Aubre Lawless
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The Pursuit of Truth in the Social Sciences

In the standard catalogue of the social sciences, no two disciplines seem to be more closely related than sociology and anthropology. Both examine the structure and function of human societies--the way individuals construct their social realities and the way they are simultaneously shaped by structures beyond their control. Both disciplines consider the way humans interact with one another and the way they conceive of their own place in the world. Both look for the underlying causes of the things human beings take utterly for granted, and both reflect upon the similarities and differences in human social structures across space, time and countless other boundaries. Yet at the same time, no two disciplines have more fundamentally opposite views on the nature of truth and human knowledge--on the very nature of social reality itself.

I will show that that sociology and anthropology were shaped by the prevailing modes of academic thought at the time of their inception--specifically, that sociology is a hybrid of rationalism and induction, whereas anthropology combines induction and art. Moreover, the two disciplines have different methodologies which focus on different aspects of social truth; however, the goal of each is fundamentally the same--to provide an accurate depiction of social reality.

Before I begin, I would like to add a few words of caution. This paper refers largely to stereotypes (ironically, one of the most fundamental taboos of social theorizing). In many cases, the views set forth here were held most firmly during the growth and establishment of the sociological and anthropological disciplines as unique

fields of study--that is, from the mid-1800's in the case of sociology and the early 1900's in the case of anthropology. Since approximately the 1970's, the boundaries between the two fields have begun to blur. Most of the latter generation of social scientists recognize the need for the merging of concepts and methodologies from both fields in order to achieve a more complete picture of social reality. However, the debate is still raging--bitterly, in some cases--and in practice it is difficult not to fall on one side of the line or the other. Also, in my discussion of research methodologies, I generally assume that sociological research is largely quantitative, while anthropological research is mostly qualitative. However, a great deal of overlap exists between these methodologies in reality.

Sociology began its development as a discipline in the 1800's, at what might be called the tail end of the Age of Reason. Most of its founding fathers, including the famous triad of Karl Marx, Max Weber and Emile Durkheim, were inheritors of the Hegelian system of rationality and teleological reasoning. They believed everything could be explained scientifically, if one could accurately pinpoint its origins and its current trends. Later sociologists such as C. Wright Mills and Talcott Parsons in the mid-20th century took the rational scientific doctrine to the extreme, reducing complex social constructions to simple causal diagrams with clearly delineated contributing factors and results.

At the end of this era of "the last grand theories," the sociological discipline fragmented into a myriad of subdiciplines which have continued to grow ever more specific. Today, sociology is closely integrated with many other disciplines, ranging from psychology to economics to environmental science to politics. Rather than

developing broad theories of social organization as it did in the past, its aim is largely to find concrete solutions to social problems, from the relatively large (e.g., wealth distribution, human rights, etc.) to the very small (e.g., an evaluation of a specific social program in a single location). In view of this goal, sociologists have moved increasingly toward the highly scientific, experimental method of gaining knowledge.

The reasons for this trend are complex. On a purely practical level, a well-documented scientific approach is the best way to gain access to the tightly controlled government funds on which much social research now depends. For another thing, the focus on rationality which has been a tradition since the times of sociology's inception has grown increasingly rigorous over time, perhaps in order to set it apart from related disciplines such as anthropology. Finally, sociologists like to make claims that they have discovered the true nature of things and to explicate the relevant causes and effects. This is an approach to truth and knowledge that currently seems to be unique to the physical sciences (and to some extent psychology). Some sociologists are zealous advocates of the claim that sociology *is* a science, both methodologically and in its explanatory function, and thus has just as much claim to the field of truth as the so-called "hard" sciences. In some cases, I believe sociologists take their scientific methodology a little too far simply in order to be accepted as a valid science.

Anthropology, on the other hand, has its roots in a distinctly different tradition. Although anthropology really began as an exercise in curio-collecting by 19th century European colonialists, classic anthropologists Franz Boas and Bronislaw Malinowski soon established a holistic view of culture as the central dogma of the discipline. In this way, anthropology differs radically from most other sciences (with the possible exception

of ecology, a discipline that studies the behavior of biological organisms in their natural and complex environment). Whereas sociologists attempt to isolate factors from their environments in order to experimentally analyze their characteristics and relationships, anthropologists believe that no culture or social institution can be understood outside of its complete and natural setting. This means that practicing anthropologists usually visit and/or participate in the groups they are studying, while attempting to disturb their normal functions as little as possible. The anthropological philosophy strictly precludes the use of experiments as a way of gathering data, because an experiment is by definition removed from natural settings.

In the heyday of anthropological exploration in the early- to mid-1900's, anthropologists such as Margaret Mead established the principle that anthropology would be more than just a science; it would be an art as well. The tales of their adventures and experiences were presented in books, photographs, artifacts--whatever would add richness and depth to the story the returning researcher had to tell about the things (s)he had seen, heard and done. In this way, it differs greatly from the cut and dry, statistical nature of published sociological studies.

Although sociology and anthropology have very different methodologies and often different aims, they have similar criteria for what counts as "truth." The idea of truth in the social sciences rests on three central tenets: generalizability, reliability and validity (Wolcott, 1995). Researchers place different emphases of each of the criteria, in part because some methodologies are better suited to one or the other, but generally all three are seen as desirable in both disciplines.

Briefly, generalizability is the extent to which the results of a given study can be generalized to the larger population. For sociologists, generalizability is determined by sample size and research design--if you have a large enough and random enough sample, the results should theoretically apply to the larger population from which the sample was drawn. Since a sociologist's ultimate goal is to explain social events and human behaviors (that is, to reveal a recurring pattern that represents social truth), generalizability is essential, because something is not an explanation if it only occurs in one specific instance. For anthropologists, on the other hand, generalizability is impossible (and largely undesirable) to achieve. Each culture or subculture is considered unique; the whole goal of the research is to highlight and attempt to explain these differences between groups. Researchers do sometimes draw parallels between similar aspects of different groups to generate broader theories of human behavior, but cultures and societies remains the true unit of analysis in anthropology, and these cannot be generalized.

Reliability is the extent to which the data collected means what the researcher thinks it means. In sociology, this can often be determined by asking several similar questions in a survey and checking statistically to make sure people give similar answers to these questions. In this view, the stronger the statistical significance of a certain measurement tool of a certain result, the more likely it is to be "true." In anthropology, the process is more obscure--the researcher must consider and investigate potential sources of bias both in her own perception, and in the things she is told by the people she is studying. She can only speculate on whether or not her data are factual and her

interpretations match those of the research participants--that is, whether she has truly captured the "insider's point of view."

The related concept of validity considers the extent to which the research has captured the reality of the situation--not just whether the data is accurate, but whether it is complete and effective in answering the research question. Sociology has notoriously low validity, because no matter how many factors are accounted for in the experiment or survey design, there are always hidden factors that simply cannot be measured. This does not mean that the study is worthless--many explanatory factors for a given problem or outcome may be identified and can be targeted by subsequent research and policy development. However, a simple survey undoubtedly fails to capture the complex reality of any given individual's situation. Anthropology, on the other hand, is a science designed around the concept of validity. Through a two-hour interview or two months of participant observation, a researcher can get a fairly good idea of all the factors and complexities that shape an individual's social experience.

Immanuel Wallerstein is the founder of a recently developed (c. 1970's) discipline he calls "world systems analysis" which incorporates most of the existing social sciences in an attempt to analyze social change on a global scale. Wallerstein divides the social sciences into two camps: the "nomothetic," which includes economics, sociology and political science, and the "idiographic," which includes history and anthropology. The former are those who "believed that the object of research was the discerning of general laws on human behavior, true of all time and space," whereas the latter are those who see their task as "ascertaining empirical reality, which was always particular, indeed

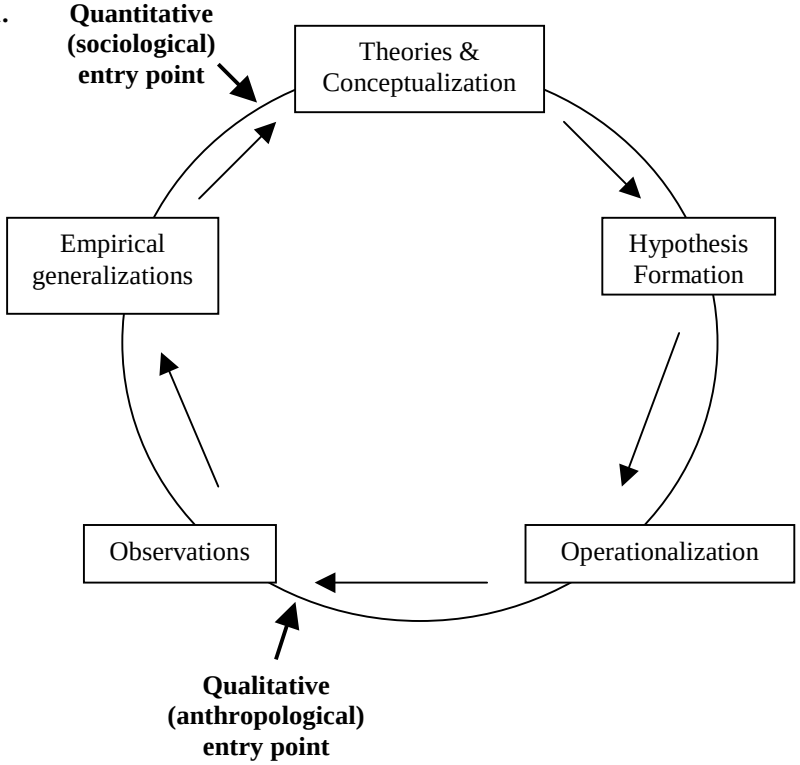
idiosyncratic" (Wallerstein, 2000). He sees the two as opposite poles or "temptations," between which a savvy world-systems analyst like himself must steer a middle course.

The interesting thing to note about these definitions is that both sides claim to hold the methodological keys to truth. In the physical sciences, the terms "general laws" and "empirical reality" would be inseparable, if not interchangeable. Yet in the social sciences, they are seen as conflicting views of reality. The two most extreme views held by advocates on one side or the other are that either 1) the empirical reality of human society is not subject to any general laws (anthropology), or 2) general laws, if they could be made to account for all the relevant factors, could completely explain all of empirical reality (sociology). Of course, I don't believe any anthropologist or sociologist would completely concur with either of these views. Perhaps the trouble is the strong terminology; in place of "general laws," sociologists prefer the term "statistically significant trends," and in place of "empirical reality," an anthropologist would discuss the "emic [insider] perspective."

Trends and perspectives…these terms make social science *social*. Conclusions are presented with caution and moderation, acknowledging the fact that human behavior is largely unpredictable and unquantifiable. And yet, social science still maintains its claim to be a *science*--that is, to describe or explain something about the real world in which we live and the reasons behind the way we behave. I believe that anthropology and sociology share the principle of induction or empirical reasoning. However, they modify this basic principle in different ways based on their epistemological backgrounds and methodological processes, as described below.

In the standard circle model of research (Porter; see Figure 1), sociology (i.e., quantitative research) begins with a pre-established theory--either one that has already been generally accepted or one that is generated by the researcher through prior study. The researcher uses the theory to generate a specific hypothesis, which (s)he then confirms or rejects based on empirical observations. Eventually, sociologists accumulate a large enough body of research to be able to accept, reject or modify the original theory. In anthropology, (i.e., qualitative research), the researcher begins by making comprehensive and theoretically unbiased observations, which are then interpreted to make generalizations and generate an original theory about the culture or subculture in question. Ideally, this theory is then checked against more data.

Figure 1.



Thus, if inductive reasoning is defined as the development of theories based on observation alone, then anthropology seems to come closer to this goal than sociology or

other experimental sciences. Becker defends his discipline by claiming "…ethnography's epistemology, in its insistence on investigating the viewpoint of those studied, is indeed like that of other social sciences, just more rigorous and complete" (1996). This may be due to its very late inception in the history of academic disciplines, when logic and research methodology had already been clearly codified. However, its efficacy may be limited in reality. For one, empirical observations can never be completely unbiased, particularly when they are filtered through the perceptual lens of a human individual raised in one culture experiencing another culture for the first time. Some assumptions and hypotheses undoubtedly come into play. For another, in many cases anthropologists are not able to complete the cycle and check their new theory against more observations because they have to leave the research site due to practical constraints.

However, qualitative researcher often point out that their discipline involves more than just collecting and presenting facts: it also involves a degree of, for lack of a better term, art. The observations are compiled into a final ethnography which attempts to tell a story or paint a picture that accurately captures the reality of the society being studied. Thus anthropology is an intriguing mix of induction and art.

Sociology as an inductive science seems to have a somewhat stronger foundation than does anthropology. It openly claims to adhere to the true scientific method of experimental observation, and indeed, it is strongly rooted in the "positivist" tradition and is obsessed with objectivity, as opposed to the "interpretivist" and subjective basis of anthropology (Glesne and Peshkin, 1992). However, "empirical" observations and experiments on humans are inherently limited and largely uncontrolled; thus, the theories are necessarily limited in their explanatory power as well. However, sociology also

developed at a period in history where rationalism was still highly touted, and I believe the sociological method is a unique hybrid composed of rationalization and induction.

Rationalization, in the Cartesian sense, is conducted in isolation from all empirical realities. It begins with a finite number of assumptions or axioms and logically works out their consequences into a complex philosophic system. This method works well for philosophy and pure mathematics, which are inherently theoretical and removed from external realities. Many of the early sociologists attempted a similar explanation of social structures, working from basic assumptions about human nature and expanding these to describe the way societies "had to" operate. In fact, one author illustrates the way Thomas Hobbes used rationalism to develop a logical system of political science (Grant, 1990). Sociology began to emerge at the tail end of this rationalizing movement and originally employed this highly intellectual approach to theory development.

Induction, on the other hand, is a method securely rooted in external, observable phenomena, and is best suited to the physical and biological sciences. Anthropology developed at a period in history where this approach to the world was lauded by academics in a variety of exciting new scientific disciplines as being superior to all others.

Sociology, as a discipline in the modern sense, arose at a time when the Cartesian rationalization of the Age of Reason was transitioning into a preference for the inductive sciences with the Scientific Revolution. Thus, it synthesizes these two methods and applies them to the study of a subject (i.e., human society) which is not empirically quantifiable, yet still clearly exists in the realm of empirical reality.

In conclusion, the social sciences are in the unique position of pursuing a truth that is at once tangible and inexplicable. They bridge the divide between the physical sciences and the philosophical realm. Society does exist, and its mechanisms have a profound impact on the way its members behave and conceive of their experiences; however, the distinct factors shaping social and structural interactions are not easily isolated or calculated.

Sociologists attempt to solve this problem through a system that proposes hypotheses (rationalization) and tests them using quantifiable measurement (induction). Although it is impossible to capture the full complexity of the issue, it is possible to highlight some of the important factors and trends, and make cautious predictions based on these observations. Generalizability and reliability are important concepts with very practical applications: researchers cannot measure everything, but the factors they do focus on should be measured accurately, and their results should have some applicability to the larger society.

Anthropologists approach the same problem a different way: they attempt to understand in detail all the facets of a culture or subculture and the ways these factors interact by observing *all* behaviors (induction) and then proposing theories to fit their observation (art). Qualitative methodologies enable them to describe with some depth the perspectives, beliefs and behaviors of their research subjects. Validity is emphasized—that is, having an accurate understanding of what is truly going on in a given situation. Although this type of research allows a thorough understanding of a given context, it has little applicability outside that specific site.

Both systems are products of the intellectual environment in which the discipline developed, and both capture different but equally important aspects of the complex reality of human societies. Modern researchers and theorists appreciate the complementary strengths of both methodologies--the value of both "numbers and words" (Glesne and Peshkin, 1992). As one writer puts it, "Practitioners of qualitative and quantitative methods may seem to have different philosophies of science, but they really just work in different situations and ask different questions" (Becker, 1996). After all, the true goal of any social research is simply the pursuit of truth in all its forms.

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