GROWTH OF GEOGRAPHIC THOUGHT

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1: Theoretical Considerations

I. Science:

A. concerned with the establishment of general laws regarding the behaviour of empirical objects or events;

B. Tries to understand the world as it is independently of ourselves (rationalist approach)

C. hypotheses are formulated and tested by observation and experiment

D. Theories and ultimately laws are constructed from these.

E. Inductive method: universal statements are derived from singular statements (eg the results of experiments) Seen as a major criterion in the demarcation between science and non-science.

i. No amount of singular statements can prove a universal case: the white swans

ii. So, what is more important is, can it be falsified, not verified

iii. Preconceived hypothesis influence the collection of facts and determine their relevance: we decide in advance. So it is not purely inductive.

F. Deductive method: singular statements are derived from Universal ones:

i. Move from theory to fact

ii. Here again, our theories derive from observation

G. Neither purely inductive nor purely deductive is possible

H. Is rationalist science possible, or even desirable?

i. All scientific "rules" are eventually superseded by new ones

ii. There are no final truths in science

iii. It is one of several competing ideologies

II. Scientific Revolutions

A. Kuhn:

i. Paradigms: "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners." (i.e. the scientific community)

ii. Normal Science: research based on past achievements, achievements which are accepted as provided a foundation for further practice

iii. Young scientists are socialized into this paradigm

iv. Does not produce major novelties, conceptual or otherwise

B. Paradigm shifts:

i. Revolutions take place when it becomes clear that the existing paradigm has ceased to function adequately

ii. These could be major (Copernicus) or minor (X-rays)

iii. Involves dissatisfied scientists doing research outside the accepted bounding young or new scholars

iv. If the new paradigm is accepted, a scientific revolution has taken place.

v. These revolutions can happen slowly or quickly.

III. Foucault: Knowledge & Power

A. Truth is linked circularly "with the systems of power that sustain it, and to effects of power which it induces, and extend it."

i. Each society has its own regime or "general politics" of "truth"

ii. These are types of discourses which society accepts as makes function as true

iii. "power is tolerable only on condition that it mask a substantial part of itself. Its success is proportional to its ability to hide its own mechanisms."

iv. Lines of force, not bars of a cage.

B. Under capitalism, truth is

i. Centered on scientific discourses and the institutions that produce it

ii. Is produced and transmitted under the dominant control of a few great political and economic apparatuses

C. Epistemes:

i. conceptual strata underpinning various fields of knowledge forming the different epochs of Western thought

ii. delimits in the totality of experience a field of knowledge

iii. defines the mode of being of the objects that appear in that field

iv. provides everyday perception with theoretical powers

v. defines the conditions in which one can sustain a discourse about things which is recognised to be true

D. Examples:

i. 16th century: everything on one plane: words and things on the same level

ii. 17th century: break between things and their representations; need to find a language for ordering the world

iii. 19th century: shift to focus on understanding function rather than appearances: SCIENCES

E. Discourses and Knowledge:

i. Discourse is a group of rules proper to discursive practice;

ii. the ordering of subjects...[the] practices that systematically form the objects of which they speak

iii. people who subscribe to a discipline (eg. Sociology, Psychology, Geography) are themselves imprisoned or "disciplined" by that discipline, i.e., they conform strictly to the tenets of that discipline.

IV. Marx:

A. The history of society is the history of class struggle

B. Social forces are rooted in control of the means of production

C. Ideology serves to hide exploitation of the working classes

D. The dominant ideas of any place/time are the ideas of the dominant class

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V. Habermas:

A. Three characteristics of critical theories:

i. they provide guides for human action by producing enlightenment in those who hold them, and are inherently emancipatory;

ii. they have cognitive content, and are forms of knowledge in themselves;

iii. they are fundamentally different from theories of natural science: they do not claim to be objective, but reflective.

B. Empirical-Analytic Science:

i. "Scientism": equating knowledge with science

ii. Positivism: Different kinds of science pass through 3 stages:

1. Theological/fictitious/mythological (supernatural beings)

2. Metaphysical: abstract forces

3. Scientific: search for laws, generalized explanations

4. So: focus on observation, "the actual";

iii. Empiricism: that which can be measured, observed

iv. So: aim to determine general laws based on observations, which themselves are guided by theories and hypotheses.

v. Habermas critique: this approach is non-self critical of its own epistemological foundations. The meaning of knowledge becomes irrational. It is aimed towards the production of technically useful knowledge, concerned with prediction and control of processes that have been objectified.

C. Historical-Hermeneutic Science: five basic propositions of Husserl

i. Experiences are the main object of philosophical enquiry;

ii. Language reflects the structure of experience;

iii. No absolute criterion of precision exist; rather, it is a function of both subject matter and context

iv. We do not necessarily have to define a term precisely before we start analyzing both it and the corresponding experience;

v. Philosophy should be concerned with the search for the absolutely presuppositionless.

vi. Habermas: contrasts markedly with objective science. it's not self-reflective; does not question how and what we already know; tries to create an objective self-understanding. It's ultimately positivism in disguise, and provides no grounds for human action.

D. Critical Science:

i. Habermas turned to Freud for an action-oriented conception of self-reflection. Psychoanalysis provides a methodology based in the logic of enquiry, but opens doors that positivism closed off

1. Psychoanalysis as a means of understanding past events to resolve anxieties that lead to disturbed behaviour in the present

2. The need to understand self-deceit

a. It is driven by interest in self-knowledge

b. Illness must be understand as part of the self

c. One must go through it before one can do it

d. So: it is emancipatory

ii. Self-reflection as central methodological core for Habermas's critical science:

1. Splitting off part of one's self to attempt to understand the whole

2. Emancipation is only achieved through self-reflection

3. Emancipation => freed from adverse structural constraints of society, by understanding them

iii. Under Capitalism, knowledge is systematically distorted

iv. The role of the critical scientist is to reveal how these distortions take place, thus providing society with a means to solve these crises

E. Theory and Practice:

i. Habermas: science has divorced itself from the means of understanding its social context.

ii. Theory is no longer a process of the cultivation of the person

iii. Rebukes Marx for "scientific materialism" that is still reductionist and positivist

iv. Communication action: language communicates and reinforces social life

v. Three worlds with which people interact when they speak:

1. Objective world: sum of all objects about which it is possible to make true statements;

2. Social world: sum of all relations legitimately regulated between people,

3. Subjective world: sum of all individual experiences of the speaker

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6: The Emergence of Modern Geography

I. Starting Points:

A. Alexander von Humboldt (see last week's outline)

B. Carl Ritter:

1. continued the Teleological tradition (Natural Theology)

a. Teleology = the study of evidences of design/purpose in nature

2. Saw earth has home of humankind, Divine Plan

3. Got heavily into Geography Education

4. Holistic emphasis --> regional geography approach

5. Shows "purpose and cosmic unity"

6. Had many important students and followers

C. Jeffersonian Era:

1. Need to explore & map the continent

2. "Notes on the State of Virginia": (1780-1) patriotic geography

a. Need to overcome European prejudice about the deficiencies of the American physical environment, plant species, etc.

3. Many similar such state-based works by other authors followed

4. Jedediah Morse:

a. compiled this information into one volume, 1789

b. issued subsequent editions

c. "Father of American Geography"

5. Lewis & Clark expedition

a. Government-funded => knowledge is property of the people

b. Hence a democratization of knowledge

c. Generated economic and imaginative interest in the West

D. British Royal Geographical Society (RGS), 1830

1. “Dining club for travelers

2. secured Royal patronage, presented various medals.

3. Darwin, Huxley, Wallace, etc among the members

4. Expeditionary thrust: fill in the empty spots on the globe

a. Arctic

b. Africa

c. Australian Outback

5. Published works of many sorts resulted

E. Important Developments of this time:

1. Geography Theory remained largely Teleological

a. “light and darkness,” seen on multiple levels

2. Those involved in practice (eg RGS) remained more practical, if not imperial

F. Important Terms:

1. Organic analogy: region and its contents is like a living being

2. Superorganicism: that this whole really is an entity with a “life” of its own

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II. Darwin’s Impact:

A. Considered the distribution of species

B. This led to theory of Natural Selection and speciation

1. A challenge to the Teleological view

C. Social Darwinism:

1. Applied natural selection to social and political theory

2. Had been previously outlined by Herbert Spencer, 1851

3. Developmentalist accounts of society

4. Rationalised nationalistic aggression, eugenics, imperialism

D. Neo-Lamarckian scheme:

1. inheritance of acquired characteristics

a. this means adaptive modifications could be passed along

b. Evolutionary tempo thus can be accelerated

2. Organic variation attributed to environment and will in concert

a. Not capricious variation

3. Ideas widely adopted, even within Social Darwinism

4. Environment comes to be seen as driving force in social processes

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III. Institutionalization

A. Halford Mackinder (Britain), an RGS member, 1880s

1. Geography needed a coherent methodology to gain status as a discipline

2. Should bridge gap between natural sciences and study of humanity

3. Held a social-evolutionary approach:

a. societies in struggle for existence within their environments

b. Man, not Nature, is the initiator, BUT

c. “nature in large measure controls….”

4. Saw Geography also as serving the Empire

5. Hypothesized the importance of controlling the “Heartland”

a. Agrarian Eastern Europe, impervious to sea attach

b. Whoever controlled this, controlled the world-island, thus the world

c. So major geopolitical thrust, within context of social evolution

B. Friedrich Ratzel (Germany), 1870s->

1. Germany as a rising imperial power, colonies in Africa and South Pacific

a. Geography became compulsory Secondary-school subject,

b. hence it became a University topic as well

2. Ratzel tries to define Human Geography

a. He was also trained in natural sciences

b. Swept up in the "Darwinism" sweeping Germany

c. Also inclined towards anthropology

d. Added a focus on migration, diffusion, isolation (Wagner)

3. Poltical Geography: States want to achieve Grossraum (large space)

a the size of a state grows with its degree of civilization

b. the lower their condition, the smaller their state

c. Hence the need for Europeans to expand overseas

d. But: felt the Grossraum expansion would include racial mixing

C. William Morris Davis (United States), 1900

1. Applied Darwinian notions to Physical Geography

a. The erosional cycle as "evolutionary"

b. But life-cycle changes interested him more than long-term evolution

c. Fascination among some circles with ontogeny, egg development

2. This codification of evolution as a new conceptual foundation for Geography

3. Important to note Lamarckian inclusion of "habits"

a. the best approach for holding together the Natural and Social worlds

D. Naturalization of Language:

1. Evolutionary theory did not immediately extract God from the equation

a. Does not deny a “creating and presiding mind” (Saml. Haughton, 1876)

b. Evolution as confirming strictest doctrine of Predestination

2. But these falling by the wayside of movement to strictly scientific approach

3. “Faith in Science” as foundation for a discipline

a. From noumenal to phenomenal, other-worldly to this-worldly