The Spatial Perspective

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Winter 2004

Overview

- The Spatial Perspective
  - Physical, Human, Regional
  - Fundamental concepts (location, place, region, diffusion...)
  - Scale
  - Models in Geography

- History of the Discipline

- Geography at UCSB

P/U/D/E Interactions

- H/E interactions

Population
  - processes (B,D,M)
  - patterns

Development
  - processes
  - patterns

Urbanization
  - processes
  - patterns

Environment
  - processes-L,H,A,B
  - patterns

Spatial Perspective – On the beach

- Beach as microcosm

- Aerial perspective
  - “eye of beholder”
  - Where are events occurring in space?

“...specifying location accurately is one of the prime rules of the geographic game.”

Spatial Perspective – On the beach

- “Eye of the beholder”

  - Physical geographer

  - Human geographer

  - Regional geographer

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Spatial Perspective – On the beach

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  - Regional geographer

Spatial Perspective – Regions

James McDonald (1966)

“For geographers seek regions as alpinists seek unconquered peaks: ‘because they are there,’ and the fact that their existence is in the correlative nature and ecological sensitivity for that geographer, rather than in a visible object of granite and ice, detracts not at all from the analogy. Both statements have deeper implications in psychology than in nature, and as the region has represented a challenge to each generation of geographers it may, in a sense, be said to be part of the soul of geography: forever sought, forever undefined.”

Morrill (1983)

“...territory (space) becomes efficiently divided into similar areas (‘cells’) as a resolution of opposing forces: of the benefits of increasing size and the costs of maintaining ‘control’ over a greater distance.”

Territorial organization is conditioned by... “the tension between an efficient structure which serves the greatest number at the least cost, and a social concern for equity of access so that none should be too badly off.”

Spatial Perspective – “Question of location”

1. Question of location
2. Question of H/E relations
3. Question of regions

Fundamental questions

• SPACE, LOCATION, and PLACE
  - ABSOLUTE versus RELATIVE location (distance, direction)
  - Rational structure of space
  - Space-time dynamics (DIFFUSION)

Spatial Perspective – “Question of location” - Space

“Of all the constraints in nature, the most far-reaching are imposed by space. For space itself has a structure that influences the shape of every existing thing. The idea that space has structure may sound strange, since we usually think of space as a king of nothingness... as the passive backdrop for the lively play of all material things. It turns out that the backdrop is not so passive. The nothingness has an architecture that makes real demands on things. Every form, every pattern, every existing thing pays a price for its existence by conforming to the structural dictates of space.” Stevens (1974) – quote from the introduction to Morrill’s (1983) article.
Spatial Perspective – “Question of location” – place

- Place
  = location + information content
  info = [human, physical]

Spatial Perspective – “Question of location” – relative L

- Relative location
  external referent
  interpersonal distances

Spatial Perspective – Place attributes are dynamic

“...to understand fully the nature and development of places geographers must view them as the present result of past result of physical and cultural processes.”
  - Fellman, Getis, and Getis (1999)

Long-term changes in the landscape are the result of two opposing forces: (1) separation as a stimulus to diversity, and (2) interaction across space that modifies diversity. Diffusion (interaction) propagates dominant characteristics over space; reinforces homogeneity.
  - paraphrase Morrill (1983)

Spatial Perspective – “Question of H/E relations”

- Environment = ‘environs’
- E → H
- H → E

Spatial Perspective – Human-Environment Systems (H/E)

- System = elements + links + boundary
- Feedback = circular loop
  - Positive feedback (growth), negative feedback (decline)

Spatial Perspective – Scale

- Spatial scale
  - Phenomenon scale
  - Measurement scale
  - Map scale

Spatial Perspective – Scale

- Geographic orders of magnitude

“...we are dealing not with the real world but with reduced and simplified models of it.”
Spatial Perspective – Models in Geography

- Iconic
  - change scales

- Analogue
  - scale and representation

- Symbolic
  - mathematical expression

“It is common knowledge that most scientist make things appear larger in order to study them. Geographers are curious folk in that they follow a reverse process. They bring reality down in size until it can be represented by a map.”