This chapter, in fact, seeks to examine science and its functions in different domains of social life. Particular emphasis is given to explain techno-science as it has increasingly become 'high status' dominant knowledge in our times. It is the very dominant characteristics of the techno-science and its knowledge forms that appeared to be privileged vocabulary of the modern nation-state. The way modern nation-state articulates its agenda of 'development' and 'progress' under its umbrella of nation-building process, is testimony to this fact. However, with one set of New Social Movements-particularly environmental movements—are engaged with an extremely critical relationship with this dominant knowledge.

No wonder, an awareness of the praxis of subaltern knowledge articulated by the participants of the movements, on the question of techno-science, critical engagement with politics, its relationship with nation-state radically transforming our understanding about nature-culture relationship. Eventually these issues become new theoretical recourses for the post-colonialist, post-modernists and subalternists to radicalize the reflexive ideas of science and open up alternative paradigms of development.
CONCEPTUAL OUTLOOK

The first section of the chapter, to begin with, discusses the evolution of modern science and its apparatuses-radicalization of human agency, universalism, technology and technocentric-of science. As a matter of fact, societal function of science is crucial element in our times as the latter is fundamentally integrated with cognitive formation, knowledge generation and its wide range of application. Science, an intellectual terrain of humans, obviously is subjected to the overall development of society and its progress. In fact, technicalities of power embodied in science, manifested in the knowledge domain, gradually become leading role in determining value systems, or for that matter, value neutrality in general. That means, scientific community and its legitimacy over knowledge domain not only confirmed in the epistemological and occupational terrains, but also operates in different apparatuses of society.

It is the fact that, discipline of sociology too is very sensitive to the development of science, its emancipatory potentials, its technocentricism, and its relation with different subsystems. It is said that, in our times, at least for some sociologist, has gradually turned out to be a knowledge society. But, one cannot deny the fact that incredible thought processes has been carried out in the classical sociological tradition from its inception on this quest. Ever since the expanding importance and proliferation of scientific knowledge system, not only transform modern societies, but also shift in the epistemological location in our thought process and action. It made tremendous impact on social fabric of ideas; precisely social conditioning of knowledge.

Instead of explaining the dynamism of science through its eurocentric attributes like technicization and scientization, we examine this issue, in the form of socialization of knowledge system within the perspective¹ of the

¹Perspectivism holds a dominant position in the philosophy of science dates back to neo-Kantian belief in its essence. It is a theory that various essential meaning come into being together with the epoch to which they belong. These essential meanings belong to essences which have their own being in an absolute sense. However, the disciplinarians of history could comprehend them only in perspective fashion in such a way looking at them from a standpoint which is itself a product of history. In fact a perspective of a thinker is tied to concrete existence and relationism partly takes over the role of perspective of certain aspect of truth from a specific standpoint. It
contextualization of science. The process of contextualization in fact opens up multiple perspectives driving out science beyond its primary locus of producing reliable knowledge. It also directs towards a new set of regulation, mediation, consultation and a space for contestation. Therefore, reliability of knowledge in our times is dependent upon, what extent the new horizons of scientific knowledge as a domains of contestation over polity and culture (Nowotny, Scott and Gibbons, 2001).

Karl Mannheim, for instance, viewed that cultural and political factors are the crucial elements in the process of knowledge production. As he argues, the way we think; that itself is a source of meaningful knowledge. Historical analysis of objective culture would create meaning subjectively. Meaning, in this context, is understood by a relationship between individuals and their work. Thus, it was the work that expresses and represents the inner world. It is in this context, work has a primary function in linking the soul with objective culture, in which the soul can express itself to meet individual's needs. When knowledge forms were explained historically, this would become a culturally sensible. Therefore, knowledge is a functional aspect of culture (Mills, 1940: 323) that transcends from oneself to other through expressions of work (Woldring, 1987:73). When the constituency of knowledge tends to transform itself into a complex terrain of social life, then in that case, it becomes social epistemology\(^2\) (Shera 1970).

In the second section of the chapter, we try to elaborate on, how every-day experience of thinking and knowing-pedagogy of science-becomes a process of learning for critical and practical activity. The entire scholarship in the studies of

\(^2\) In their celebrated paper, Library Quarterly in 1952, Egan and Shera exemplifies social epistemology as the study of those process by which society as a whole seeks to achieve a perceptive or understanding in relation to the total environment-physical, psychological, and intellectual. Their focus, however, was to analyze production, distribution, and utilization of intellectual products. Such a framework seems to be, emanated from an effective framework of investigation on the complex problem of the intellectual process of society. (See Furner, 2002:5).
sociology of knowledge, although, generated a body of literature as a specialized discipline, its relation with praxis, at least for an analytical purpose, needs to be substantiated. It is in this context, the theory of praxis has been elaborated further to logically link theory with its diverse aspects of practices.

Historical explanations of praxis and its transcendental phase under the theoretical rubric of social science exactly would slow down to link sociology of knowledge with praxis. As a matter of fact sociology of knowledge is all about the discourse of praxis. That means, knowledge ends and begins with praxis. In other words, praxis means knowledge in action. In doing so, knowledge can be seen as a transcendental phenomenon, which links consciousness with practice. As we discussed it in detail later on, it was Karl Marx, to whom the theory of praxis is closely associated with. To Marx, true activity is a revolutionary and a practical-critical activity. When praxis is conjoined with revolutionary ideas, reality gets transformed itself into critical forms. Subsequently, this becomes critical and practical guide for action. Knowledge, in this case, is no longer treated as mere contemplation. That means, praxis impels action, guided by knowledge. Praxis can also be a sensible road-map for alternative ways of looking social life of the subaltern masses as they strive to experience contradictions and transcend the given-timeless and space-less-epistemological assumptions.

The third phase of this chapter analyses on how subaltern knowledge challenges the dominant paradigm and creating a new space of autonomy and hegemony. Tracing subaltern into the forefront, and self-representation with a stand point, was a challenging business among the historians belonged to a particular tradition, of our times. In academic circle, this paradigm became a celebrating one as it has been found in the ordering of subaltern while detour into a discipline of writing history from below. In doing so, subaltern scholars wanted to create an autonomous but, hegemonic to those, whose voices were not part of dominant history writing business. The project also visualizes a concrete birth of aspirations and new intellectual energy and moral order. In doing so, subaltern struggle sought to construct an autonomous and superior culture in its own right.
When subaltern project traverse from historical project to contemporary discourses on the issues of marginalization with the impact of new-liberal hegemony and economic globalization, it agenda was not only to inaugurate a new paradigm in the world of academia, but also challenging the global hegemony too. Added to post-colonial sensitivity to the onslaught of cultural deprivation, subaltern discourses foreground the issues of ecology led by the micro-level local protests. With continuous struggles to change the material, symbolic and cultural relations of power; the subaltern creates an autonomous constituency of meaningful life and recourses the nature-culture relationship once again. In the new social movement paradigm, subaltern struggle essentially becomes a new thesis for pedagogy of alternative perspectives.

**SCIENCE AND SOCIETY**

Science precisely means an intellectual activity of man in society, which enables us to know things and to do things systematically (Russel, 1954) both in imaginative and creative forms. It is an organizing principle of our knowledge terrain to unleash more and more hidden potentials of nature. True, science would always be with full of inventions that are directed by a set of complex social needs (Bronowski, 1965). Some times, need of the age gives rise to scientific exploration and progress in society. In a modern social settings science occupies a privilege position in social organization, as it promises an enduring form of democratic social order-equivalent to the ethos of science. To that extent, it is being argued that science is a societal dimension of intellectual and democratic activity that produces multiple views on social phenomena and in turn governs to reach out ultimate ends (Durkheim 1960:48). Science and its method, in this context, are seen as a set of practical and ethical issues.

Critical Marxist, for instance, Antonio Gramsci, would treat science as an ordering principle in its totality in terms of its intellectual, methodological and political terrains. It is said that intellectual quality is not innate in man, instead are acquired, and developed in socio-historical process (Kilminster, 1979:116). Along with technical attributes, it is the micro-institutional context that tends to set the trajectories progress and development in society. However, technological advancement in human life as a result of accumulation of knowledge and
capabilities opens up new possibilities. Obviously, they were not available in the earlier period of history. Because of this reason, science became crucial in modern times. It is in this context, one may find complementarities between science and society and its continuous engagements in our social life.

It is true that scientific knowledge can also create an intellectual domain that enhances man to question accepted belief, as well as established objectives, purposes and goals of the system. To that extent, societal function of science depends on its stability for criticality as an autonomous sphere. However, institutional structures of science, in our age, with the expansion of certified knowledge, are proliferating into applied and technical skills. This emerging trend provoked social scientist to react critically on the questions of ethos of science, as a matter of fact that the technical and moral norms are very crucial in the final destiny of science (Sztompka, 1996:268).

Science and organization of knowledge
Science, in fact, functions as systematic and controlled factual evidences of social phenomena that are organized and classified on the basis explanatory devises. The theory of science, drawing from Wittgenstein, is grounded on rationality, objectivity and truth that are subjected to socio-cultural specificities. It tends to discover hidden and general assumptions under which events are being explained differently. David Bloor (1991) sets out three major methodological principles to organize knowledge:

- **Causality**: Causal explanations were sought out for general interpretation. It avoids the dichotomy of explanation vs. understanding.
- **Impartiality**: To be impartial, i.e. neither with truth nor with falsehood of the assertions made by the actors. However, in a normal situation, same types of causes may be used to explain both beliefs to be true or false based on the actors judgments.
- **Reflectivity**: Treating science as a subject matter. As a result, the same treatment can be applicable to other branches of science too.

No wonder, many of the existing scientific domains have graduated to reach out the practical concerns of daily-life experiences. Admittedly, there are other stimuli in our scientific enquiry than the problems of practical arts. This would
largely left to the historicity of scientific enquiry. In other words, cultural attributes and belief system can also become the contours of scientific explanations, as they are critical in every day practices and action. The prevalence of scientific knowing is found in number of intellectual pursuits, as Paul Feraband, (1978:77) argues, that are-

.... either derived from their own traditions or adopted traditions both from rationalism and from the traditions of their forefathers. It was a beginning stage in which, intellectuals start developing interpretations. They did study on non-western tribes and culture for quite some time....according to them oracles, rain dances, the treatment of mind and body express the needs of the members of a society, they function as a social glue, they reveal basic structures of thought, they may even lead to an increased awareness of the relations between man and man and man and nature but without an accompanying knowledge of distant events, rain, mind, body. Such interpretation were hardly ever result of critical thought-most of the time they were simply a consequence of popular anti-metaphysical tendencies combined with a firm belief in the excellence first of Christianity and then of science.

Although the intellectual product of modern science often differentiates itself from commonsense knowledge, some times it links organized or classified commonsense. In this context, commonsense knowledge gets meaningful when facts remained to be static or unchanging (Nagel, 1961:2-5). Similarly properties of informal theories can also vouch for. To that extent, scientific activities, its emergence and crystallization of new paradigms, perhaps, in relation to intra-and extra-theoretical social factors (Bourdieu, 2004:19). When engaged with a constant interaction between the abstract properties and their occurrence, science may detour into establish new linear progressions. This can well make informal (social) settings for a new beginning. These informal properties, in fact, contribute to describe new explanations, than objective assessment in the positivistic tradition. Such a complex relation, in a sense, produces different types of knowledge activated in social and object domains, that in turn, led to differentiate the rule of the game in science practices (Wattenmaker, 2000:405).

It is clear from above that the structured objects are unviable to serve as a base for primary knowledge. Instead, social categorization, based on informal stimuli, helps in abstracting them. In other worlds, unstructured abstract features represent concrete reality based on their occurrences and properties.
This can also explain on what extent the knowledge terrain contest over methodological issues of scientific paradigm. Sociological wisdom, thus, would traverse to a complex question of the social foundations of science, without losing its critical edge into question and thereby making a meaningful sociological enterprise (Bourdieu, 2004:4).

Needless to mention, methodological doctrines have played a pivotal role than philosophies of science. This was basically against conventional order for judging action. Despite the fact that science is crucial in organizing normative behaviour and material resources for knowledge production, its method is no longer understood as an external guide for action as rule. It means, instead of scaling procedure to generate research results, methods themselves become a sight of enquiry. This again is both methodical and methodological. If the former was contested between competing research programs and procedure without having a neutral point of reference, the latter focuses on the institutional structures to reinforce legitimacy in scientific methods (Lynch, 2005:143).

The protagonists of post-modernism on the other hand argue that the conventional methodological question had a blind faith in rationalization of arbitrary rules and exposes the vagaries of truth. The real is, thus, empirically to be demonstrated so that it unfolds multiple truths from the outer world and reflexivity. Here empiricism examines the hidden (confused) continuity of being that is being reconstituted by means of temporal connection in a discontinuous representation (Foucault, 1970:73). Human life in modern times, demonstrates on how different stages of science have organically been linked with each other. Admittedly, scientific methods, in this context, are seen as how different ways of doings things, or organizing men, for their practical life.

Discourses on epistemological base not only allow for critical understanding in the philosophical, but also-examines the cultural or political aspects of science as well. Wittgensteinian method of philosophy, in fact, addresses this questions from a sociological point of view in general and cultural
critique in particular. By developing an internal logic of sociology of science, one needs to draw Wittgenstein's later philosophy to reinterpret conventional epistemological positions too. It is not an easy task to historicize the sociology of science, as the protagonist vision of history. Such an attempt makes any discipline at stake. As a matter of fact, different historical epochs encounter as their location of reality and their agents were discursively produced differently. In such a situation one cannot make a claim for indisputable truth. As a simple solution, one can enumerate the gains (problems as much as solutions) that are to be integrated together. Here Bourdeiu (2004:9) locates sociology of science into the operational side of the cognitive regimes and its complex relationship with historical conditions. In this context, sociological aspect of science and knowledge would become effective tool for further critical scrutiny.

Although science is defined in terms of its goals and its outcomes, science itself is a knowledge that emanates from the activities surrounded by scientific processes. It can also be derived from non-scientific activity as well; if at all the knowledge was conformed to stipulation of facts and fact-like statements (Mark, 2005:55). This in fact, enhances the degree of social determination, unfolds the hitherto unknown aspects of the character of social laws with varieties of ways. As a result, one can reach out to a scientific solution of problem as well (Horowitz, 1960:176-177).

Science, in fact, is critical domain of knowledge that testifies facts and fact-like statements derived from hypothesis under strict control on the manner in which facts are produced. Subsequently, theories can be produced on the light of information gathered from the primary investigation and reflections upon it (Mark, 2005:55). Presentation of facts and fact-like statements, in fact, are not necessarily been distinguished science from non-science. Instead, one needs to follow the principles systematically as they postulate basic rule for scientific investigation. Some of the basic rules are as follow:

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3 Wittgenstein sees culturally relative views on language, meaning and rationality. Former approach is more naturalist approach which linked the possibilities of human social and cultural life with certain facts of the natural history of the species- a rule governed social practice.
• Science is a series of factual propositions. They are, thus, connected to each other by a common subject matter (the natural world) and a project (the extension and completion of knowledge of the natural world).

• Facts connect factual propositions through application of theories in it. Scientific theories describe what is known and what not known about the world.

• Science is empirical; therefore, it is experiential domain.

• Scientific is a domain of applied rationality, so that it employs concrete and rigorous methods and rejects all dogmas.

• Scientific knowledge is result oriented, i.e. science to 'work'. In other words, it would transform our lives through producing technological inventions, cures for illnesses, new ways of understanding our environment, etc.

• Scientific knowledge is cumulative and progressive. We know more about the natural world than in the past, but build our knowledge on foundations that have been laid down in the past.

These conditions are, indeed, critical to conceptualize theoretical paradigms based on a systematic collection and analysis of observable information in order to verify hypothesis. No doubt, these are the fundamental principles of the logistic positivism. Hence, over the years, there were dissenting voices against this confirmative and conservative scientific enterprise too.

Karl Popper, (2004a.) one of the adherent supporters of this movement, is of the view that, instead of confirmation, scientific theories are to be the outcome of a creative imagination. To him, growth of scientific knowledge is based on the doctrine of falsifiability. Hence, science, for Popper, is not simply a name of one set of practice that happen to be accommodating the allegiances of people in modern societies. Instead, it is a metapractice that challenges all such allegiances. In this respect, science is continued to be in line with critical philosophy. This perhaps, again makes science more empirical and technical than philosophical (Fuller, 2005:484). According to Popper, theories that are testable and falsifiable, by observation and experiment, would fundamentally open for scientific evaluation. What Popper makes distinction is that, no scientific theory ever to be proved true, but all can prove themselves to be false. Therefore scientific knowledge is better than other forms of knowledge because, as they emerges from theories that are falsifiable. Precisely, science is all about for Popper,
hypothesis testing, not belief formation. This point of departure of scientific thinking was a turning point in the idea of philosophy of science as well.

Sociology of scientific method, in fact, looks into this point as an epistemological break from the earlier positivist method and sees how representation of scientist and their standard of analytical tools construct knowledge as they are shared by common norms and values. This phenomenon, Hagstrom describes as a specific mode of behaviour of scientific community to exercise and exchange information. This very exchanging of ideas confirms and complements the socialization process in science. As a result, a productive and organizational nature of science would stem from the open and egalitarian nature of scientific community. This organization of community of scholars establishes a cordial relationship between individual scientists and the wider community they formed. When a matured scientific domain recognized by a community of scholars, Thomas Kuhn (1970) terms it as a paradigm. In Kuhn's philosophy of science, paradigm denotes the central object of study. To him, for all action in the history of science is subjected to its rise and fall of paradigm. Kuhn conceptualizes paradigm on the following grounds (Klee, 1997:133).

- It finds out root cause of the problems and suggest solution for the community of practitioners.
- It helps to form a set of procedures for experimentation, technicalities, and instrumentalities in order to sought out what kind of problems to be taken for research enquiry.
- It renders repeatable and standardized illustrations on various theories available in textbooks, lectures, and other artifacts of professional training.
- It establishes qualified acceptable examples of successful scientific practice.
- It recognizes the existence of theoretical, instrumental and methodological commitments.
- It constitutes a worldview.
- It cannot be characterized by precise rules or sentence.
- It is being privileged over theories, but it is not theory per se.

The community of scholars looks different set of problem by setting out unique attributes on data, which may bring out a distinct world views. Each group differentiate from it competitor paradigm by taking slightly different aspects of the problems to find solutions according to their own vantage point. It
becomes a normal science when it slowly gets institutionalized through pedagogic practices, writings, engage in communication with the community of scholars etc. As a result, it also stimulates practitioners to elaborate its basic principles so that it will ensure some theoretical consistency in paradigm. However, all the time it has to undergo fundamental scrutiny to qualify scientific validity, to make the paradigm normative. Sociological thinkers would also traces out these qualifications as they are very much part of institutional form of scientific thought. Robert K. Merton, for instance, explicates four strands of institutional imperative of the ethos of science (Sztompka, 1996:267-2, 208-209 and Mark, 2005:126-127).

- **Universalism**: truth claims are subjected to pre-established impersonal criteria. Universal methods until they were qualified to be proven. It endorses talents but rejects particularism and prejudice.
- **Communism**: findings of science by the scientific communities are based on social collaboration as its properties are being shared with the community at large. In fact, scientists and their contributions will be recognized in society at high esteem.
- **Disinterestedness**: As scientific enterprise is a competitive field, a scientific property cannot easily be falsified without good reason. Disinterestedness helps the scientists to scrutinize their peers objectively in order to trace what is ‘truth’.
- **Organized skepticism**: judgments are to be suspended until the facts are at hand. At the time of experimentation, the scientist suspends his or her common sense, so that it allows the hidden truth to unfold.

While explaining the ethos of scientific community, like any other social institution, it can be explained from the outside of its structure and function. As Thomas Kuhn argues, these scientific communities are identified themselves by generating and sharing paradigm of thoughts of their own. Merton, however, explains them as externalities that influences upon knowledge. Perhaps the limits of Merton’s scientific analysis, is the vary act of externalities, i.e. the sociology of knowledge paradigm. However, Jagjit Singh (1977:42) argues that, the ethos of science maintains rigid self-restraints relapse into wishful thinking both at the level of theorization as well as the level of experimentation. They can also challenge the established theories whilst they conflict with facts observed in everyday-life. As a result, science can overcome from what may be called cultural lag and share knowledge with wider groups.
In anthropological wisdom, scientific enterprise appears to be a strategic mode than as a different stage of development of human mind. It proposes two theoretical modes in which nature is accessible for scientific enquiry: (a) developing perception and imagination and (b) removing sensible intuition (Levi-Strauss, 1966:15). Sociology of science, in fact, is a socially determinant system of knowledge. In this perspective, it is being argued that science is linked with the material functioning of society and it would shed light on a comprehensive approach to find out solution. Precisely application of scientific methods, from a sociological point of view, is well integrated into the fabric of society. However it is not free from limitation too. Organizational structures of science paradigm, for instance, may threat to engulf traditional values of autonomy, public knowledge, disciplinary communism and personal commitment as they opposed to formations of modern sciences.

One cannot, however, deny the fact that scientific knowledge is in the frontiers of forecasting future events and actions as it was superior over intuition and rationality over irrationality (Horowitz, 1960:179). But most importantly, empirical foundation becomes an important terrain in scientific method for theory building. As Mannheim (1982a:129) rightly pointed out that the revolution in methodology and epistemology always are grounded on their immediate empirical reflections. The future of science, in this respect, would rest upon developing a paradigm based on ethical judgment. It is the ethical judgments that fundamentally pose a questions that why men value, what they value in a given life circumstance. Socialist thinkers, in this regard, were also optimistic about the role of scientific method as a practical critical activity. Scientific Marxism, for instance, narrowed down the idea of science into social relations. Karl Marx (1845) makes his point very clearly by stating that,

The question is whether objective truth can be attributed to human thinking is not a question of theory but is a practical question. In practice man must prove the truth, that is, the reality and power, this-sidedness of his thinking. The dispute over the reality or non-reality of thinking which is isolated from practice is a purely scholastic question....Social life is essentially practical. All mysteries which mislead theory to mysticism find their rational solution in human practice and in the comprehension of this practice.
Quest for moral judgment, in a sense, is visualized in a set of practices rest in humanism (Horowitz, 1960:185). It seeks to search from the history of philosophy of sciences which distinguishes man from his natural environment. It does not mean that such an attempt is completely divorcing theory from action. Instead, theory needs to be assessed through actual distance, in which men have traversed from their 'original state of nature'. Thus, distance of man between him and the physical surroundings is rated by consciousness. This, in fact, helps humans to set their desirable action that emanates from conscious-being (Horowitz, 1960: 186).

Science and Technologies of Power
The domains of modern science are a priori organized as a conceptual institution for universalization, productive control and theoretical model subjected to practical questions. These properties normalize the processes and procedures for conceptualization and analytical tools for theory construction and their practical possibilities. Theoretical reason, although, remained to be pure and neutral, its technical procedure would guide for purposive action as well. It is not only science, but quite often its technocratic assumptions would dominate and govern over human consciousness. Eventually technologies of power embodied in the science paradigm discursively produce political power that cut across all cultural spheres (Marcuse, 2002: 162). Manipulation of technologies of power, in other words, reduces modern men into monotonous one dimensional. A fundamental question needs to be answered that, whether a type of society we cherish, should shape our choice of technologies, or should allow our society to be shaped by the 'inevitability' of technology and its apparatuses.

There is no logical reason behind throwing technological forecasting out in a conservative bathwater. Instead, one needs to be seriously debate on its normative domains but at the same time its social ramifications. In doing so, what is finite is not a question of quantification and physical viabilities of scientific knowledge; instead one need know a meaningful scientific knowledge in its totality. The role of knowledge, in other words, is largely dependent upon what extent one would make sense of the capabilities about oneself and her world out there (Rose and Rose, 1969: 252). Such a reflexive understanding
would not demand for modern devises to be possessed by all; instead it is basically a question of whether the whole community will be practitioners and participants in the business of scientific advancement. Somehow, it is similar to Amartya Sen’s capability theory approach.

Disseminating science, through this technological forecasting, would rather expand the scientific horizon of its concrete societal practice. Technological problems in the domains of social sciences, no matter whether they are in a private or in a public, would ultimately shed light on social problems and reliable solutions. Technological apparatuses help to theorize definite standards, for instance, standards of clarity and practical testability (Popper, 2004b:54). The application side of technology, to Popper, is the terrain of social engineering. As he argues, all social problems, in which knowledge is used is not to be handled by an individual. Instead, the task of social engineering is as much as discursive, for instance, it may tend to design new social institutions or reconstruct those are collapsed or drive those that are already in motion (ibid: 58).

Yes, scientific advancements, in our times, have increasingly been challenged by a set of sustainability questions. This was to enhance societal capacity and judicial use of scarce resources of the planet to meet the needs of a larger but stabilizing human population. This quest fundamentally relates to the pressing developmental issues such as hunger and poverty questions worldwide. In this regard, sustainability science provides useful knowledge for solving the very practical, but highly complex existential problems. Science and its technologies of power need to further advancements in its adaptive, but complex mechanisms, for instance an enduring form of human-environmental relations, with democratic spirit, so as to overcome from the new challenges of risk society (Clark, 2007).

Science and Human Values
We are told that the ethics of science would always deal with things, not with people. Since its implications perhaps directly or indirectly affect the life conditions of people, the former proposition gets meaningless. Needless to
mention the ethos of science is very close to human values and in turn, human values influence science. However, it doesn't mean that ethics of science, time and again, derived from science qua science alone. Instead, it basically derived from a set of questions such as what 'science and technology' are consisted with, what their social ramifications are, what 'human values' are and above all whether social values are necessary to forecast complex technical enterprises. To address these questions, one need to understand on, what science is and what its social functions are? A broader view of it, thus, unfolds many possibilities for reevaluation, reform action and guidance in order to map out certain ethical conceptions in science question, for instance, freedom of enquiry, professionalism, responsibility, scientific community, and public interests, etc. Such a coherent aspect of moral properties in the process of science at work makes its advancements more humane and justice.

Linking ethical issues with scientific practices, in this context, is reasonable for a responsible social enquiry. In other words, the ethics of science tends to be grounded, as we early mentioned, on humanitarian principles (Rapoport, 1957:798). In fact, Joseph Bronowski (1965:62) held the view that society fosters 'values of science' as autonomous sphere where the notion of freedom grew from the very social apparatuses. If at all science and its enterprises are largely part of societal ethics, it cannot redefine social ethics exclusively. As a matter of fact, its monopoly over creativity, truth-finding will have limited impact. Precisely, value of science can possibly strive for organizing practical ethics on the question of what to do next?

Technical activity in social enquiry can be seen at two levels from its ethical point of view: (a) involvement of science at work and (b) its implications on value perceptions of scientist on their respective domain of research. To William W. Lowrance (1982:6), ethical values in science is seen, for instance, at the time of undertaking research enquiry and systematic organization of field observation with the support of research techniques in light of available philosophical doctrine. Such an enquiry would necessarily influence the values on the public directly or indirectly. It is a social reality that the underprivileged striving to pursue these social resolutions are hardly been found realistic since the
preference and value systems are accessed and controlled largely by a privileged minority.

It is in this context, science has limitation to find out grand solutions as they were themselves are organized for scaling universal goals. Therefore, multiple social actions perhaps would be effective than finding answers from one dimension of science (Lewrance, 1982:14). Knowledge and its properties, instead, to be answerable for such questions like, how one would make a choice without limited options, or when and what forms, choices and options get conflated? Further, how should one pursue collective societal goods with non-violent means? And how should one get a specific guidance on a particular real action that is derived from abstract precepts.

It is true that knowledge systems based on scientific experimentations, interrogates the basic ethos of science being progressive in the every-day-life of people. In social sciences, in fact, this basic question challenges the occurrence of social attitudes and practices that perhaps are the sources for social change. This challenging domain would necessarily help agencies for self evaluation and crucial devise for taking decision. Such a systematic organization of knowledge would help one to find out pressing problems and its hidden social mechanisms and institutional arrangements to translate idea into actual social action (Dror, 1960:356).

For disciplinary enquiry, value for research is inferred from a patterned social behaviour that is systematically followed by the community of researchers. These desirables, in fact, influence a bench of available modes, means and ends for scientific enquiry. Value, in all these stages, becomes prerequisite for integration, associations and preferences. To that extent, value becomes a desirable conception that is inherited in a set of preferential responses. In other words, value guides for actual preference. It, in fact, appears in symbolic forms and meaning that are consciously employed in cognitive faculties. These symbols, for instance, reflects in human life, evokes our motivation, social behaviour, and cultural patterns. When it comes to scientific filtration, then in that case it epitomizes a logical construct linking culture with social structure. All these
expressions can be inferred—and abstracted from the immediate sense data of both verbal and non-verbal behavioral events emanates from a general theory of action (Catton, 1956:312). These value premises, in the social science discipline, are crucial for (a) codifying existing concrete knowledge, (a) inspiring further research, and (c) avoiding biasness in observation and interpretation. In other words, values are mainly sociologically valid from its nascent stage to its most advancement stage. Beyond, this, as we earlier discussed, society itself, set the rule of the game in the knowledge formation and its progress. In the following section, an attempt has been made to make sense of a perspective on sociology of knowledge.

PERSPECTIVES ON SOCIOLOGY OF KNOWLEDGE

Although the theories of sociology of knowledge began its experimental bit from a collective-representation under the theoretical rubric of positivism, it is a well known fact that the two intellectual heritage; reason and empiricism, have been dominated throughout in the history of western social science paradigm. One of the creative minds of science, Albert Einstein, for instance, finds out the relation between the content of theory on the one hand and the totality of empirical facts on the other. These components constitute, as he argues, two forms of knowledge, the empirical and the rational. The former gives concepts which are particulars, normative. Hence the later is formal, mathematically generated concepts which are universal, as it derives meaning by postulating universal propositions. Although, both these components are inseparable, to Einstein, they stand as *eternal antithesis* (Holton, 1986:4). Perhaps, this dualism may transcend itself as an active mechanism, as and when the every-day life experiences actively engaged with scientific pursuit as critical and reflexive.

With one set of observation of new empirical evidences, new theories may generate (Mannheim, 1982 (a):129-130). Empiricism can also be rational method as modern men rationalise all their behaviour in a new situation. This would easily be understood on how fast discontinuity taking place in cultural patterns. This result to new order and the old no longer continue as it is. That means, rationalism, as Foucault (1966:54) believes, is related to one's ready-made concepts and scientific order that mathematicizes empirical knowledge through
observation. It is in this background of the modern form of knowledge; social relations were constructed and reconstructed. In other words, science is much to do with society today.

German sociologist Karl Mannheim, in fact, addresses this ambiguity by exposing their inherent ideological positions. The way knowledge is produced has brought about two controversies. First, whatever is ‘known’ is appeared to be systematic, proven applicable and evident. To the knower, it is assumed to be knowledge. On the contrary, the second proposition indicates the fact that every alien system of knowledge appeared to be contradictory, unproven, inapplicable, fanciful or mystical (Burke, 2000:2).

Sociology of knowledge basically deals with certain fundamental questions like how knowledge is conceptualized at the existential level and how it is maintained in the domain of intellectual development of mankind as a historical process. It would trace out a battery of workable criteria for determining the interrelations between thought and action (praxis). To begin with, it can be argued that knowledge is an outcome of a set of practices in a particular time and space. Subsequently, these practices get their meaning, as and when, they were tested in a particular context (Cohen, 1986:179). In other words, the standard and validity of knowledge are determined based on their context specific. Moreover, truth claim of knowledge is also in relation to the standard that applies in a context of attribution

Practices are, indeed, the expression of meaning grounded on the experience of everyday life (Wenger, 1998:52). In fact, Karl Mannheim (1952) defines sociology of knowledge as a discipline which explores functional dependence of each intellectual stands among differentiated social groups. It is because of these differentiated locations that the reality retraces the evolution of various standpoints. Antonio Gramsci, in fact, states that every social group

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4 Stewart Cohen would argue that knowledge has a social component. He demonstrates that social factors determined whether one does possessor undermine one’s knowledge. According to him attributions of knowledge are context-sensitive (see Cohen, 1986: 574).
would have its own organic intellectuals and they would make intellectual standpoints by maintaining autonomy, as an independent social group in which they are being represented. According to him, intellectuals, cannot form a single group, instead they are divided into sub-sets that emerge from and serve for other groups too. However, Mannheim was of the view that different standpoint of intellectuals and their indifferent intellectual disposition would not stand for long, as the process of education exposes the logic of their self-interest for opposing each other. It is in this context, a movement of historical and epistemological relativism opens up new paradigms in the terrains of sociology of knowledge too.

This paradigm has two strands. At one level, it is said that, those who maintain Wissenssoziologie is alone properly 'substantive. It means that sociology of knowledge analyses the functional interrelations of social process and structures on the one hand and the patterns of intellectual life, including the modes of knowing on the other. Therefore, it is not history of ideas in their social context, but social determinism of thought and domination of material over non-material culture. The second proposition deals with issues of epistemology. There are two views on this epistemology: theory and historical sociological method of research. The former is again sub-divided into (1) an empirical enquiry through description and structural analysis of the way in which social relationship influence our thought and (2) the validity claim of functional prerequisites of the observed (Hinshaw, 1943:58-59).

Taking cue from the disciplines of anthropology, social identity of man, as a conscious being, inhibits a quality of bearing knowledge. In this context, to begin with, one needs to ask a question of, what possibly humans know? and validity of the known and its knowledge-claim. The latter proposition is largely depended upon the extent of socially acceptable rules and procedures. As Chattopadhyaya (1991:5) would argue, it is the acceptable rules that create appropriate theoretical positions. However, the appropriateness is appeared to be a non-theoretical aspect of knowledge. Although it is hardly to be sought out any ideological position, nonetheless it does carry a moral intent.
Sociology of knowledge, in fact, does not address ideology per se. It examines, instead, how different thought forms and its undercurrents are being taken in the process of social development in diverse social settings. Hence, 'ideology' in sociology of knowledge, has no place for a moral or denunciatory intent, instead the perspective of a thinker would enable to hold morality. Instead of ideology as a reflexive mode of practice emanates from conscious being, the quest for existence can be seen as a set of discursive practice. It is in this context, functional aspects of discursive or non-discursive practices give meaningful explanations that are equivalent to other practices as well (Foucault, 1972:185).

It is the fact that the process of knowledge, by and large, is influenced by extra-theoretical factors that are very close to the history of thought ever since. But, at the same time, one can also move against the existing history of thought as well. Gunthner Stern would call this process as non-historical and counter-historical epoch. This process, as he would argue, cannot be understood historically (Child, 1941:399). That means, one can live in a state of pure repetition, without anticipating any other forms of existence. It does not mean that the existence of humans is not historical; instead, one may not always be aware of the historicity of his existence (Child, 1941:400). As a result, even today, one could see the older methods of intellectual history, perhaps, repeat in the changing trajectory of its ideas and thoughts. Therefore, a broader purview of historicity cannot be seen in isolation; instead a spiral of cumulative process of human activity is in operational at multiple layers. In this context, historical sensitivity contributes complex dimensions of human life in the discourses on sociology of knowledge. In other words, historicity is a living force in which humans are participants that express their actual attitudes to shape their collective will in social life. In other words, individual thinking and knowing hardly be understood without taking into account the existential conditions and social implication of the collectivity of human life (Mannheim, 1982[a]: 109-111). As Mannheim states:-

The individual does not live alone and for himself...and the contexture of his experience as a distinguishable formation is not a function of his own experiential stream alone. The individual possesses a great part of his stock of experience in common with other individuals. These
experiences, which are simultaneously present in all the individuals who belong to the same entities constituted by possessive socialization and community formation, must be mutually interconnected in structure in a way similar to that which obtains among the experiential part of an individual stream of experience (Mannheim, 1982[b]: 71).

To that extent, inventing or creating new structures or bringing out certain internal changes become a meaningful enterprise. Contrary to Mannheim, Wenger (1998:55) was of the view that knowledge domain is significant in particular activities with a selected group of people. According to him, participation is a learning process and a living social experience, which ensures people's membership in their collective life and active community involvement. These engagements, eventually, form identities too. It is in this new identity that would give concrete meaning to something that is abstract. Meaning, thus, cannot be limited by viewing from outside. Instead it perpetually incorporates as well as dissolves it in itself. In other words, knowledge is ascertained not only by internalizing of externalities, but by objectifying the self by the agencies themselves too. In the words of Sartre;

Mind objectifies itself, alienates itself, and recovers itself-without ceasing; it realizes itself through its own history. Man externalizes himself, he loses himself in things; but every alienation is surmounted by the absolute knowledge of the philosopher...therefore, we are not only knower; in the triumph of intellectual self-consciousness, we appear as known. (Sartre, 1968: 8-9; emphasis added)

It is in this context, social background becomes an invisible force for subjective thoughts process and ideas, and it is not an outcome of an isolated aspiration of great genius. It is, in fact, an inner dialectical development of ideas rooted in historicity by a set of constant contradiction that takes place in the succession of generations (Mannheim, 1982a:114). Similarly Max Scheler of the view that knowledge co-constitutes the object, “human society” and all forms of knowledge is rooted in the same objects that determine and specify the characteristics of society. That means, all forms of knowledge is tested by society and its structures (Child, 1941:408). According to Mannheim, this process is evolved from patterned experience that shares a collective life with several other members of the group (Mannheim, 1982b:71).
Experiencing a collective life is fundamentally different from the
dialectical nature of subject and object as Wittgenstein has rightly pointed out. He
would treat private as the public and individual as social. The basic rules of
concepts, as collective experience, are not based on individual experience instead;
they are deeply rooted in a shared social life as natural process. Therefore,
learning a concept is an intellectual activity. It would place individuals into a
particular part of reality, regardless of private experiences or impulses of the
external worlds for similar experiences and feelings, to be shared (Trigg,
1991:211). Application of concept, thus, more or less is shared by a community.
The domains of sociology of knowledge deals with this issues by finding sources,
meanings and its different manifestations in life experiences, institutions,
traditions, and their collective practices.

The approach of sociology of knowledge would also extent to mediate
between knowledge producers and their products (Goldman, 1994:266-67). This,
in turn, gave rise to several possibilities for ‘transcending the self’ and, in turn
‘relativizing the self’ too (Woldring, 1987:157). Even if knowledge remained to be
a fixed, as a field of co-ordination and subordination of statements in which
concepts are rested and defined, it relevance largely applied in a context of
transcending ‘the self’. In this regard, concepts become crucial component to
pursue new forms of knowledge and shed light on theoretical reflections
obtained through systematic observation. Concepts, to that extent, can become a
guiding principle for identification, classification, association and definition of the
subject matter that one tends to experience. According to Tarcisio Zandonade
(2003:80) concepts are the building block of knowledge and that would allow us
to visualize underlining theoretical possibilities. It also becomes critical tool to
use existing knowledge for practical purpose. Through these discursive
practicalities of concepts, may lead to new forms of knowledge. It is this newly
created space of knowledge generation that a subject can take up her position and
can speak about objects as and when she deals in her discourses (Foucault,

In a modern social setting, quite often, science appears to be a
‘systematic’ attributes that eventually graduated from evolutionary stage of
existential conditions, to a contingent “purposive” stage. As a matter of fact, certain things are yet to be known and certain errors are still exist, and thus an incomplete knowledge about our present would create curiosity for scientific enquiry further. This generic aspect of curiosity and pursuit influences the social position of the investigator to contextualize the “situational-relativity”. As a result of the contextualization of the subject matter, researcher tends to develop a ‘perspective’. It is the perspective that would signify our views on objective, our perception and above all a guiding principle to construe our line of thinking. Some times, perspective, in fact, is something more than a formal determination of thinking as well. In other words, certain qualitative elements in the structures of thought influence perspective. In the perspectives of sociology of knowledge, by and large, research pursuits would take into account the expectations of a group in which the research is carried out. This unavoidable political intent would necessarily be a crucial qualitative dimension. In this respect, two conditions are central in the studies of sociology of knowledge: (a) morphological (data do not open for explanation) and (b) analytical (data is broken for more empirical questions/interrogation).

Yes, these classificatory propositions are sought only for analysis. Therefore, it is not a question of different people would think differently, instead, how different ordering of the materials of experiences are expressed differently in diverse social groups and communities. That means social facts have little room, out of context in the community in which it is created. In other words, knowledge becomes meaningless if the former is taken out of context. Hence, it may not be successful when it put in a different context too. To that extent, facts are that of artifact which are of little or no use outside of the community in which it was created. But one cannot deny the fact that no knowledge is existed without contextualizing facts. When the newcomers in the community start learning on how to make use of it, for instance, creates knowledge. This gaining of knowledge was basically derived from those who form and participate in the business of community (Hildreth and Kimble, 2002). With its obvious reason, different groups may develop distinct thought-model depicting a specific cultural trait as world-view. All these modes of abstract and concrete forms, in one way or other, seek to relate social existence as the accidental ontology. These critical
reflections, as Manheim (1982a:115-121) argues, have logical reason to transcend historical genesis of organizing the content and forms of knowledge systems.

While treating sociology of knowledge as a sight of epistemology, one needs to discover more than a factual occurrence, unless it demystifies some of the prejudices or revises existing epistemology. In other words, new facts compel to revise existing theories, thereby epistemology (Mannheim, 1982a:127). To that extent, sociology of knowledge can be treated as a set of theoretical propositions; but at the same time a set of method of enquiry. In its analytical mode, sociology of knowledge can generally be classified into two;

- Empirical investigation through structural analysis of the ways in which social relationship influences our thought process. In other words, an existential determination of actual thinking.
- Epistemological enquiry indulging into the problems of validity of the very bearing of interrelationship. It transforms empirical research questions into an epistemology where in validity and relevance of thought's bondedness brought about the research problem.

It is the fact that immediate empirical procedures lead to construct new knowledge. As long as mind remained to working on these lines, knowledge would be generated by actively integrating sense data with previous perceptions. In the human mind the sense data is inscribed in classificatory mode by comparing, and building association of data, into comprehensible pictures. To get the coherence of experience, both concept and symbolic representation of the given fact are interchangeably used (Zandonade, 2003:81). This would revise the older forms and eventually would shed light on newer forms. Such an approach is unavoidable in theoretical orientation that, in itself, is a philosophical question.

Through times, theories of sociology of knowledge, sharpened and expanded its methodological tools from the narrow disciplinary caves to interdisciplinary approach in order to make sense of the possible alternative movement in the complex terrain of scientific paradigms. As a result, anthropologist like Claude Levi-Strauss established a theory of knowledge around the opposition between the 'raw and cooked' by distinguishing western notion of what is 'nature and culture'. On the other hand, critical theorists reframed the
same question by locating at the prevailing social arrangements of knowledge assessment. It was the critical cognitive forms, for them, that contributes to knowledge production and judge its validity and ideological positions. Moreover, these are the debates; that redirected the political role of social scientists to be politically charged intellectuals (Hammersley, 2002:176).

In fact, Thomas Kuhn, a well known philosopher in history of science locates this ever ending process in the realm of scientific revolution occurs in history. Kuhn refers it a normative science when the orthodox paradigm is replaced by inventing new paradigm, until it was challenged by a new paradigm. Subsequently, Michael Foucault, brought about a relation between knowledge and power at different levels (both micro and macro), by locating various discursive spaces or sites of knowledge played out. Finally the studies of knowledge turned back into the landscape of sociology again by the contributions of Pierre Bourdieu through his studies on power of institutions, such as university system that counts as legitimating domains of knowledge. Of late, development in the sociology of knowledge, and its intellectual activity too gradually proliferated into different terrains. This proliferation perhaps been seen in the sociology of profession, the sociology of knowledge, the sociology of science and so forth. These different terrains, in fact, represent collective identity of individuals in a new social setting that makes the discipline more sensible towards inclusiveness with complex terrains (Kurzman and Owens 2002:63).

Despite these propositions, there is an inherent dynamism found particularly from an epistemological standpoint, where, knowledge tends to transcend from the acquisition and transmission to the fundamental questions of how construction and production of knowledge is taking place. This question usually debated in the writings of post-modernism and post-structuralism. The main critique of this theory, in fact, was born of the social scientist themselves by judging knowledge in their political and ethical location than cognitive terms. In this context, post-modernist see science, rationality and knowledge are the principle domains of maintaining legitimacy, and expression of power relations. This new approach had turned against the earlier debates on structures and, focused to individualistic and linguistic practices as method of classification and
experimentation. As a result, over the years a growing number of state holders are engaged themselves on the quest for politics of knowledge-production than economics of knowledge (Burke, 2000:3-9).

Structure of thinking in fact, is an extension of developing humans historically in terms of their intellect, capacities, and talents, practical skills and critical thinking. Such thinking, however, reflects upon men as subjects, who tend to see in a dialectical relation with nature, and with objective reality. Dialectical tradition, as an ontological phenomenon, would share a world-view with different domains of thoughts, as a sight of variety of contradictions. It is in these internal contradictions sources of change to be visualized and the very contradiction can only be overcome by change. Hence, contradiction, essentially, bounds to exist in its own right (Fisk, 1979:119).

Dialectics of thinking process, in other words, is very much part of knowledge production to begin with. In other words, knowledge tends to maintain objectivity through dialectics of thought (Dolgov, 1988:57). It was the objective reality in human consciousness that tends to make a dialogical relation with nature, human beings and above all conceptions for philosophical questions. One would find it with dialectics of subjective type in its objective nature where knowledge is delegated in the form of objectivated projection (Greimas et al, 1989:568). Lenin (1981:182) clarifies this dialectical position further by logically connecting knowledge with cognitive process in human beings.

Logic is the science of cognition. It is the theory of knowledge. Knowledge is the reflection of nature by man. But this is not simple, not an immediate, not a complete reflection, but the process of a series of abstraction, the formation and development of concepts, laws, etc and these concepts, laws etc. embrace conditionally, approximately, the universal law-governed character of eternally moving and developing nature. Here there are actually, objectively, three members: (a) nature, (b) human cognition and (c) the form of reflection of nature in human cognition and this form consist precisely of concepts, laws, categories, etc. Man cannot comprehend nature as a whole, in its completeness, its immediate totality; he can only eternally come closer to this, creating abstractions, concepts, laws, a scientific picture of the world, etc.

Although, theory is a crucial component in mapping knowledge, quite often, both theory and knowledge are fundamentally shaped by the lines of
methodology. A theory would map out the domains of inquiry and it provides a way of proceeding through the structural reality of the domain in question. Scholars in social sciences, unlike natural science, raise many methodological questions. This in turn produces what is popularly known as paradigms. And it the paradigm, that unfolds alternative ways in which social phenomena is sought to construct a continuous dialectical relation between implicit theories and enriched field experiences. Their dialectical relationship would ultimately pave the way for action that would express multiple theoretical possibilities.

However, there is a need for objective methods to scale the validity of these theories. In this regard power of a theory can be judged at three levels, i.e. (a) what extent the components of law are well-established, (b) how strong interconnection is made and (c) how plausible the logical inferences are. In nutshell, theory makes an attempt to organize the facts-some proven, some conjunctures within the domain of an inquiry into a structurally coherent system.

In the domains of science, theory building assumes paramount importance by establishing laws that would explain, predict and, if possible, control a given phenomena. As we discussed, facts is crucial in the process of scientific inquiry and theory construction. In a scientific enquiry, facts are not hidden answers 'out there' waiting to be found. Instead, they are to be invented, shaped and fitted together in a conjuncture. Since the properties of facts are derived from particular experience, scientific problems may not find out solution to all our problems. It is in this context, the question of objectivity in science is trouble-some in our times. Michael Polayani (1962:68) has rightly observed that

There are no mere facts in science. A scientific fact is one that has been accepted as such by scientific opinion, both on the grounds of the evidence in favour of it, and because it appears sufficiently plausible in view of the current scientific conception of the nature of things....Science is what it is, in virtue of the way in which scientific authority constitently eliminates, or else recognizes at various levels of merit, contributions offered to science.

Both Pareto and Evans-Pritchard share this same view by arguing that the scientific notion maintains objective reality subjected to validity of their premises.
and to the inferences drawn from. To prove a valid claim, science conception
needs to be agreed upon what reality actually is? (Wintch, 1972:10-11). It is in this
case; science is eternally provisional and basically is a question of consensus.
In other words, the scientifically true is what scientists endorse as being true. In
science, facts can only be a mean, confirmed to an extent of suspending
provisional characteristics. It is in this context, any item of new knowledge, to
begin with, tends to be justifying against the existing knowledge system based on
the proven facts. This justificatory obligation, as an innovative idea, is the central
burden and strength of science terrain. Therefore, scientific knowledge needs to
be judged by both analytical and predictable power. It is this predictability that
would lead to form new conjectures and realizations.

It is well known fact that scientific knowledge is intellectually simulative
and progressive. As result, it would also seek to buildup orthodox knowledge and
at the same time strives to supersede existing knowledge. Pursuit of knowledge in
social sciences, in this context, embraces most heterogeneous, varying, self-
conscious, mischievous, non-ideal subject in the universe as well as life-world
based on the intimate observation. It would also provide analytical detachment
from particular cause and mechanical explanations in order to handle fact as
value to defense against other forms of occurrences (Lowrance, 1982:42-55).

Experience of Thinking and Knowing
Although knowledge is a product of collective consciousness, it is slightly
doubtful that whether this consciousness can be revived. But this question
cannot be solved simply within the framework of modern thought. Instead one
needs to understand that how and why a whole mode of consciousness gradually
is being replaced by new set of modes, instead of experiencing them empirically.
To AK Saran, changing terrains of consciousness in new mode is as extra
theoretical factor i.e., essence. Society, to him, is an extra theoretical space. Since
the world-outlook itself is put into divergent motions of change and dynamism,
an exact explanation to this question may not be possible. In order to escape
from this logical predicament, one needs to distinguish casual relationship as well
as dialectics of relationship.
Sociology of science, perhaps, postulates a question on the relationship between changes in consciousness and changes in extra mental sphere (Saran, 1998:58-59). Locating social structure as an extra mental sphere, inter-subjective dialogue between these apparatus tend create collective consciousness. This in turn, changes internal or external factors that are conditioned by the very structure. Therefore, the agenda of sociologies of science was to discover the perspectives that are implicit in a set of properties embodied in the structures.

Inter-subjective thought and interaction, in fact, is an integral part of life-world. The life world has its own historical root to explain life experiences. To make sense of this, one needs to traverse from the social science to conscious level. Specificities of life-world arrangements shed light on methodological scheme for social enquiry. Phenomenological school, for instance, treats humans as a social being that are fundamentally established through symbols and languages—a mode of communicative action. In every subjective consciousness, thought is found to be continuous and change, that are derived from our experience stored in the inner world. Behavior expresses, in other words, our experience of consciousness that bestows meaning as a result of spontaneous activity. This spontaneous act is nothing but a mode of intentionality constituted by the objective conditions. It is in this context; the method of phenomenology seeks to explain the intentional appearance of social phenomena and describes its inner structure. In doing so, fixed images will be replaced by a coming-to-be. As a result, contours, boundaries and differentiations would increasingly become meaningless. Hence the moment these changes are experienced, it modifies our understanding and eventually it becomes part of collective memory (Schutz, 1976:55-62). Recovering memory, in fact, is the crucial element of all rational construction. However, each phase of experience melts into the next without having any distinction. Therefore, 'the becoming would' would qualitatively be better one in the world of every-day life.

What is to be noticed in praxis is that the consciousness of life-world expresses definite number of spaces ranging from the location of action at one extreme, to the location of imagination on the other. Praxis examines this continuous but fluctuating flow of thought process in these spaces. This can be
understood at two levels; (a) living with one’s own experience and objectification, and (b) reflexivity from past experience and search for new meaning. The latter, in fact, is a doctrine of wide-awaken and a new beginning for legitimize pragmatic interpretation of cognitive process. This cognitive process pulls out pragmatically relevant determinedness, forms and contents of our stream of thought. In addition, when we experience action, it unfolds a series of inner and outer time that unifies everything together for a holistic understanding.

By undertaking perpetual action and interaction, one can visualize her deed. This will eventually change the way we understood the world. As the work has been irrevocable, we cannot make undone what we have done so far. In this context, from the moral and legal point of view, we are responsible for our deeds but not for thoughts. But it is to be remembered that, our reflexive thoughts unfold freedom of choices between several possibilities before arriving in the outer world. This would open up possibilities for modification too.

Every-day-life, as we discussed earlier, brings about inter-subjective world which has been existed for long, experienced and interpreted by others, our predecessors, as an organized world. Now it is given to the generation of our times to experience and interpret through these historical experiences. All interpretations of this world are the cumulative process of a stock of previous experiences, our own experiences and those handed down to us by our parents and teachers. These forms of knowledge, thus, function as a scheme of reference at hand. It also helps to circumscribe definite qualities; for further action or resist action. The world of everyday life is a genre which objectifies our actions and interactions. Biographies of everyday life and the stock of knowledge serve as a tool to interpret past, present experience and determine future, is called stock of knowledge. The stock of knowledge is split into layers that are relevant for finding solutions. This in turn would establish various zones of knowledge. Even in a limited commonsense knowledge of everyday life, points of interests, problems and relevance may not be sufficient condition for explanations at the practical level, but, all these questions complicate further direct for future enquiry (Schutz, 1976:69-75).
Practical Knowledge

In the world inter-subjectivity, Karl Mannheim created theoretical void on the question of how to deal with the empirical materials subjected to the semantic truth and its empirical verifications. In fact, they are embedded in certain pragmatic thought in Mannheim by explaining two key concepts; idea and utopia. Mannheim, while elaborating sociology of knowledge as a separate theoretical paradigm, perhaps wanted to distinguish them with deep sensibility. These two concepts brought about two extreme theoretical positions; epistemological relativism and absolutism. As he argues, ideological thought is untrue due to its perspectival determination. On the other hand, he regards utopian thought as ultimate truth. However, he held the view that total conception of ideology can develop knowledge. What will be then, when the intellectual enquiry of a party is transformed into a method of research in social and intellectual history generally?

In this context, Mannheim eliminates relativistic proposition and transcends the narrow ideological thought into utopian world view. This theoretical position perhaps, appeals sociology as a dream project of scientific enterprise too.

Although, the scientific approach eventually unfolds the complexities of human life, its urgent quest was to find out pragmatic tools. In other worlds, in the terrain of social scientific paradigm, particularly, to search out truth is not merely a matter of simple correspondence between thought and existence. Instead, it is tied up with the imaginative terrain of the investigator on the subject matter, stand point, evaluations and definition of the object under consideration. As we discussed earlier, there are two unresolved epistemological questions Mannheim left behind the history of sociology of knowledge. They are; (a) thinkers of idealism less likely to find answer to the question of pragmatic approaches derived from empirical stand point. On the other hand, (b) the empiricist with strain of thought perhaps provides tools to address the problems of historical and social relativism (Hinshaw, 1943:70-72).

Act of thinking, in business of everyday-life, is not monologue, instead, as Schutz believed, has been complicated with (a) incoherent, (b) ambiguous and (c) contradictory for further elaboration. Some of the complicated process as follows:
- Determining subject matter for enquiry is not itself integrated coherently as they are partially begun to organize based on subjective positions. Therefore, the selection of the objects depends on the degree of change of the observed and that reflects upon the knowledge system.

- World of everyday life has only partial understanding about knowledge. It is an ambiguous sight of discursive relationship between the elements of subjective principle and general principle.

- Although knowledge of everyday life is inconsistent, perhaps contradictory, it can be treated as valid when they tend to interact with one another. Our thoughts are just precipitated over subject matters pitched on cultural identities. For instance, as a father, a citizen, an employee, and a member of church, one may have different and the least congruent opinion on moral, political, or economic matters. (Schutz, 1976:76)

It reminds us that every-day life is not a result of one's own, as knowledge itself not merely biographical location. In other words, nature transcends the reality of every-day life and production of knowledge in particular time and space. As the world of nature existed before man, it is certain that time will exist after man as well. Regarding space, the world transforms one's actual reach and takes over to an infinite horizon as potential reach. Experiencing the horizon of potential reach, would transform us into actual reach, surrounded by new horizons and so on (Schutz, 1976:245). Although differences are prevalent according to the organization of power, status and privileges of human society, in the commonsense thinking of everyday-life, we simply come to know that nature and society represent coherent order, yet the essence of time order is unknown (Schutz, 1976:247).

As an inclusive domain, derivatives of knowledge such as local, every-day practical actions as well as activities of the intellectuals are to be taken seriously at the level of epistemology. This epistemological location, traces new approaches are being found in micro-spaces. This would function in a wide-range of arena from laboratories to libraries. Scholars of German school of sociology, in fact, theorize the knowledge paradigm as 'socially situated', beyond the class and racial prejudices. Critical theorists, for instance, Jürgen Habermas (1971), treats as a domain of emancipation. According to him there are three cognitive guidelines for the production of knowledge: the technical, the practical and the emancipatory. If the first two principles were empirical and analytical to establish causal relations and to control nature, the latter proposes hermeneutical interest to secure and expand the possibilities of mutual and self-understanding in the
conduct of life. To Habermas, the third proposition transcends the limits of the earlier two, but at the same time enunciates a normative preposition to maintain autonomy of the individual through communicative action.

Taking cue from the contemporary social philosophy and relocation of epistemological spaces diverts the attention of social scientist to critically engage with emerging complex social issues like environment, gender, subaltern groups etc. As these critical issues demystify the way we understood epistemology. As a result, knowledge cannot merely be seen as a symbolic system protected into the iron cage of scienticism based on objective facts, instead, it perpetually transcend the thought process and collective action as well. Therefore, conceptualization of knowledge in society (theory) appears to be more in conjunction with practical concerns. Therefore, knowledge we derive, in our age, are being heavily grounded and informed by the criticalities of praxis.

**PRAXIS: Constituency of Knowledge Domain**

In its simple term praxis is defined as a set of self-creating activities of humans. It asserts an idea that people create their own world (under certain conditions) as against repeating mere objective laws of history. As a matter of fact, all praxis is born of creative activity; hence not all activity is praxis. That means, praxis is not mere action; instead it is well informed by theoretical explanations. Therefore, praxis is an action which reflects further development of the theoretical possibilities (Tibetts and Patricia, 1985:744). It is in this context, praxis is a meeting point of theoretical reflections. But it is not to say that a theory which informs the scientific praxis under circumstances. Here, praxis and ends are not preordained, instead are new beginning of creative engagements.

As a significant category in the domain of philosophy, praxis is not merely understood by a mode of interpreting the world, but a guiding principle for transformation too. In philosophical domain, praxis is explained in terms of consciousness as well as its most profound link with actual action. However, praxis, neither stood for materialistic nor idealist philosophy, nor represents a return to the past. As a result, it can overcome from both negation and assimilation or from the dialectics of materialism vs idealism.
Praxis does not only offer a theoretical explanation of reality _per se_, but does show under what circumstances the transition from theory to practice is understood, the way that leaves intact their intimate unity. In other words, it is being argued that an ordinary consciousness as well as dialectical negation of the mystified consciousness of praxis is crucial for the development of an objective, scientific perspective upon man's practical activity. This unites thought and action at the level of consciousness. However, an ordinary consciousness although quite often links with practical acts, it does not see praxis, as an act of transforming society.

Although an ordinary man knows an idea of praxis, the same idea remains tied with practice until it step out from the every-day plane to reflects in the highest expression of philosophical consciousness. It means that an ordinary consciousness can never vouch for a true revolutionary praxis until it traverses through reflective consciousness (Vazquez, 1977:6). In such a situation, an ordinary consciousness would necessarily get transcended into a philosophical consciousness of praxis and in turn, elevates every-day praxis into a higher, thought process. It is in this context; Lenin (1961:369) argues that 'without revolutionary theory, there can be no revolutionary movement'. That means a genuine consciousness of praxis would go beyond narrow terrains of practical activity, but locate in their anthropological, cognitive and above all social dimensions.

Praxis from an Anglo-European perspective, its meaning extended to the domain of knowing, doing, and making, as they appear to be a primary function of human psyche. At the outset, Plato interpreted action in accordance with principles of knowledge or understanding. However, existentialist Sophist finds it in conformity with the will of the individual agent. On the other hand, Aristotle, the pragmatist, locates in response to problematic situation from which principles can be abstracted. In his time, praxis designated those activities engaged in by a free man, in contrast both to labour performed by slaves and to purely intellectual labour. That means praxis is free domain that shuttle between human's moral and political life. It is because of this fact that the Renaissance
men seem to be an active subject, builder and creator of the modern world (for e.g. Leonardo, Giordano Bruno and Francis Bacon).

Subsequently, Aristotle strongly held the view that citizenship is praxis and to assume praxis in a full sense, one requires the freedom of leisure (Crocker, 1983:49). It seems that praxis is an ideal human activity constituting partially with freedom and creativity. Hence scientific knowledge as a creative domain is no longer regarded as an activity valid for itself. Instead, it is highly appreciated when it is applied to practical-mechanical problems (Hall, 1980:57). Such practical activities are linked with the agenda of transformation of nature which now no longer in stage of slavery in the ancient age, but to liberate from all sorts of bondages.

In classical sociological tradition, there has been a long debate on the question of praxis that was strongly associated with Karl Marx while he emphasizes on the revolutionary potentials of the proletariat. It was with Karl Marx whom the philosophy of praxis is more inclined through his celebrated notes in the *Thesis of Feuerbach*, nonetheless the fact that the very praxis was ceased in his lifetime. With Marx, theory of praxis not only transforms the nature cease to be separated for the transformation of man, but also becomes a necessary precondition for consciousness and social relations. It was in this conception of praxis that Marx underlined in his writings on *Thesis of Feuerbach*.

...the fundamental problems of philosophy have to be posed in their relation to practical human activity, which is central not only from the anthropological standpoint, because man is what he is in and through praxis, but also from the standpoint of history (since history is the history of human praxis), cognition (since praxis is the basis and the end of knowledge, as well as its sole criterion on truth) and ontology (since the problem of the relation between man and nature, or between thought and being, cannot be resolved without reference to practice). (Vazquez, 1977:25)

Marx here locates his experimental bit on the theory of praxis and the conception of men as an active, creative, practical being who tends to transform the world not only in her consciousness, but also in practice. Marx, in fact, wanted to unpack the inherent contradictions of German Idealistic philosophy.
and Hegelian material condition so as to bring praxis at the centre. Subsequently, in the writings of Italian theoretical Marxist Antonia Labriola (1934), philosophy of praxis has been substantiated as a micro project of Historical Materialism. It is believed that philosophy of praxis is independent as any other philosophical currents, is self-sufficient. It is believed that only man who can attempt to build up the philosophy of praxis scientifically which embodies reflective elements for historical interpretation (Gramsci, 2004:387). According to Labriola (1934);

....finally, as the historical materialism, or the philosophy of praxis, taking account of the integral social and historical human being, put an end to every form of idealism which regards the empirical existing things as reflex, reproduction, imitation, consequences of presupposed thought....in the same moment it is the end of naturalistic materialism....The intellectual revolution, which has led to the processes of human history as absolutely objective ones, is simultaneously accompanied by other intellectual revolution which succeed in historicizing physical nature. The later is no longer, for anything, human being, a fact which was never....instead in the process of becoming (cited in Wolfgang, 2001), (Italics is emphasized).

Labriola sees the essence of Marxism in its unique nexus between theoretical and practical activity mediating through the philosophy of history. In so doing, he distinguishes himself from the Hegelian school and locates in the primacy of concrete relations of consciousness. Similarly, a radical anthropological perspective sees praxis from a historical point of view. For instance, Richard Bernstein (1971:62-63) held the view that,

Man is by nature an active, productive animal. By nature simply means man is creative who cannot survive unless he produces-exercises labour-power in order to maintain himself. This essential productive dimension of human life is praxis. But the social forms that this labour takes are historically conditioned.

This explanation seems to be generic activity which distinguishes humans from other creatures with sensible approaches by tracing the praxis through historical interpretations. However, in the later stage, philosophy of praxis turned around anti-materialist tendency (Gramsci, 2004:xxi). Thus, Antonio Gramsci, contrary to the historical materialism, establishes relation between future in the past and past future. He elaborates philosophy of praxis as an established inseparable link between theory and practice, thought and action (ibid: xiii). To
Gramsci, philosophy of praxis is not deeply rooted at the core of philosophy; instead it was understood as a philosophical dynamics wherein theory produces critical thinking. Although, it appears to be vague, Gramsci’s re-reading of Marx explicates new theoretical tools to make sense of today’s world through following orientations.

- Conceptualization of philosophy from below grounded in the necessity of individuals working themselves out of a state, that is parallel to the term passive revolution
- Skepticism in objectification is replaced by civil society with practical implications
- A theatre of scientific experiment as a cell form of modern rationality, which culminates in Marxism mediating between society and nature
- Constitution of the term hegemony as a philosophical fact
- The politico-ethical dimensions of all hegemony
- The materialistic historicization of language

By investigating a dialectical approach to the philosophy of praxis, Gramsci argues that praxis, is a mode of self-enlightenment of human reality cutoff all hitherto ideological apparatuses. To him it was a social reality with sober eyes at the active positions of humans toward each other and toward nature (Haug, 2001:76-78).

Making sense of everyday reality has been mediated between the lines of human activities and their social conditioning. In this case, there is no objective reality assumed. Instead, it is related to theoretical possibilities like subjects as hegemony, the organic intellectual, civil society, common sense, passive revolution and transformation, and the history of subaltern classes and so forth. As a result, the hegemony and its meaning changes, as soon as one enters into a debate in the organic composition of Gramsci’s thought. This turns around, the relationship between future in the past and past future. All these concepts would radically change and possibly create concrete meanings, that are already been constructed in this historical process. Reality, as this theory exemplifies, have several facets, one among them being, how one sees reality itself.

History in Gramscian view is a continual process of becoming and so it is essentially unforeseeable. In addition he draws a sharp distinction between past
history and actual historical becoming. In other words, living history as a present perspective, would shed light on the past. In philosophy of praxis, humanity creates itself through historical labour, loses itself in ahistorical reification, and finds itself through self-conscious action. Through a concrete study of the past history and the present activity, it is believed that one can construct a new history. It is in this context, Gramsci is not returning to Neo-Kantianism, instead, making a dialectical superseding of the philosophical ideology whereby the understanding of objectivity is mediated by practices, as universal subjectivity. To that extent, social frames of man-nature relations would get united culturally (Haug, 1999:103-107 and Sher, 1977).

Social Science and Praxis

It is assumed that the ramification of the concept praxis became theoretical issue for social and polity in the backdrop of First World War among the Western Marxist as they were constantly engaged in the studies on anti-positivism. The theoretical vocabulary they used to refer as activist domain as similar to what early Marxists’ terminology, i.e. praxis of proletariat. It implies transcendence of Marxian science of historical materialism. This tradition later on polarized theoretically and led to authentic Marxism, labeling themselves as New Left. This, in fact, resurrected the earlier notions of praxis with Frankfurt tradition under the leadership of Lukas-Gramsci-Korsch. Hence a new tradition with the epistemological, philosophical and theoretical question of the relation between theory and practice, gave rise to a theoretical pedigree to justify the political action advocated thereafter (Kilminster, 1979:5).

To Gramsci, valid social science to be political science as it tends to predict the possibilities of activity and knowledge coinciding with praxis, as contrary to logical positivism based on scientific concepts that perpetuate the historical passivity (Kilminster, 1979:117). Without going into the vulgarity of science, Gramsci stresses the importance of will and reinforces that theory cannot be devoid from practical life. To that extent practice can also qualified to be an epistemological and ontological domain linking together thought with object. However, Markovic tried to differentiate practice from praxis by arguing
that the former is an epistemological notion, whereas the latter is explicitly normative. Markovic says that:

Praxis has to be distinguished from the purely epistemological category of practice. 'Practice' refers simply to any subject's activity of changing an object and this activity can be alienated. 'Praxis' is a normative concept and refers to an ideal, specifically human activity which is an end-in-itself, a career [sic] of basic values, and at the same time a stand of criticism of all the forms of activity (cited in Crocker, 1983:54).

Identification of practice and theory is a critical act. If the former is demonstrated as rational and necessary, the latter is realistic and rational (Kilminster, 1979:120). Although theory of praxis has double tasks; theoretical criticism and the foundation of real acts, is neither ceased to be theory nor practical activity in itself. However, theories have practical consequences, as long as they remained to be opposing or hiding the transformation of reality. In other words, a theory can be seen as guide for practical action that aims to transform the world. But it remains to be silent until it gets realized or shaped in material form from that very action. A conscious unity of theory and praxis spontaneously generate practical consequences so that there is hardly need for transition from one sphere to another. It means that, to be remained as a truly revolutionary theory, it cannot stand as theory per se, but it can be truly praxis. So that it get shaped in material form so as to prevent theoretical preoccupation (Vazquez, 1977:134).

There is another way of scientific approach in praxts from German critical theorist Habermas and Wellmer by taking relatively a value-neutral position based on productive labour and practical activity. To them, praxis is a particular mode of being: the world-constitutive and self-generative species-life of man. The species life, to begin with, consists of two irreducible but connected modes; the way of knowing objects and acts. It helps human beings to frame objective domains. The world-constitutive activity, in fact, generates object domains on the basis of two quasi-transcendental cognitive interests: technical and practical knowledge. These are the guiding principles for two approaches in science: the empirical-analytic and the hermeneutic. The former constitutes a world of observable things and events and engage in work or purposive-rational
action. Both instrumental and strategic actions are involved in it. If instrumental action deals with technological progress (achieving desired goal), strategic action does with improving decision procedures (choices). However, the latter is informed by practical interest where human beings constitute a world of speaking and acting. This in turn allows them to engage in communicative action. In other words, it enables a person to engage with communicative action effectively to establish personal identity, but at the same time, tries to maintain social identity as a member of the community (Crocker, 1983:55-56).

Both theoretical and practical human action is intertwined ever since in the proletarian movement in Marxist theory. Yet, practice without theory, in fact, is blind and theory without practice is largely purposeless. Critical theorist took up this issue very seriously in order to address the changing nature of the subject-object relationship. The basic question is whether human intervention can alter the character of social process. This case, traditional theory perhaps offers only human practice, not praxis. However, critical theory retreats praxis a part of development of society: both protest against the established order of things, and the very protest generated by the order itself for self-determination, and autonomy in the next step in the historical process (Kilminster, 1979:206). Critical theory, as result of it, opens up possibilities in generating alternative scientific paradigms as well, when the traditional concepts lost it critical edge to recognize these historically enforced social processes and commitments.

Alternative science, in fact, reinforces it further by substituting the current models that dominate in the science paradigm. It paraphrases unfreezing of narratives; especially the history of science and unleash alternative forms of knowledge. It can also explore the possibilities of alternative science. To Shiv Vishvanathan (2006:164-165), the process of unfolding history of science and the politics of other is all about a politics of knowledge. Instead of debating the politics in an axiomatic to knowledge, he finds problems in methods and exposes its epistemic violence that is found in modern politics, especially democracy that tends to black-box the content of knowledge.
By criticizing the knowledge claims as an abstract category, Vishvanathan locates knowledge at the heart of life-world connected with livelihood, life-style and life-cycle. It results to create multilayered institutional abilities to recognize and negotiate varieties of knowledge to fulfill the needs of different strata of societies, instead of keeping western hegemonic forms of knowledge in tact. One needs to be understood by the fact that multiple layered knowledge forms create hierarchies within it that often bewilder into the center-periphery dichotomy. As a matter of fact, the periphery can also form the histories of exchange in scientific progress (Fischer, 2006:173). For instance, Kerala Sastra Sahitya Parishath (KSSP), a people's movement which made an effort to reach out science to the people, as alternative approach to mobilize the local people in Kerala, becomes a epistemic location on how the peripheral structures trying to link science with revolutionary praxis.

In fact, KSSP had great appeal to the middle class as well as poor since it has given emphasis on development for the people. Moreover, the context in which KSSP has developed its experimentation in Kerala, was in the backdrop of its remarkable achievements in high literacy rate. As a slogan of Science for Social Revolution, KSSP conceptualises science in three forms:-

- Instead of equating it with certain branches of knowledge, science to be perceived as a process or means by which human beings attempt to explore relationships between cause and effect both in natural or social world.
- The process of science and its uses, to which the conclusions of science and its applications (i.e. Technology) drawn, were based on human decisions.
- Those human decisions based on the scientific principles are now challenging in grave social problems such as the meaning itself.

Such a conceptualization and its institutional procedures led to the popularity of the movement among the ordinary people, not merely for the elites who are eventually served by it. KSSP articulated real development as a process of people-both individuals and groups-leaning to help themselves. It also created a democratic space for free interaction and opportunities for the reconstruction of the voices of the marginalized (Zachariah and Sooryamoorthy, 1994:20-25). The praxis of science, popularized by the KSSP ensured people's participation in
the developmental strategies in Kerala. It proved to be more humane in scientific
approach which led to societal transformation from the peripherals. It shows
how alternative genealogies of epistemology being operational in the every-day
life of the subaltern masses as well. Therefore, scientific approaches of praxis
have proved to be potentials to transform the oppressed group-the subaltern.

It is in this context; praxis explains the ability of oppressed groups to
change their economic, political, and social worlds through rationally informed
reflection and deliberative social action. Many scholars advocate praxis-based
solutions to end the subaltern status of many oppressed groups, but not limited
to, the colonized, the poor, women, people of color, and gays and lesbians
(Wartmann, 2007:3612). For many, pedagogical practice too, is being linked with
the theories of praxis. For instance, the Brazilian educationist Paulo Freier's
celebrated book on the Pedagogy of the Oppressed, underlines the critical pedagogy as
an effective tool for the theory of praxis. In the context of pedagogy, theory of
praxis is set into two fundamental tasks: (a) to combat modern ideologies in their
most refined form, in order to constitute its own groups of independent
intellectuals; and (b) to educate the masses, whose culture was medieval. Thus,
the latter one denotes subaltern which subsequently traces new philosophical
space of the popular masses, where one could absorb all its strength both in
quantitative and qualitative terms (Gramsci, 2004:392).

Subaltern, as Gramsci explains, is an unorganized groups of rural
peasants based in Southern Italy, who had no social or political consciousness as
a group, and therefore, susceptible to the ruling ideas, culture and leadership of
the state. For Gramsci, popular and subaltern were interchangeable concepts.
Subaltern here, we read as peasants and workers, just as philosophy of praxis in
Marxism, integral to revolutionary thought process. Hence, practically it is
difficult to treat subaltern representing as a concrete social-historical subject in
the disciplinary discourses and at times, academic knowledge itself produces
subalternity as an act of representation.

In other words, the category subaltern precisely means revolutionary, is
itself something inseparable from that of discourses and their discursive practices
Subaltern discourse, in deed, evolves from dialectics of consciousness and contradictions in political agency that are, in a broader sense, culturally rooted [as Homi K. Bhabha rightly pointed out], than political or economic (Beverley, 1999:12-13). Tracing the subaltern itself represents a standpoint of academic circle as it has been found in the ordering of subaltern as a discipline domain. In this context, philosophy of praxis becomes significant when the masses, i.e., subaltern groups maintain autonomous and hegemonic space, to visualize a concrete birth of aspirations and new intellectual energy and moral order (Gramsci, 2004:388). In doing so, subaltern struggle sought to construct an autonomous and superior culture in its own right.

**SUBALTERN DISCOURSE: Alternative Epistemology**

As an alternative discourse, the category subaltern exemplifies an articulation of the hidden or suppressed accounts of numerous subordinated groups. In the post-colonial Indian society, subaltern is said to be the burden of modern state which is continued to be oppressing the rural peasantry, the working class and the untouchables. This regime tried to gain the consent of certain groups, while excluding other groups from civil society. Here Gramscian notion of hegemony stress the incorporation and transformation of ideas and practices belonged to those who are dominated, rather than simply imposing from above (Loomba, 2001:31).

As we discussed earlier, it was with Gramscian way of formulating subalternity that underlines spontaneous causes of oppression and then set out an agenda to organize politically against the hegemony of the oppressor. To realize this, it is viewed that the subaltern discourse needs to be succumbed modern theoretical apparatuses, so that, it would give holistic perspective and guarantee a moral force; but sure not guided by any reactionary groups (Rabasa, 2005:371). It is in this context, subaltern history moved beyond the narrow approaches of history from below, instead it entered into the spontaneous activities of everyday-life to develop the elements of popular psychology, historicity and sociability that redirect a process of pedagogy; i.e. learning from below.
Subsequently, following new epistemic roots from Jakobson and Barthes, the post-structuralism of Foucault, and the critique of Enlightenment epistemologies associated with Derrida, Lyotard and others, a set of thinkers of subaltern school began to reconceptualise and foreground their theoretical bits (Lal, 2001:136). With a new sensibility, the subaltern project extended their theoretical space to educate subordinated groups in order that they overcome their subalternity, instead of treating them as static historical objects as it was quite visible in the colonial hegemony. This elementary form of consciousness building underlined a theoretical vocabulary in everyday practice, (in other words praxis). As a result, theory began to transcend itself from the conventional forms (Rabasa, 2005:371).

As an historical enterprise, subaltern studies traveled a long journey from Fascist Italy to post-colonial India, and promised to write a critical project of colonial historiography. As a matter of fact, subalternity is a result of political, economic, and social subordination as a consequence of epistemic violence that undermined and sought to destroy indigenous knowledge. Hence, while narrating the significance of the subaltern scholarship, Edward Said indeed (Guha and Spivak, 1988: vii) pointed out that, subaltern is another way of articulating the concerns of underlined politics and power. As a self-reflexive and theoretically self-conscious project, subaltern scholarship is strictly in different tone. In other words, the consciousness being as colonial subjects is itself modified by our own experience and, in turn, establishing our own intellectual heritage. History of ours through colonial consciousness would only help to form colonial subjects. This critical understanding of the limits of colonial subjectivity signals the beginning of a new autonomous relation in order to inaugurate a new perspective for subaltern studies.

As the development of this perspective continues, it would eventually form a new relationship with the chronicles of cultures that would unfold locally grounded histories (Das, 1999:310-324). In addition, it would also bring about narratives missing from the official knowledge system of the established state institutions. It is in this context, subaltern studies appear to question the very base of established theories and so much so that it's inherent methodological
contradictions. This new direction at one level has the capacity to debunk radical elite cultures, of liberal, bourgeois and modern epistemologies and projects. But on the other hand, as a project of representation of the subaltern, it gears up for epistemological possibilities and subsequently to re-interpret the old-facts with new insights.

Subaltern studies are, in fact, emerged directly out of the need to re-conceptualize relations of the categories such as nation, state and people. Followed by Gramsci, Ranajit Guha mapped out a history of subaltern alternative, which unfolds the inherent weakness of the modern state in order to transform the peasant class as a whole into the process of national formation. To Guha, it was a historical failure of the nation to come its own, is exposed the inability of the state formed under the political leadership of bourgeois liberalism. Guha was very critical on the way historiography of Indian nationalism is represented. For Guha (1988:1-5) nationalist discourses and its historiography, for a long time, has been dominated by both-colonialist elitism and bourgeois nationalist elitism. What is left out from this historiography, however, was the politics of the people in which the principal actors are not the indigenous elite or colonial authorities. Instead, they were the subaltern classes and groups constituting the labouring masses and the intermediate strata in the country side. These subalterns were considered to be an autonomous but more spontaneous group.

In fact, the South Asian Subaltern Studies Group highlighted the ideological bankruptcy of the left in explaining the crisis of modern nationalism and set out an agenda to promote a systematic and informed discussion of subaltern themes of this part of the world. In so doing, it helps to rectify the elitist bias characterizing much research and academic work in the particular area. John Beverley (1999:6) summarizes this crisis by acknowledging the fact that although the literature of Subaltern Studies began to appear around 1980, its critical impulse dated back to an earlier project of Indian nationalism in the

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3 For Gramsci, the 'national' does not coincide with the popular because of the sheer fact that the intellectuals are distant from the people, i.e. from the nation. They are tied instead to a caste tradition that has never been broken by strong popular or national political movement from below.
1970's. The scholarship bracketed a serious of internal contradictions: the trauma of partition and the communalist violence that continued to indulge independence, industrialization, without promising any signals of prosperity.

Marxist scholarship, too, failed to displace the political and cultural hegemony of the bourgeoisie and landlords at the national level on the one hand and the alarming growth of right-wing Hindu fundamentalism on the other. It precisely implicated the impasse of Indian nationalism and failed to offer a historical model of national development. Marxist scholarship shown to be disinterested in these debates and as a result, they could not propose an alternative part of economic modernization based on the state regulated key sectors of economy. This theoretical bankruptcy complicated a historical failure to both bourgeoisie and the working class to lead a decisive victory over the colonizer.

As a strategy, subaltern discourses not only interrogate the issues of subordination brought about by the colonialism spilled over post-independent India, but also cross-check with the effect of neo-liberal hegemony and economic globalization as well. Therefore, the Subaltern Studies group, being an interventionist produces not only the past, but also finds its critical space in the present too. Although as a school of thought unfolded under the shadow of post-colonial discourse world over, Subaltern Studies School focused on certain critical question like nation and nationalism in India with a shifting conceptualization and its manifestations of the agencies of culture. It also reflected a distinct historical context in which the idiom of nation is fundamentally being interrogated in the new spaces created by national culture, gender, race, class and so on. It is in this normative juncture; Beverley (1999:3) would try to argue that subaltern studies not only inaugurate a new paradigm in the world of academia, but also signals a new mode of envisioning the project of the left in the backdrop of globalization and late-modernity. Eventually, Subaltern Studies Group attracted wider audience including those who are interested in the literature and history of colonized societies, as its attention apparently, turned out to be in the terrain of post-colonial narratives.
The term post-colonialism became catchword among the academics in our age, particularly, those who are engaged with the third world sensibilities. Its mode of perception, cultural location has increasingly become visible sight in their scholarship. A first set of theoretical recourses in post-colonial scholarship could easily be found in Gandhi and Fanon, albeit their vantage points in the analytical spaces were different. If Gandhi interrogated it in terms of politico-religious vocabulary, Fanon locates the nuances of post-colonial dialogue through Sartre's existential humanism (Gandhi, 1998:18). What was common in their approach was that of the consequences of European imperialism upon the natives which diagnosed everything subjected to colonial frame of reference.

Post-colonial scholarship, in fact, unpacked the mode of thought and belief system learned through colonial history that continued to be indulged into the native cultures even after the formal collapse of empire (Patke, 2006:370). Therefore, post-colonialism is not about the West where this theory was originated, but about the colonized other as well. Perhaps it was the first time in the history of the Western academia a non-Western scholarship with a new perspective is made its presence at the centre of its dominant discourse (Trivedi, 2000:232). However, when one locates post-colonialism in the context of Globalization, it becomes a new challenge to make sense of their dialectical relations and mode of expressions on hegemonic cultural/political relations between Euro-American and the rest of the world (Moore-Gilbert 1998:49).

Since the post-colonial theory has been engaged in multiple activities with a wide range of complex social issues, generally it is not formed as a theory in its strict sense. Instead it produced a variety of abstract models applicable to an indefinite number of empirical descriptions. However it enabled a complex interdisciplinary dialogue within the humanities, to incorporate mutually antagonistic theories, for instance, Marxism and Post-structuralism that intended to give material expression on it. The unbroken term 'post-colonialism' itself, perhaps, be targeting towards a history of both colonialism and its unintended consequences upon the colonized (Gandhi, 1998:3). On the contrary, Ella Shohat (1992:101) of the view that the trajectory of post-colonialism had moved ahead
of anti-colonial nationalist theory and become a movement beyond a specific point in history of colonialism and Third World nationalist struggle.

The subaltern discourse, in other words, can be located as of the micro-projects of post-colonialism interrogating the epistemological issues of the colonial mode of knowledge production. It also forms an anti-positivistic theoretical position located in individual consciousness, local culture, folk etc. As a form of knowledge-politics, post-colonial dialogue precipitated into the political and cultural experience of the marginalized periphery. This would equally question the foundations of western Eurocentric intellectual and academic hegemony and its protocols of objective knowledge (Young, 2001:64-65). To that extent post-colonial sensitivity becomes a combination of epistemological and cultural innovation as a political process. It is with this theoretical and political depository, post-colonialism represents as an agency to intervene at the time of oppressive circumstance. According to Robert J.C. Young (2001:57), post-colonialism as:-

....dialectical concept that marks the broad historical facts of decolonization and the determined achievement of sovereignty—but also realities of nations and peoples emerging into a new imperialistic context of economic and sometimes political domination...encouraged the development of a post-colonial culture which radically revised the ethos and ideologies of the colonial state and, at the same time, reoriented the goals of the independence movement towards the very different conditions of national autonomy.

However, in the academic circle, the discourse of post-colonialism apparently became a central force as the impact of Edward Said's celebrated work *Orientalism: Western Conceptions of the Orient* (1978). Said here exemplifies the western (Eurocentric) style of domination for dominating, restructuring and holding authority over the Orient. In his systematic disciplinary approach, Said questions how European culture manages and produces the Orient politically, sociologically, militarily, ideologically, scientifically and imaginatively during the post-enlightenment period. As a result, the imposed action and thought of Orientalism, as Said argues, the Orient was not being able to free subject of thought and action (ibid). His criticism of Orientalism tried to dismantle the science of imperialism as a project of colonial discourse analysis itself engendered
where literary theory converged with the transgressive writings of the marginalized.

However in the 90's onwards post-colonialism started foregrounding its conceptual tools to recognize identities, voices and situations that are not granted by the hegemonic colonial power, are perceived and defined by the marginalized. In his widely acclaimed thesis on *The Location of Culture*, Homi Bhabha directed against the ideological assumptions of modernity which are said to flatten out complexity. Post-colonialism, to Bhabha, unveils unequal and uneven pressures of cultural representation contested in political and social spheres within the domain of modern world order. These uneven pressures are largely found in colonial Third World countries and geographically dispersed minorities. They all participate in the ideological discourses of modernity to question the hegemony that attempted to undermine differential histories of nation, races, communities and people. According to Bhabha, postcolonial discourses are largely concerned with a set of social pathologies. In his thesis, Bhabha makes critical revision on the issues of cultural differences, social authority, and political discrimination in order to reveal the antagonistic and ambivalent moments within the rational attributes of modernity. The project of post-colonialism, as it appears, resists any sort of holistic assumptions and single line of explanations. Instead, it acknowledges more complex cultural and political boundaries that exist on the cusp of these often opposed political spheres (Bhabha, 1994:171-173)

It is stated that, it is from those who have suffered the sentence of history-subjugation, domination, diaspora, displacement—that even a growing conviction that the affective experience of social marginality...transform critical strategies of the colonized countries (Bhabha: 1994:172). As a matter of fact, the post-colonial studies not only restricted their experimental bits in delineating the working of power, but also they tried to locate and theorize oppositions, resistances and revolts on the part of colonized. It is theorized in Gayatri Spivak's writing on the subaltern as oppressed subjects by her celebrated work *Can the Subaltern Speak* (1988). In her critical remarks, Spivak questions the race and class blindness of the Western academy over the subaltern subjects of the colonized and recovers the voices of the same.
By demystifying a wide range of stereotypes assigned upon the colonized in the colonial text, Bhabha possibly is trying to unpack a master-discourse which is already been interrogated by the colonized in their native accent. Following Said (2001:335), Bhabha, unlike Spivak, reasserts that subaltern has spoken and his readings of the colonialist text recover a native voice (Parry, 2004:24). It is in this context, there was growing sensitivity on the question of marginality and oppression of the colonial period which, eventually reversed into an empowerment strategy in the post-colonial era.

This challenging question, in fact, seeks to develop a strategy of reading the text that would speak the historically muted native subjects, predominantly inscribed as subaltern. Rereading the historical text in a different pace and tune by a collective of intellectuals led to the birth of the Subaltern Studies Group. The broader agenda set out by this collective was to promote a systematic and informed dialogue of subaltern themes in the field. As a constructive approach, the formation of Subaltern Studies Group perhaps represented as a sphere of counter writing where, cultural identities are foreground as historical problem. The historical problem of the post-coloniality is a state of mind manifested in individual and communities whenever the ambivalent energies of the colonial legacy inscribed (Patke, 2006:370). It would also map out a wide range of issues grounded on culturally well informed conditions of visible history, politics, economics, and above all, sociology of subalternity.

Theories of post-colonial studies, indeed, are constantly been engaged with the project of subaltern school in the backdrop of a radical thinking and knowledge and social identities authored and authorized by colonialism and Western domination. For instance, Edward Said and Gayatri Spivak have collaborated with the historians involved in this project. Moreover, the work of Homi Bhabha proved to be assimilated in it. In addition, post-colonial dialogue addresses another question of representation of the colonized other with a desire of deconstructing the authority of colonial discourse that brings near to the project of subaltern studies. Needless to mention, postcolonial studies elaborated
counter-discursive formations located in the critical hermeneutics is also found
with counter re-reading of colonial texuality by the Subaltern Study group.

To that extent, the dissemination of Subaltern Studies can be seen as an
intervention in South Asian historiography and developing into a vigorous
exercise on postcolonial critique in a complex reworking of knowledge domain.
The new challenges in historical scholarship not only rest with South Asian
studies but also spread out other regions and certainly, in other disciplines as well.
For instance, the category subaltern now is frequently been referred in the studies
of Africa, Latin America, and Europe and its analysis brought about diverse
space in the scholarship of history, literature and anthropology (Prakash,
1994:1476). It is understood a fact that how subaltern circulates as a self-
conscious sensibility within the space created by the postcolonial theories, text,
conferences and conversations. More specifically, post-colonialism endorses
pragmatic self-reflexive opposition, expressing itself as an implicit co-operation
and, finding out a space for dialogue both in ideas and action.

Through times, Subaltern Study Project had undergone self-scrutiny as it
followed wide range of lucid theoretical positions. For instance, it spread out
from historical materialism to Euro-centric metropolitan and bureaucratic form
of knowledge. With the entry of post-structuralism, there was an intellectual
bifurcation which led to two theoretical strands; continued to be writing history
from 'below' and post-Marxist writings. The presence of ideological differences
within it signaled inadequacy of clear subaltern theory was in itself to be a
strength rather than weakness. The exigencies of contemporary politics grounded
on the issues of gender, caste and secularism played a very crucial role in
elaborating subaltern themes. In addition, construction of critical theory of
subalterinity unfolded other possibilities of the future of new international social
movements taking beyond the narrow domains of imperialism and nationalist

This epistemological shift towards social movements and agency of
particular disempowered subaltern group, to Spivak, was marked by a
radicalization of methodological terrain as well (Morton, 2003:52). This new
methodology tries to recover and make adequate theorization of popular consciousness and popular practice. A variety of histories from below began to foreground, for instance, insurgent sociologies, new approaches in political economy, mould-breaking developments in anthropology, feminist and environmentalist work in all sectors of the social sciences, and so on.

**Subaltern: A Thesis for New Social Movement Studies**

Scrutiny of New Social Movements paradigm assumes not only shift from earlier theorization geographically dispersed from urban centres to rural, but also underlines a new thesis in which everyday resistance combined with peasant resurgence become a description for knowledge and purposive action. To that extent, new ways of protest and their mobilization is underlined by both subaltern and New Social Movements scholarship. This approach, needless to mention, eventually became commendable methodology of discourse analysis and resistance theory. Ideology and action, in this regard, is decoupled from the dialectical relations of class and revolution. Moreover, it becomes multi-vocal in a sense to disperse its origin, causation, effect and ultimately steered to political action.

As subaltern study is theorized under the theoretical rubrics of post-modernism, it epitomizes the reactionary conservatism of the 1980's and Euro-centric meta-narratives. These narratives, in fact, also demystify the western notions of enlightenment and emancipation as a building block of historical transformation. Departing from the earlier theorization, it is understood by the fact that action is not guided by class structure/struggle, but largely by specificities of subaltern identities based on ethnicity, gender, ecology and so on. Therefore, both subaltern and post-modern logic see that agrarian mobilization and resistance to colonialism and then to late-capitalism has more to do with the experience and ideology of different attributes than homogenous class analysis. Methodologically, disciplinary domains of post-modernism would acknowledge individuals as discursively constituted subjects. As a result, they would speak in multi-vocal, for instance in the languages of gender, ethnicity, region and ecology instead of univocally. In other words, subaltern signifies inclusive concept for subordinated group in a hierarchical and political order.
According to Scott, although subaltern is a weaker party or relatively powerless group, they are being collectively engaged in every form of resistance against oppressive state apparatuses, is the strength of movement. Sociologically, this category, in fact makes more sense as it embraces all social compositions existed in a multi-cultural society (Brass, 2000:127-137). Here subjects are represented and constituted as unproblematic categories, unlike in the Marxism, as their meanings are structured inter-subjectively. This in fact reinforces return-to-nature thesis widely recognized by moral economy and peasant resurgence.