

3 Studying Geography

Prof. Anthony Grande
Hunter College Geography

Lecture design, content and presentation ©AFG 0118
Individual images and illustrations may be subject to prior copyright.

The Five Fundamental Themes of Geography

Source: Michigan Geographic Alliance

Any Questions?

This handout is on the course homepage.

Today we will take a closer look at "region".

Geography

Five Themes to Help Understand the World and Its People

Focus on "Region"

❖ **A region is a part of the earth exhibiting similar traits or characteristics.**

- ✓ A region can be **natural** or **cultural** or a unique **combination of both**.
- ✓ Helps us to bring order to a diverse planet by dividing the earth up into unique areas.
- ✓ Makes it easier to study and compare these areas by setting them apart from others.
- Regions with different characteristics can overlap.

Region

All regions have 5 characteristics:

1. **Location:** we can find it on earth
2. **Spatial Extent:** we can measure it
3. **Boundaries:** we can set its limits (*however most boundaries are "fuzzy" and blend into each other*)

Region

All regions have 5 characteristics:

4. **Categorization**

- a) **formal** (exhibit a uniform appearance)
- b) **functional** (created by interaction or connections)
- c) **vernacular** (mental or perceptual)

Formal Region

An area that exhibits a uniform appearance or characteristic.

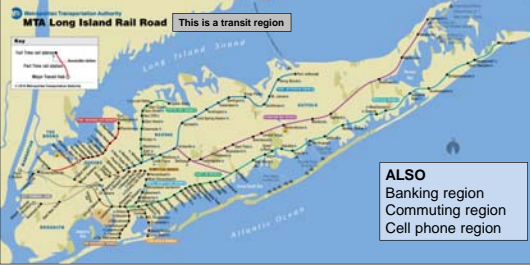
Political regions (counties) of NYS

ALSO

- Climate region
- Landform region
- Ecoregion
- Agricultural region
- Cultural region
- Language region
- Urbanized region

Functional Region

Is created by interaction or connections.




This is a transit region

ALSO
Banking region
Commuting region
Cell phone region

Vernacular or Perceptual Region

An area created in one's mind (mental image) or popularized by usage.

The Midwest region is defined (perceived) differently by people.



ALSO
Bible Belt
Good neighborhood
Rust Belt
Vacation area

How is "Long Island" defined?

Region

All regions have 5 characteristics:

5. Hierarchical Arrangement

- a) major
- b) minor


Hierarchy of Regions

NOTE: There are a number overlapping regions portrayed here.

Regions within regions within regions within regions.

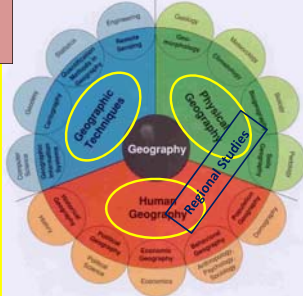
The State of Delaware, the Delaware shore and Rehoboth Bay ecological area are smaller regions.

Mid-Atlantic, East Coast, and North America are larger regions.



Subfields of Geography

Regional Studies incorporates elements of **physical** and **human geography** (which create unique natural and cultural landscapes) and uses **geographic techniques** to study them.



This diagram is in the Handout Section of the course homepage.

Geographic Methodologies

Geographers study the earth in a number of ways.

- ❖ **Opposing views or dualisms:**
 - **Physical (natural) vs. Human (cultural)**
 - **Topical (themes) vs. Regional (areas)**
 - **Descriptive (What's there? Cataloguing, knowledge accumulation) vs. Analytical (Why is it there? Hypothesis testing, systematic investigations, spatial analysis)**
- ❖ **Time reference:**
 - Past
 - Present
 - Future

GEOGRAPHIC RESEARCH

1. Assess the need.
2. Collect information.
3. Process the data.
4. Analyze/interpret the data.
5. Create an output.
6. Apply to a real world situation.

This diagram is in the Handout Section of the course homepage.

Geographic Methodologies

Geography of the Present

We study **current** conditions, interrelationships and happenings.

It focuses on today. It goes back in time to set the scene. It evaluates the present for future interactions.

Geography of the Past

Historical geography looks at and analyzes the conditions that have led to or influenced the **actions of people over time**. The emphasis is on **developmental processes**. It studies **change**.

Geography of the Future

Uses the knowledge gained from the past and present to **make assumptions** about the future. Regional and urban planning are examples of this.

Geographic Methodologies

All three methodologies (past, present and future)

- ✓ Are studied from **geographic dualisms** point of view.
- ✓ Use **geographic research methods** to gather and analyze data.
- ✓ Look for and analyze **patterns of spatial distribution**, always asking the question **WHY?**.
- ✓ Use **cartographic methods** (mapping) and **GIS** to portray information spatially.

SPATIAL DISTRIBUTION

Spatial distribution is the essence of geography.
We need to distinguish between the following:

- ❖ DENSITY
- ❖ CONCENTRATION
- ❖ PATTERN
- ❖ SPATIAL INTERACTION (issues of distance)
- ❖ DIFFUSION (issues of spread)

Spatial Distribution

1. **DENSITY:** the number of times something exists within a given unit (space)
(as people per sq. mi. or seats per 400 sq. ft. classroom)
2. **CONCENTRATION:** grouping of density
(clustered or dispersed; proximity to each other)
3. **PATTERN:** the arrangement of density
(as linear, rectangular, circular, centralized, random)

1. Density: the number of times something exists within a unit

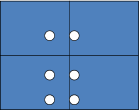
9 Dots

12 Dots

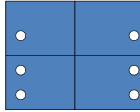
20 Dots

Which box has the greatest density?

2. Concentration: the grouping



Clustering

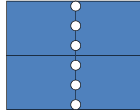


Dispersion

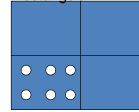
Grouping refers to the proximity to each other.

Each grid has the same density but in different concentrations.

3. Pattern: the arrangement

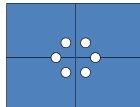


Linear

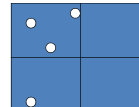


Rectangular

Each grid has the same density.



Circular



Random

However, they have different arrangements (patterns) and different concentrations.

4. Spatial Interaction: the movement and contact between parts

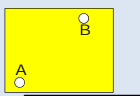
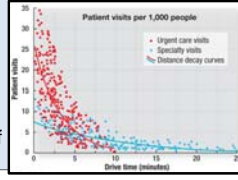
a) Distance – How far?

- ✓ Linear distance
- ✓ Time distance
- ✓ Psychological distance

b) Connectivity: linkage; connection of points

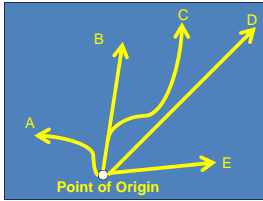
c) Accessibility: ease of movement along links

d) Distance Decay: frequency of contact decreases with distance

21

5. Diffusion: Spread from point of origin



We ask: Why was there movement from point of origin? What route was taken? and Why did that route facilitate movement?

4 TYPES of DIFFUSION

- Expansion diffusion
- Relocation diffusion
- Contagious diffusion
- Hierarchical diffusion

22

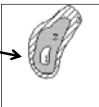
Types of Diffusion

a) EXPANSION
Movement away from point of highest concentration. Increase in both area and numbers.


b) RELOCATION
Migration; movement away to another location

c) CONTAGIOUS
Contact and exchange between adjoining areas (person-to-person contact).


d) HIERARCHICAL
Movement between levels – “up the ladder” – skipping areas in between.



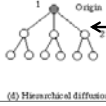
(a) Expansion diffusion



(b) Relocation diffusion



(c) Contagious diffusion



(d) Hierarchical diffusion

23

Diffusion: Spread of Cholera in the U.S. 1832 and 1849

Disease spreads from ports of entry along lines of transportation.

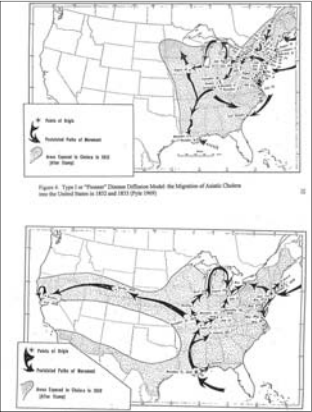
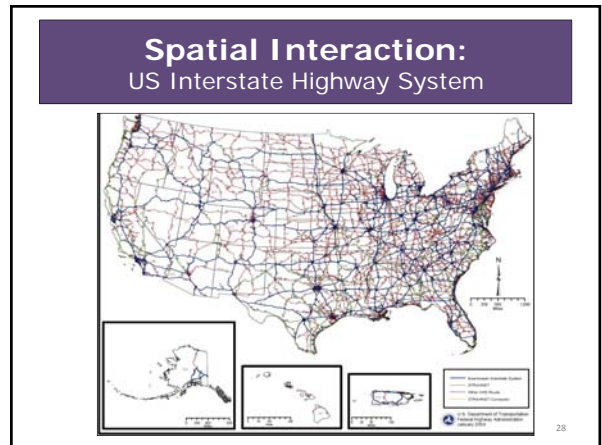
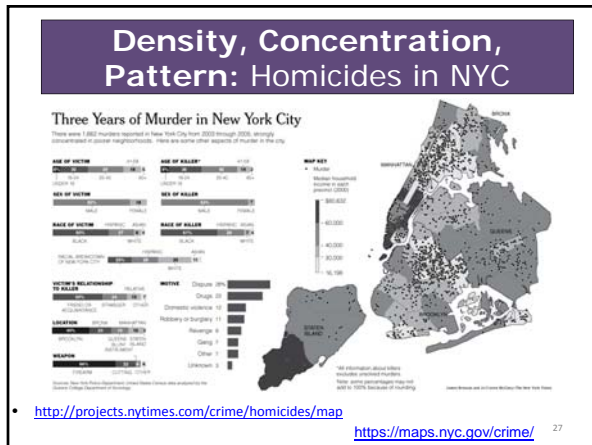
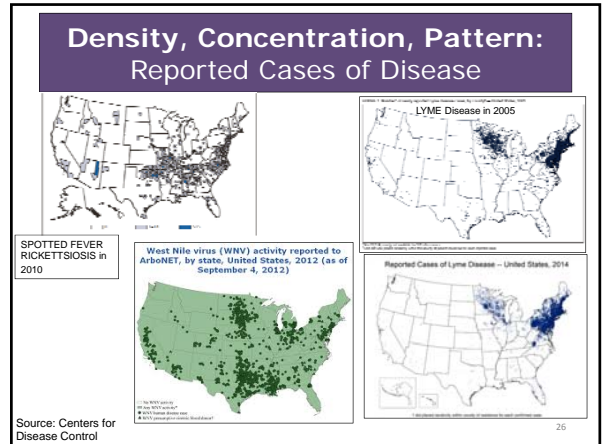
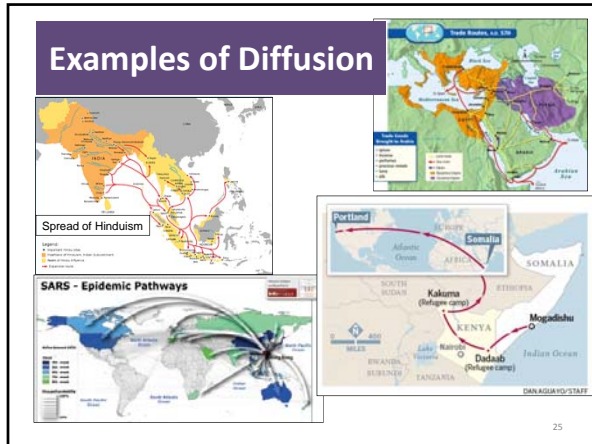


Figure 4. Types of “Hierarchical” Disease Diffusion Model: the Migration of Asiatic Cholera from the United States in 1832 and 1849 (John Snow)



NEXT

Geographers' Tools: Making Maps

30