Assessing Social Reality, is quantification enough? A case of poverty in India

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Abstract

Social reality is vast unorganized chaotic multi-layered and dynamic, it differs from natural reality by its character therefore the ways of knowing must be different. Present paper is a modest attempt to explore the relevance, efficiency, desirability and applicability of natural science's methods on social phenomena through the case of poverty in India.

Section I

Natural vs. Social Reality

Fascinating natural reality that surrounds us has been always a subject matter of human inquiry, However ways of knowing, learning and enquiring may have changed over the long evolutionary span but the pursuit of knowledge is as old as the human civilization itself. When the humanity embark upon its journey to civilization it seems that the first encounter would have with the physical environment i.e. mountain, rain, rivers, vegetation and other physical phenomena would have been studied first. And therefore scientific codified and well documented knowledge of physical environment may have preceded over that of the knowledge of social world. However the ways through which reality was explored may not be appropriate and sufficient to apply on the social reality. Natural reality which is objective, has a pattern therefore the ontological approach is on discovering the natural laws, and the episteme stands analytic and it leads to scientific, predictive laws and theories.

However in case of social reality which is multi-layered, vast, unorganized, chaotic and dichotomous the ontology is understanding the human interaction and episteme is generally synthetic and the outcome has high infallibility for universal application, and outcome is heuristic in nature as the subject matter (human interactions) in question is dynamic, unpredictable and it is difficult to generalize.

Therefore, it is evident in the literature that there exist objective reality and its subjective dimension. Objectivism and subjectivism have been described in many ways all through the historical line of the social sciences. Easterby Smith (1991) describes them as positivism and phenomenology. However, Hughes and Sharrock (1997) described them as positivism and interpretive alternative. Whatever name we may give but one thing that is vivid in the literature is that there exist separate entities called physical phenomena and interaction of social actors which leads to social phenomenon. But how to study these disparate entities is debate

in social science academia. Methods of studying the physical phenomenon and social phenomenon could be similar or not is debatable in the academia. Positivism which was a rejection of metaphysics, a meta theory it was a theory about theories, which support that all knowledge is based on the logical inference from certain "protocol sentences" which are grounded on observable facts. Proponents were a votary of materialism, naturalism and empiricism.

Table 1. Meta theories

Dimensions	Positivism	Post-positivism	Interpretivism
Teleological (Purpose)	Prediction/control/ explanation / Framing of general laws	Prediction/control/ Explanation/ Generalizations.	Understanding/ Reconstruction/Transfer of findings**.**
Ontological	'Realism', belief in a tangible social reality existing independent of those 'creating' reality. A social reality can exist just as a natural reality exists.	'critical realism', belief in a social reality but acceptance that knowing this reality will always be inhibited by imperfections as result of human fallibility	Belief in multiple constructed realities that cannot exist outside the social contexts that create them. Realities are time and context driven
Epistemological	Objectivist/dualist investigator and investigated are independent of each other	Modified dualist/ objectivistic acceptance is not possible but objectivity is seen as the goal and demonstrated by external verification	Transactional/ subjectivist the result of the investigations are a product of interaction between the subject and the investigator. What can be known is the result of the interaction
Methodological	Experimental/ Manipulative Hypothesis testing, variable identified before the investigation. Empirical testing is conducted in order to establish the truth of a proposition. Predominantly quantitative. Analysis by variable	Modified experimental/ hypothesis testing but more emphasis placed on context. Quantitative and qualitative analysis by variable	Empathetic interaction. Investigator interacts with the object of the investigation. Each construction of reality is investigated in its own right and interpreted by the investigator. Qualitative including hermeneutics and dialectic interchanges. Analysis by case
Source: Compiled from Pickard(2010), Hughes and Sharrock(1997)			

August Comte (1865) believed that the methods of natural sciences could be applied to the study of social phenomena. And his philosophy of positivism incorporated two basic precepts, *la certitudes* this means "the unity of scientific method". This implied that the different branches of knowledge were distinguished by their subject matter and not their method. In other words sciences differ from one another in what they study rather than how they study. Second percept was *le précis* which means sciences should pursue a common scientific goal of formulating testable theories and no subjective value judgements in the scientific inquiry. Positivism probably bridge the gap between social and natural sciences, the basic ethos of positivistic science is to understand the universal laws associated with material structure or social structure which can be explained through scientific investigation. Positivistic sciences look in to the structure sub- structure and try to establish the logical and rational correspondence between them. Positivistic science search for value freedom objectivity and give importance to comparison, verification to arrive at a generalization.

Positivistics believe that modern society is an organic system having neatly defined parts and sub-parts and every social phenomena also have parts and sub-parts present in it, which can be understood by using reducational analysis. The correspondence between human motive of intention with that of prescription of social and cultural institution gives rise to social statics meaning continuity and any imbalance between the both gives rise to social dynamics. Thus to Comte positivistic methods can be used to understand social statics and social dynamics. Cohen (2000) noted basic principle of positivism are determinism, empiricism and generality. Those who endorsed to positivistic philosophy also canvassed its adaptability for social sciences, staunch supporter of this philosophy argued that even if social reality is dynamic and chaotic still there exist causes behind every human action which can be identified and verified.

Though positivistic tradition created a scientific vigour in social sciences but it has its own limitation positivism foresee an order and regularity present in social life, which may not be fully true. And it fails to understand the variation in the role performance of individuals, positivistic analysis gives importance on quantitative analysis, casual analysis undermining human behaviour, taste and distaste love and hate, friendship and likes and dislikes can't be weighed in quantitative terms. Evaporation may give rise to rainfall but economic inequality will necessarily give rise to social revolution it is not certain. Therefore social world does not experience generality. Social sciences particularly economics were quite impressed and adopted these methods to explain the social world. Poverty is one such phenomenon which is explained through quantification only.

Section II

Setting the Case of Poverty in India

Marginalised, deprived, downtrodden, the destitute in short the poor are the subjective matter of almost all the social sciences. And therefore all disciplines have their own way to look at this social fact. But all social sciences agree on certain character of it i.e.

poverty is fundamentally a denial of choices and opportunities, a violation of human dignity. It means lack of basics capacity to participate effectively in society, it means insecurity, powerlessness and exclusion. It means susceptibility to violence. The issue of poverty estimates has been subject matter of public discussion. The methodology of arriving at poverty estimates has been in place for the last several years and various committees in the past have arrived at estimates based upon certain indices of poverty from time to time but all the methods are quantitative in nature.

The Planning Commission in 1977 constituted a Task Force on Projections of Minimum Needs and Effective Consumption Demand under Chairmanship of Prof. Y K Alagh. The Task Force defined the poverty line as monthly per capita consumption expenditure (MPCE) level of Rs 49 for rural areas and Rs 56 for urban areas. Followed by the task force a more comprehensive and advanced criteria was proposed by another Expert group, Lakdawala Committee (1993) also defined the Poverty Line based on per capita consumption expenditure for Estimation of Proportion and Number of Poor. He emphasized state- specific poverty lines to reflect the interstate price differentials. But it does not capture important aspects of poverty like ill health, low educational attainments, drinking water supply, sanitation, geographical isolation, environmental standards and other dynamic aspects of poverty. Further, Tendulkar Committee, (2005) reviewed the methodology for official estimation of poverty and recommended some of the major departures it moved away from calorie anchor; focused to provide a uniform 'Poverty Line Basket (PBL)' to both rural and urban population and recommended a price adjustment procedure estimation incorporated an explicit provision in price indices for private expenditure on health and education. But Tendulkar committee overlooked inclusion of disabled, aged, widows, and primitive tribal groups in the category of poor groups, which Supreme Court has already directed the Government of India to automatically include.

On the other hand to identify rural poor the Ministry of Rural Development introduced a system of uniform identification of BPL households in rural areas in order to more accurately and effectively target the poor families. Since 1992, three successive BPL censuses (1992a, 1997b, 2002c) identified rural families that are below the poverty line and thus eligible for government support such as subsidized food or electricity and schemes to construct housing and encourage self-employment activities.

The BPL census (1992) used income as a way of classifying the poor. So, poverty measurement has been dominated by the so called income approach. Deaton and Kozel(2004) criticised this approach as income was not straight forward to measure in rural households as many households were self-employed in agriculture. To improve upon the 1992 methodology, the 1997 BPL census used expenditure and multiple criteria rather than income criteria alone and excluded the visibly non- poor. However, critics including subsequent Expert review criticised the 1997 as the criteria were too stringent (possession of a ceiling fan was grounds for exclusion) and Poverty lines for all states and union territories were lacking, this BPL criteria was not uniform

across states, hence interstate comparison was difficult. And there was no procedure to add new families to the BPL list for five years. Further the 2002 census was based on Score Based Ranking (SBR) for each household, indicating their quality of life. Families were identified as poor based on 13 criteria approach. But it came under severe criticism for its inherent complexity and lack of transparency in identifying poor, corruption, low quality data and coverage, imprecise scoring methods, poor survey design.(Saxena 2009; Roy, 2011; Alkire and Seth, 2012). There was a lack of clarity in the criteria, drawbacks in how the scoring and aggregation was done, and increased probability of wrong selection. For instance, parameters such as availability of clothes were not directly verifiable or observable. With the criticism of the 2002 approach, the N. C. Saxena (2009) report proposed an improved method for identification of BPL families in rural areas. The report includes the criteria for automatic exclusion, automatic inclusion and certain sections of society facing deprivations and vulnerability. It was criticised for continuing to impose pre-defined "caps" on the BPL coverage for a particular state or area. Implementing caps can result in exclusion errors among the poor who deserve to get the BPL card. Also, given that a particular score can be obtained through various combinations of indicators, it was believed that the proposed method was unsuitable for participatory implementation or verification. Recently the Socio- Economic Caste Census (SECC, 2011) had adopted new way to automatic inclusion, exclusion and deprivation scoring. Most of the method are positivistic, objective, more in to quantification and envisage

to capture the poverty through objective verifiable method. A social reality called poverty tried to capture through the methods of naturalism which has its own scientific value but is it possible to capture the social reality in its totality? Are the quantitative methods appropriate to social inquiry which is fundamentally different from those of natural science? Is scientific investigation of the social world even possible or desirable? What type of knowledge does social inquiry produce? Can the social sciences be objective and value neutral? Should they strive and aspire to be? Does the social world represent a unique realm of inquiry with its own properties and character? Or can the regularities and other properties of the social world be reduced to facts, generalizations? If poverty is a relative deprivation are we able to capture the relative deprivation in terms of power? Social and cultural power that a dominant caste enjoy a godly position enjoyed by some caste. Can we capture the disadvantages and entitlement among man and women, subordination of women to men? Can we capture the attitude, belief, norm values of men towards women though its manifestation? Is there in unequal treatment in terms of basic right to food, health care, education, unemployment control over productive resources, decision making but can we capture the pain, sorrow and relative deprivational feeling, feeling of staying low, timid due to socially constructed beliefs? Are these normative aspects quantifiable? If yes can we quantify the intensity felt by every individual being which is of course unique to an individual? Can we capture the widespread socio- cultural characteristics, aptitudes, personality traits, roles, responsibilities,

behavioural pattern which are spatially and temporally dynamic and keep on changing? The change in attitude, mental construct and world perceived by one villager to another villager differently seems unconceivable by mere quantification. Every village possess its own social world. Can we capture the relative deprivation of women's feelings about patriarchy as an institution by mere quantifiable measures if so can we also judge the intensity of ways a child learning patriarchal norms through his farther and the reinforcement he gets in his own gender role.

David Harvey (1989) talked about time- space compression he states as a result of technological innovations including technologies of communication like telegraph, telephones, fax machines, Internet, rail, cars, trains, jets, has open up new markets, speed up production cycles, and reduce the turn overtime of capital. Further if we go by the arguments of Iqbal Z Quadir (2002) he states that connectivity is productivity, the poor who is not connected is mere disconnected or this deprivation has multiple manifestation on the quality of life he is about live in the offing. How this can be captured? The significance of integration in the world economy as a driver of economic growth has been a persistent theme in the literatures on economic history and development economics. An influential article by Jeffrey Sachs and Andrew Warner (1995) talks about the role of integration. Dani Rodrick (2002) also emphasise the role of integration. Thomas L. Friedman (2005) in "The World is Flat" comprehensively discussed the role of information technology. Friedman elaborates on the technologies that allowed work to flow. Paul Virilio (1986) advocates time- space compression is an

essential facet of contemporary life today we are entering in a space which is speed space. The new other time is that of electronic transmission, of high-tech machines, and therefore, man is present in this sort of time, not via his physical presence, but via programming. Virilio uses the Dromology to describe 'speed space'. If the world is flat, if there is time space compression, if there is speed space certainly there is also unconnected people and space, those who are out of this 'speed space' how much deprived they are? From social skills, social capital and a full spectrum of soft resources. Are our quantitative techniques capable enough to capture this contemporary globalizing world's relative deprivation?

Section III

What is there in qualitative methods for social reality?

Therefore given the dynamism and complexity of the relative deprivation the quantitative paradigm which is based on positivism and characterised by empirical research and believes all phenomenon can be reduced to empirical meaning seems ineffective in capturing this dynamism. The ontological position of quantitative paradigm is that there is only one truth, and objective reality that exists independent of human perception though it seems untrue for the social world. Epistemological stand of the positivistic is that investigator and investigated are independent entities. Therefore the investigator is capable of studying a phenomenon without influencing it or influenced by it which is not applicable in life world. Altheide and Johnson (1994) states qualitative method in contrast of

quantitative is based on interpretivism and constructivism. This paradigm believes that there are multiple truth, multiple realities. Reality is socially constructed so it keeps on changing. On epistemological level there is no access to reality independent of our minds. Denzin and Lincoln (1994) believes that the investigator and the object of the study are interactively linked. Smith (1983) suggests that reality has no existence prior to the activity of investigation and reality ceases to exist when no longer focus on it.

What Sociology Offers: Classical sociologist advocated that behind every possible social discourse there present a cultural meaning and individual judgements attached therefore prime motto of social sciences is not see explain the visible structure, rather behind structure are action manifested the meaning attached speak out variation present in the structure. Double Heurmentics: Giddens (1982) argues that social and natural sciences differ fundamentally. In natural sciences scientists try to understand and theorise about the way the natural world is structured. The understanding is one way that is, while we need to understand the actions of water, soil or minerals objective phenomenon don't seek to develop an understanding of us. Therefore it is 'single hermeneutics'. In contrast, the social sciences are engaged in the 'double hermeneutic'. Therefore it is very difficult to quantify, generalise the social reality.

Max Weber in his voluminous work advocates versthen method, he asserts that researcher should not be having a predetermined opinion about structural part of the society, rather he should put himself in to the position of researched to understand the meaning behind their action. There is possibility of action being same but outcome of action and its structure, character may be understood from peoples stand point what it is. Verstehen refers to understanding the meaning of action from the actor's point of view. It is entering into the shoes of the other, and adopting this research stance requires treating the actor as a subject, rather than an object of your observations. Individuals are seen to create the world by organising their own understanding of it and giving it meaning. To do research actors without taking in to account the meanings they attribute to their actions or environment is to treat them like objects.

Anthropology and Psychology's stand: Carl Jung (1912) believes that science is a form of divination, it is a faith like we have faith in God. Science is evolving as form of new God in the contemporary times. We should therefore question science as questioned religion and God. So no need to celebrate science rather it should be questioned. Therefore any quantitative framework is questionable. Sudhir Kakkar (2008) states that scientist should have free mind. He looks at scientific method from a dynamic perspective. He believes in innovative and creative method free from framework and guideline. Paul Feyerabend (1975) states you cannot exhibit your innovative side if you follow a stereotype methodology. He says that a methodology is stupid frame, bondage an ideology that kills research. So methodology should be taken away from sciences and freedom of choice will give new results. Feyerabend is not "anti-science". He is only anti-science to the extent that he is pro-freedom, and sees science as a tyrant.

Bent Flyybjerg (2001) in "Making Social Matters" believes that the social science are increasingly coming under attack for their failure to live up to that standards created by the natural sciences. He explains in this book why social science will never be able to develop the type of explanatory and predictive theory that is the ideal and hallmark of natural sciences. Flyvbjerg sets out to reorient mainstream social theory and social science methodology based on the Aristotelian concept of phronesis which goes beyond analytical, scientific knowledge (episteme) and technical knowledge or know-how (techne). Further he believes social science has mistakenly modelled itself on natural science and then inevitably disappointed all who have sought from it explanatory and predictive theory applicable, regardless of time and place.

Flyybjerg argues that, in contrast to the natural sciences the social sciences can offer little by way of explanatory and predictive theory, but can contribute greatly to the reflexive analysis and discussion of values and interests, which is the predictive for an enlightened political, economic, and cultural development in any society, and which is at the core of phronesis.

Grounded theory: Glaser (1998) Grounded theory method is a research method which operates almost in a reverse fashion from traditional social science research. Rather than beginning with a hypothesis, the first step is data collection, through a variety of methods. From the data collected, the key points are marked with a series of codes, which are extracted from the text. The codes are grouped into similar concepts in order to make the data more workable. From these concepts, categories are formed, which are the basis for the creation of a theory, or a reverse engineered hypothesis. This contradicts the traditional model of research and liberate from theoretical framework. Grounded theory aims to discover the participant's main concern and how they continually try to resolve it. Another qualitative approach, Ethnomethodology a distinctive approach commonly accepted to have been initiated by Harold Garfinkel (1967) states Ethno-methodology's goal is to document the methods and practices through which society's members make sense of their world. Further he states regularity, pattern, harmony, integration which are actually not found in real situation are hypothesized by the positivist sometimes the relationship among the people is consistently changing thus construction of reality varies from one situation to other. So social scientist should look into moods, intentions, motivation, interactions etc. which takes place around the peoples and try to enter in to their life world. Peter Berger and Lukaman (1966) stated that people's perception of reality is greatly dynamic it is impossible to find regularity in social life. However Latour (1986) criticize that ethnomethodology goes into too much of details too much of disaggregate level creates particularism and he incited the example of one worksites details does not match with other worksites details.

Geographers and Subjectivism:John K Wright (1947) introduced the notion of Geosophy, which he defined as the study of geographical knowledge based on all people (and not only geographers). Every person has a geographical knowledge at his disposal which in some way determines their actions and way of living. Kirk (1951) mentions

that the environment is not simply a thing but given meaning by humans. And this is passed through generations. Therefore the environment can be seen as two separate but not independent parts phenomenal (objective i.e. earth) and behavioural (human perception and interpretation of the phenomenal). Guelke (1971) if geography tries to be law applying science, it can hardly find any results except a very strong generalization, as humans don't follow any laws, humans are unpredictable. And he provided an idealist philosophy. Guelke (1981) states that mental activity cannot be controlled and that all knowledge is ultimately based on individual's experience of the world and their mental views. A 'real' world independently of the mind does not exist and this therefore criticises the positivist spatial science because it believes in a 'real' world explained by general laws. Guelke basically believed that geographer should adopt a method by which one can rethink the thought behind the creator of the cultural landscape. Another idea that there's no objective world independent of human existence: 'all knowledge relates to experience' emerged in geography which laid to the adoption of phenomenological tradition. Phenomenology believes that the environment is unique to every individual and phenomenology is the study of how the individual gives meaning to the environment. The phenomenology approach was introduced Relph (1970) and followed by Yi-Fu Tuan (1971). There are methods in phenomenology where the qualitative aspect can be captured like bracketing. Dermot Moran (2000) explains, bracketing is basically the "unpacking" of phenomena, or, in other words, systematically peeling away their symbolic meaning like layers of an onion only the thing itself as meant and experienced remains. Thus, one's subjective perception of the bracketed phenomenon is examined and analyzed in its purity. In phenomenological research epoche is used, epoche is described as a process involved in blocking biases and assumptions in order to explain a phenomenon in terms of its own inherent system of meaning. Mercer and Powell (1972) argued that land-use patterns can never be understood by just looking at them. Research methods should be developed which view a problem through the eyes of the people being researched. Buttimer (1976) introduced the 'life world' a combination of the world of facts and human experiences. It rejects positivism as that separates the observer from the studied object James Sidaway (2002) talks Photography as method Rose (2000) writes, recent work on photography and geography has certainly focused on the meanings of things photographed. Several writers have made a strong case for the importance of photographs as a method.

Alvares (2011) talks about Eurocentric perspectives followed in social sciences and other allied disciplines in the non-western parts of the world. Along with a set of proscriptions, he also furnishes a list of prescriptions at the end of his easy as panacea to the Eurocentric sickness of social sciences, especially in India. He also throws light upon the academic institutionalization of knowledge in general and its Eurocentric malcontents in particular.

However in qualitative methods there is very high degree of normativity and it is difficult to achieve objectivity. Like one very complex issue is of positionality.

Gregory (2009) while defining positionality notes that the fact that researcher's social, cultural and subject positions, psychological processes affect the questions they ask, how they frame their relations with those they research, how they interpret therefore positionality is dynamic. Our lives are in flux and as a result so are our subject positions. So it is difficult to be objective in position. But still qualitative methods inspect the phenomenon in detail and disaggregate level. It is generally accepted in the various sciences dealing with complex collective behaviour that there exist some fundamental differences between the individual and the aggregate levels. Knorr (1981) states it seems common sense that there should exist two levels of analysis the micro-level that focuses on individuals the macro level that focuses on the aggregates.

Therefore the paper seeks to explain that quantification of normative aspect is difficult. And social reality like poverty could be better judged with qualitative alternatives. Today's world is a world of internet, network, integration and flow of information those who are connected to these nodes have different capacities. And those who are not connected what they are losing cannot be ascertained. Therefore this kind of poverty (poverty in dimension of lack of information) or information as a capital how one uses it how much leapfrog he or she takes with it is a vexed question. Therefore mere looking at poverty in terms of some countable dimension is not enough.

All theoretical strands, methods, approaches and philosophies of social sciences try to explain the social phenomenon in their unique and peculiar style but the dynamism of social world is a complex array of meanings, belief attributes and characters conceived by individual actors which require a more reflexive, interactive, participative methods which can explore the layers embedded in the conception of the actors. A social fact like poverty requires more interpretive, participative interactive, reflexive and reflective method. In their exploration a multiplicity of method could go closer to the existence of social reality.

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