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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

OIL  
REFINERY

EBOLA

MOSQUE

BEACH

RICE  
PADDY

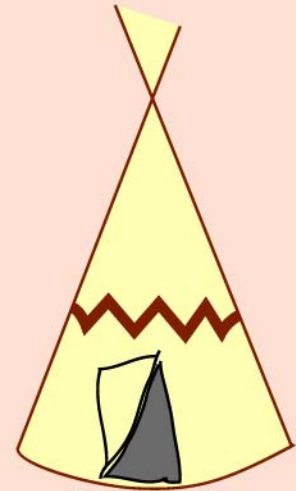
ATOLL

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

**"TREE"**

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.

**You**

**4**

Attraction to this place is measured.

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

**2**

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

**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:

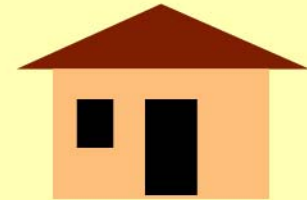
- greater distance
- rugged terrain
- bad roads
- closer places to get what you want



# 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?



# 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

# 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

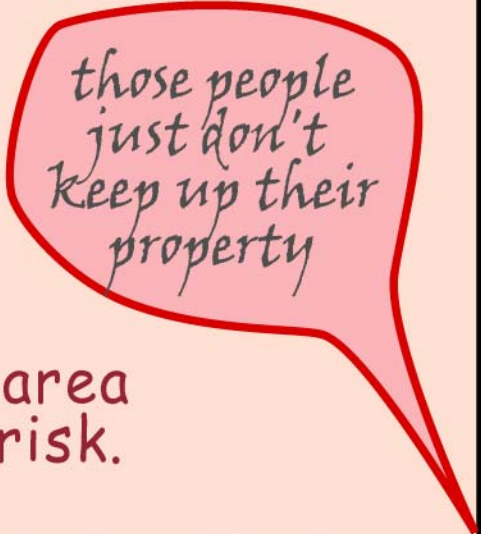
# Redlining

**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.



*those people  
just don't  
keep up their  
property*

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)