

Geographical Theory: A Review

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Abstract - The emergence of geographical theory was an inevitable product of the desire to systematize existing geographic knowledge and to use that systematized base to explore new areas of knowledge. Although the usefulness of theory and predictive models in geography is by now a matter of record, it was not always the case. The usefulness and need for theories was often disputed, despite the oft-repeated argument that theories of location explained the laws of spatial distributions, theories of interaction explain the laws of movement and spatial behaviour, theories of growth and development explain the nature of past, present, and future states of being, and theories of decision-making and choice explain observable regularities and repeatable trends in individual, group, institutional and governmental behaviours. Hudson (1969) argued that a theory represents a direct attempt to provide a logical system or nesting place for previously noted regularities – in his case concerning changes in rural settlement patterns.

Keywords: Decision-Making, Institutional, Interaction, Geographical Theory etc.

I. INTRODUCTION

Because geography is a science of multiple approaches, being at the crossroad of various sciences, it takes methods from many other associated fields. For the one side, it is located amongst the earth or natural sciences, from geology to meteorology and biology, and on the other side, amongst the social sciences, from history to economy and sociology. It is for this reason that geographers are continuously discussing about the objectives, methods and unity of geography. However, the unity cannot be methodological because it uses the methods of natural and social sciences. This variability of orientations makes it a science very sensible to conjectural issues in relation to the need of global knowledge inherent to social worries

II. THE BASIC SCIENTIFIC PRINCIPLES

As in all natural sciences, research in physical geography follows the principles of rational science, that is, considers science as an ordered, logical activity, with judgments based on reasons, and has developed and progressed from the classical approach to the modern critical rationalism. Classical, or empirical, science, issues from Francis Bacon in the sixteenth century, for whom the scientific knowledge is certain because it is based on observation, experience, and measurement. The experience provided by observation and experimentation is what distinguishes science from other sources of knowledge. The classical tradition asserts that knowledge grows by the patient accumulation of well-

attested facts, on data perceived by the senses. A key element is the concept of induction, the process by which reliable generalizations are obtained from a set of observations of reality. Induction generalizations are made once all the facts on a matter have been assembled. An example of the methods of classical science is the work by Charles Darwin. In the twentieth century, the logical positivist accepted the view of the classical tradition but sought to give a more rigorous justification of this approach by trying to solve three problems: verification, induction and theory-dependent observation. Verification, that is the gap between the reality that is experienced and the interpretation of it by the observer or scientist, who can never be certain that his senses are trustworthy and unprejudiced. Induction or the fact that there is no principle that can justify the truth of a conclusion derived from a set of statements about a particular event, the justification of a universal statement on the basis of a set of particulars. The dependence of observation on theory, because theoretical terms always enter into observational reports the critical rationalist view of Karl Popper is an important alternative to the classical tradition. He argues that scientific method is essentially deductive in character, and that it is the ability to falsify scientific statements, rather than to verify them, which distinguishes scientific statements from all others. The term critical comes from the fact that scientific method is essentially critical in character. The term rationalism is used because such critical investigation is supposed to provide good, rational reasons for holding some theories rather than others. The main principles are those of falsification, criticism and demarcation. The first principle indicates that universal statements and theories can only be refuted and not verified. In the second place, because all scientific knowledge is speculative and it grows by a process of trial and error rather than by accumulation of facts, the only rational attitude to adopt towards it is a critical one. Finally, the principle of demarcation asserts that the essential characteristic of scientific statements is that they are empirically testable and capable of refutation.

III. THE MAIN CONCEPTIONS IN HUMAN GEOGRAPHY

Johnston, in his book on human geography, identifies three types of approaches in this field: empirical, hermeneutic and critical. In the empirical (or analytic), knowledge comes from direct experience and empiricist work is the recording of information within an agreed and approved conceptual framework. For geographers in the decades prior to 1945, this involved the collection and recording of material within a framework, which identified the physical environment as the major determinant of the pattern of human activity on

the earth's surface. In a particular form of empirical science, generally known as positivism, the goal is not only to describe but also to explain. Presenting individual occurrences as examples from which general laws are issued, thereby providing a predictive device of future occurrences. While successful positivist physical science is used to manipulate and control the environment through the application of known physical laws, successful positive social science can be used to manipulate and control society through the application of known social laws. The hermeneutic approach denies the existence of a separate empirical world outside the individual researcher. No observation and description can be neutral, because it involves interpretation of the world as it is perceived through a system of meanings, which are human constructs developed by individuals through a continuous process of socialization in contact with others. These characteristics influence how we act. In addition, our interpretation of what they mean guide our thinking and acting. Therefore, general laws of human behavior are impossible, because humans, with their powers of memory and reason, cannot be treated as equivalent to machines that always respond in the same way to an identical stimulus. Hermeneutic science does not offer explanations, but rather understandings. Its goal is to appreciate what people believe, how those beliefs develop within societies, and how they are drawn upon as the bases for actions. The critical approach does accept neither the determinism of the positivist nor the voluntarism of the hermeneutic. According to critical sciences, people live within societies that are complex organizations created to ensure both individual, day-to-day and collective, inter-generation survival. Those organizations involve rules that must be operated if the society is to continue. People are free to interpret a society's rules in a variety of ways, as long as they do not transgress its boundaries between the acceptable and the unacceptable. In the critical approach, therefore, it is necessary to appreciate the basic rules by which a society operates in order to achieve a fundamental understanding. Its goal is to ensure that people understand the rules by which a society operates. Once people understand the rules, and then they understand the fundamentals of the society - in technical terms, they are emancipated.

IV. CONCLUSION

The theory of geographical dimensions consists of a number of structural laws. It is a matter of objective, necessary, general and consequently essential connections between geographical objects and geographical dimensions. They refer to object classes with the same structure and are explicit independent of time. The geographical dimensions refer to the geographic space. Accordingly, they are valid not only for geography but also for all sciences which operate in and with geographical space. The theory of geographical dimensions is an inseparable part of geographic and cartographic theory. The history of the sciences teaches that an empirical theory like the theory of

geographical dimensions is not necessarily right for good. It is relative truth, and will be replaced by means of relative truth of higher order in the course of time.

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