

Scientific Communities and Theoretical Paradigms in Social Sciences

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I. Introduction

In undertaking research studies in the social sciences, scientists and scholars are mostly likely going to come across the concepts 'scientific communities' and 'theoretical paradigms' which constitute the subject of this article

II. Purpose Of This Article

Motivation of man to sciences

The current emphasis in social science upon techniques and precise empirical data is a healthy, one, but skilful collection, organization, and manipulation of data are worth no more than the problem to the solution of which they are addressed.

Source Robert Lynd

What actually motivates a man or a woman to sciences can be better explained by the following quotation: A man may be attracted to sciences for all sorts of reasons. Among them are the desire to be useful, the excitement of exploring new territory of knowledge, the hope of finding order, and the drive to test established knowledge..... Finally, at a still higher level, there is another set of commitments without which no man is scientist. The Scientist must, for example, be concerned to understand the world and to extend the precision and scope with which it has been ordered. That commitment must, in turn, lead him to scrutinize, either for himself or through colleagues, some aspect of nature in great empirical detail. And if that scrutiny displays pocket of apparent disorder, then these must challenge him to a new refinement of observation techniques or to further articulation of his theories.

Source Thomas S. Kuhn: 1970.

Function and nature of paradigms

This academic work aims to clarify the function and nature of paradigms in the process of cumulative (or normal) social science. Cumulative social science may begin with original, sensitizing conceptual thinking or research, but it more often involves social research and theorizing based upon one or more past achievements.

Concepts: scientific communities and theoretical paradigms

The **concept of paradigm** is explained in terms of **five** dimensions:

- generic propositions
- theoretical models
- values and norms
- research exemplars; and
- theories

Source: Robert B. Smith: 1983

Three distinct disputes over values and norms in social sciences are clarified by analysis of three classic debates:

- a. *Lynd* versus *Lundberg* on *value neutrality*;
- b. *Blumer* versus *Lazarsfeld* on *qualitative as against quantitative methods*; and
- c. *Merton* versus *Glazer* and *Strauss* on *strategic reasoning for theorizing (inductive grounded theory versus logico – deductive theory)*.

Resolutions of the three debates are presented, and the process of cumulative social sciences is defined. The theme of this work is that paradigmatic differences and debates about styles of sociological work are

reconcilable in terms of this process. The different theoretical paradigms are more or less coordinated to different aspects of the empirical social worlds and have different generic proportions. Given any paradigm, however, coordination of *qualitative* and *quantitative* research and formal theorizing is a useful procedure for cumulative social science.

A brief contributions by Siedan [1977, *why not Quantitative Analysis? Public Administration Review, volume, 37, No. 3*] states as follows:

Quantitative And Qualitative Analysis

In our attempt to change implementation from an art to a science, management may overemphasize *quantification* to the detriment of *values*, making it *an end* rather than *means*.

According to Siedan [1977:45] the increase in literacy and the growth of communication in the post – industrial society created a situation: “where *quantification* became fashionable because counting was comfortable and predictability was scientific. We have been encouraged to believe that quantification is impersonal and objective, and therefore, more reliable than qualitative methodology”.

Qualitative methodology has been ignored as being too difficult to apply and too subjective and very few analysts have paused to question the inherent nature of qualitative analysis which in many instances is based upon the subjective choice and artificial construction of its designers.

According to Siedan [1977: 45] “The canard that objective is good and subjective is bad **denies the fundamental worthiness of human endeavour – of creativity, imagination, ingenuity, and spontaneity**”.

The question “what went wrong?” is frequently raised when a programme fails to produce certain desired effects (results). For instance if the state provides resources to erect **X** amount of homes to relieve the shortage in housing, *quantitative analysis* would normally assume that **X** amount of houses relieved the housing shortages for **Y** amount of citizens. When confronted with further claims of dissatisfied home owners, those relying on quantitative analysis start asking questions such as “what else can be wrong?” Those who perform *qualitative analysis* will probably *generate information* involving the *feelings, needs* and *attitudes* of citizens such as

- The homes are far removed from basic facilities;
- The homes are too small and built using inferior materials;
- The necessary services associated with residential properties were not provided.
- In the absence of enough qualitative information ‘*red tape*’, ‘*bureaucracy*’ and ‘*the system*’, or ‘*not enough money*’ are often baled for the failure to adherer to the qualitative aspects of public service.

Scientific Communities And Theoretical Paradigms

Those researchers who undertake research belong to a community of scholars, each of whom has journeyed into the unknown to bring an empirical fact, a truth or a point of light

Organized Groups Of Researchers And Scholars

Scientific research is practised by loosely organized groups of researchers and practitioners who share the same scientific speciality. These groups of scientists have been called *scientific communities, invisible colleges, theory groups, networks and schools*. Members of a particular scientific community are likely to have received similar scientific education, to work on similar research problems, to cite one another’s articles and books, to know one another personally, and to be influenced by the same senior scientists, senior lecturers and professors.

There are numerous scientific communities within the disciplines comprised by contemporary social science. Because these groupings do not share a common theoretical paradigm, there often are interdisciplinary disagreements about the relevance and quality of scientific work. But within each grouping communication is relatively easy and full, and professional judgements are fairly unanimous, because the scientists share a common theoretical paradigm, a common professions world – view. This theoretical paradigm is fitted to salient aspects of the empirical world the group of scientists studies.

The Concept Of Theoretical Paradigm In Social Sciences

Definition

What Precisely Are Theoretical Paradigms?

Briefly, **theoretical paradigms are basic set of assumptions, ideas and viewpoints that more or less fit some aspect of the empirical social world [R. B. Smith: 1983: 3 – 4].**

Functions:

Paradigms **point** out significant problems, **provide** conceptual models and concepts for analysis, and **specify** criteria for the evaluation of the quality of scientific work. Paradigms guide **exploratory, focused, and theoretical research** [Smith: 1983: xiii – xv].

Exploratory Research

Exploratory research is the *firsthand observation* of the empirical social world. It is often based on qualitative data such as field notes, diaries, and field interviews. It has two objectives:

- i. To familiarize researchers with a sphere of social life that is unfamiliar and unknown to them: and
- ii. To enable researchers to develop and sharpen theoretical paradigms so that the research problem, concepts, interpretations, and conjectures will be empirically grounded and adequate to the reality of those aspects of the empirical social world under scrutiny [Smith, 1983: xiii].

Focused Research

Focused research strives for rigorous empirical analysis and corroboration of findings; it is best based on the insights and findings from prior, paradigm-guided exploratory studies. It requires the specific and development of clear, discriminating concepts and indices, along with the controlled assessment of casual relationships between elements. An elaboration procedure is often utilized to control for possible spurious relationships. When elaborating variable, the analysis ascertain whether a relationship between two variables still exists when possible spurious factors are controlled. Spurious factors cause the relationship observed between variables. The effect of spurious factors can be assessed readily if the variables are gauged quantitatively and if statistical or experimental controls and introduced. Focused research may involve the close inspection of qualitative data; but more often qualitative data from social surveys, experiments, and archives are analyzed in this way [Smith, 1983: viii – ix].

Theoretical Research

The end products of the focused research are a more adequate theoretical paradigm and a consolidated, organized system of empirically sound relationships between the variables under analysis – ‘*a middle range*’ empirical theory [Smith; 1983: ix – x].

Summary Of Findings From Social Research

Findings from social research provide a base for the development of formal theories. The process of theoretical social since involves at least four interdependent operations:

- i. The consolidation of findings from previous theoretical and empirical studies pertinent to the theory – building task;
- ii. The reconceptualization of these variables and their synthesis into a ‘middle – range’ casual system or formal theory written in a verbal, logical, or mathematical language;
- iii. Confirmatory research – the derivation and testing of logically deduced implications from the formal theory; and
- iv. The modification and trimming of the theory and the underlying theoretical paradigm to account for anomalous empirical facts.

According to R. B. Smith [1983: 21 – 45], the phrase ‘**theoretical paradigm**’ refers to the **basic set of assumptions adopted by a scientific community in a particular historic phase**. Theoretical paradigms are coherent, unified viewpoints that affect the way scientists of a given tradition view and deal with the world. **The chief function of these paradigms is to provide a general context for research by steering the scientists to what are considered relevant problems and providing concepts that aid in data interpretation and hypothesis formulation. Theoretical paradigms identify challenging puzzles, supply clues to their solution, help the scientist to determine what might be a legitimate piece of evidence, and guarantee that a truly clever practitioner will succeed.**

Scientists have a theoretical orientation when they are committed to a theoretical paradigm that directs their scientific work. A theoretical orientation is an internalized theoretical paradigm. A scientist without a theoretical paradigm would waste time searching for an urgent problem to study and lose even more time trying to develop concepts for data interpretations. The findings from a science conducted without even a rudiments theoretical paradigm would be chaotic. Each study would use ad hoc conceptualizations, there would be no theoretical convergence on important problems, and it would be extremely difficult to compare and consolidate the results of various studies in order to establish empirical regularities and then scientific laws and formal theories.

Theoretical Paradigm Is Explained In Terms Of Five Interrelated Dimensions

At present there are *numerous theoretical paradigms* in the **social sciences** for the most part *each* focuses on a particular and different aspect of the empirical social world. But regardless of social scientific discipline or school, *theoretical paradigms* in contemporary social science can be organized by *five interrelated dimensions*. These sub-components of the paradigm concept are:

- generic propositions;
 - commitments to particular theoretical models;
 - values and norms;
 - research exemplars; and
 - recent theories
- [Smith: 1983:21 – 45].

The paradigmatic status of the social science differs from that of mature or natural sciences, such as biology, chemistry, physics, mathematics, because in the latter theories often are stated as symbolic generalizations. These are mathematical theories expressed in formulae that accurately predict events. The facts that energy equals the products of mass and the speed of light squared is symbolized as $e = ml^2$ ($e = mxl^2$). Theories in the social sciences are generally too imprecise to be called symbolic generalizations. The lack of rigorous mathematical theories that accurately predict events precludes the occurrence of revolutions in social science, although there are many examples of novel, creative and innovative social research and theorizing.

Because theoretical paradigms are fundamental to any research programmes, researchers and students should know how to explicate the essential features of any theoretical paradigm. Next we closely examine the sub – components of the paradigm concept.

Descriptions Of Sub-Components Of Paradigm Concept

Descriptions Of Sub-Components Of Theoretical Paradigm Concepts

According to R. B. Smith [1983: 20 – 51], theoretical paradigms in contemporary social science can be organized by five dimensions. These sub-components of the paradigms concept are:

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- commitments to particular theoretical models
- values and norms
- research exemplars; and
- recent theories

Generic Propositions

The various theoretical paradigms in the social sciences abound with generic propositions. These are orienting prescriptive statements that direct students and researchers committed to a particular paradigm to problems considered *relevant and urgent*.

Symbolic interactionists, for example, are directed to study the actor's perspective, believing that no adequate analysis can take place without some reconstruction of the sense that a founder of structural functionalism, directed sociologists to build up a sociological realm, that is, it seek the determining cause of a social fact among the social facts preceding it. Because they believe that all events in a society are determined by its technology and the social relations connected with it.

Marxist sociologists in communist countries are directed to relate all empirical observations and all integrating concepts back to the mode of production existing at that time in society.

Following *Simmel*, exchange theorists are directed to analyze the structure of social associations in order to discern the processes governing them and the forms they assume.

These generic propositions, and others, provide contexts that point out types of variables that analyst should take into account. In the way generic propositions provide *a focus for conceptual thinking and empirical research* [Smith, 1983:22].

Commitments To Theoretical Models

According to *R. B. Smith* [1983:23] it is stated that every theoretical paradigm has as its base some kind of metaphysical, metaphorical, or heuristic theoretical model that is relevant to the substantive reality it deals with [*Thomas S. Kuhn: 1970: 184*].

Some analysts truly believe in the existence of their models, these are metaphysical models, accepted on faith, for example, the *Marxist* communists.

Other analysts merely employ models as metaphors, analogies, or heuristic devices because they are useful. For example, *Paul F. Lazarsfeld: Main trends in sociology; 1973, p. 46*] believes that it is reasonable to explain human conduct in terms of psychological forces and structural elements, a person's position in an institutional and cultural system. Thus, he uses a stimulus – organism – response [S-O-R] model to explain voting behaviour [*Bernard R. Brelson, Paul F. Lazarsfeld and William N. McPhee, voting: 1954, p. 278*].

Examples of *models are historicism, structural – functional analysis, generic administrative model, social systems analysis, open systems model, fused prismatic-diffracted model* and so on.

Sociological paradigms also utilize models. Information – processing model [Aaron Cicourel, *Cognitive sociology: Language and meaning in social interaction; 1973*] is a key conception of symbolic interactionism and cognitive sociology. This conception holds that humans make reflective use of symbols that they employ, interpreting and unravelling the meaning of events, not merely reacting to them. Anthropological functionalism conceives of society as an integrated system of mutually interrelated and functionally interdependent parts [Robert K. Merton, *On theoretical sociology:1967, 142*]; the image of society as comprised of groups with different degrees of power and with conflicting interests is a fundamental component of the Marxian model [Arthur L. Stincombe, *constructing social theories: 1968: 93 – 101*].

Models supply the analysts committed to their use with approved images of the subject matter of their discipline and with basic concepts for analysis and theory construction. They help determine what will be considered a relevant problem, an acceptable solution, and component work [Kuhn, 1970:184].

Values And Norms

Smith [1983:23 – 28] states: cross – cutting the substantive distinctions between the various scientific communities are commitments to different values and norms that affect scientists, often producing lively and controversial debates between the adherents of **different value orientations**. Three distinct polarities are:

- Value – neutrality versus an active social science
- Qualitative versus quantitative methods; and
- Inductive, grounded theory versus logico – deductive theory

Source Robert B. Smith: 1983

Value – Neutrality Versus An Active Social Science

A recurrent fierce controversy in social sciences concerns the place and role of values in guiding and shaping the products (output) of social science research. Paradoxically, some social scientists, perhaps following the directives of *Professor George Lundberg [1895 – 1966]*, believe in doing value – free social science research, while others, perhaps following the dicta (dictums) of *Professor Robert S. Lynd [1892 – 1970]* support an active, involved stance.

Value – Neutrality: George Lundberg’s Contributions

In his famous book entitled *can Science save us of 1947*, *Professor George Lundberg*, a sociologist who taught at Columbia University, Bennington College, and the University of Washington, argued for a value – neutral social science?

He was affected by the perception that powerful – government officials, congressmen, heads of foundations – and humanists held social science in low esteem. Powerful people thought that social science had little to offer the practical person of affairs; they also did not perceive it as biased [Lundberg, *can science save us, p. 114*]. Consequently, they did not financially support social science. This lack of support inhibited the development of social science and prevented it from solving important social problems and guiding social and economic policies [George Lundberg, *can science save us?194: 115*]. The humanists did not value social science either, believing that novels and movies provided more accurate and perceptive descriptions of life in America that did the research reports of social scientists [Lundberg, *Can science save us? 1947: 88 – 89*].

Professor Lundberg thought that social science would be supported by powerful people if *social scientist* would study utilitarian problems in an objective and *value – free* manner, maintaining a rigid separation between their status as *social scientists* and as *citizens*. In Lundberg’s words:

Social Scientists Had Better Confine Themselves To Three Tasks:

First and foremost, they should devote themselves to developing reliable knowledge of what alternatives of action exist under given conditions and the probable consequences of each.

Second, social scientists should, as a legitimate part of their technology as well as for its practical uses, be able to gauge reliably what the masses of men and women want under given circumstances.

Thirdly, they should, in the applied aspects of their science, develop the administrative or engineering techniques of satisfying most efficiently and economically these needs and wants, regardless of what they may be at any given time, regardless how they may change from time to time, and regardless of the scientists’ own preferences [Lundbrg, *Can science save us? 1947, p. 50*].

Scientists may then in their capacity as citizens join with other citizens in advocating one alternative rather than another alternative, as they prefer [Lundberg, *Can science save us? 1947:29*].

Criticism of Professor Lundberg’s views

Although objectivity and value neutrality tend now to be associated with basic or discipline research, that is, the development, articulation, and testing of scientific theories, the passages above indicate that

Professor Lundberg valued and advocated value – free policy and applied research. This is probably a contradiction in terms since these type of research are inherently not value – free [**R. K. Merton, the sociology of science, 1973:84 – 88**]. As usually practiced, policy research is concerned with assessing consequences and devising alternatives to societal mechanisms, but it includes the recommendation and partisan advocacy of the alternatives thought to be better. Applied research is designed to be useful to a client or sponsor who usually defines the research goal. Because its direction is determined by the needs and desires of the client, applied research is seldom value – neutral, although it may be carried out with detachment and objectivity [**Merton: 86 – 87**].

Basic, or discipline, research conforms more to **Professor Lundberg's** objective posture, but it is not completely value – free either, for it is conditioned by the implicit values of the scientists [**Merton:1973:87**]. Basic research requires that the researcher be committed to the value of science. Moreover, other values implicit in the scientists' paradigm influence the choice of what problems to study and what theories to develop [**Kuhn, The structure of scientific revolutions, 1970: 184 – 186**].

In retrospect, if viewed as a tactic to gain financial support from practical men and influential people, the value – neutral stance that characterizes much of American social science has been successful. The social sciences have established themselves as sciences and have perfected their research methodologies [**Morris Janowitz, Professionalization of sociology. American Journal of sociology, 1972:120 – 123**]. However, humanists still hold social science in low esteem [**Charles Kadushin, The American intellectual elite, Boston: Little, Brown, 1974.(vii)**], and attributes of a conservative bias and substantive sterility sometime impinge on those who conform to **Professor Lundberg's** notions of value – neutrality.

An Active Social Science: Professor Lynd's Contributions

Professor Robert S. Lynd, who taught sociology at Columbia University, was an early spokesman for an involved, active social science. In his famous book, *Knowledge for what of 1939*, written when America was still in the throes of a severe economic and social crisis. **Lynd** directed American social scientists to study the more critical problems of American culture objectively and then to devise and advocate concrete programmes of American culture objectively and then to devise and advocate create programmes of action to alleviate these problems [**Lynd, Knowledge for what? 1939: 202 – 250**]. He thought that values may be and are properly and necessarily applied in the preliminary selection of significant and important problems for research [**Lynd, 1939:180 – 201**]. In his views a research problem is important and significant to the extent that it is related to deep, more widely based, cravings which living [democratic] personalities seek realize [**Lynd, 1939:191**]. Once a problem is selected, however, values should not be allowed to bias one's analysis or interpretation of the data [**Lynd, 1939: 193**]. In essence, **Professor Lynd** advocates a scientifically rigorous social science directed towards enhancing democracy, freedom, and opportunity.

Similarities And Differences In Lynd And Lundberg

The similarities and differences in **Lynd's** and **Lundberg's** value orientations are clarified, compared and contrasted in selected passages from their books. There are three major points of comparison:

- choice of problems;
- objectivity of analysis, and
- implications drawn from findings

There is a fundamental disagreement between **Professor Lynd and Professor Lundberg** concerning the place role of values in affecting the choice of problems to be studied.

Professor Lynd stresses that democratic values can properly affect the choice of problems, that an orientation towards social change is consistent with rigorous social science.

Professor Lundberg, contrariwise, seems to advocate a form of ethical neutrality that borders on submissiveness to authority and support for the status quo.

Agreement

Both scholars agree, however, on the need for objectivity in the analysis of collected data and for the nonalignment of social science with political parties or party lines, because this leads to an attention of objectivity.

Disagreement

They disagree about the appropriateness of drawing policy – oriented interpretations from one's objectively analyzed data.

Professor Lundberg recommends that social scientists separate their role as scientists from their roles as citizens. As social scientists they should assess consequences of alternative possible courses of action in an

impersonal, objective, neutral manner. As citizens they may join with other citizens in advocating rather than another.

Professor Lynd believes that this role separation is artificial. After social scientists study a problem intensively and objectively, they may then offer an informal, subjective interpretation of the findings of their analysis. Professor Lynd fears that if a social scientist does not do this, someone less informed, and perhaps more biased, will do so, thereby misinforming the public. But social scientists in applied – research positions often are constrained by their client not to make global interpretations. To do so might jeopardize their relationship with the client and the continuity of the funding.

Professor Lundberg’s recommendation is one way out of this dilemma. Another way is to write one report for the client, to satisfy contractual obligations, and then another report for the general public, in which the data are interpreted more fully.

Qualitative Versus Quantitative Methods

According to Y. Lincoln and E. Guba (1985) and E Hirschman (1986), the evaluative criteria relating to credibility, transferability, dependability and conformability of qualitative research are not suitable for research that falls outside the positivistic domain. For Lincoln and Guba (1985), steering away from using conventional criteria, such as: internal and external validity, reliability and objectivity, was important for evaluating research generated by interpretive design.

Therefore, based upon the recommendations of G. Morgan (1983), four evaluation criteria are proposed for interpretive based research, explicitly: credibility, transferability, dependability and conformability. These four concepts mirror that of the positivistic concepts of internal validity, external validity, reliability and objectivity, respectively. Table 1.1 below demonstrates the differences in evaluation criteria in relation to qualitative and quantitative researchers.

Table 1.1 Evaluation criteria for qualitative versus quantitative research

Qualitative	←	→	Quantitative
Credibility			Internal credibility
Transferability			External validity
Dependability			Reliability
Conformability			Objectivity

Further Smith [1983: 28 – 32] states from some science researchers the qualitative versus quantitative distinctions is a source of scientific controversy. Some social scientists, perhaps influenced by Herbert Blumer, prefer the rich descriptions and new insights that can be obtained from *qualitative field methods*, detailed *interviews*, and *documents*. But some social science qualitative researchers reject quantification.

Contrariwise, some quantitative social scientists, equally myopic, ignore the many virtues of qualitative studies. But there are some social researchers, perhaps influenced by *Samuela Stouffer or Paul F. Lazarsfeld*, who value the articulation and integration of qualitative and quantitative methods in the same study in a methodical way.

The opinions of *Herbert Blumer*, a founder of symbolic interactionism and practitioner of qualitative methods, are compared with those of Paul Lazarsfeld and structural sociologist and research methodologist. *Blumer’s* statements are excerpted from *The Methodological Position of Symbolic Interactionism [Herbert Blumer, Symbolic Interactionism: perspective and method, 1969:1 – 60]*. Lazarsfeld’s statement are from his Introduction to the English translation of Marienthal, a study of an unemployed community near Vienna, circa 1930 [*Jahoda, Lazarsfeld and Zeisel, 1971, pp (vii) – (xvi)*]. In this study qualitative observations are cross – checked against quantitative measures.

There are three points of comparison:

- adequacy to the reality being studied;
- exploration versus corroboration and elaboration, and
- qualitative methods versus articulation of qualitative and quantitative methods.

Agreement On Concepts And Research Methods

Blumer and *Lazarsfeld* agree that concepts and research methods must be adequate to the reality being studies. In order to understand social reality one must have detailed knowledge of the social setting and must use concepts that fit.

Disagreements In Choice Of Research Methods

Blumer and **Lazarsfeld** agree that concepts and research methods must be adequate to the reality being studied. In order to understand social reality one must have detailed knowledge of the social setting and must use concepts that fit.

Disagreements In Choice Of Research Methodologies

The two sociologists disagree, however, in their choice of research methodologies pertinent to their common goal of adequate description. This difference is partly explained by the difference in their research emphasis. **Blumer** is more concerned with exploration. **Lazarsfeld** with corroboration and elaboration.

By exploration, **Blumer** means that analytical strategies and conceptualizations are affected and emerge from the social researchers' firsthand knowledge of the empirical social world. The key connotations of exploration are flexibility of purpose and improvisation of method, but **Blumer** definitely prefers the qualitative methods of directed observations detailed interviews, listening to conversations, securing life histories; diaries, memories, notes, writings, etc.

As data are obtained, the social researcher scrutinizes them by close inspection. Here **Blumer** means that the analyst assesses not only the relationship between empirical instances and analytical categories, but also the empirical linkages between these categories.

Lazarsfeld uses the terms exploration and inspection in a similar way, but more often he does so in the context of survey research. In exploratory analyses of social surveys the analysts inductively finds questionnaire items that are indicators of some abstract dimensions. These are put together to form dimensions of variables; and the variables are cross – tabulated and elaborated to test conjectures.

This emphasis on corroboration of conjectures differentiates **Lazarsfeld** from **Blumer**. In the Marienthal study the researchers strived to cross – check and elaborate. They cross – checked introspective reports and objective observations, case studies and statistical information, historical and contemporary accounts, and natural and experimental data. Because **Lazarsfeld** is concerned with corroboration, he naturally is led to recommend the articulation of qualitative and quantitative methods. This multi-method approach enables the analyst to view the many facets of a complex phenomenon from different points of view. **Blumer** fears the sterility of excessive quantification, and this leads him to overemphasize the virtues of qualitative methods and to discount quantification.

Advantages Of Eclectic Use Of Qualitative And Quantitative Methods

Qualitative and *quantitative* methods may have their *unique advantages and disadvantages* [Martin Trow, *Comment on 'Participant observation and interviewing: A comparison' Human Organisation, 1057:16, 33 – 35; Morris Zelditch, Some methodological problems of field studies: American Journal of Sociology, 1962, 67, 566 – 76; Barney G. Glaser and Anselm L. Strauss, Discovery of grounded theory: Strategies for qualitative research, 1967: 17 – 18; Sam Sieber, The integration of fieldwork and survey methods, American Journal of Sociology, 1973: 78, 1335 – 59; and Ruhard J. Light and David B. Pillemer, Numbers and narrative: Combining their strengths in research reviews. Howard Education Review, 1982:1 – 26]; but each *research methodology* complements the other, and both are best when articulated and integrated. Preferably, these methods may be articulated at the same time in the same study, as in Marienthal or seriously, as suggested by the process of cumulative social research and generation – first qualitative social research and generation of theory [*Glaser and Strauss, Discovery of grounded theory: strategies for qualitative research, 1967:185 – 200*], then elaboration and corroboration of qualitative findings and theories [*Stinchcombe, Constructing social theories, 1968*] by focused, qualitative social research.*

Thus, the process of cumulative social science diagrammed earlier, which provides the generic organized structure of this study, attempts to resolve this aspect of the **Blumer – Lazarsfeld** debate. It states that a good starting point for new social research resides in the theoretical paradigms and substantive problem a social scientist finds of interest.

Now given a new paradigm or problem, social researchers first practice exploration. They assess how well their concepts and models actually pertain to those aspects of the empirical social world under scrutiny. Here the main concern is conceptualization, inferring either new concepts or analytical categories from the substantive data; *Glaser and Strauss, 1967:28 – 31*] call this generating theory, or assessing the degree of fit between prior conceptualizations and new data.

This process of close scrutiny of concept and data is also defining characteristic of analysts by close inspection. Additionally, when inspecting data, the analysts attempt to ascertain and test the empirical relationships between the analytical categories. Both **Blumer** and **Lazarsfeld** stress finding these empirical linkages by inductive analyses. The qualitative methods of exploration and inspection and patterning rely heavily and inductive thinking, that is, the discovery of general principles from specific findings.

But *Lazarsfeld* also stresses *deductive thinking* – the derivation and testing of findings by elaboration procedures and the cross – checking of empirical relationships by corroboration, replication, and consolidation of findings. These are the hallmarks of quantitative methods.

Inductive Grounded Theory Versus Logico – Deductive Theory

R. B. Smith [1983:32 – 37] quotes as follows:

Another lively debate around *Barney G. Glaser and Anselm L. Strauss's* formation of strategies for grounded theory and their polemic against logico – deductive theorizing as portrayed in *Robert K. Merton's* classical writings on 'The Bearing of Sociological Theory on Empirical Research' (*Merton, on theoretical sociology, 1967:139 – 155*) and *Anomic, Anomia, and Social Interaction*; Contexts of Deviant Behaviour [Merton, 1964:213 – 242].

By *grounded theory* *Glaser and Strauss* mean the discovery of theory from data, data systematically obtained and analyzed in the process of comparative social research.

By *logico – deductive theory* *Glaser and Strauss* [1967:29] mean analytical propositions and conceptual models that theorists derive from the generic propositions and conceptual models of their theoretical paradigms.

The analytical categories are designed to organize empirical data, and the theoretical hypotheses are to be tested in verification studies. Both of these applications are usually carried out by researchers other than the theorist. *Glaser and Strauss* fear that logico – deductive theories do not adequately fit the empirical social world, but they do agree with *Professor Merton* on several other points.

The issues in this debate are presented in tabular form as:

1. paradigms are important;
2. from substantive to formal theory;
3. gaps between theory and research;
4. generation of new theory from data verification of developed theory;
5. adequacy of theory to data versus theoretical relevance;

Which compares the views of *Professor Merton* and *Glaser and Strauss* on *five* topics: namely

a)	The importance of paradigms;	}	agreement
b)	From substantive to formal theory;		
c)	The gap between theory and research;		
d)	The generation of new theory from data versus verification of developed theory, and	}	
e)	Adequacy of theory to data versus theoretical relevance. The protagonists <i>agree</i> on the <i>first three issues</i> but <i>disagree</i> about the <i>last two issues</i> .		

General Agreement on Issues

Glaser/Strauss and Merton agreed that paradigms are important: this is not surprising since *Glaser* was a student of *Professor Merton*. The former note that researchers do not approach reality with a blank mind – they have a *perspective* (a synonym, for *paradigm*) that helps them to select pertinent problem and to abstract significant concepts from their data. *Professor Merton* also notes that theoretical orientations [integrated paradigm] are important. They steer the social scientists to silent problems and suggest which types of variables are to be taken into account. Paradigms facilitate the derivation of research hypotheses.

Glaser/Strauss and Merton also agree that an important task for theorists to develop formal theories from well – codified substantive theories and empirical generalizations. A substantive theory covers a substantive topic or an empirical area of inquiry such as voting, residential morality, race relations, crime and delinquency, education, etc; a formal or general theory is more global in scope and may be applied to explain findings in many different substantive areas.

These sociologists also agree that in present day social science there is an embarrassing gap between theory and research. *Glaser and Strauss* attribute this gap to logico – deductive theorists who theories without data. They believe that it is easy to generate theoretical ideas when these ideas need not to be based on data, and since it is difficult and expensive to test these ideas quantitatively, it is not surprising that a gap between theory and research exists. *Merton* attributed this gap to split in the profession between theorists, who theorize, and empiricists, who do research without a theoretical orientation.

General Disagreement On Last Issues

These debates offer different recommendations about how to close this gap. *Glaser/Strauss* recommend that researchers take their own data and inductively discover a theory that is appropriate to the data; this does not preclude the use of well - known social – scientific concepts, but the applicability of these

concepts is to be discovered in the process of research. The concepts are not to be imposed on the data before their relevance is ascertained.

In essence, *Glaser and Strauss* recommend starting with facts and working up to the ladder of abstraction. First, a substantive theory is developed. Then this specific theory is generalized to create a grounded formal theory.

After a theoretical paradigm has guided researchers to a pertinent area of inquiry, they then observe firsthand the empirical social world, gathering data and developing analytic categories and substantive propositions. Next they rework their substantive theory to create a more general formal theory; then they verify their general theory using quantitative methods.

As a theorist *Professor Merton* uses theoretical paradigms.

Research Exemplars

R. B. Smith, [1983:37 – 44] sums up as follows:

The multiple paradigms in the social sciences and related disciplines call for a simplification and synthesis that will allow freedom of inquiry while at the same time providing a methodological convergence that is common to the various theoretical paradigms. The process of cumulative social science provided the needed convergence, as documented by the subsequent discussion of classic and recent exemplars of cumulative research and formal theorizing.

III. Research Theories

Further *Smith [1983:44 – 50]* concludes as follows:

Many recent developments in sociological theorizing have involved the application of path analysis, structural equations and econometric methods, and log – linear models to the analysis of social research data. These techniques have been characterized as revolutionary because they allow theory and research to be combined in one operation.

Qualitative and quantitative methods may have their unique advantages and disadvantages [Martin Trow: comment on ‘Participant observation and interviewing: A comparison, Human, organisation, 1957:16; 33 – 35; Morris Zelditch, Some methodological problems of field studies. American Journal of Sociology, 1963.; 67: 566 – 576; Glaser and Strauss, Discovery of grounded theory: strategic for qualitative research, 1967: 17 – 18; Saom Sieber: The integration of fieldwork and survey methods. American Journal of Sociology, 1973: 78; 1335 – 59; and light and David B. Pillemer: numbers and narrative: combining their strengths in research reviews: Harvard Education Review, 1982, 52, pp. 1 – 26]; but each methodology compliments the other, and both are best when articulated and integrated. Preferably, these methods my be articulated by the same social research scientist at the same time in the same research study

Books

- [1]. R. T. Holt and J. E. Turner (ed), the methodology of comparative research, New York: Free Press, 1970.
- [2]. Victor Lazzaro (ed), systems and procedures; a handbook for business and industry, New Jersey: Prentice – Hall, 1959.
- [3]. B. J. Roux, Epistemological challenges of contemporary politicology (An inaugural lecture delivered in the capacity of professor of political science and public administration at the University of South Africa), Pretoria, 14th August, 1969.
- [4]. Kate L. Turabin, A manual for writers of research papers, theses and dissertations, First British Edition, London, 1982.
- [5]. Barney G. Glaser and Anselm L. Strauss: Dictionary of grounded theory: strategies for qualitative research Chicago: Aldine, 1967
- [6]. Fred W Riggs: Administration in developing countries; the theory of prismatic society:
- [7]. Ferrel Heady: Publication Administration: a comparative perspective: Englewood Cliffs, New Jersey: Prentice-Hall, 1979
- [8]. Fox, W & Meyer, I. H.(1995): Public Administration Dictionary: Juta & Co. Ltd(ISBN 0-7021-3219)
- [9]. Marume, S. B. M. (2015): *Public Administration: special contemporary problems and challenges*: LAP, Lambert Academic Publishing, Berlin, Germany (ISBN: 978-3-659-75883-6)
- [10]. Marume, S. B. M.(1988): SADCC administration of economic programmes with reference to food and agricultural programmes: Unpublished PhD [Public Administration] thesis: California University for Advanced Studies: State of California: United States of America.