

Sociology: From Science to Pseudoscience?

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Abstract: *Sociology was proposed by its founder Auguste Comte to be a science, following in the line and logic of the other sciences in the nineteenth century. Based on his dictates, the early sociologists like Herbert Spencer and Emile Durkheim sought to perfect a methodology suitable for a science of society. But over the years, and particularly as sociology crossed the ocean and began its career in the USA, much of the objectives of being a science was lost. And today it is difficult to claim sociology as a science. This paper looks at the demarcation criteria used over the years to designate the sciences and concludes that sociology is no longer a science according to these demarcation criteria. But by posing as a science, which it is not, sociology has relegated itself to the realm of the pseudoscience.*

What would sociologists say to a student who asks for an example of a success of Comte's positivist vision? - John Angle

Let me begin by saying that "sociology is not a science", at least, not any more!

In a gathering of scientists, say the physicists, a statement like "physics is not a science" may meet with raised eyebrows shocked with disbelief or even ridicule for the speaker. But in a gathering of sociologists such statements regarding their discipline will meet with a few all-knowing smiles and nodding heads or at worst, nonchalant indulgence.

The reason for the passive acceptance of the statement is that a sizable number of sociologists do believe that sociology is not a science for, 1. it *cannot be* a science, meaning that it cannot be a science like the natural sciences, precise and churning out numbers. 2. It *should not be* a science, meaning it should not treat human subjects like the objects of nature. And 3. *must not be* a science as there is no such thing as a science, it is all a social construction by the powerful ones in the society. Whatever may be the reason, "sociologists make some of the strongest arguments *against* sociology being a science"¹.

Yet, in the US alone every year 600,000 students who take the Soc. 101² course are told that sociology is a science. And in the public mind the semblance of respect we that we think we have is because we are thought to be doing science. Whatever foolery we do in the name of that doesn't have to leave the room, but it does and we don't get much respect for that either. In a

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¹ <http://answers.yahoo.com/question/index?qid=20061208083245AAA83Ho>

² Robinson. W.C. http://web.utk.edu/~wrobinso/531 Lec_socio.html

conference of the evolutionary biologists when it was noted that “sociology is leaving behind the scientific method”, the most common response was “I never knew they used it” and this was usually followed by laughter and even scorn³. Others suggest that the status of sociology as a science is easily questionable when compared to how acknowledged scientists study the natural world.⁴

So then, if sociology is not a science, is it 1. a *proto-science*, that is a “science in intention”, but yet to become one, like the string theory? Or 2. a *pseudoscience*, that is a “science in pretension”, making big claims but is not, like astrology? Or 3. is it a *non-science*, there is no pretension or intention to be a science, like the arts and the humanities or the religions. No, strike that, religion has always had the pretension of being a science, like the Christian Science or the creation science etc.

Indeed, it was because of such claims of religion to be a science that Sir Karl Popper had to devise his distinguishing category between science and non-science. This, in philosophical terms is called “demarcation”, that is, demarcating the boundaries of each. This paper is an attempt to examine the question of whether sociology today is a science or not in the light of the expectation of the founding father of sociology and what eventually happened to that vision and how and why it has degenerated into the status of a pseudoscience.

Sociology, like it or not, began with the claim to be a science of society by its founder, Auguste Comte⁵. That claim rested on the methodology of the then sciences that he thought should be followed by sociology in its inquiry of social life. The methodology of the sciences at the time basically meant the methodology of physics, so his name for the new subject of social life was chosen as “Social Physics”. When someone else used the term “social physics”, for a compilation of social data, Comte promptly, albeit grudgingly, changed the name to “Sociology”. And thought he had solved the problem!

In fact, that was the beginning of all the problems faced by sociology as a “science” today. Had it retained its name as “social physics”, perhaps there would not have been any need to change the methodology from those of physics or “science” to anything else. But by using the term sociology he turned it into the “study” of society. As is well known that *socius* was taken from Latin and “logos” from Greek and combined into the word “sociology”. Incidentally, *socius* actually means “companion” and logos is “knowledge” so that technically speaking, sociology means knowledge

³ <http://answers.yahoo.com/question/index?qid=20061208083245AAA83Ho>

⁴ Jacob (Jake) Barrie Gordon @ www.jakeg.co.uk at <http://www.jakeg.co.uk/essays/science.htm>

⁵ *Auguste Comte and Positivism: The Essential Writings*. Edited by Gertrud Lanzer. New York: Harper Torch Books. !975. All subsequent references to Comte are made from this source as well.

about companionship (interesting!), but it came to be translated as the “study” of society. Nowhere does the name “sociology” imply a “scientific study” of society. Even the current definition of sociology provided by the American Sociological Association (ASA) calls it a “*study* of social life...” and does not even mention the word science anywhere⁶.

Now, add to this the First Amendments to the US Constitution, that is, the freedom of expression, and you end up with a “study of society” for each person created in his or her own image. To the extent that, as one critic argues, there are really 30 or 40 sociologies, with “a range of research techniques”⁷ “going off in every direction”⁸, and each of these with many sub-specialities⁹ And today, “[t]here is no social activity that does not have its official sociologist”¹⁰. In the chaos that follows, there is no unity of either the subject matter or of the methodology. Indeed, “anything goes” seems to be the tacit understanding even by the ASA definition. So where is the “science” of Comte?

The methodology that Comte wanted sociology (not just social physics) to follow was what goes by the name of the “methodology of the natural sciences” or, often called, the “real sciences”. Which means that “the knowledge must be based on observable phenomena and capable of being experimented for its validity by other researchers working under the same conditions”¹¹ that is, *the results must have the quality of being repeated*. Repeatability is a cornerstone of science. Without it, science is reduced to rumor and hearsay¹². Usually this implies that knowledge is based on “gathering observable, empirical and measurable evidence subject to specific principles of reasoning. A scientific method, thus, consists of the collection of data through observation and experimentation, and the formulation and testing of hypotheses”¹³. For Comte these meant that science (or the so called Positive science) is concerned only with observable phenomena and the establishment of law-like relations among these through the gathering of factual knowledge. This Comte thought could be done by sociology through observation, experimentation and comparison like the other sciences.

“If his sociology had really followed these methods, it would have been a strong case for sociology as a science”¹⁴. Unfortunately, Comte himself did none of that, except probably for the use of historical data, which he claimed was a special case of comparison. Unfortunately, there is

⁶ http://www.asanet.org/cs/root/topnav/sociologists/what_is_sociology

⁷ ASA. http://www.asanet.org/cs/root/topnav/sociologists/what_is_sociology

⁸ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

⁹ Islam, N. 2005. “End of sociological Theory” in *End of Sociological Theory and Other Essays on Theory and Methodology*. Dhaka: Ananya.

¹⁰ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

¹¹ Wikipedia. http://en.wikipedia.org/wiki/Main_Page

¹² Lee Moller - <http://www.ntskeptics.org/1989/1989mayjune/mayjune1989.htm#pseudoscience>

¹³ Wikipedia. http://en.wikipedia.org/wiki/Main_Page

¹⁴ <http://www.human.nagoya-u.ac.jp/~iseda/works/soc-sci.html>

very little detailed direction in his writing as to how to go about doing science. After all he was not a scientist; he only proposed what sociology should be, as a *philosopher!*

However, the whole process was supposed to follow the inductive logic, then thought to be the logic of science, and is often called “inductivism”. Accordingly, we have to collect “facts” about the real world and classify these in an objective manner and statistical relations (meaning “correlations”) among these be established. (Hence, comes in the dreaded statistics courses and drives a few reluctant ones to opt for the non-statistical excuses a.k.a. the qualitative methodologies). Once a positive correlation is found, we may take it a step further and show how one fact may be the cause of another and these be built into theories¹⁵.

An unaccountable number of objections have been raised against inductivism in general and its use in sociology in particular. The most important of these is that “facts” about the real world is not self evident, they have to be interpreted as facts rather than simply discovered to be facts. So that, we have to make a subjective judgement about these - and this, clearly, is not what doing “objective science” means¹⁶. So that if the identification of facts is dependent on subjective judgements about what constitutes "a fact", then it is clear that we have no way of judging between “bad” or “good” or even if the theory is valid¹⁷.

Sir Karl came to the rescue of science based on inductivism. Popper argued that a theory could not be tested or verified by inductive logic as the very process of producing a theory, as shown above, to explain the observed “facts”, was its own proof. But without really abandoning the positivist ways, Popper proposed to move from the inductive to the deductive way, although not completely, only hypothetically, as you need a theory before you can deduce but to have a theory you need to collect facts as in inductivism. So, you are back to square one.

In the actual process all you need to do is to have the hypothesis from what ever little observation you can make, and treat the hypothesis as the theory – hypothetically, of course – and the process has come to be known as "Hypothetico-Deductive" form of positivism or "Hypothetico-Deductivism". Here the scientist is expected to observe the world for facts and construct hypothesis about these and then observe further to check if the hypothesis holds, thus allowing for the hypothesis to be “*Falsified*” rather than simply “verified”. Falsification thus demarcates

¹⁵ <http://www.sociology.org.uk/methsci2.doc>

¹⁶ <http://www.sociology.org.uk/methsci2.doc>

¹⁷ <http://www.sociology.org.uk/methsci2.doc>

between scientific and non-scientific theories and helps account for the development of scientific theories, at least, was supposed to, for Popper¹⁸.

Unfortunately sociologists often confuse between hypothetico-deductivism and inductivism and treat them as one and the same method and end up making moral judgements about their theories. So that instead of allowing for total falsification they allow for the probability (using the dreaded statistics, of course) that a theory may be accepted or rejected according to the calculated value of the probability of acceptance and rejection, which, as we are told, varies from zero to one. So that a value close to 0 gives a bad theory while a value close to 1 is accepted as a good theory.

This is because Popperian falsification is based on taking decisions about how and when to observe and what data counts¹⁹. The problem with this is that if falsification is based on “decisions”, then “anyone can accept or falsify any theory based on which decisions they make about observation and data” so that there is “not only no confirmation, but there is no falsification either”²⁰. Also, that a statement like “he has grey hair” that can be easily falsified, is not a scientific statement. Many similar objections have made Popperian criteria unacceptable and *were largely discarded by the 1970s*.

And that practically ended sociology’s adventure into the realm of science. Not because Popper was proved wrong but because sociology had reached its limit as a scientific enterprise. It had refined its methodology, based first on the “verification” principle and then on “falsification”, considerably but very little theory or law-like propositions ever followed. In its nearly 200 years of history it cannot show any thing even close to what is expected of a science. But more importantly, the world has not waited for sociology to fulfill its obligation as a science, the demarcation criteria that followed Popper’s falsification have become far more stringent and as if “by default” relegates sociology to the status of a proto-science or non-science (even pseudoscience), and sociology has no way of rising to the occasion.

The demarcation criteria that followed Popper dealt with paradigms and research programmes and the success of a science is seen in terms of building law-like propositions or theories. For Kuhn²¹ the demarcation problem is not related to falsification at all because if falsification was the criteria, no theory would survive long enough to be of any use as all theories develop anomalies almost from the beginning or soon thereafter. For him the “value of a scientific paradigm is its

¹⁸ Newall, P. “Falsification” (2005). Manuscripts, Galilean Library. <http://www.galilean-library.org/>

¹⁹ <http://todshammer.wordpress.com/>

²⁰ <http://todshammer.wordpress.com/>

²¹ Kuhn T. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press. 1970

predictive power and its ability to suggest solutions to new problems while continuing to satisfy all of the problems solved by the paradigm that it replaces"²². A new paradigm is accepted by the scientific community for its ability to solve present and new problems²³.

For Kuhn there are two kinds of sciences the "normal" science and the "extraordinary" science. Normal science is the one with a paradigm (the lack of which in sociology caused so much uproar against Kuhn). What Kuhn argued was that disciplines like the sociology did not have a well established set of theories or a proper methodology like the natural sciences so as to be called a "normal" science. The activity of a normal science is "puzzle solving" as it already has a good theory and a set of guiding methodological principles. (This obviously infuriated sociologists for not being called "normal" scientists.) Extraordinary science is that science which falls from the state of normal science and accumulates anomalies or unanswered questions, thereby leading itself to a state of crisis and fails to act like the normal "puzzle solving" science. Sociology, for obvious reasons is not even an "extraordinary" science since it was not a normal science to begin with!

Thomas Kuhn introduced the term proto-science into the demarcation criteria while trying to place the disciplines he could not accommodate in his scheme of sciences. These, including the social sciences, were seen by him like the "arts and philosophy" unable to graduate into the realm of the mature sciences, *in spite of the fact that they do "satisfy popper's demarcation criteria"!*

Kuhn notes, and I quote in detail:

"In any case, there are many fields — I shall call them proto-sciences — in which practice does generate testable conclusions but which nevertheless resemble philosophy and the arts rather than the established sciences in their developmental patterns. I think, for example, of fields like chemistry and electricity before the mid-eighteenth century, of the study of heredity and phylogeny before the mid-nineteenth, or of many of the social sciences today. In these fields, too, though they satisfy Sir Karl's [[Popper's](#)] demarcation criterion, incessant criticism and continual striving for a fresh start are primary forces, and need to be. No more than in philosophy and the arts, however, do they result in clear-cut progress"²⁴.

Thus, sociology, even if it followed the Popperian logic or churned out numerous statistical tests, is no longer to be treated as a science. It is, as Kuhn would have it, only a proto-science. (The other varieties of sociology, qualitative and postmodernist etc., would not qualify to be demarcated as science by even the Popperian standard). More importantly, Kuhn notes that these proto-sciences are like "philosophy and the arts" resembling the pre-scientific days of chemistry or "the study of heredity and phylogeny", unlikely to be transformed into sciences. He

²² <http://www.soc.iastate.edu/sapp/falsificationism.pdf>.

²³ <http://www.soc.iastate.edu/sapp/falsificationism.pdf>.

²⁴ Kuhn T., as quoted in Wikipedia: http://en.wikipedia.org/wiki/Protoscience#cite_note-1

concludes, “in short, ... the proto-sciences, like the arts and philosophy, lack some element which, in the mature sciences, permits the more obvious forms of progress”²⁵.

That, more or less, seals the fate of sociology as a science as far as Kuhn is concerned.

However, in the latest arguments on the demarcation problem, even Kuhn’s distinction between normal science and proto-science is not enough. In this demarcation criterion Lakatos²⁶ rejects both Kuhn and Popper arguing that neither simple refutation nor building up of anomalies kills a theory. Scientists are very tenacious people and hold on to their theories and try to improve these and that the theories themselves have “a vast ‘protective belt’ of auxiliary hypotheses”²⁷. He thus talks of sciences in terms of “research programmes” with its theories, hypothesis and even anomalies. He then divides the research programmes into “progressive” and “degenerating” ones. In “a progressive research programme, theory leads to the discovery of hitherto unknown novel facts”, while in “degenerating programmes, theories are fabricated only in order to accommodate known facts”²⁸. By giving examples from Newtonian and Marxist research programmes he shows how the Newtonian one is a progressive one which predicted and discovered new and hitherto unknown planets. But, although the early predictions of Marxism were bold and stunning, they failed. Marxism ‘explained’ all its failures. But their explanations “were all cooked up after the event to protect Marxian theory from the facts”²⁹ Thus for Lakatos a progressive programme is scientific and the degenerating one is pseudoscientific.

Lakatos uses Marxism as an example of a degenerative pseudoscience, as did his teacher Popper as an example of a failed theory. What other theory does sociology or even the social sciences have that may even be considered as a “research programme” with theories and hypotheses and even anomalies? And what earth-shattering discoveries did sociology or any of its “theories” with (or without) predictive power, like those of Newtonian theories, achieve in the past nearly two centuries that we may claim to have a “progressive” research programme? Indeed, if any thing, sociology has failed miserably to build theories that cut across the discipline and /or across time and space³⁰, let alone be predictive of anything. In a recent essay in the *Footnotes* (the monthly news letter of ASA), Bruce Keith noted that, “I find no evidence that members of our discipline have discovered any law or principle that is applicable temporally

²⁵ Kuhn T., as quoted in Wikipedia: http://en.wikipedia.org/wiki/Protoscience#cite_note-1

²⁶ <http://www.lse.ac.uk/collections/lakatos/scienceAndPseudoscienceTranscript.htm>

²⁷ <http://www.lse.ac.uk/collections/lakatos/scienceAndPseudoscienceTranscript.htm>

²⁸ <http://www.lse.ac.uk/collections/lakatos/scienceAndPseudoscienceTranscript.htm>

²⁹ <http://www.lse.ac.uk/collections/lakatos/scienceAndPseudoscienceTranscript.htm>

³⁰ Islam, N 2005. *End of Sociological Theory and Other Essays on Theory and Methodology*. Dhaka: Ananya.

across social contexts”³¹. John Angle in his response to Keith notes, “The length of the silence to Prof. Keith’s year-old assertion reveals how Comte’s vision has faded”³². So that, by any definition, sociology, or its parts thereof, constitutes an ideal case of a degenerative research programme or a pseudoscience!

However, the choice is no longer with the sociologists. While they were busy how not to do science or at best building up, often useless and trivial generalizations that had no possibility of being *repeated*, let alone being applicable across time and space, other sciences have moved beyond their grasp. The demarcation criteria have, thus, put science beyond the reach of sociology. It is, as Kuhn notes because of the lack of “certain element, which in the mature sciences, permits the more obvious forms of progress”.³³

The element that has put sociology behind is the *very will to be a science*, to do the hard work that is necessary to conceptualize and measure factors like emotions or motivation, which we give up by making excuses that they are far more difficult to do than the work done by the other sciences with their concepts and measurements. Thus, we have relegated ourselves to the status of a non-science or even a pseudoscience (because without doing the work necessary we continue to pretend to be a science, at least the intro text books continue to claim so).

Beginning with Weber in the first decade of the 20th century alternatives to scientific methodology have been sought actively and many have been proposed in the process. The general theme has been that human beings are different from the objects of nature and are much more complex and so too is the society, indeed far more complex than any thing that the natural sciences tackle. This, I feel not only trivializes the natural sciences but is tantamount to burying the head in the sand.

The great discoveries and inventions in the natural sciences have become so much a fact of life that they may fool us in believing that those discoveries were simple matters. But just think for a moment that it took thousands of years to even discover that the earth was round and not flat. Or that the dome that covers the flat earth, called the sky, where the sun and the moon and the stars were hung to give us light is not a flat screen but billions of “light years” deep. Indeed, can you imagine the leap in imagination that was required to even grasp that light moves at a fantastic speed through the void of space and that the speed itself can be measured and measured in terms of light years? Even the greatest mind in science, Newton, who discovered gravitation, could not believe that distant objects are held together because of gravitational forces. And these

³¹ Keith, B. 2005. “A Century of Motion: Disciplinary Culture and Organizational Drift in American Sociology.” *Footnotes* December, 33(9):6.

³² *Footnotes February 2007*

³³ Kuhn T., as quoted in Wikipedia: http://en.wikipedia.org/wiki/Protoscience#cite_note-1

were just the beginnings of modern science. Few, if any, of us can actually grasp what goes on in the other sciences today.

If we think that the achievements of other sciences are trivial compared to what we face, we should indeed give up science and take up story telling. Some have already begun doing so and are speaking in terms of “narratives” and “discourses”. So, the element lacking in us is the will to do the hard work that science requires. We have been making excuses and trying to convince the intellectual world why sociology cannot be a science more earnestly than trying to make it into a science. If we are convinced that sociology is not or cannot be a science, let’s make a clear cut declaration and be done with it once and for all. If science or theory building is not our cup of tea, so be it. But to pretend to be a science without doing the necessary work, tantamount to demoting it to the level of a pseudoscience and, as Lakatos warns us, that can be a dangerous thing.

Sociology’s status as a science was claimed by Comte to be the result of a logical progression of the sciences. He placed it as the newest of the sciences to take off from the biological sciences with, obviously, using the same methodology of the other sciences such as observation, comparison and experimentation. While he did suggest ways of observations and comparison he himself was not much clear on experimentation. He never offered any clear cut direction as to how to experiment with society (man as a unit of analysis came much later).

Research methodology for sociology was more fully worked out by Spencer³⁴ adopting the survey techniques that were then current in Britain. He was also aware of the limitations of such techniques but assumed that the bugs could be worked out as he himself suggested ways to avoid biases etc. Much of these later got transplanted in the US sociology and developed there to the present state. In France, Durkheim, following in the footsteps of Spencer, showed how currently available data could be successfully manipulated to analyze social trends. He thus showed that mathematics, revered by Comte as well, could help work out trends in the observed data. He went so far as to claim that the facts of sociology are to be treated as “things” like the facts of the natural sciences!

But as sociology traveled to the US the progression of sociology to the domain of the natural sciences was nipped in the bud as it had to meet the overwhelming demand for “social welfare” and “social work” type of use of the discipline. “The early years were shaped by Christian projects of social reform”³⁵ and many of the early sociologists were priests and sons of priests. Some critics suggest that U.S. sociology was really the secularization of American Protestantism’s

³⁴ Herbert Spencer, 1961. *The Study of Sociology*. Ann Arbor: University of Michigan Press.

³⁵ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

social gospel³⁶. It even had to contend with the then dominant “Christian Science” movement. Even Albion Small had to placate Christian Science while taking stock of the past ten years of the journal in the editorial of the 10th volume of American Journal of Sociology.

Much of sociology then rested in the hands of the social workers and not scientists, nor even academicians. Over and above that, the first sociological research techniques (in the US) were actually developed outside of the universities by social workers, philanthropists, public health and charity workers, journalists and reformers³⁷. What science could anyone expect from this diverse group of nonscientists? (And the methodology that developed was later formalized with Popperian notion of falsification.) Other disciplines “saw sociology (naturally) more as a movement than an intellectual discipline ...the discipline (itself) began with no focused content and (with) some confusion between sociology and social work”.³⁸ And while “Sociology hoped to be able to explain behavior,” early sociology turned out to be the study of “a hodge podge of poverty, crime, insanity, marriage and divorce, slums and other social pathologies”.³⁹

It would be only futile to look for a “science” or even the agenda of Comte in this muddle. Later developments, particularly from the 1930s onwards, did lead to a well organized set of principles in terms of a “research methodology” based on surveys and observations, including incorporating statistics into it. But, as noted above, it got fossilized in the Popperian version of scientific logic and could never transcend to the level of the natural sciences or be counted among these.

So that although data collection and data analysis became the mode of this science, no one took pains to define these data, or the concepts behind them, precisely to be acceptable to all or to offer a standard technique of measurement of these data. The first object of any science is to define and refine its concepts and their measurements. Concepts as simple or mundane as air, water, sound, light, heat or speed and force needed to be defined and measured, even when the measurements were made in terms of fictitious numbers and scales (Fahrenheit and Centigrade) or assumed constants (like “G” for gravitation, which is yet to have a conclusive measurement) and at a later period each be corroborated by the others. And as Kuhn noted, there is a general acceptance of the concepts and their measures in the given field of science. It is this consensus which, for Kuhn, defines a science and the lack of which in the social sciences forces Kuhn to conclude against these being sciences⁴⁰. Sociology, let alone refined measurements, does not even have agreed upon definitions of any of its basic concepts!

³⁶ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

³⁷ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

³⁸ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

³⁹ Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

⁴⁰ Kuhn T., as quoted in Wikipedia: http://en.wikipedia.org/wiki/Protoscience#cite_note-1

Of course, as it is forcefully argued, that you cannot measure society, culture, family, socialization, class or emotions and feelings even if you could find agreeable definitions. The same could be argued about light, sound, heat or force five hundred years ago, and who knew that the air that keeps us alive is oxygen and nitrogen and these can be measured, along with the fact that a certain *amount* of oxygen in the air is a must for all living things, less would render air unbreathable. Precise definitions and measurements of each of these concepts took decades, if not centuries, and painstaking contributions of scientists, made famous by those same discoveries.

In the hustle and bustle of survey research and probability mathematics, or the fuss over inductive and deductive logic, sociology forgot that much of the advances of the natural sciences, particularly in their measurements of concepts, are dependent on finding the right kind of tools, be they simple inclined planes or dropping balls from a tower. "New scientific disciplines come into being only when tools are invented and discoveries are made that make fruitful work in that area possible".⁴¹ Astronomy could not have taken off without the telescope, or biology without the microscope and X-ray. Much of the sciences today make ceremonial advances because of the inventions of ever newer technologies. Sociology did not invent nor had any use for such technologies so far. But today technologies are available that can "see" inside the body organs and measure agitation in different parts of the brain or secretion by different glands, record postures and facial expressions or voice modulation. And their range of penetrating the human mind and body is advancing by leaps and bounds.

These allow me to be bold enough to suggest that *the time for sociology as a science is now*. Indeed, when Comte proposed his science it was in the wake of the level of development of the natural sciences of the day without the advantages of the modern developments, particularly of technologies. So, much of the science of society was based on whatever data were "observable" superficially, mostly in terms of collective representations or opinions. Comte himself advocated "comparison" of historical data – that's all he could do those days! The limitations of such data are obvious and have failed to advance sociology beyond the study of the "unaided observations" to simply opinions of either the respondents or the researcher. It is like pre-Galilean astronomy, trying to observe the universe with the naked eye. So that, in a way, Comte's proposition was premature, without the advantage of the needed technology to make the proper observations and experimentations.

We also tend to forget that Comte wanted the science of society to be built on the laws discovered by the earlier sciences (in his hierarchy of the sciences), particularly biology. Comte himself divided his science into the "statics" and "dynamics" following the division in physics and

⁴¹ <http://www.dharma-haven.org/science/psuedo-science-or-proto-science.htm#Top>

as adapted in the case of biology in terms of “anatomy” and “physiology”. Spencer, more than anyone else, followed this direction but came to be ridiculed on the very ground that he was using an “organic analogy” and the evolutionary model. Since then it has been treated as bad practice to copy other sciences or areas of knowledge.

However, both Comte and Spencer suggested that we use the other sciences for heuristic reasons and once we have developed our own science we could leave them behind. But we left them much too early, long before we could stand on our feet with our own set of clearly defined and measured concepts and a set of theories with a workable methodology, and that is where we made the first mistake. Just think of the developments the other sciences have made since the mid 19th century and compare it with the lack of progress in sociology. We are still in the nineteenth century or at best in the early 20th century, if we have to quote Marx, Weber and Durkheim as our champions. But even by the 1920s sciences like physics was already way beyond our grasp. We could not have used the laws of those sciences for our purposes. No wonder that by then we started talking of how not to be a science like physics! Interestingly, however, the only other science sociology flirted with was psychology, whose very claim to science also remains questionable.

We decided to go our own ways, mostly because we were not sure of our status as a science. A science can and must cooperate with the other sciences for its and others’ growth. But being unsure of our status we were scared, lest we loose our identity and get sucked into the science we follow, as it almost happened with psychology, thus buried our heads in the sand while other sciences prospered. Today, sciences like astronomy or physics or chemistry are so far beyond our grasp that their theories would be incomprehensible to most, if not all of us, and as such beyond the possibility of any use in sociology. Remember that, for Comte the other sciences were not very far from comprehension as is clearly evident from his analysis of those sciences, while Spencer was a bit of a scientist in every field and was well respected for his scholarship by the great scientists of his day. But, since then we left the other sciences, in reality were left behind by them, and today they are reluctant even to recognize us as a science. And, rightly so!

If sociology were to keep pace with the advances of the other sciences and grounded its observations with the available laws and technological aids, it would not be startling today to find a sociologist beside a CAT- scan machine mind-reading with a brain scan.⁴² Such readings today are already “revealing what a person planned to do in the near future” to the extent that “[i]f brain-reading can be refined, it could quickly be adopted to assist interrogations of criminals and terrorists, and even usher in a ‘Minority Report’ era (as portrayed in the Steven Spielberg science fiction film of that name), where judgments are handed down before the law is broken on the

⁴² <http://machineslikeus.com/news/mind-reading-brain-scan>

strength of an incriminating brain scan.”⁴³ Or a sociologist running with a video camera after a mob, recording its progression from a crowd into the mob; or looking at an oscilloscope focused on the shouting of a quarrel and trying to identify the peaks and troughs at which the quarrel turns into a fist fight; or measuring the secretion from the pituitary glands in trying to fathom the meaning of rites of passage in different societies; or even working on the nature of alien societies of extra-solar planets as sociology would definitely transform itself into “exosociology”, following biology (as in exobiology).

None of the above are farfetched, other sciences are using these same tools, and data generated thereof, in their own fields of work. But sociologists are content just calling up their subjects (respondents) to get an opinion on the impending slum clearance and hoping to predict the result with 99.9% probability of success! Without instruments of observation and in the absence of experimentation the very claim to a science becomes hollow. Sociology failed to keep pace with the development of the other sciences and take advantage of the growth of technology even if that technology was created for the other sciences.

So then, are we a proto-science of the Kuhnian type or a pseudoscience of Lakatos? Some are already in agreement with Kuhn and calls sociology a science in intention⁴⁴ or a proto science. Others have felt that “for various reasons, academic sociology has largely been transformed from the applied science envisioned by the founders into what is essentially a literary pursuit”⁴⁵. Concerned with its future R.W. Connell visualizes that a “quite probable future for sociology is gentle decline into an atmosphere of nostalgia”⁴⁶. Bruce Keith surmises “that sociology is more akin to a profession than a science”⁴⁷. ASA, to be on the safe side, omits the word “science” when defining “What is Sociology?” So that, sociology is no longer in the realm of science even for its own practitioners – thus, a non-science, perhaps!

But does it matter?

Unfortunately, it does matter where it hurts the most. Angle notes that it may not be coincidental that after Richard Bernstein quoted in the *New York Times* a sociologist attending the 1988 ASA Annual Meeting saying that sociology will never be a science like physics and those expecting it are fooling themselves, a few sociology programs were shut down in the years following.⁴⁸ So that, if it does matter to the public for sociology to be a science, then think how would the same public react when it becomes aware that sociology is actually a non science only pretending to be

⁴³ <http://www.guardian.co.uk/science/2007/feb/09/neuroscience.ethicsofscience>

⁴⁴ John Angle: <http://www2.asanet.org/footnotes/feb07/fn9.html>

⁴⁵ Jay Weinstein quoted by Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

⁴⁶ Quoted by Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html

⁴⁷ In John Angle: <http://www2.asanet.org/footnotes/feb07/fn9.html>

⁴⁸ <http://www2.asanet.org/footnotes/feb07/fn9.html>

a science, or a pseudoscience? Some, like Irving Horowitz, are already aware of the fate of sociology and notes that "Sociology threatens to join phrenology as a pseudo science and to share the fate of the occult studies in being viewed more as a privileged language of dedicated elites than as a field of investigation broadly reflective of public needs".⁴⁹

⁴⁹ As quoted by Robinson. W.C. http://web.utk.edu/~wrobinso/531_lec_socio.html