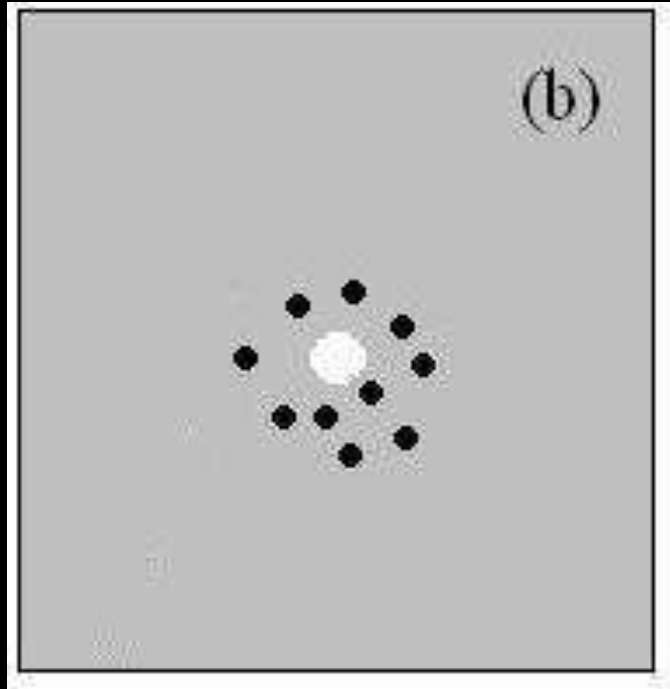
- The geometric arrangement of objects in space
- Pattern refers to distribution, but the reference emphasizes design rather than spacing
- Types of Patterns: Linear, Centralized, and Random

Linear Pattern



- Linear Patterns typically depict houses along a street or towns along a railroad

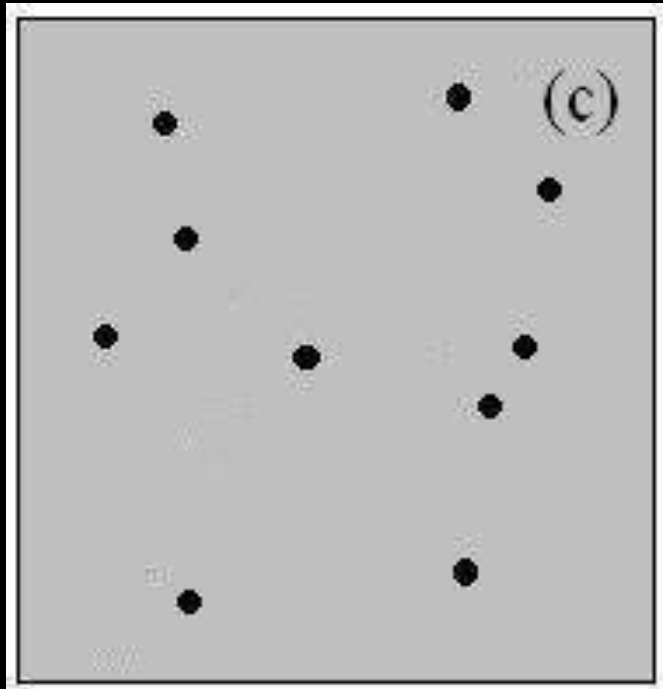
Centralized Pattern



- Centralized Patterns typically involve items concentrated around a single node

- Ex: Center City with surrounding suburbs

Random Pattern



- An unstructured irregular distribution

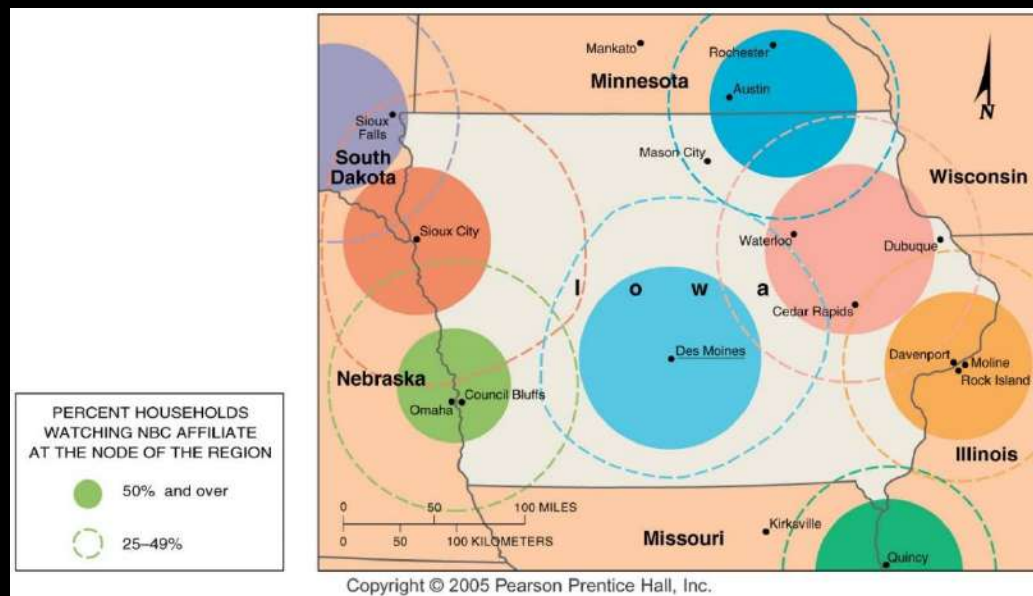
Regions

1. Formal/Uniform region: defined by a commonality, typically a cultural linkage or a physical characteristic.
e.g. German speaking region of Europe

Regions

2. Functional/Nodal region: defined by a set of social, political, or economic activities or the interactions that occur within it.

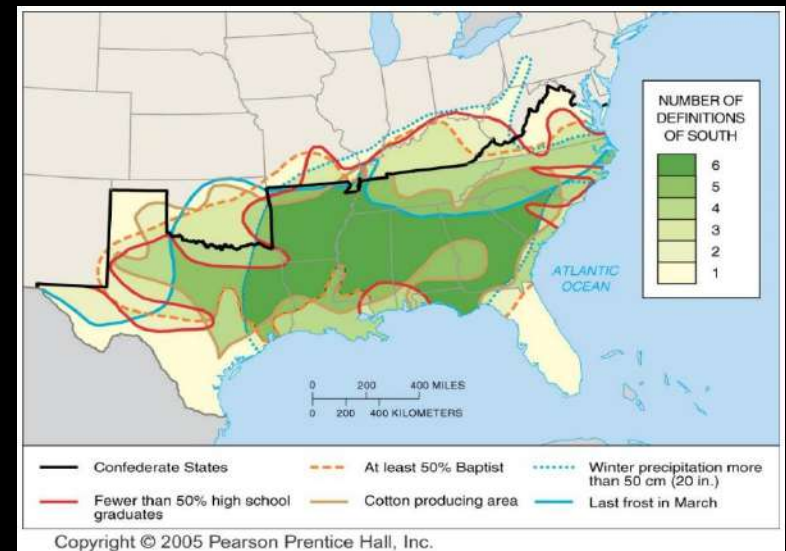
e.g. an urban area, magazine circulation, radio station

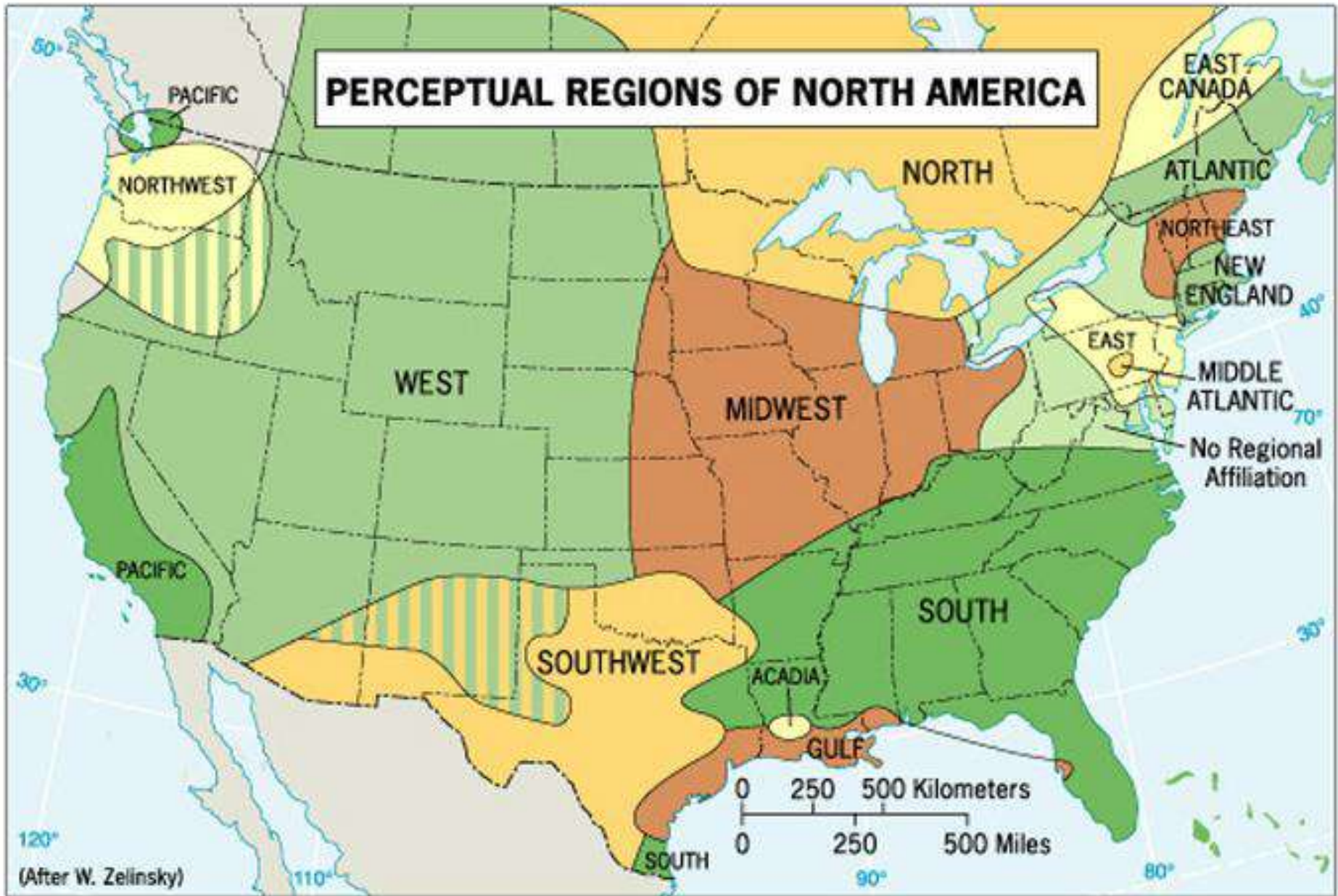


Regions

3. Perceptual Region/Vernacular: ideas in our minds, based on accumulated knowledge of places and regions, that define an area of “sameness” or “connectedness.”

e.g. the South
the Mid-Atlantic
the Middle East







The meanings of regions are often contested. In Montgomery, Alabama, streets named after Confederate President Jefferson Davis and Civil Rights leader Rosa Parks intersect.

Region v. Realm

- Realms are larger, and often encompass several regions

e.g.

“core-domain sphere” model

Created by Donald Meinig

- **Core Region:** distinctive attributes
- **Domain:** dominant but not exclusive
- **Sphere:** present but not dominant

Key Question:

What are Geographic Questions?

Key Question:

**Why do Geographers use Maps,
and What do Maps Tell Us?**

Two Types of Maps:

Reference Maps

- Show locations of places and geographic features
- Absolute locations

What are reference maps used for?

Thematic Maps

- Tell a story about the degree of an attribute, the pattern of its distribution, or its movement.
- Relative locations

What are thematic maps used for?



Reference Map

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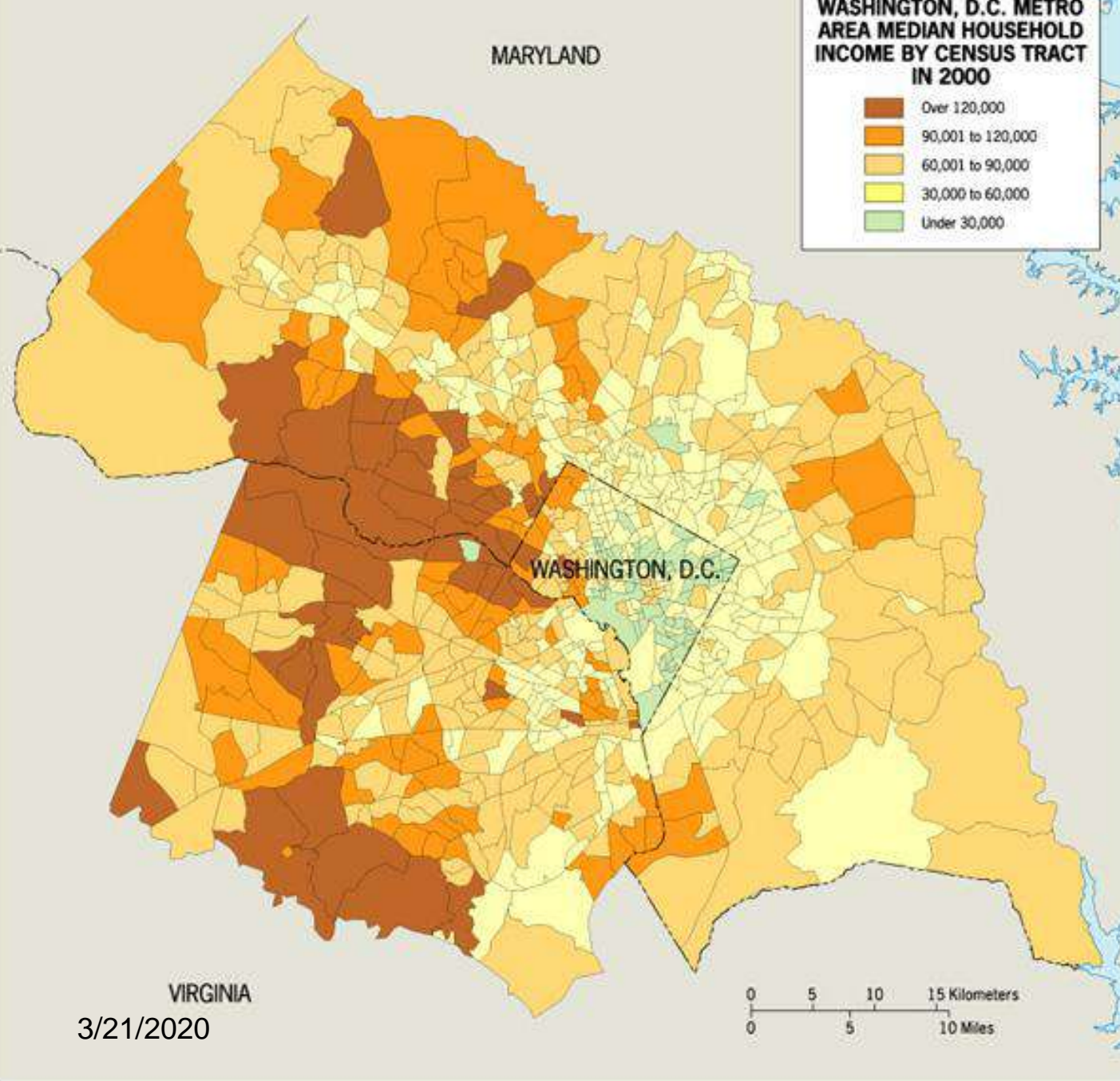
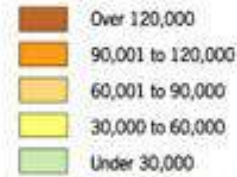
Thematic Maps

- **Thematic Maps:** a map depicting a specific spatial distribution or statistical variation of abstract objects (e.g. unemployment) in space
- **TYPES:** Graduated Circle, Dot-Distribution, Isopleth, and Choropleth

Thematic Map

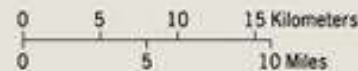
What story about median income in the Washington, DC area is this map telling?

WASHINGTON, D.C. METRO AREA MEDIAN HOUSEHOLD INCOME BY CENSUS TRACT IN 2000



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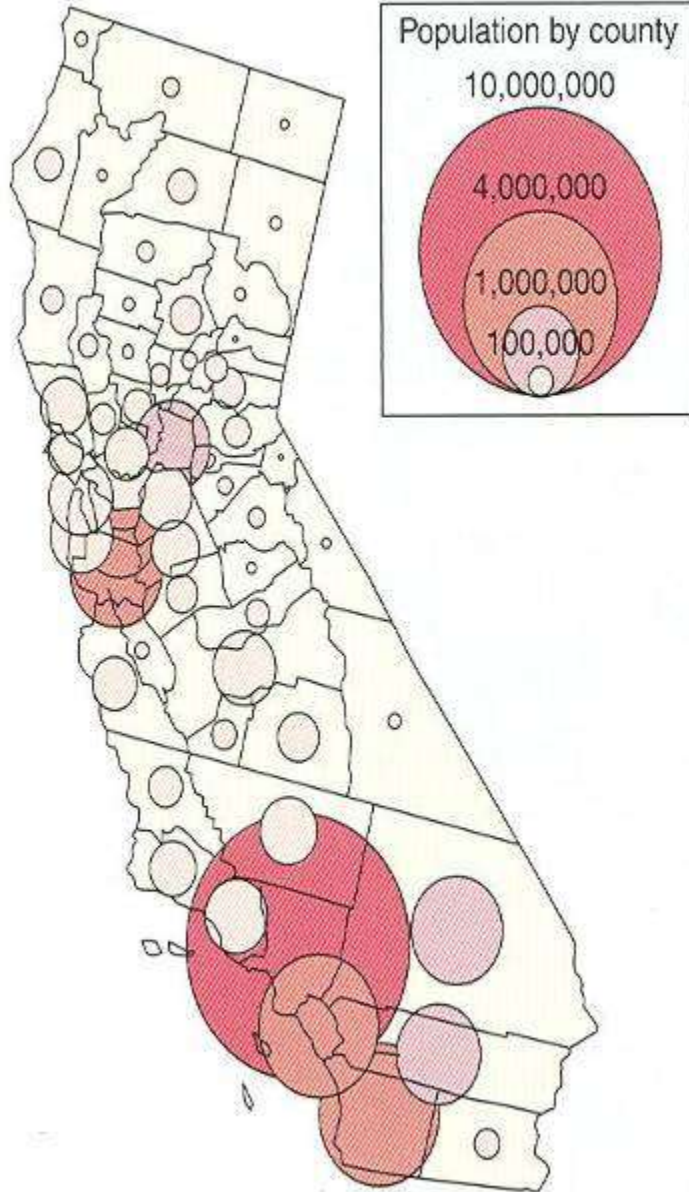
VIRGINIA
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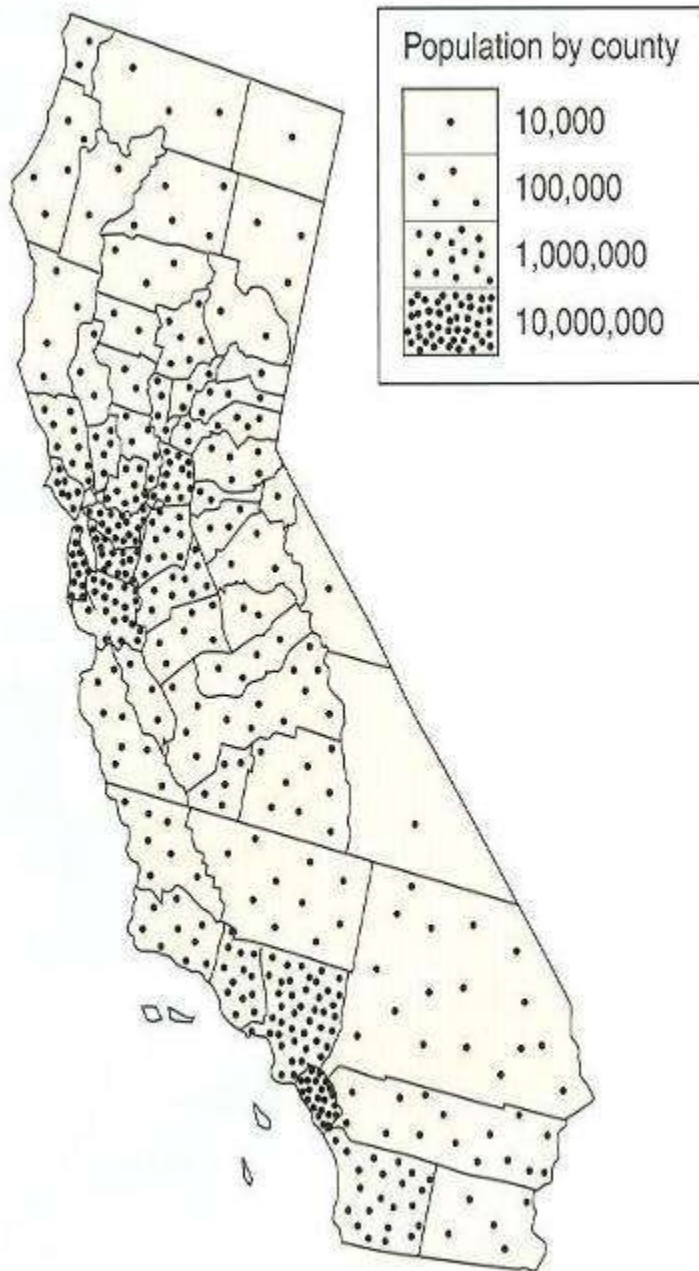
Graduate Circle Map

Uses circles of different sizes to show the frequency of occurrence of a certain topic.

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(a) Graduated circle map



Dot-distribution Map

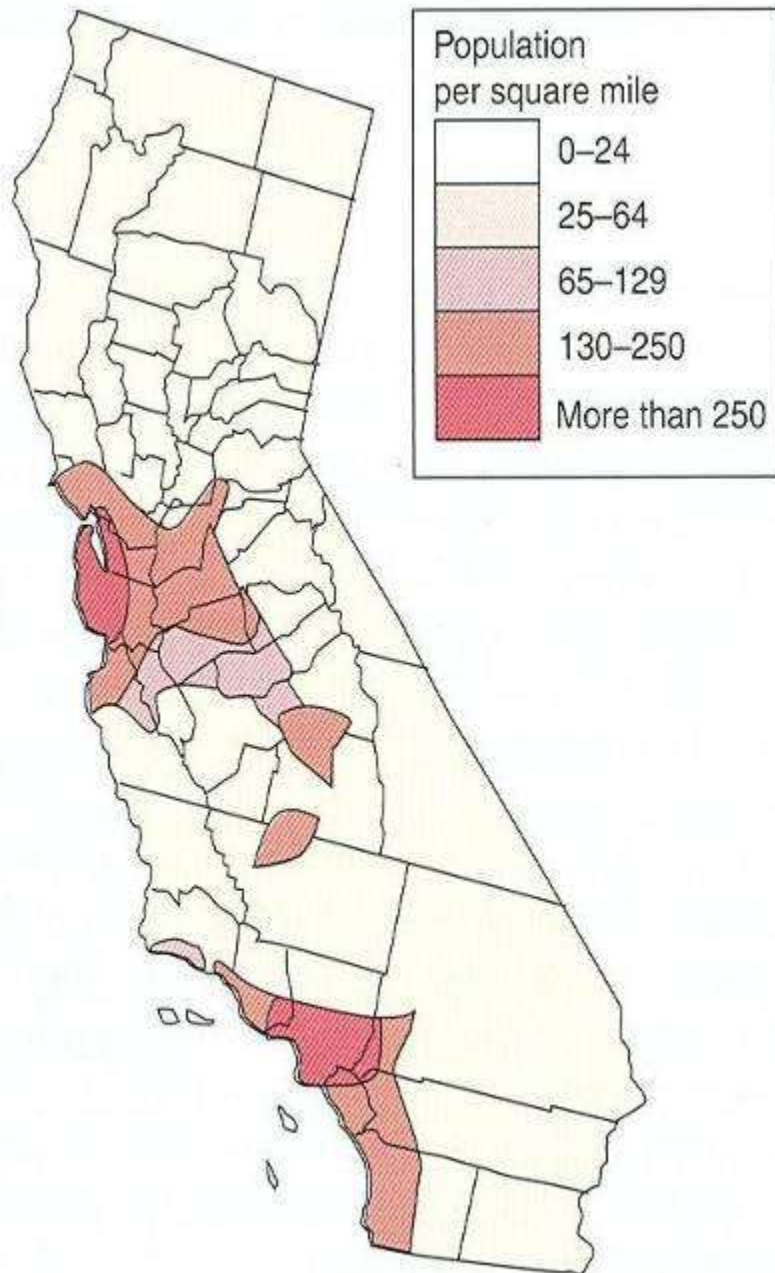
A single of specified number of occurrences are recorded by a single dot

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Isopleth Map

Calculation refers not to a point but to an areal statistic

The isoline connects average values per unit

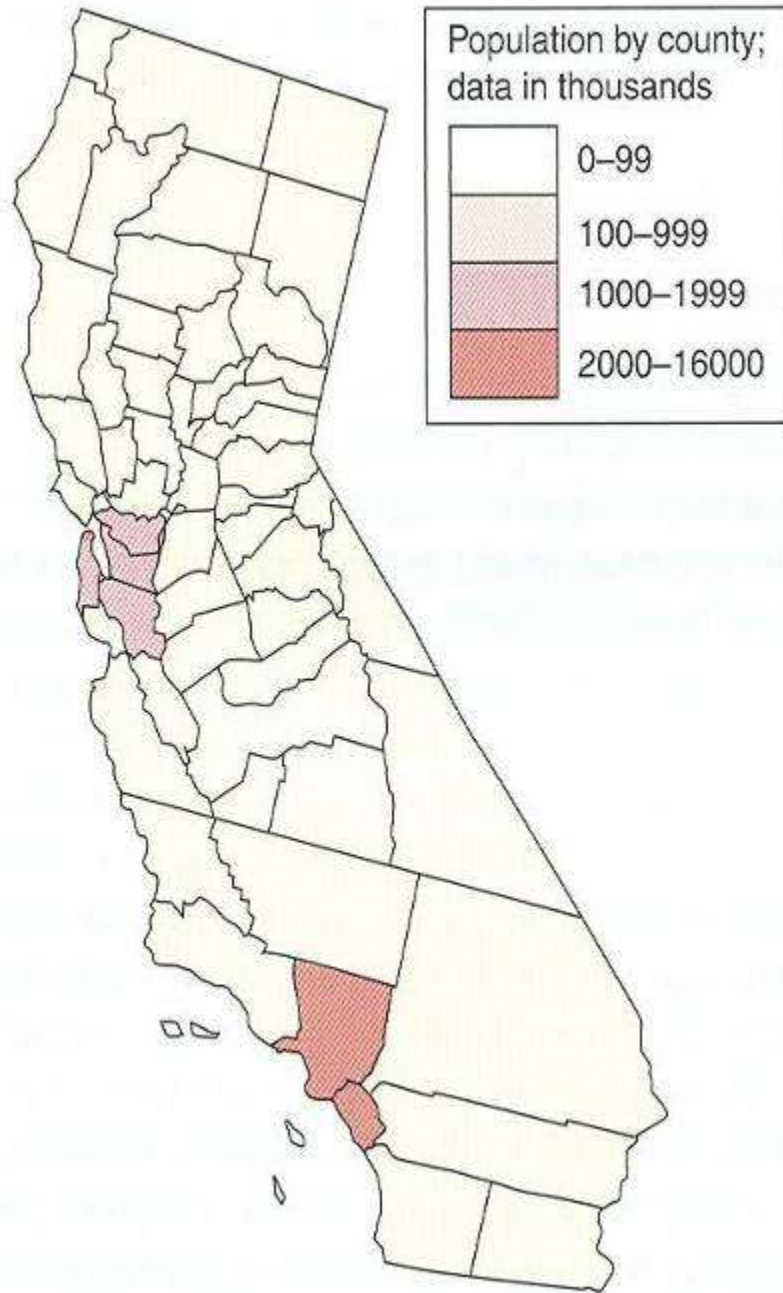


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Choropleth Map

Present average value of the data studied per preexisting areal unit



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Mental Maps:

- **maps we carry in our minds of places we have been and places we have heard of.**

can see: terra incognita, landmarks, paths, and accessibility

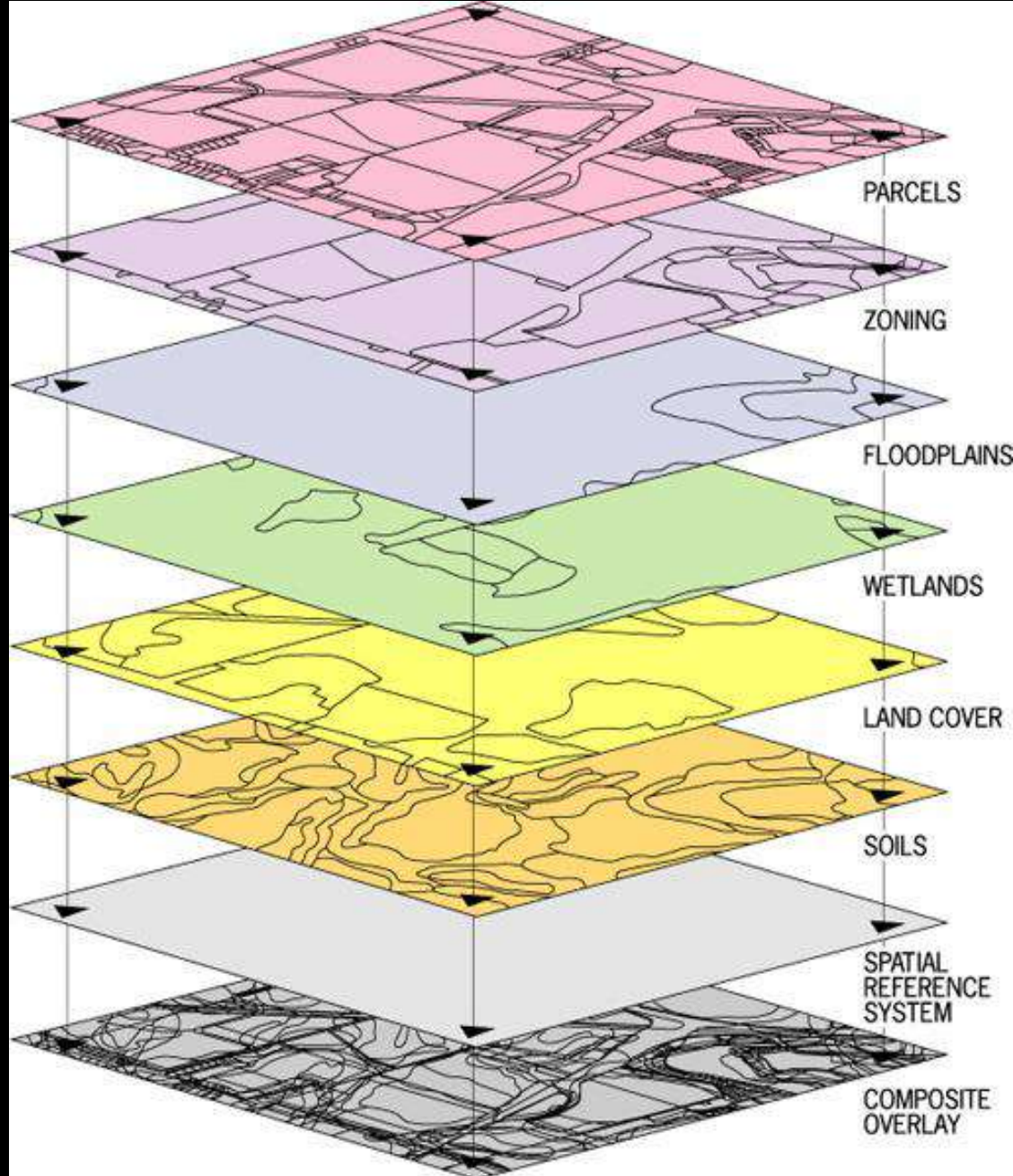
Activity Spaces:

- **the places we travel to routinely in our rounds of daily activity.**

How are activity spaces and mental maps related?

Geographic Information System:

a collection of computer hardware and software that permits storage and analysis of layers of spatial data.



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**Remote
Sensing:**
a method of
collecting data by
instruments that
are physically
distant from the
area of study.

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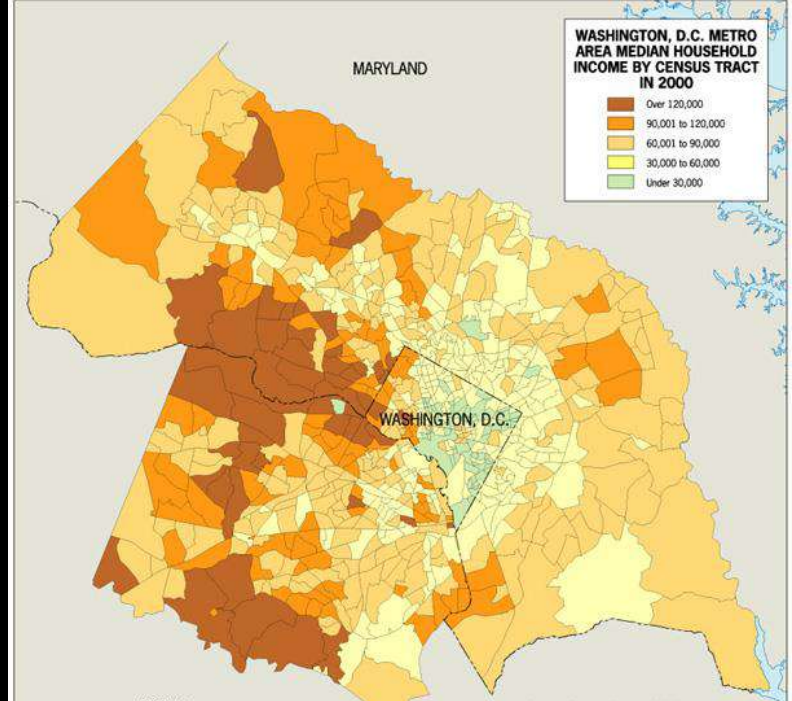
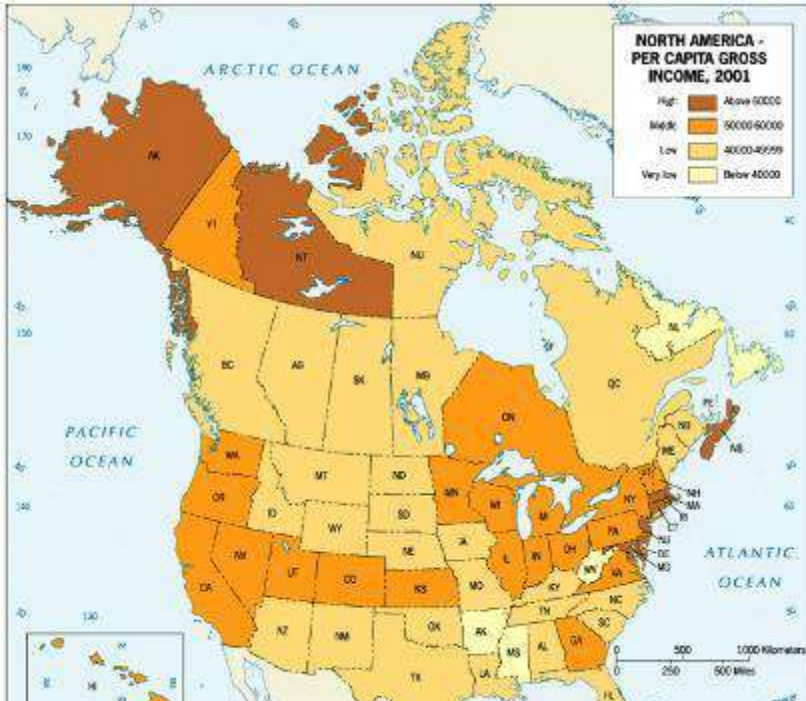
Key Question:

**Why are Geographers Concerned
with Scale and Connectedness?**

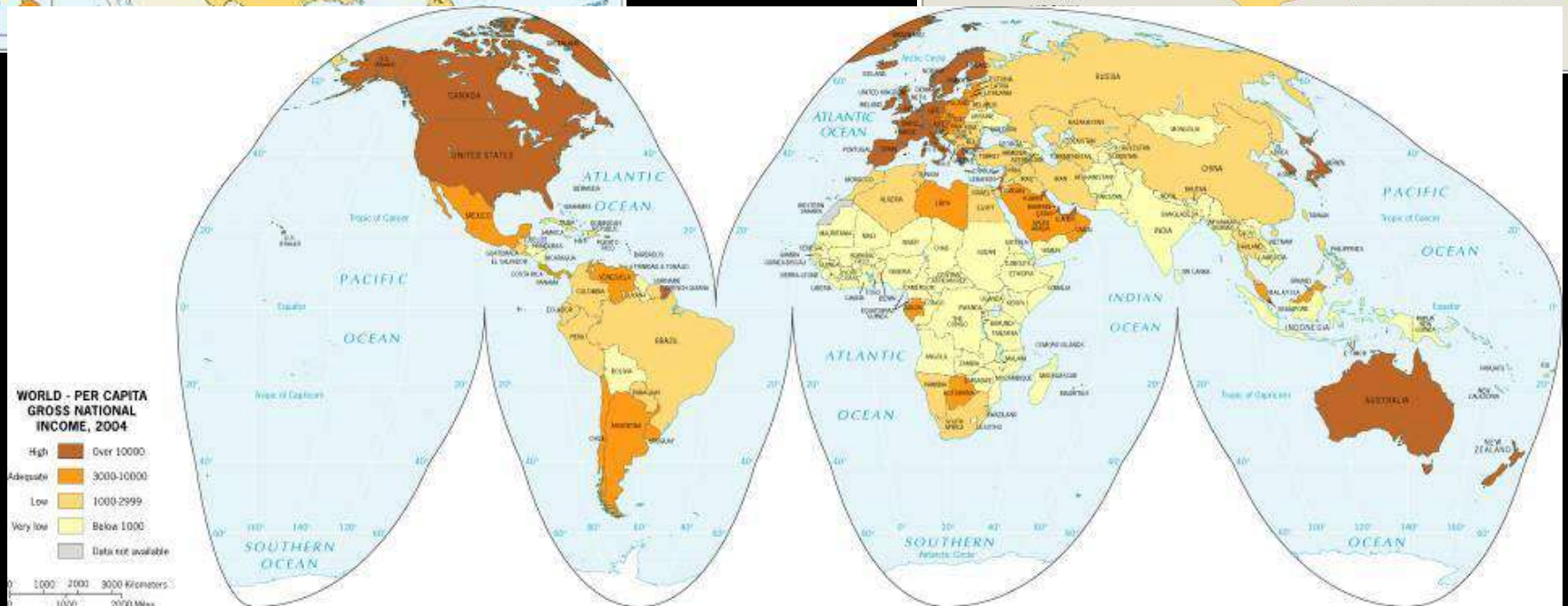
Scale

**Scale is the territorial extent of something.
The observations we make and the context
we see vary across scales, such as:**

- local**
- regional**
- national**
- global**



Scale



Scale is a powerful concept because:

- Processes operating at different scales influence one another.
- What is occurring across scales provides context for us to understand a phenomenon.
- People can use scale politically to change who is involved or how an issue is perceived.
 - e.g. Zapatistas rescale their movement
 - e.g. laws jump scales, ignoring cultural differences

Old Approaches to

- **Human-Environment Questions:**

Environmental Determinism (has been rejected by almost all geographers)

Possibilism (less accepted today)

New Approaches to

- **Human-Environment Questions:**

Cultural ecology

Political ecology

The Importance of “Physical Geography” to “Human Geography” (environment)

Koppen Classification System of Climates

http://www.uwsp.edu/geo/faculty/ritter/geog101/textbook/climate_systems/climate_classification.html

Climate Types

1. Humid Equatorial Climates (Tropical: Class A)

- Af – no dry season
- Am – Short dry season
- Aw – dry winters (S.W. Florida)

2. Dry Climates (Dry: Class B)

- Bs – Semiarid
- Bw – Arid

3. Humid Temperate Climates (Temperate: Class C)

- Cf – no dry season
- Cw – dry winter
- Cs – dry summer

4. Humid Cold Climates (Cold: Class D)

- Df – no dry season
- Dw – dry winter

5. Cold Polar (tundra and ice) (Polar: Class E)

6. Highland Climates (Vertical)

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Other ideas related to climate...

- Greenhouse Effects (anthropogenic – human caused) – Global Warming caused by the release of greenhouse gases
- ENSO – (El Nino Southern Oscillation) – areas of regional warming
- Soils – (fertility and degradation)
- Global Distribution of Precipitation
 - Monsoons – system of low-level winds blowing into a continent in Summer and out of it in the winter (Southern Asia)
 - Intensity – Regularity

Ecosystems or Ecological Systems

- Ecosystems are living communities of plants and animals that share common characteristics – primarily related to climate, soil, and vegetation
 - Abiotic Elements – those that are non-living but that affect systems (water, heat, relief, nutrients, rocks, atmosphere)
 - Biotic Elements – those living elements of the ecosystem (plants and animals)
- Food Chains (sequences of consumption)
- Biomes (large subdivisions of terrestrial ecosystems found in the world)

Major Biomes and Desertification of the Sahel

- **Major Biomes**

 - Tundra

 - Boreal Forest or Taiga

 - Temperate Broadleaf Deciduous Forest

 - Tropical Broadleaf Evergreen Forest

 - Tropical Savanna

 - Desert scrub

 - Temperate Grasslands

 - Mediterranean Scrub

- **Desertification of the Sahel**

 - A semiarid region of north-central Africa south of the Sahara Desert. Since the 1960s it has been afflicted by prolonged periods of extensive drought.

The Management of Global Ecosystems

- sustainability – main method of management
- Major Problems

Tropical Rainforests – Removal of trees results in removal of nutrients for soil, less oxygen produced and more CO₂ remains in the atmosphere

Acid Rain – sulfur dioxides and nitrogen oxides emitted from power stations are carried by winds and when precipitation occurs it pollutes lakes and rivers (pollution from Britain and Western Europe has damaged Scandinavia and Eastern European countries: also, pollution from the Midwestern states has damaged the Great Lakes and Eastern Canada

Absolute Location

- **Mathematical location**

 - Latitude & Longitude**

 - degrees, minutes, seconds

 - Township & Range (1785 Land Ordinance)**

 - Subdivision: parallels & meridians

 - Topographic quadrangle, US Geological Survey

 - Metes & Bounds**

 - is a system or method of describing land, 'real' property (in contrast to personal property) or real estate

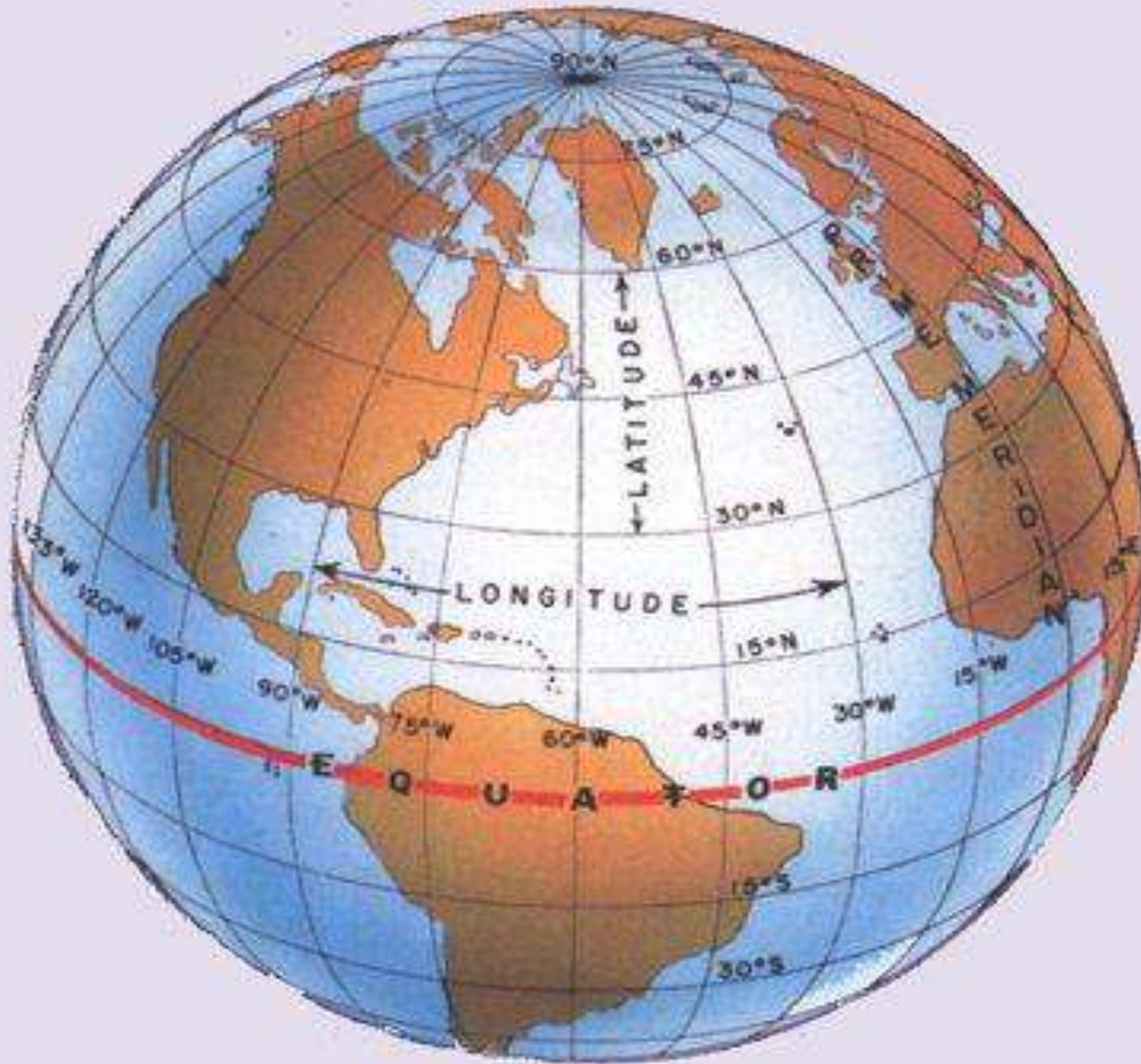
Latitude & Longitude

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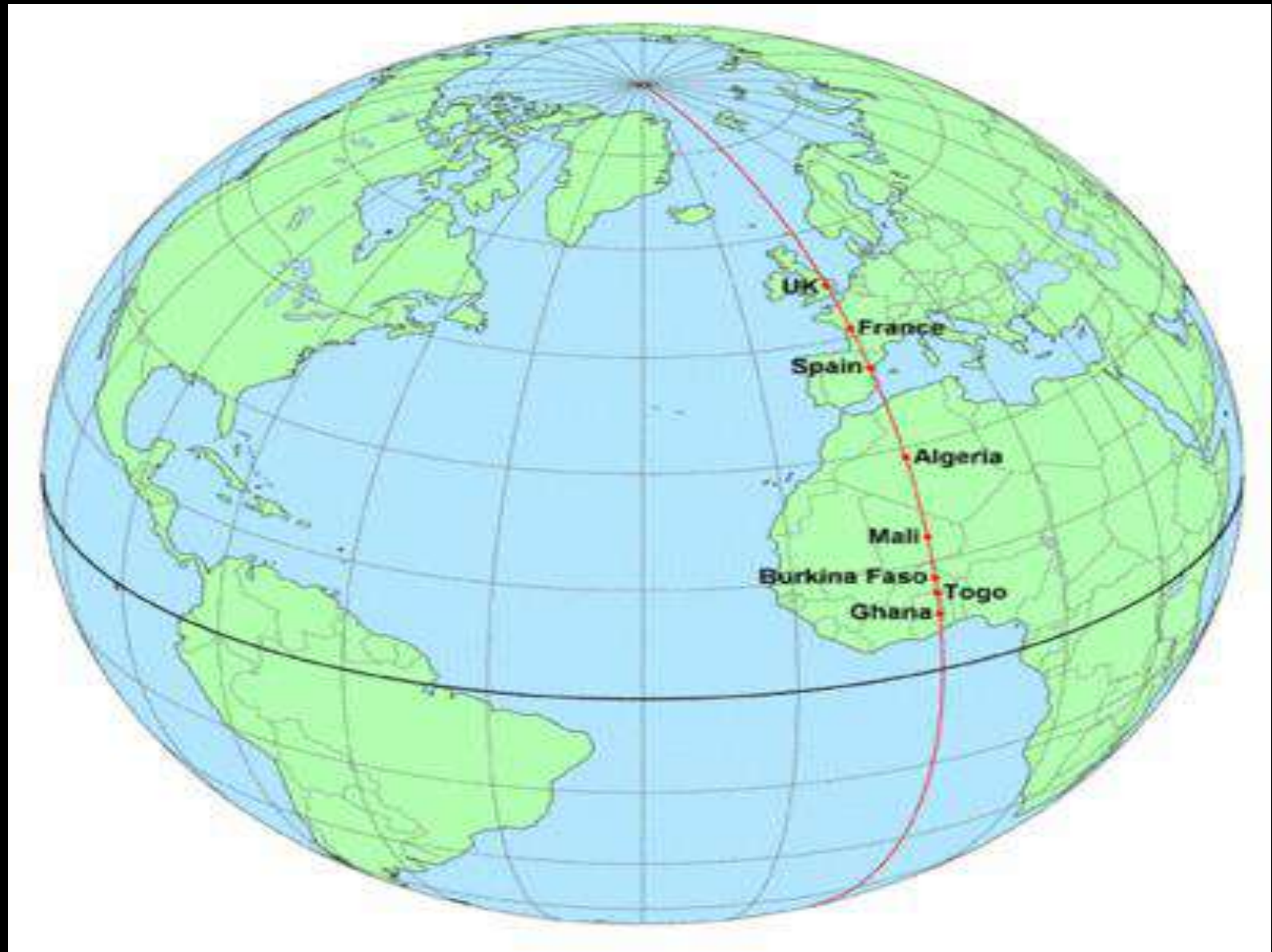
Longitude and Latitude

- **Meridian:** an arc drawn between North and South Poles
- **Parallel:** circle drawn around the globe parallel to the equator and at right angles to the Meridians



Longitude and Latitude

- Location of Meridians are determined by a numbering system known as Longitude
 - 0° Longitude = Greenwich England
 - The Prime Meridian



Longitude and Latitude

- **Latitude:** numbering system used to represent parallels
- Equator = 0°
- N. Pole = 90°N
- S. Pole = 90°S

Longitude and Latitude

- **Longitude:** numbering system used to represent meridians
- **Prime Meridian = 0 °**
- **Longitude Lines in 15 ° intervals either East or West**

Relative Location

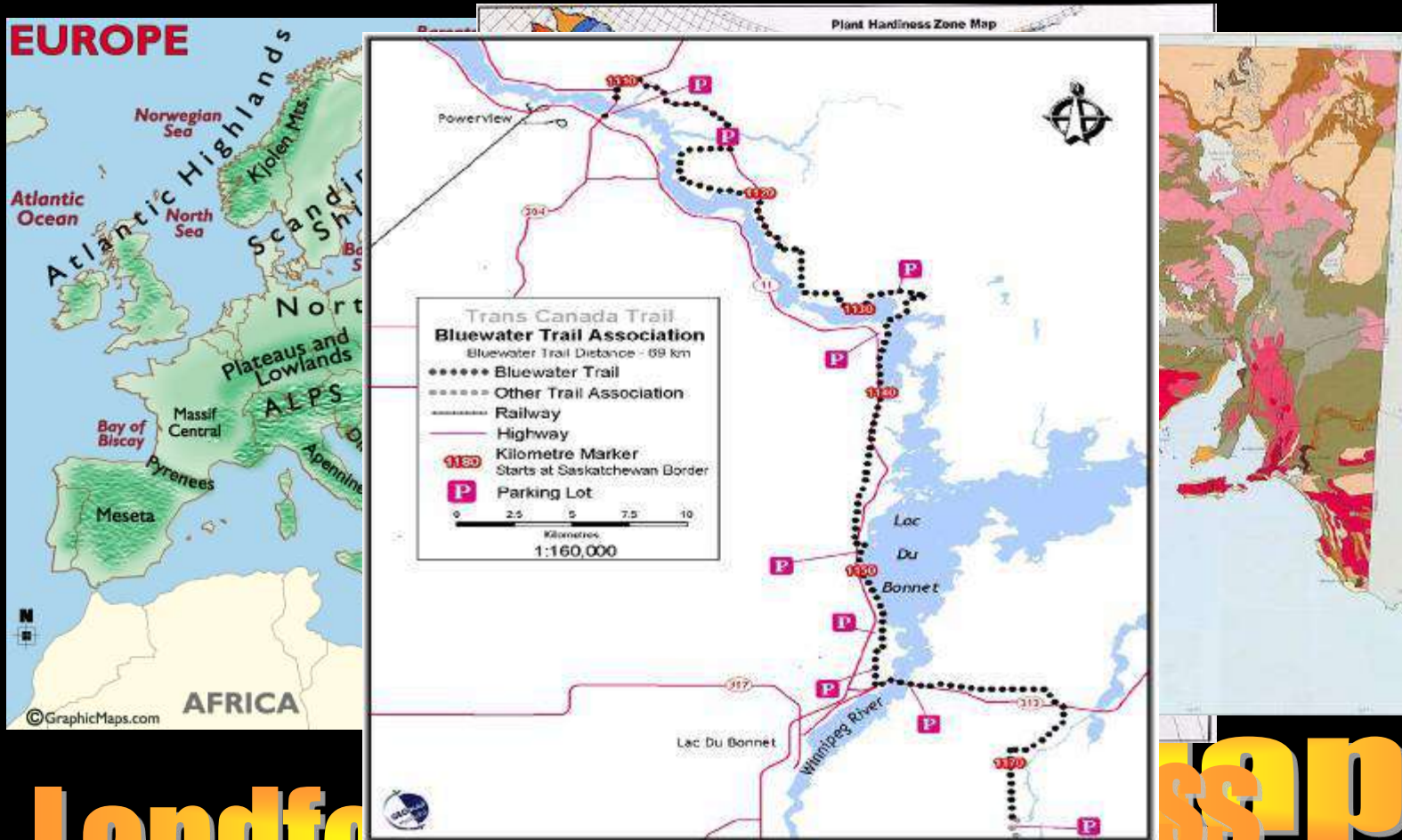
“Place” in relationship
to surroundings



The Natural Landscape

- the physical environment unaffected by human activities
- Climate and soil, the presence or absence of waters supplies and mineral resources, terrain features
- Help provide the setting for human action

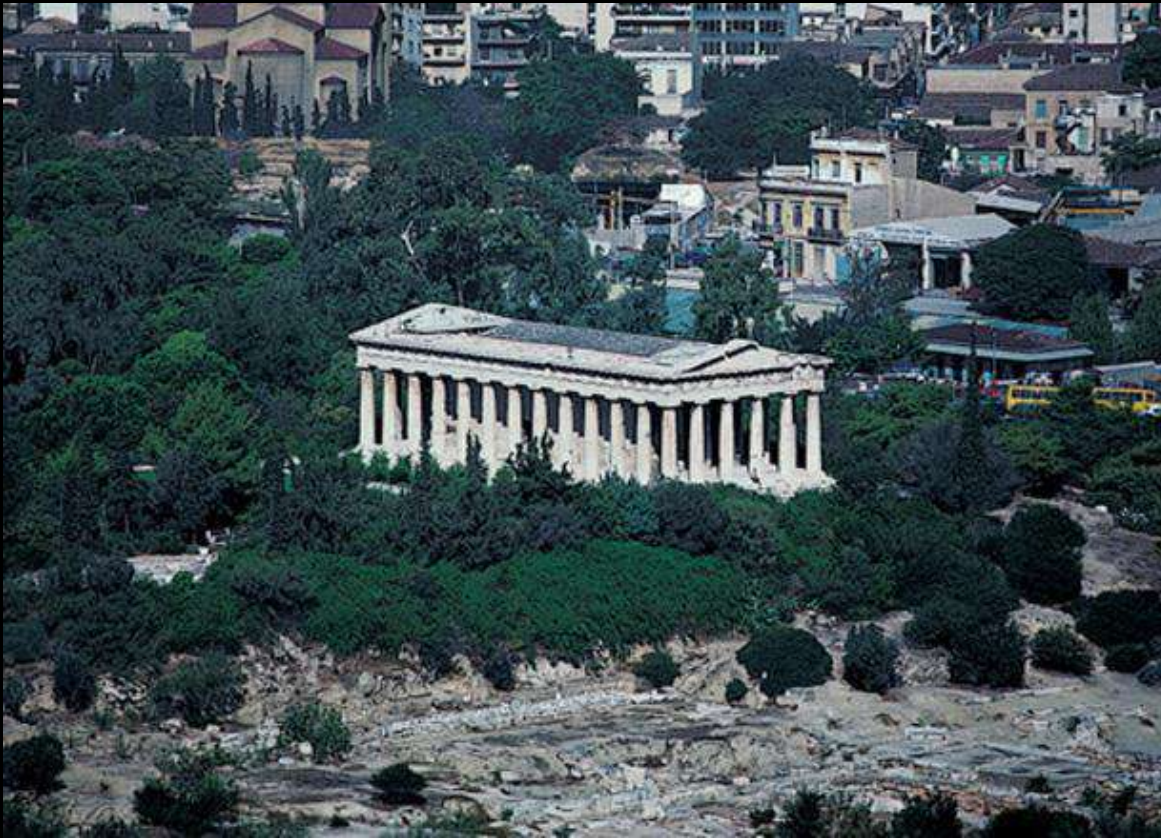
Physical Characteristics



Landform Maps
Water Maps

Sequent Occupance

Layers of imprints in a cultural landscape that reflect years of differing human activity.



Athens, Greece

ancient Agora
surrounded by
modern buildings

Development of Geographic Thought

“Four Traditions of Geography” (Patterson’s - U. of Chicago – 1964)

- **Earth Science Tradition** (physical geography approach)
- **Locational Tradition** (use of satellite imaging-mapping)
- **Cultural-Environment Tradition** (impact of deforestation)
- **Area-Analysis Tradition** (regional patterns of development)

Development of Geographic Thought

Why Geography Matters [DeBlij's address to NCGE (National Council of Geographic Education) – 1999]

- **Age of Exploration** (China, European, Islamic)
- **Globalization** (expansion of economic and political activities aided by information technology and transportation)
- **Devolution** (regions within countries demanding autonomy)

Asia-Pacific Economic Cooperation

North American Trade Organization

European Economic Commission

- **Supranationalism** (E.E.C., A.P.E.C., N.A.T.O.)
- **Environmental Degradation**
- **Remote Sensing** (spy satellites – used in Iraq and Afghanistan)

Thank you