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Strands of Meaning:
Facts, Concepts, Issues
Geographical Strands of Meaning

**Facts** - Visual images, sounds, smells, other sensory impressions, measurements of all kinds

**Concepts** - Theories to explain why particular features occur in specific places

**Values** - Opinions about how particular features, ideas, and behaviors fit in a specific place
Images and Words

One obvious task of a geography teacher is to help students learn some words that people use to name key features in different parts of the world.

- Tepee
- Savanna
- Subway
- Ebola
- Oil Refinery
- Beach
- Rice Paddy
- Atoll
- Typhoon

Obviously, this is not a complete list!
Images and Words

How can we help students learn the names of important features in different places?

**Videos and photos are useful.**

Show several examples of something, and let students' brains extract the common features, rather than memorize every detail of a perfect example.
Words and Images

Geography teaching is complicated by the fact that a word can mean different things in different places.

- stubby baobab in Senegal
- skinny spruce in Quebec
- tall redwood in California
- red maple in Vermont
- scrubby juniper in W Texas

And if that is true for a simple word like "tree," what about words like "family," "religion," or "government?"
Geographical Theory

A geographical theory is a proposed explanation for a geographical observation.

- Central Place Theory
- Land Value Theory
- Push-Pull Migration Theory
- Strategic Value of River Gaps
- Factory Location
- Culture Shock
- Diffusion of Disease
What is a Theory?

A scientific theory is not just a guess.

It is a reasoned attempt to make the most plausible statement you can, given the available evidence.

Its purpose is to summarize what we know.

At its best, theorizing is a courageous willingness to make a clear statement and dare anyone to disprove it.

So, while it is true that no theory can ever be proved to be "true," the longer it stands without being disproved, the stronger it seems.
The Gravity Model - simple version

Your attraction to a place depends on its size and its distance.

This place is twice as big, so it is twice as attractive.

This place is twice as far, so it is half as attractive.

You

4 Attraction to this place is measured.

2

8

?
The Gravity Model - complex version

Things that tend to increase traffic:
- larger destination
- larger origin
- family ties
- economic links
- political connections

Things that tend to decrease traffic:
- greater distance
- rugged terrain
- bad roads
- closer places to get what you want
Their Own Theories

Geography teaching is complicated by the fact that people in a place have their own theories about it, and their theories can guide how people behave there (e.g., how they build things).

Complication 1: theories can be different in different places.
Complication 2: different groups of people (e.g. children, women, immigrants) can have different theories in a place.
Questions about Land Use

Why do people in a place use land as they do?
How does their environment influence their use of land?

What are the consequences of a given land use?
Are those consequences different in different places?

How might land use change if other things change?
Do different groups of people reap the benefits or pay the costs of different kinds of land use?
Aspects of Land-Use Theory

Land use is influenced by:
- environmental conditions
- cultural values and know-how
- available infrastructure
- prior use
- political borders and policies
- population density

what else?
Spatial Imbalance

Are the features we are examining scattered throughout an area, or mostly on one side?

- Way west
- Mostly west
- Mostly east
- Run east-west, mostly south
- Way east

Association of American Geographers, 2008  www.aag.org
Mental Maps for Comparison

United States map patterns worth knowing - and why

Mountains - transportation barriers, rainfall traps
Zero water balance - just enough rainfall
4-month growing season - can grow grains, soybeans, ...
7-month growing season - can grow cotton, rice, ...
Pleistocene glaciers - soil, drainage interruption
Settlement frontier - date of settlement of places
Confederate States - economic, political legacies
Federal land ownership - land use, political attitudes

What would be on a similar list for another continent?
Geographical Issues

A geographical issue is a question about behavior in a specific place.

- Flood Zoning
- Land Reform
- Unemployment
- Wildfire
- Redlining
- Global Warming
- Gold Discovery
- Disease Control
- Illegal Immigration
Redlining

**Redlining (n):** drawing (red?) lines around areas where banks may refuse to do mortgages or home-repair loans

Redlining is an example of how opinion can influence the landscape.

**Pro:** some areas are more risky.

**Con:** a person who lives in a redlined area is not necessarily a bad credit risk.

Geographic fact: a redlined area has much less chance of recovering.
Geographical Issues

A geographical issue is the "hook" that makes it seem worth the effort to learn some facts about other places and some theories to explain them.

GEOGRAPHY TEACHER'S BELIEF

Geographically informed students are likely to be better citizens -- better equipped to make decisions or to choose people to make them.
Taxonomies of Learner Outcomes

Some textbooks describe science as a process of making observations and then formulating theories to explain what was observed.

That view has led some to suggest that learner outcomes can be put in a kind of logical hierarchy from "low-level" observation to "higher-level thinking skills" (sometimes abbreviated as HOTS).