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ABSTRACT

The topic of discourse in general is examined and examples of how scientific inquiry in the field of geography is affected by discourse are provided. To develop a more complete understanding of research, the author states that it is often useful to step back and ask why researchers choose to conduct research as they do, and why they so often ride the intellectual bandwagons which roll through various disciplines. He then discusses how a portion of the answer may lie in certain thoughts stemming from Foucault's conceptualization of discourse, defined as a broad collection of principles and beliefs which serve to set the bounds of knowledge and understanding. The effects of discourse on the following three areas of geography are examined: (1) the evolution of cartography; (2) the study of human ecological adaptation; and (3) the influx of quantitative approaches to the study of geographical topics. Insights grounded in the phenomenology of Husserl, particularly the notion of regional ontologies, are proposed as important potential means of dealing with the effects of discourse. (Author/RM)

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BEWARE OF THE BANDWAGON: SOME REFLECTIONS ON THE

ROLE OF DISCOURSE IN GEOGRAPHICAL INQUIRY

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**BEWARE OF THE BANDWAGON: SOME REFLECTIONS ON THE
ROLE OF DISCOURSE IN GEOGRAPHICAL INQUIRY**

Abstract

In the world of the contemporary human sciences, it seems that the problems focused upon tend to become increasingly complex with time. To develop a more complete understanding of such challenging settings, it is often useful to step back and ask why, given the huge number of possible avenues of inquiry available, we choose to conduct research as we do — and why we so often ride the intellectual bandwagons which roll through various disciplines. A significant portion of the answer may lie in certain thoughts stemming from the sociology of knowledge, particularly in Foucault's conceptualization of "discourse". Examples from geography as wide-ranging as the evolution of cartography, the study of human ecological adaptation, and the influx of quantitative approaches to the study of geographical topics are presented to help support this basic claim. And insights grounded in the formal phenomenology of Husserl, particularly the notion of regional ontologies, are proposed as important potential means of dealing with the effects of this powerful guiding force.

Introduction

To most individuals engaged in modern academic inquiry, the idea of intellectual freedom is something held quite dear, a highly valued personal right not willingly surrendered at any price. So it comes as no pleasant surprise when research in that area of study known as the sociology of knowledge suggests that such liberty is in many ways imagined — that we possess anything but such freedom, being tightly constrained by our intellectual times in a prison defined by the questions "worth" asking and how one "acceptably" asks them. Such problems face all of scientific inquiry. But it is in the human sciences, where so little is truly understood, and where understanding can so radically change, that they are likely to provide the most shattering impact.

A personal interest in this topic arose as I struggled with questions

concerning the languages of our investigations (cf. Olsson 1980). It is useful to note immediately how Michel Foucault's notion of discourse arises again and again when we examine this subject. As originally envisioned, discourse emerges as a broad collection of idioms which serves to guide inquiry; it represents the establishment of REASON. At any one time we are immersed in some form of discourse, and as a result one seldomly even considers its existence, much less its precise form and universal effects. Discourse tends to become exposed only after carefully examining the history of various sorts of inquiry — through conscious efforts aimed at coming to an understanding, somehow, with research conducted at a different place and time.

That the discipline of geography is affected in a profound way by such a guiding force may be established by examining various areas of geographical research (a rare example is Scott 1982). We briefly conduct such an exercise, below, focusing upon three important, but temporally and topically diverse, settings of geographical study: the development of cartography over the course of the last two millennia; the development of the study of hunter-gatherer adaptation over the course of the last century; and the development of quantitative approaches to problems in human geography over the course of the last twenty-five years. The historical perspective has the advantage of helping to illuminate the often elusive form of discourse present in any given situation. But similarly, it serves to emphasize the immense challenge in determining the precise influence of the discourse affecting contemporary research. To understand present inquiry, some means of emancipation, is required, in the sense outlined by Habermas (1971), with the goal being somehow to free ourselves intellectually from our immediate surroundings — to provide a platform for critical reflection. It is in such a role that formalisms from the phenomenology of Husserl may serve some of their most valuable functions for the human sciences, a thought explored briefly in the pages below.

Some Thoughts on Discourse and the Archaeology of Bandwagons

The idea that scientific inquiry is guided somehow by forces other than those individuals actually conducting it is not a new one. Kuhn's (1962) well-known work, for one, explored related questions in a very careful manner over two decades ago. What came with research in the sociology of knowledge was an added dimension, one more removed from simply examining paradigms as such, and focusing instead upon the question of how such developments are influenced by the social and cultural settings of knowledge that they evolve within (Merton 1957; Mulkay 1979). Lying in many ways at the center of this is the notion of "discourse", a concept which ~~may~~ prove quite useful in efforts to understand our intellectual surroundings. As so often is the case with powerful, thought-provoking concepts, the notion of "discourse" is anything but easy to define in a clear and precise manner. As outlined by Foucault in both The Archaeology of Knowledge (1972) and The Order of Things (1973b), it suggests a broad collection of principles and beliefs which serve to set the bounds of knowledge and understanding. The term itself implies a sense of interaction, but there are many sides to this. On the one hand, such interaction suggests an active relationship between certain facets of a cultural system or sections of a society at large. On the other, the interaction may be more limited to that between individuals -- or even within a single individual, as in the monologue of psychiatry (Foucault 1965:xii-xiii).

Discourse tends to exist at a more elevated, more abstract level than most of us are consciously aware, comprising many of the general reasoning rules and paradigms which we all operate within. As a result, its specific form rarely is evident. The most successful endeavors in defining and describing specific

modes of discourse have occurred as the result of carefully searching through the records of previous research in different areas of inquiry; for Foucault, this has meant painstaking forays into the histories of psychiatry (1965), medicine (1973a), sexuality (1978), and the human and biological sciences in general (1973b). Many of the different ideas that arose in these various areas of research over the centuries now seem very strange and confusing to modern eyes. But it is important to recognize that they were all in a very real sense systematic products of the modes of discourse that they evolved within — just as contemporary research is today. Seen in such a light, discourse becomes a key to understanding the world around us; indeed, it seems as if we are bound by the sheer lack of any other choice to wrestle with this concept if we hope to come to grips with any sort of research endeavor, even those that we ourselves conduct.

Foucault refers to the sort of research which he engages in as "archaeological", drawing upon the physical analogue of prehistorians excavating to uncover the remains of the past. The difference is that for Foucault the goal is to discover, or perhaps expose, the set of guidelines that led to the emergence of a particular form of discourse, and in the process to come to grips with what is permissible within it. He focuses upon three general rules involved in the formulation of this guiding force (cf. Foucault 1972:41-42). The first is the surfaces of emergence, a rule which examines those aspects of society or culture where a form of discourse first appears. The second concerns the authorities of delimitation, a rule which looks toward the socially recognized body involved in establishing and judging an area of discourse, and which may refer to such vastly different subjects as the law or the church, and in more recent times various well-defined philosophical and scientific schools of thought. Finally, Foucault focuses upon the grids of specification, a rule which helps to establish the system by which individuals

may examine, classify, and communicate about subjects within a certain mode of discourse. Taken together these help to generate some form of discourse, and thus develop the set guidelines, fixed expectations, and general limits to be worked within; they generate a collection of intellectual mores, and in the process establish the boundaries of reason seldom crossed.

This collection of basic thoughts points toward one fundamental and extremely important idea: discourse is not about a subject -- rather, it is the subject (Sheridan 1980). Discourse determines not only what we examine in the world around us, but also the choice of logical and methodological tools to study it with, and the definition and selection of data appropriate for any investigation. It represents compliance to a set of rules within a certain mode of reason, and ultimately determines what we see because it is what we set out to look for in the first place. Such far-reaching thoughts help us to cope, for instance, with the vast differences in various areas of research conducted over the centuries. Thus the 'madness' of the European Renaissance during the fifteenth and sixteenth centuries was very different from the 'madness' of the Age of Enlightenment. And both in turn differed from the results of psychiatric studies conducted during the age of modern positivism -- all understandably so (Foucault 1965).

Throughout the realm of discourse run vehicles of intellectual transportation which we can refer to as 'bandwagons'. Although varying in popularity, bandwagons more often than not are quite crowded, and with more potential passengers waiting to climb aboard. In a sense, bandwagons are areas of intensified focus within discourse. They can have both positive and negative effects. On the positive side, bandwagons are capable of bringing about the increasingly penetrating studies so important in all areas of inquiry. But this can be harmful as well, for in such an increased focus one runs the risk of losing track of one's overall position within scientific

inquiry proper, and it is for this major reason that we must be wary of such sources of intellectual support. The challenge arises when we recognize that making note of such dangers in an abstract manner is one thing -- and actually defining and dealing with them something quite different.

Some Geographical Cases in Point

With these compressed glimpses at the complex subject of discourse in mind, let us now briefly examine some examples of its powerful influence on geographical inquiry. As one might well imagine, the list of possible examples is a long and potentially involved one here. Out of necessity, we shall restrict ourselves to three carefully selected intellectual settings. These all relate to certain aspects of the study of human behavior and existence in space, as examined within the discipline of geography, but they are chosen to represent very different time scales and topics.

As a first example, consider the development of cartography over the past two millennia. The general topic is a carefully studied one, for the evolution of this area of geographical research has been crucial to the development of many other important phases of human history. And the contrasts are striking, as one traces the evolution of modern cartographic techniques from their beginnings during Hellenistic times with Eratosthenes and Ptolemy to the present era of satellite-based remote sensing and analytical cartography. Most traditional histories of the subject strike familiar chords time and again (e.g., Crone 1968; Bricker and Tooley 1969; Wilford 1981): cartographic development in many ways followed the development of pragmatic societal requirements such as trade and exploration, and was made possible by the tools and techniques available at any given time. Thus we see the geometries and the

need for certain means of measurement during the Hellenistic Period having generated certain sorts of cartographic advances, as the Greeks sought to understand the then known world; the development of certain navigational skills and tools with the evolving needs of Moslum traders during the eighth and ninth centuries; the vast developments in navigation and chartmaking during the period of exploration in the European Renaissance; and so on.

None of these reasons can or should be discounted in any way, for they are all important in gaining an understanding of this complex subject. But by the same token, the notion of discourse provides what seems to be a more penetrating way of examining several such developments, the seeds of which may be found in certain more traditional works on the development of cartography (e.g., Brown 1949). Many specific topics can be examined here, but let us restrict ourselves to a more extreme case, the development, or rather lack of development, of cartography during the Middle Ages in Europe (cf. Kimble 1968).

That this period in history is poorly understood is not restricted to the subject of cartography. The title "Dark Ages" has carried with it many feelings of intellectual isolation and restricted development, so much so that the many developments crucial to modern life which occurred during that period are often overlooked. The traditional view of cartography is no different, and the maps produced during this period laden with symbolism rather than realism, mythical beasts and imaginary places rather than cartographic "accuracy", provide a convincing source of support. But the story is often cast in terms of lacking in aim and focused intellectuality, with maps the product of an absence of serious purpose rather than a systematic description of the world reflecting the discourse present at the time.

And yet general works by historians like Matthew (1977) and Borkenau (1981), which deal with treatments of the Medieval European mind, paint a

picture different than one of an ignorance of the world and an absence of purpose. Medieval Europe knew and understood things, but in its own way, one based upon a mixture of religious beliefs and certain facets of barbarian tradition, of a military aristocracy built ultimately upon a simple agrarian society whose concern was one of survival within a very limited portion of the world. It was a time of personal introspection and paranoia, and of limited external search, where the Church was in many ways the only unifying force. These principles helped to generate Medieval European culture. The cartography of the day was not unsystematic, but reflected the constant and pervasive emergence of such discourse. Looking back, it is easy to be critical of early cartographic techniques and abilities; but the important thing to note is that things were different because the fundamental idioms which guided understanding were different, and this is what helped to produce the maps and history of the Middle Ages. The contrast provided by cartographic developments of the ensuing European Renaissance similarly reflected a shift in the mode of prevalent discourse. Once again, the needs of explorers and traders, and the advent of both navigational advances and chart publication abilities should not be underestimated in terms of their importance. But a focus upon the forces underlying these developments, upon the emergence of a society destined to push beyond the bounds of familiar physical and religious experience to incorporate portions of past discourse with that of the present, may provide an increased appreciation of such dramatic shifts.

As a second example of the effects of discourse in geographical research, but with a more restricted time frame, let us consider the study of ecological adaptation by non-western societies as conducted by cultural geographers and anthropologists. The history of research on such groups is a fascinating one, particularly over the course of the last century, for our understanding has evolved from depicting them as simple, barbaric collections of people barely

able to squeeze out an existence (e.g., Morgan 1877) to that of sophisticated cultural systems possessing multi-faceted adaptive strategies which enable survival in even the most challenging of environmental settings (e.g., Flannery 1965, 1968; Nietschmann 1972). Once again, we could examine any number of particular instances here. But for reasons of focus, let us restrict this to the study of a particularly well-known collection of peoples, the San Bushmen of the Kalahari Desert.

The bushmen groups of the Kalahari have long been a source of fascination for westerners. Since Schapera's classic description of people in this area over fifty years ago (Schapera 1930), one main question has plagued researchers: how did these peoples manage to survive in such a sparse and hostile environmental setting? For the most part, studies beginning as early as the 1930s depict the bushmen as people living in a bleak and barren corner of the world for lack of any alternative, as more powerful groups of pastoralists claimed the richer lands for themselves. Several documentations, including those classic studies by the Marshalls (e.g., J. Marshall 1958a, 1958b; L. Marshall 1960, 1965) depicted the San as surviving, but with great difficulty and hardship, and in all the picture painted was not terribly different than the general and largely speculative work of nearly a century before.

During the early 1960s, a long-term research project was initiated out of Harvard University to focus upon these same groups (Lee 1976). The subjects of study were the same, but now new perspectives on observation and quantitative description were brought to bear on the whole question of San Bushmen adaptation. And the insights resulting were vastly different from those that had preceded. Through the collection of data aimed explicitly toward measuring the adaptive efficiency of these groups, the San came to be depicted in a completely different light. Their hunting and gathering way of

existence now seemed like an extremely efficient, and in a sense an extremely easy means of survival (cf. Lee 1968; Tanaka 1976; Yellen 1977). The bushmen were not only healthy (Truswell and Hansen 1976), but they were obtaining everything they needed in the world with very little investment of time and effort (Lee 1969).

Although certain more popular publications continue to depict the San Bushmen as struggling bands of unfortunates (e.g., Wannenburgh 1982), academic literature tends to represent such groups as examples of "the original affluent society" (Sahlins 1972). Nevertheless, the important point here is not one of debating a view of impoverished as opposed to affluent bushmen; what is important is how, with the advent of emphasis upon more formal ecological questions, and the adoption of a less ethnocentric viewpoint, we have come to understand these peoples in a totally different light. The change certainly was not in the bushmen themselves -- they have quite probably carved out a similar sort of existence in the Kalahari for at least 11,000 years (Clark 1970). Instead the shift was in the bases of our knowledge, in the particular discourse we operate within, or perhaps the particular bandwagons we ride. A decade from now we may understand bushmen adaptation in a totally different, and perhaps yet unforeseen, light. The picture will radically change, while the San themselves, barring the extreme influx of the forces of acculturation by modern society (which seems increasingly unlikely), will continue in many ways to pursue the way of life which has sustained them for centuries.

As a third and final example of the effects of discourse on areas of contemporary geographical research, let us consider the quantitative methodology bandwagon that has rolled through most of the human sciences over the last two or three decades. Our focus now has shifted toward a broad area of methodology and relatively short period of time. But the topic can nevertheless be depicted within the broad perspective of discourse, both in terms

of the introduction of quantitative analysis to human sciences like geography, and its maintenance in present form. It is interesting to note, for instance, the appearance of similar developments in other areas of the human and behavioral sciences, like sociology and anthropology, at about the same time. Although the role of interaction between disciplines cannot be discounted, neither can the influence of an increasingly technological and science-oriented modern world exploring such new intellectual and technical frontiers as computers, nuclear power, and the possibility of travel in space. Tools were adopted from the natural sciences to increase rigor and produce more objectively precise analyses: hypotheses were tested statistically to establish acceptance or rejection; systems were examined to determine objectively optimal solutions; mathematical models were based upon functions, where a shift in a value determined a specific shift in the outcome. The result has been heralded a 'revolution' by some -- but conceptual or merely technical (Gould 1975), and how have various facets of the discourse underlying such developments been carried through?

Consider some points of interest here. As with other areas of concentrated discourse, the nature of this quantitative bandwagon has caused many to either lose sight of, or close their eyes to, several of the more general questions of inquiry around them. One of the most regrettable results is that those devoted to quantitative techniques often look condescendingly upon investigations which do not employ computers and numerical analyses. On the more ironic side of things, researchers interested in the currently popular host of mathematical approaches to the human sciences have largely avoided alternative mathematical methodologies -- methodologies which often seem more applicable, and more operationally valid, than many of the now traditional views. Two examples, based upon personal more than documented sources, might be mentioned here. The first lies in the area of distribution-free statistics,

approaches which boast of robustness while at the same time removing many of the often difficult-to-meet underlying assumptions associated with traditional statistical approaches (e.g., Edgington 1980; Costanzo 1983). And yet, researchers in the human and behavioral sciences pay little heed to these alternatives, or perhaps reject them, in favor of more familiar, constraining parametric approaches. The second case in point involves recently introduced developments in combinatorics and algebraic topology. Here I am referring in particular to Gould's attempt to familiarize geographers with a methodology known as O-analysis (cf. Gould 1980). Although his arguments in support of this general approach seem quite sound, even on fundamental mathematical grounds, the list of adopters is a very short and restricted one. Of course the changes may come and the list of adopters may grow. But how long will it take -- at what price are these bandwagons ridden?

Phenomenology and Regional Ontologies: A Means of Emancipation?

Our above examination of the topic of discourse in general, and its role in geographical inquiry in particular, leads to two crucial thoughts. First and foremost is the notion that discourse is a concept much too important to be neglected or avoided; put another way, in order to gain an increased understanding of the world around us, we must strive to understand why we examine it as we do, and the notion of discourse is quite critical to this understanding. Secondly, as important as the notion of discourse is, it is also an extremely difficult concept to define and describe in contemporary research settings. This difficulty stems from a need to define a current mode of discourse while actually living and working within it. Some means of emancipation seems to be called for (cf. Habermas 1971; also Gould 1982), to

provide an intellectual setting for critical reflection beyond the bounds of discourse. The means to this end are not clear, but the crucial philosophical tools may well lie in the more formal foundations of phenomenology (Husserl 1962, 1970).

It is regrettable that the philosophical perspective of phenomenology is at the same time one of the most potentially useful and one of the most misunderstood of those to gain favor in the discipline of geography. Many immediately associate it with the "humanist" research currently popular in the discipline (e.g., Relph 1970; Seamon 1980), but it is well worth noting the original aims of this philosophical position (Pickles 1982). If we appeal to its development under Husserl, then we find a central goal of providing a means around the suppositions and reductions of positivist inquiry in general. With an aim to build a solid basis for philosophy as a rigorous science (Husserl 1965), this embodied a move back to the study of the "things", or phenomena, themselves. In the present context this is a valuable target, for it links closely with research on the same topic taking vastly different forms.

The phenomenology of Husserl sought to leave nothing unsolved; instead, it wanted to attain an absolute knowledge of things (Husserl 1965), a goal accomplished by probing beneath the levels of higher order presuppositions to that of the primary presuppositions. This call of searching for the roots of underlying phenomena can be extended, for in so doing for any given science or discipline we help to define its regional ontology (Landgrebe 1981). The path to this is a constantly searching and self-critical one. Certain formalities may be found in outlines for eidetic and phenomenological reduction (Kockelmans 1967), but operationalization is a complex and challenging endeavor -- one which cannot be explored within the bounds of this essay.

The results of such reductions are very important for empirical science in general, and for the topics examined in this essay in particular. The

definition of a regional ontology, of the presuppositionless foundation of basic meanings which underlies an area of scientific inquiry, enables one to compensate for the influence of discourse — or perhaps better, provides a base from which a discipline can be examined. This is what is needed, this is what we must strive for if we hope to come to grips with the many different guises which empirical research, through discourse, can take. In the phenomenology of Husserl lies seemingly one of the few means of freedom from the forces which forever guide our inquiry, a context-free product which enables the critical evaluation of empirical research.

Concluding Thoughts

So much of what we do under the auspices of academic research is affected profoundly by the power of discourse. The ideas developed decades ago seem totally foreign to us today, and so often it is difficult to understand how they could ever have come about. Occasionally we refer to them as products of their time without realizing how potentially insightful such a statement really is. Different areas of research really do reflect the nature of the discourse that surrounds them.

There are two important goals one might embrace where the notions of discourse and bandwagons are concerned. The first is more clearly within reach. We must in a very real sense view our own work, and the work of others, no matter where or when conducted, as in a large way reflecting the discourse present at a particular time. In one sense this helps us to understand more fully the work of others. In another it helps us to conduct our own research, perhaps with an eye toward the bounds of current discourse and being willing to stretch our own work to the limits of this — in the hope of providing useful

insights impossible within the strict limets of the status quo. Extremely valuable discoveries over the centuries have been made by doing just this.

The second of these two goals presents a greater challenge. In order to understand contemporary research, and the subjects of such research, one must strive to come to grips with the discourse that guides it. To view inquiries from a different time frame, and effectively look from one mode of discourse into another, is one means of achieving a sort of freedom; it is the approach employed so well by Foucault himself. But this is little help to those of us interested in conducting and evaluating current research within the realm of the present mode of discourse. It is here that the principles of phenomenology may provide a means to emancipation, as we aim to sweep away presuppositions and explore the things themselves — and similarly the regional ontologies which various disciplines, like geography, are defined within.

Understanding the complexities of the world around us presents an immense challenge. But until the emergence of concerns with language and discourse, I wonder if anyone really appreciated how difficult a task such inquiry really is? How we conduct any piece of research is extremely important. But to approach the factors underlying this, we must avoid the clouding of our present mode of discourse, and move toward the phenomena studied. It is along this winding intellectual path that emancipation may ultimately lie — along with increased understanding which we all seek.

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