A CRITICAL ANALYSIS OF CONTEMPORARY PARADIGMS IN EDUCATIONAL RESEARCH

BY

FAIROZA BUDROODEEN SIRKHOT

SUBMITTED IN PART FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF EDUCATION

IN THE DEPARTMENT OF FOUNDATIONS OF EDUCATION
IN THE FACULTY OF EDUCATION AT THE
UNIVERSITY OF DURBAN-WESTVILLE

SUPERVISOR : PROF B.F. NEL

DECEMBER 1986

TO

MY MOTHER, AMEENA SIRKHOT

The physicist Leo Szilard once announced to his friend Hans Bethe that he was thinking of keeping a diary : 'I don't intend to publish it; I am merely going to record the facts for the information of God.' 'Don't you think God knows the facts?' Bethe asked. 'Yes', said Szilard. 'He knows the facts, but he does not know this version of the facts.'

Freeman Dyson, Disturbing the Universe (Preface)

ACKNOWLEDGEMENTS

I wish to express my sincere thanks to Professor B. F. Nel for her patience and encouragement and many valuable suggestions in supervising this dissertation.

I am also grateful for the assistance given by :

Michael Wolfgang Kannewischer without whose help my research work in Germany would not have been possible;

Farida Patel for the thorough and conscientious way in which she undertook the proof-reading;

Fazila Padayachee who typed the dissertation;

My brothers and sisters for their support and encouragement;

My colleagues from the Faculty of Education who assisted in various ways;

and the Human Sciences Research Council for their generous grant towards the financing of this study.

LIST OF CONTENTS

CONTENTS			PAGE
CHAPTER ONE : STATEMENT OF PROBLEM			1
1.1	Assumptions about the nature of social science		2
1.2	Positivist and Interpretivist Paradigms		4
1.3	Complementary methodologies : The problem of triangulation ...		6
1.4	The neglect of epistemological roots in contemporary research paradigms		11
NOTES AND REFERENCES			17
CHAPTER TWO :	THE HISTORY OF THE PHILOSOPHICAL FOUNDATIONS OF QUALITATIVE METHODOLOGY IN THE SOCIAL SCIENCES		20
2.1	Introductory Remarks		20
2.2	Two Traditional views of Scientific Inquiry		21
2.3	The Rise of Positivism In the Social Sciences		25
2.4	Dialectic Trends		28
2.5	Phenomenological Trends		32
	2.5.1	Edmund Husserl	34
	2.5.2	Martin Heidegger	37
	2.5.3	Jean-Paul Sartre	37
NOTES AND REFERENCES			42
CHAPTER THREE :	TWO MAINSTREAM DEVELOPMENTS IN QUALITATIVE RESEARCH METHODOLOGY IN THE SOCIAL SCIENCES : A REACTION TO POSITIVIST DOMINATION		46
3.1	Preamble		46

CONTENTS (CONTINUED) PAGE

CHAPTER THREE (CONTINUED)

3.2 Symbolic Interactionism 46

3.2.1 George Herbert Mead 48

3.2.2 Anselm Strauss 54

3.2.3 Erving Goffman 58

3.3 Ethnomethodology 63

3.3.1 Alfred Schutz 63

3.3.2 Aaron Cicourel 69

NOTES AND REFERENCES 75

CHAPTER FOUR : THE HISTORY AND PRESENT POSITION IN EDUCATIONAL RESEARCH METHODOLOGY 81

4.1 Introduction 81

4.2 The Functionalist Tradition 83

4.2.1 Approach to Education 84

4.2.2 Assessment of the Functionalist Approach to Education 87

4.2.3 Summary 88

4.3 The Marxist Perspective 89

4.3.1 Historical materialism 90

4.3.2 The Marxist Analysis of Education 91

4.3.3 Summary 95

4.4 Interpretive Approaches to Education 96

4.4.1 Variations within micro approaches 98

4.4.1.1 Symbolic Interactionism in Educational Research 100

4.4.1.2 Ethnomethodology and Educational Research 109

4.5 Assessment 111

NOTES AND REFERENCES 116

CONTENTS (CONTINUED) PAGE

CHAPTER FIVE : THE SOCIOLOGICAL ALTERNATIVE?

5.1 Preamble 122

5.2 The Sociology of Knowledge 123

5.3 The Sociology of Science 128

5.3.1 The Development of the Speciality 128

5.3.2 The Social Construction of Scientific Knowledge 133

5.3.2.1 Empirical Studies of Scientific Development 136

5.3.2.2 Synthesis of main points emerging from the case studies 144

5.4 Research in education and the positivist and interpretivist traditions of epistemology 146

5.5 Conclusions and Recommendations 156

BIBLIOGRAPHY 166

CHAPTER ONE

STATEMENT OF PROBLEM

The application of the methods of the social sciences to educational research has had an interesting outcome in that educational research has absorbed two mainstream competing views of the social sciences - the traditional 'positivistic' view and the more recent 'interpretivist' view. The former holds inter alia that there is no difference between the social sciences and the natural sciences and is therefore concerned with discovering the universal laws that regulate and determine individual and social behaviour. The latter view, however, examines the processes of construction of realities by people.

The author is fully aware of recent developments in the philosophy of science, in that an anti-positivist form of naturalism has developed which cannot strictly be classified as interpretivist. This movement is often referred to as characteristic of a post-positivist phase which tries to effect a synthesis in the positivist/anti-positivist debate preceding this phase. (1) Exponents are for instance Bhaskar, Urry, Keat and Harŕé. For the purpose of this dissertation, however, we are not going to deal with this development, as a study of present research output in education reflects that the debate is still very much located in the positivist/anti-positivist phase.

The two contending views viz. positivism-antipositivism have different ways of looking at social reality, and hence their manner of interpreting it and their corresponding reflections in educational research are strikingly different. We will examine briefly the assumptions underpinning these two approaches and will base our initial analysis on the work of Burrell and

Morgan who identified four sets of such assumptions in order to illustrate the problem at hand. (2)

1.1 Assumptions about the nature of social science

The different approaches to social science are underwritten by philosophical assumptions which are subsumed in epistemology, ontology, human nature and methodology, and have direct implications of a methodological nature. The approaches of social scientists are shaped by their assumptions about the nature of the social world and the ways in which it may be investigated.

Assumptions of an *ontological nature* concern the question of 'reality' : should 'reality' be investigated as something external to man, as a given 'out there'; or is 'reality' the product of individual consciousness?

Closely interrelated with these ontological assumptions are assumptions of an *epistemological nature* which entail ideas involving the grounds of knowledge : how does one distinguish between what is 'true' and what is 'false'? The dichotomy of 'true' and 'false' presupposes an epistemological stance and concerns issues related with the nature of knowledge itself : whether knowledge can be acquired or whether it is based on personal experience and is essentially subjective in nature.

Methodology we will regard as an encompassing term denoting the logic of the movement through ontological, epistemological and strategy development towards a research problem.

The philosophical debate between so-called determinists and voluntarists has its roots in the assumptions concerning human nature. The "deterministic" perspective in the social sciences sees human beings as conditioned and

controlled by their environment and as responding in a mechanistic fashion to the external world. The voluntarist perspective has at its centre the concept of the 'free will' of man and regards human beings very much as the creators and controllers of their environment.

We have stated above that the philosophical assumptions underwriting the different approaches to social science have implications of a methodological nature in that they have consequences for the way in which social scientists attempt to investigate and obtain 'knowledge' of the social world. Methodologies which subscribe to the view that the social world can be treated like the natural world regard knowledge as external to man and therefore attempt to discover the objective, universal laws which can explain the reality being observed.

Methodologies which subscribe to an alternative view viz. that knowledge has a personal and subjective quality, are concerned with the ways in which individuals create, modify and interpret the world, and is thus concerned with the unique and particular, rather than with the general and universal. These approaches question the existence of an external reality and emphasize the relativistic nature of the social world.

Our brief sketch of the various ontological, epistemological, and methodological assumptions underlying the different approaches in social science research highlights two broad and polarised perspectives : the subjective - objective perspectives which have characterized debates in social philosophy. It is this subjective-objective dimension which has formed the basis of the various research paradigms in the social sciences and which has generated different concepts and analytical tools for the analysis of social phenomena.

1.2 Positivist and Interpretivist Paradigms

The conventional inquiry paradigm which we will refer to as the 'positivistic' paradigm, is the most prominent in social science research today. It emerged from the growth of positivism which has been defined as "a family of philosophies characterized by an extremely positive evaluation of science and scientific method." (3) Positivism had a major impact in reforming scientific method and its concepts provided a new rationale for the actual doing of science. Positivist epistemology is based upon traditional approaches of the natural sciences. It tries to establish regularities and causal relationships between the constituent elements of the social world in order to explain and predict what happens in it. The growth of knowledge is seen to be a cumulative process in that new insights are added to the existing stock of knowledge.

In the last twenty years, the growth of interpretive or micro social theories has challenged the epistemological assumptions of positivist or macro theories. Micro theories reject the notion that science can generate objective knowledge of any kind. (4) Social science is seen to be an inter-subjective enterprise in that the social world is essentially relativistic and can only be understood by occupying the frame of reference of the individuals who are directly involved in the phenomenon being studied. These micro approaches differ markedly in theoretical background and we will examine briefly their origins and intellectual traditions.

The interpretive paradigm attempts to explain and understand the social world from the point of view of the actors who are directly involved in the social process. Its history is rooted in the German idealist tradition which grew

out of *inter alios* the work of Immanuel Kant (1724-1803) who postulated that *a priori* knowledge is independent of any external reality and as such, it has to precede any understanding of the sense data of empirical knowledge. Inherent in man's consciousness are in-born organizing principles by which man structures and arranges sense data and thus understands. Central to Kant's philosophy are the ideas of 'mind' and 'intuition'.

However, it is the works of Dilthey, Husserl and Weber which have played a decisive role in shaping the interpretive paradigm. Some major categories of the interpretive theory are phenomenology, phenomenological sociology and hermeneutics. (5) In phenomenology, we distinguish between the *transcendental phenomenology* of Husserl, and the social phenomenology of Schutz. In social thought we identify two branches which are closely related to phenomenology but which combine the phenomenological perspective with other elements. These branches are ethnomethodology which derives from the phenomenology of Schutz, and symbolic interactionism which incorporates the work of G.H. Mead from a pragmatist perspective. (6)

Social science research which applies a natural science approach to social phenomena and which is based on the positivist paradigm, is often commonly referred to as "quantitative" research methodology. (7) Criteria which determine this research approach are for example objectivity, replicability, causality etcetera. Proponents of a so-called "qualitative" research methodology which is based on the interpretivist paradigm, attack positivistic social science on the grounds that social science, unlike natural science, 'stands in a subject - subject relation to its "field of study", not a subject-object relation; it deals with a pre-interpreted world in which the meanings developed by active subjects actually enter into the actual constitution

or production of that world.' (8) In contrast to quantitative research methodology, the epistemological principles of qualitative research methodology have yielded research methods which focus on the *lived experience* of people. Examples of techniques used are unstructured interviews and participant observation. The main problem that has to be confronted in this regard is whether the assumptions underlying quantitative and qualitative methodologies and their respective research techniques, are mutually exclusive categories in an epistemological sense. However, one finds in social science research several advocates of 'triangulation' or the 'multi method approach' who argue that a combination of quantitative and qualitative research techniques will minimize the disadvantages inherent in any one or more method, and maximize the possibility that the final product will reflect the diversity inherent in human communities. (9)

1.3 Complementary methodologies : The problem of triangulation

Cohen and Manion define triangulation as the use of two or more methods to collect data in the study of some aspect of human behaviour. (10) It is argued that since research methods act as filters through which the environment is experienced, they can never be neutral or atheoretical in representing the world of experience. (11)

It is also possible that reliance on a single method may distort the researcher's picture of the reality he is investigating. (12) In the light of these two observations, it is argued that the use of methods which contrast with each other will result in the researcher having increased confidence in his findings especially if the different methods of data collection yield substantially the same results. The use of contrasting methods will also reduce the chances that any consistent findings are attributable to similarities of method.

Another advantage attributed to the use of triangular techniques is that it overcomes the problem of 'method-boundedness.' (13) Boring states :

> as long as a new construct has only the single operational definition that it received at birth, it is just a construct. When it gets two alternative operational definitions, it is beginning to be validated. When the defining operations, because of proven correlations are many, then it becomes reified. (14)

Denzin cites four types of triangulation : data, investigator, theoretical and methodological. (15) There are three main kinds of data viz. time, space, and person. Time-triangulation makes use of cross-sectional approaches where data is collected from different groups at one point in time, and of longitudinal approaches where data is collected from the same group at different points in time. Thus time-triangulation takes into account social change and process. Space-triangulation involves the use of data from a variety of locations in an attempt to overcome the limitations of studies which are conducted within one culture or sub-culture. In person-triangulation, the three levels of analysis adopted by social science researchers are the individual, the group and society. One who person-triangulates will use data from two or more levels of aggregation.

Investigator triangulation refers to the use of several individual observers to study the same phenomenon. The use of two or more observers or participants independently can lead to more valid and reliable data.

Denzin identifies two categories of methodological triangulation :

(a) within-method triangulation applies to the use of variations in the

measurement process e.g. the inclusion of two different measuring instruments in a single questionnaire; and

(b) between-method triangulation which refers to measures of a single characteristic or relationship obtained in two or more different modes of data collection. (16)

Thus far, we have outlined the principles of triangulation and described the types of triangulation and their characteristics. Four categories of Denzin's typology have been used in educational research. These are : time-triangulation with its longitudinal and cross-sectional studies; space-triangulation e.g. when a number of schools in the same area or across the country are investigated in some way; investigator triangulation e.g. when a group of inspectors report on a school or a sample of schools; and methodological triangulation which is frequently used in educational research.

Cohen and Manion suggest that triangulation will be relevant where complex phenomena have to be explained. They use the example of a comparative study of a formal and an informal classroom to illustrate this point of view and point out that due to the contrasting philosophies, objectives and practices in the two classes, a single method approach would have a very limited value in reflecting the "more subtle, intangible features and the non-academic factors distinguishing the two classrooms." (17) However, if the researchers adopt a multi-method approach combining academic criteria (achievement tests, record cards, assessment of class work) and non-academic factors (attitudes of children and teachers, relationships, interview data and observations by the researcher), a more realistic view will be generated allowing investigators to discuss them on a comparative basis.

The authors discuss other occasions when triangulation will be appropriate in educational research e.g. when a more holistic view of educational outcomes is sought; when different methods of teaching have to be evaluated and when controversial aspects of education need to be more fully explained.

With regard to the problems of how methods are to be selected and how the data is to be used, Cohen and Manion suggest the following :

(a) The selection of methods depends on the kind of information required and the context of the research. If the researcher wishes to generalize his findings to wider populations, statistical data will be most efficient. If, however, he requires information of a personal or phenomenological perspective, interviews will be more successful in yielding such data.

(b) The authors list achievement tests, personality tests, attitude tests and sociometric tests as yielding quantitative data; and participant observation, interviewing and teachers' assessments as yielding non-quantifiable data. Depending on the type of information the researcher is seeking, he must combine and complement the most appropriate methods and sources to "build up as full a picture of the areas he is investigating as time and facilities permit." (18)

Cohen and Manion are of the opinion that the combined methods approach breaks down the traditional barriers between positivistic and interpretivist approaches. However, they offer no directives regarding the question of how the methods are to be combined, explaining that the answer depends on the particular situation, the objectives of the study, and the weightings which the researcher assigns to the methods providing him with data.

The authors identify two kinds of problems which arise from the question of

how the data is to be used. With quantifiable data, the researcher has to impose some kind of meaning in line with a theory or hypothesis; whereas with qualitative or interpretive data, meanings and explanations have to be drawn from the data themselves. The problems facing the researcher stem from the inconsistencies between quantified measures arising from weaknesses in available measuring instruments, and the differences between quantifiable and qualitative data or between different sets of qualitative data. The solution to the first problem is, according to Cohen and Manion, a more refined and valid instrumentation; the solution to the second problem is "an imaginative leap." There is a possibility that the solution to the second problem can result in discrepant sets of data being presented in "the form of a collage". However, the authors accept that it cannot be expected that complete consensus among data can or should be achieved. We note with interest the following statement made by Cohen and Manion :

> "Indeed, the very burden of the interpretive approach is that *different actors in a situation will have different meanings* and that *each meaning is equally valid*." (19)

This discussion brings us back to the main problem as stated earlier viz. Whether the assumptions underlying quantitative and qualitative methodologies and their respective research techniques, are mutually exclusive categories in an epistemological sense. In our explanation of triangulation, we discussed the views of some social scientists who are of the opinion that if quantitative and qualitative research are seen as complementary to each other and are mixed in research of many kinds, the gap in the traditional dichotomy between quantitative and qualitative research would be bridged. However, it has become evident to us that in the various discussions about these two

methodologies, technical and epistemological issues are being confused, and that the epistemological roots of these paradigms are merely being 'glossed over' in actual research practice. In the words of Bryman, discussions about the two methodologies "are being explicated at an epistemological level and an attempt is then made to establish a link between it and a technical level, i.e. the practice of social research." (20) In our next section, we hope that this point will reveal itself more clearly.

1.4 The neglect of epistemological roots in contemporary research paradigms

In recent discussions about the two methodologies, reference is sometimes made to the term 'paradigm' in order to reinforce the epistemological nature of the discussion and to denote the two traditions. (21) It is clear that two divergent epistemological bases are being expounded and that the question of techniques of investigation is considered in terms of the technique's appropriateness in terms of a particular set of epistemological premises. Hence, proponents of qualitative methodology justify their preference for participant observation and quantitative researchers theirs for the social survey by referring to their respective intellectual traditions.

Research practices which are chosen for their 'appropriateness' are being linked with abstract philosophical issues. However, philosophical deliberations in recent years do not subscribe to the view that it is the problem that determines the use of a particular technique. It is argued that problems are formulated within the context of a prior intellectual commitment to a philosophical position. (22)

We note that in the debate about quantitative and qualitative research, the terms 'quantitative' and 'qualitative' are taken as reference points

for the intellectual traditions. But, we ask, are the presence or absence of these types of data manifestations of the underlying epistemological issues? Do they in fact signify the philosophical commitments for which they are presumed to stand? We will attempt to answer these questions by examining briefly the issues concerning technique and epistemology.

We have pointed out that questions of research technique are taken to be systematically related to epistemological issues. Trow's view that problems determine methods indicates that one technique may be more appropriate in some contexts than another and thus cannot claim to be superior to it's alternatives. (23) Trow has therefore made reference to a technical rather than an epistemological issue. Other examples of 'technical' arguments demarcating particular methods as 'appropriate' or 'inappropriate' can be found in the writings of Zelditch, and Warwick and Lininger. (24) Arguments of this nature are tied up with the researcher's views about technical viability, and as such, are "quite distinct from philosophical debates which argue for the superiority of a particular epistemological bedrock from which considerations of method then emerge." (25)

In the recent mode of discussing methods of investigation in terms of appropriate knowledge bases, there is sometimes evidence of a vacillation between an epistemological level and a technical level. We will examine briefly some areas in which this is revealed :

(a) Supporters of qualitative methodology argue that its techniques are more sensitive to the complexities of social phenomena, unlike the techniques of quantitative methodology which do not promote an

understanding of the contextual significance of the complexities underlying social phenomena. An example of this form of reasoning can be found in an article by Light, a supporter of qualitative methodology. (26) In the article, he attacks the Coleman Report, a quantitative research survey which concluded that the schools children attend are poor predictors of achievement. (2 Light compares this study with :

> a recent study from England (28) ... systematically observed students in schools and came to very different conclusions. With richer, more holistic data it found that schools made an enormous difference in the proportion of students who passed national exams or got arrested for delinquency ... While the investigators collected output data, they also went into the schools to find out what social processes ly lay behind the successes and failures of the contrast. In contrast to the wastefully expensive Coleman Report, which tried to analyse a training programme by isolating a few variables from the whole, the British study examined the whole and discovered key dimensions of educational programs that only systematic observations over time could discover. (29)

Light's comparison is disconcerting in that it reveals that the different results of the two studies seem to be attributable to the different research techniques employed. A problem arises : how is one to 'know' which of the two studies is the 'correct' analysis? Light favours qualitative studies perhaps because it yields "richer" data, but one can ask what does this have to do with the clash between positivism and phenomenology? It appears to us that Light's preference for qualitative study seems to be based upon technical rather than epistemological criteria because the different philosophical bases of the two methodologies

play no part in answering the question of the appropriateness of one technique against another in solving a research problem. However, as Bryman states, "if the research problem is one which directly emanates from a particular epistemological position then the question of the appropriateness of a research technique is significant, for the technique must properly reflect the epistemological framework in which the research is embedded." (30)

(b) We are of the opinion that the proponents of triangulation, which we have discussed already in some detail, are also guilty of confusing technical and epistemological issues. The argument for a combination of the strengths of different techniques in social science research is essentially a technical one as it implies that such a combination of quantitative and qualitative techniques would produce a better overall view of reality, and as such a superior piece of research.

Several writers who acknowledge the distinctiveness of the two methodologies in philosophical terms, make recommendations for a combination of the two. For example :-

(i) Whyte asserts : "My strategy calls for a weaving back and forth among methods through the various stages of research." (31)

(ii) Douglas states : "Since all research methods have costs and benefits, and since they differ greatly in their particular costs and benefits, a researcher generally finds it best to use some combination or mixture of methods." (32)

(iii) Van Maanen asserts that "qualitative and quantitative are not mutually exclusive." (33)

Statements such as the above illustrate that the writers are considering technical and not epistemological issues in social science research. The arguments for triangulating research techniques suggest that at the technical level, the quantitative - qualitative distinction is an artificial one. But at the epistemological level, the picture is quite different. Consider, for example, the following statement :

When we speak of 'quantitative' or 'qualitative' methodologies, we are, in the final analyses speaking of an interrelated set of assumptions about the social world which are philosophical, ideological and epistemological. They encompass more than simply data gathering techniques. (34)

Following from this statement, we would like to make the point that even though it may appear that at the technical level the debate between quantitative and qualitative methodologies is reconciled by combining and/or triangulating research techniques, such 'reconciliation' does not seem possible at the epistemological level. This is so because the underlying tenets of positivism and phenomenology, to use an example of the two major philosophical strands, have fundamentally different views about the relationship between knowledge and reality. To support our view we refer to Snizek (35) who, in his analysis of journal articles, has shown that research techniques cannot be directly extrapolated from a knowledge of a researcher's epistemological assumptions; and to Marsh (36) who, in his attempts to distinguish philosophical issues from technical ones, questions whether the survey technique is inherently positivistic.

We maintain that many of the writers we have mentioned have confused epistemological issues with technical issues in their attempts to relate questions

of method to philosophical debates. It is our view that in the light of this confusion and especially because of the 'explosion' in qualitative literature in recent years, we need to subject to considerable investigation the philosophical underpinnings of both "quantitative" and "qualitative" methodologies. We hope that such an investigation will help make clearer our research perspectives in the social sciences, particularly in educational research.

With this objective in mind, we will proceed as follows : In Chapter two we will trace the rise of positivism in the social sciences and examine the tension it generated with the dialectical and phenomenological trends in philosophical thought. In Chapter three we will discuss how the development of symbolic interactionism and ethnomethodology posed a threat to positivist domination in social science research. Chapter four will entail a discussion of the present position in educational research methodology. In Chapter five we will examine firstly the sociology of knowledge and the sociology of science, and then relate our discussion to the positivist and interpretivist traditions in educational research. Our intention in the last chapter is to show that the fundamentally different views which the two major philosophical strands have about the nature of knowledge and about what is to pass as warrantable knowledge, have to be firmly grasped before they can be considered axioms of research in the social sciences.

NOTES AND REFERENCES

1. See, for example, Lincoln, Y.S. and Guba, E.G. (1985): *Naturalistic Inquiry*, Sage, Beverly Hills.
2. Burrel, G. and Morgan, G. (1979) : *Sociological Paradigms and Organisationa Analysis*, Heinemann Educational Books, London.
3. Reese, W.L. (1980) : *Dictionary of philosophy and religion*, Atlantic Highlands, NJ : Humanities.
4. See Douglas, J.D. (ed.) (1970) : *Understanding Everyday Life*, Chicago : Aldine Publishing., pp 3-44, for a comprehensive illustration of the anti-positivist view of science.
5. In terms of the subjective-objective dimension, the hermeneutic school is the least subjectivist in this paradigm. Hermeneutics concerns itself with studying the objectifications of the human mind. Through the method of *verstehen* which postulates that the observer has to relive in his subjective life the subject of his study in order to comprehend, it, objectively valid knowledge can be generated in the *Geisteswissenschaften*.
6. Opposed to **Mead**ian symbolic interactionism is behavioural symbolic interactionism which uses positivist research methods. This methodology however, goes against their basic theoretical orientation.
7. The use of the word 'quantitative' gave rise to much confusion. We will use the term as it is commonly used to refer to the positivist paradigm, although we realize the problems surrounding the use of such a label.
8. Giddens, A. (1976) : *New Rules of Sociological Method : a Positive Critique of Interpretative Sociologies*, Hutchinson, London.
9. See, for example, Denzin, N.K. (1970) : *The Research Act*, Aldine, Chicago, pp. 298-299.

10. Cohen, L. and Manion, L. (1980) : *Research Methods in Education*, Croom Helm, London, p. 208.
11. Smith, H.W. (1975) : *Strategies of Social Research : The Methodological Imagination*, Prentice Hall, London.
12. Lin, N. (1976) : *Foundations of Social Research*, McGraw-Hill, New York.
13. Some theorists, for example H.W. Smith (1975), argue that some researchers push particular pet methods because they believe that they are superior or because they are the only ones with which the researcher is familiar.
14. Boring, E.G. (1953) : 'The role of theory in experimental psychology,' *American Journal of Psychology*, 66, pp. 169-84. Boring was one of the earliest scientists to predict such a condition.
15. Denzin, N.K. : See (8) p. 299.
16. This approach to triangulation is emphasized by Webb, E.J., et al (1966) : *Unobtrusive Measures : Non-reactive Research in the Social Sciences*, Rand McNally, Chicago.
17. Cohen and Manion : See (9) pp. 214-215.
18. Ibid, p. 217.
19. Ibid, p. 219. Our italics.
20. Bryman, A. (1984) : 'The debate about quantitative & qualitative research : a question of method or epistemology,' *The British Journal of Sociology*, Vol. XXXV, No. 1, p. 79.
21. See for example :
    (a) Patton, M.Q. (1975) : *Alternative Evaluation Research Paradigms*, University of North Dakota Press, N. Dakota.
    (b) Rist, R.C. (1977) : 'Overview - on the relations among educational research paradigms : from disdain to detente,' *Anthropology and Education Quarterly*, vol. 8.

22. Bryman, A. : See (19) p. 80.

23. Trow, M. (1957) : 'Comment on participant observation and interviewing,' *Human Organization*, vol. 16, no. 3, p. 33.

24. See, for example :

(a) Zelditch, M. (1962) : 'Some methodological problems of field studies,' *American Journal of Sociology*, vol. 67, no. 5.

(b) Warwick, D.P. and Lininger, C.A. (1975) : *The Sample Survey : Theory and Practice*, McGraw-hill, New York.

25. Bryman, A. : See (19) p. 81.

26. Light, D. (1979) : 'Surface data and deep structure : observing the organization of professional training, *Administrative Science Quarterly*, vol. 24, no. 4.

27. Coleman, J.S. et al (1968) : *Equality of Educational Opportunity*, U.S. Govt. Printing Office, Washington.

28. Rutter, M. et al (1979) : *Fifteen Thousand Hours*, Harvard University Press, Cambridge.

29. Light, D. : See (25) p. 82.

30. Bryman, A. : See (19) p. 83.

31. Whyte, W.F. (1976) : 'Research Methods for the study of conflict and co-operation,' *The American Sociologist*, vol. 11, no. 4, p. 216.

32. Douglas, J.D. (1976) : *Investigative Social Research*, Sage, Beverley Hills, p. 30.

33. Van Maanen, J. (1979) : 'Reclaiming qualitative research for organizational research : a preface,' *Administrative Science Quarterly*, vol. 24, no. 4, p.

34. Rist, R.C. : See (20b) p. 62.

35. Snizek, W.E. (1976) : 'An empirical assessment of "Sociology : A Multiple Paradigm Science,"' *The American Sociologist*, vol. 11, no. 4

36. Marsh, C. (1979) : 'Problems with surveys : method or epistemology,' *Sociology*, vol. 13, no. 2.

CHAPTER TWO

THE HISTORY OF THE PHILOSOPHICAL FOUNDATIONS OF QUALITATIVE RESEARCH METHODOLOGY IN THE SOCIAL SCIENCES

2.1 Introductory Remarks

Written from different perspectives, several attempts at comprehensive histories of the field of social science have been made for more than a decade.(1) We will attempt to trace the main philosophical themes underlying social thought which were built into the various research paradigms in the social sciences. Present day research paradigms in the social sciences have been shaped to a great extent by the encounter of the social sciences with the phenomenal advances of natural science and technology in the late 18th and 19th centuries. However, it must be pointed out that it would not be true to say that the methods of the natural sciences were uncritically adopted by all social scientists to form a basis for a model for social thought. For example, idealism in social philosophy maintained its distance from the intellectual standpoints of the natural sciences, and was distrustful of and sometimes hostile to the claims of the natural sciences, especially in terms of the latter's possibility of creating a science of society.

The influence of Comte however, proved to be fundamental for the development of sociological method since he "regarded the extension of science to the study of human conduct in society as a direct outcome of the progressive march of human understanding towards man himself." (2) Comte therefore attempted to bring into being a science of society which would have the same kind of explanatory power as the natural sciences in the study of human conduct.

In this chapter we will sketch briefly some of the main points of contention between the central tenets of the positivist tradition and anti-positivist traditions in the philosophy of science. We will then examine in detail the philosophical underpinnings of the positivist, dialectical and phenomenological trends in the development of the social sciences with a view to highlighting epistemological problems presently faced by the social sciences in terms of establishing what can be regarded legitimately as "knowledge".

2.2 Two Traditional Views of Scientific Inquiry

According to Von Wright, scientific inquiry is broadly speaking said to be present in two main aspects :

1. the ascertaining and discovering of facts (descriptive science).
2. the construction of hypotheses and theories (theoretical science).

One of the purposes of theory-building is to predict the occurrence of events or outcomes of experiments and thus anticipate new facts. The other purpose is to explain facts which have already been recorded. However, the discovery and description of facts cannot always be conceptually separated from a theory about them and is often an important step towards an understanding of their nature. (3) Prediction and explanation differ only in the time perspective : prediction looks forward from what is to what will come; and explanation looks back from what is to what went before. The former are some facts, the latter is a law. One can challenge this view of explanation and prediction by questioning the role of general laws in scientific explanation and to raise the problem of whether theory-building is intrinsically the same endeavour in the natural sciences and in the humanistic and social disciplines. (4)

It is useful to consider some of the problems concerning the interrelation of description, explanation, prediction and theory in the light of intellectual history. The two main traditions in the history of ideas - the aristotelian and the galilean - differ as to the conditions an explanation has to satisfy in order to be scientifically acceptable. The contrast between the two traditions, with regard to their view of scientific explanation, is usually characterised as causal versus teleological. The first type of explanation is also called mechanistic, the second finalistic. (5)

By the 19th century natural science was already established on the intellectual stage. Humanistic studies with a scientific claim were newcomers. Thus one of the chief issues of nineteenth-century methodology and philosophy of science concerned the relationship between these two main branches of empirical inquiry.

One of the stands in the philosophy of science viz. positivism, to use an umbrella term, subscribes to the following tenets :

1. Methodological monism, or the idea of the unity of scientific method amidst the diversity of subject matter of scientific investigation. (6)
2. The exact natural sciences, in particular mathematical physics, set a methodological ideal or standard which measures the degree of development and perfection of all other sciences, including the humanities. (7)
3. This contains the view of scientific explanation which is, in a broad sense, 'causal'. Individual cases are subsumed under hypothetically assumed general laws of nature, including 'human nature'. (8)

Although it is possible to derive such main tenets from positivist approaches, this does not necessarily imply that diverse trends do not exist. The reaction

against positivism, viz. antipositivism, became prominent towards the end of the nineteenth-century. It is probably a more diversified and heterogeneous trend than positivism. It is also characterized by the names "idealism" (which is appropriate for only some facets of this trend), and "hermeneutics". Representatives of this trend of thought include eminent German philosophers, historians and social scientists e.g. Droysen, Dilthey, Simmel, Max Weber and Windelband.

The exponents of anti-positivism would reject the methodological monism of positivism and refuse to view the pattern set by the exact natural sciences as the sole and supreme ideal for a rational understanding of reality. Many of these exponents emphasize a contrast between those sciences which, like physics or chemistry or physiology, aim at generalisations about reproducible and predictable phenomena, and those which, like history, want to grasp the individual and unique features of their objects.

The antipositivists attacked the positivist view of explanation. A methodological dichotomy was introduced by the German historian - philosopher Droysen. He coined for it the names "Erklären" (explanation) and "Verstehen" (understanding (9) The aim of the natural sciences, he said, is to explain; the aim of history is to understand the phenomena which fall within its domain. Wilhelm Dilthey then systematically worked out these methodological ideas and used the name "Geisteswissenschaften" for the entire domain of the understanding method. (10)

There is no sharp distinction between the words 'explain' and 'understand' in ordinary usage. Explanations do further our understanding of things. But

'understanding' has a psychological ring which 'explanation' has not. Several nineteenth-century antipositivist methodologists, especially Simmel, emphasized this psychological feature. Simmel thought that understanding as a method characteristic of the humanities is a form of empathy (in German "Einfühlung") or re-creation in the mind of the scholar of the mental atmosphere, the thoughts and feelings and motivations, of the objects of his study.

Understanding is connected with *intentionality* in a way explanation is not. One understands the aims and purposes of an agent, the meaning of a sign or symbol, and the significance of a social institution or religious rite. This intentionalistic or semantic dimension of understanding is playing a prominent role in more recent methodological discussion. (11)

There is thus a fundamental methodological cleavage between the natural sciences and the historical "Geisteswissenschaften". The question therefore arises of where the social and behavioural sciences stand. As both were born under a cross pressure of positivist and anti-positivist tendencies in the last century, they have become a battleground for the two opposed trends in the philosophy of scientific method.

The methodological unity-*or not*- of natural and social science has been a continuing central debate within the philosophy of the social sciences. (12) Despite the fact that positivists have dictated the way in which the methodological unity issue has been debated, there are a number of different conceptions of science which should be explored as appropriate frameworks for the social sciences.

Without categorizing too stringently at this stage, it is however necessary to trace the philosophical roots of these movements in the social sciences.

2.3 The Rise of Positivism in the Social Sciences

A central feature of nineteenth-century French social thought was the restoration of a new form of social order in which the individual would be subordinated to a higher social totality. A new positive outlook, or Positive Philosophy, was advocated by Saint-Simon, Comte and the Positivist Movement in general. (13) This outlook was to be founded on the certainties of science. The eighteenth-century Enlightenment had brought about the need for a new basis of moral, intellectual and social life. The positivists felt that this basis could be provided by the methods, findings and instrumental utility of science.

Comte and Saint-Simon took up the concept of society as an organic whole. (14) Comte acquired from Montesquieu the notion that like natural phenomena, social phenomena are subject to general laws. The *Cours* begins with Comte's announcement of his discovery of a fundamental law : "This law is that each of our principal conceptions, each branch of our knowledge, passes successively through three different theoretical states : the theological or fictitious, the metaphysical or abstract, and the scientific or positive." (15)

His arguments rest on two central theses. As pointed out in the above law, there is historically a progression from theological, to metaphysical, to positive modes of thought and related types of social organization. Comte maintains that there is a hierarchy of sciences with mathematics at the bottom. Sociology occupies the position at the top. Each of the sciences passes in turn through the three stages - theological, metaphysical and positive.

In the theological stage people explain events and phenomena in terms of

supernatural forces such as particular gods or spirits; in the metaphysical stage, all phenomena are explained in terms of abstract forces or personified entities; and in the positive stage, explanations are given by the establishment of regular law-like connections between empirically observable phenomena. (16)

Judging from the last stage, it is clear that the positivist is concerned mainly with observable phenomena. Facts have to be carefully accumulated and then used to establish law-like relations between the observable phenomena. Observation, experimentation, comparison and prediction are the means to establish these relations. Implicit in this view is the belief that we can know only observable phenomena and the relations between them. We cannot have knowledge of anything else.

We can distinguish between scientific and non-scientific statements in terms of their testability. Statements are only properly scientific if they are open to empirical control and if they have predictive consequences that can be tested. According to Comte, every law-like connection "discovered between any two phenomena enables us both to explain them and forsee them, each by means of the other." (17) He claims also that "any proposition which is not strictly reducible to the simple enunciation of the fact - either particular or general - can have no real or intelligible meaning for us." (18)

Thus the positivist approach is distinguishable from theology or metaphysics in the sense that for the positivist, a meaningful statement is one which can be checked, tested and refuted. Science has to organize isolated facts into sets of laws. The value of scientific theories "depends entirely on their conformity with the phenomena." Thus it would seem that Comte does not consider as important *how* scientific theories are arrived at. (19)

We will now examine the role of scientific theories in Comte's positivist philosophy of science. He contends that we construct hypotheses which are then tested against our observations. (20) Reality can be attributed only to observable phenomena. It is interesting to note that counter to his positivism, Comte also holds to a pragmatist view of science in so far as he claims that practical applicability is the main basis of positive knowledge He sees science as an instrument of control over our physical and social conditions. Science provides us with factual knowledge which directly implies changes in our belief, values and principles of social organization. Thus true, or positive, knowledge must have *practical* use to people in their day-to-day lives. Those sectors of science which lack practical exploitation e.g. the theory of evolution or the theory of probability etc., are rejected as metaphysical.

Any knowledge which is general, simple and independent of other sciences reaches the positive stage. Since sociology is none of these in that it is complicated, individual and dependent on the sciences, it will be the last to reach that stage. Sociology is not reducible to other sciences although it depends on them for empirical data and development of their methodologies. Comte suggests that in order to study society we should view each element in the light of the whole. The objective of social statics is to study the constituent parts of the different forms of social order and their relationships. Social dynamics aims to discover the general laws governing the overall development of human societies and ultimately of the human species itself.

Comte advocates that we use the historical method in the latter case. This involves a comparison between successive states of human development. This method would reveal to us the laws of the inevitable transition from one to

another. Sociology uses the methods of the other sciences : observation (as in astronomy), experimentation (as in physics), and comparison (as in biology). The historical method is a subcategory of the method of comparison.

Comte advocates that it is convenient to study the whole prior to the individual elements or parts since the whole society is more accessible and better known to us. One can question however, whether it is possible for us to 'observe' society. What we can, in fact, observe, are only the various features, elements and consequences.

2.4 Dialectic Trends

In examining the dialectical trends in the philosophy of science, we will concern ourselves mainly with the views of Jürgen Habermas as representing a contemporary neo-Marxist stance.

According to Habermas, the relation of theory and practice in the major tradition of philosophy, always referred to the good and righteous and to the life of individuals and citizens. However, since the eighteenth-century, theory now deals with "the objective, overall complex of development of a human species which produces itself, which is as yet only destined to attain its essence : Humanity." (21)

In *Knowledge and Human Interests*, Habermas accepts a central feature of Marx's epistemology viz. the attempt to relate the foundations of knowledge to fundamental characteristics of the human species. (22) Habermas contends that there are three distinctive forms of knowledge which are involved in the empirical - analytic sciences, the historical - hermeneutic sciences,

and in self-reflection. Each form is constituted by a separate 'knowledge - constitutive interest' which are, respectively, the technical, the practical and the emancipatory.

The empirical-analytic sciences include the natural sciences, economics sociology and political science. These aim to discover nomological knowledge about natural and social relations. Their claim to status as knowledge is justified by their interest in technical control i.e. their interest in increasing the possible extent of human domination over natural and social reality. We require the information provided by these sciences for rational, feedback-controlled instrumental activity.

It is necessary for us to examine what Habermas means by 'technical interest' and in what sense this interest is 'constitutive' of knowledge. According to Habermas, scientists are not typically motivated in their enquiries by the intention to discover laws that can be used for instrumental control. The technical interest is related to a characteristic of the manner in which the human species historically transforms itself : the human species reproduces itself biologically and culturally by productive activity upon nature i.e. labour. Thus productive activity requires and generates a 'specific interest' in technical control. (23)

Technical interest constitutes knowledge on two related levels. First, it provides a criterion for what is to count as 'real' or what counts as an 'object'. The 'real' is what can be detected, measured and manipulated in the situation of controlled experiments. In these situations information is received through our perceptual mechanisms. Second, the general character of the standards employed in determining the truth or falsity of statements about these objects, is determined by the technical interest e.g. the standard of falsification which rejects statements whose predictive consequences are unsuccessful. (24)

Habermas holds that as our civilization becomes increasingly scientific, industrially advanced society bases its survival on expanding its technical control of nature and using social organization to refine the administration of human beings and their relations to one another. The relationship of theory and practice has become the rational application of techniques assured by empirical science, which, together with the analytical sciences, make technical recommendations, but do not provide answers to practical questions. Socially effective theory is now directed to the behaviour of human beings who manipulate.

Habermas maintains that the criteria of reality and standards of validity in the empirical - analytic sciences are relative to the interest in technical control. There are however, other characteristics of the human species which are non-technical. There are thus other distinctive forms of knowledge which have their own criteria of reality and validity. Hence, the historical-hermeneutic sciences which are constituted by the practical interest. In these sciences the objects, or what is real, are inter-subjectively established meanings. *Interpretation* is their criteria of validity e.g. the interpretive understanding of linguistic communication. Communicative interaction cannot be reduced to other categories. The historical-hermeneutic sciences fail to define their objects and criteria of validity in the manner of the empirical-analytic sciences. They cannot be criticized for this failure as they involve a distinctive form of knowledge that is constituted by the practical interest.

Emancipatory interest constitutes the third form of knowledge. This interest which Habermas terms "Mündigkeit" is an interest in human autonomy and responsibil Self-reflection is an important aspect of this form of knowledge which is itself involved in critical theory. It is now necessary for us to examine

Habermas' opposition to 'positivism'. His central criticism is that positivism cannot account for the epistemological status of its own claims. (25)

Self-reflection for Habermas, is an important aspect of philosophical knowledge. It involves reflecting upon features of human existence and the nature of human knowledge itself. Philosophical knowledge involves questions about values and standards because it is concerned with the criteria of validity which are appropriate to different types of science. In order to answer these questions, one will have to make use of critical argument which is one of the uses of language. In *Rationalism Divided in Two*, Habermas states :

> A critical discussion, regardless of whether it concerns the acceptance of proposals or propositions, includes a threefold use of language : the descriptive, in order to describe a state of affairs; the postulatory, in order to establish rules of procedure; and the critical, in order to justify such decisions. Logically these forms of speech mutually presuppose each other. The descriptive usage is in no way limited to a certain class of 'facts'. The postulatory usage covers the establishment of norms, standards, criteria and definitions of all kinds, no matter whether practical, logical or methodological rules are involved. The critical usage employs arguments for considering, evaluating, judging and justifying the choice of standards; it includes therefore language transcendent approaches and attitudes in its discussion. (26)

Habermas outlines a "general theory of communicative competence" where he specifies an "ideal speech situation". This "ideal speech situation" is presupposed by the actual communicative competence displayed by all language users. It involves norms which are related to the traditional ideals of truth, freedom and justice. (27)

For Habermas, a critical theory of society must include interpretive understanding

of the beliefs and modes of communication in a given society, a critical evaluation of these, and an investigation of the determinants of those modes of communication and belief. One has also to justify by self-reflection and critical argument the departure of modes of communication and belief from the norms. There has to be finally a specification of the kind of non-repressive society in which these values can be realized.

Habermas maintains that a rational administration of the world (based on the questionable thesis that man can control his destiny rationally to the degree to which social techniques are applied), does not solve the practical problems posed by history. History cannot be rationalized by "an extended power of control on the part of manipulative human beings, but only by a higher stage of reflection, a consciousness of acting human beings moving foward in the direction of emancipation." (28)

One of the criticisms against Habermas' critical theory of society is that a leaning towards positivism could be detected in the way he characterizes the objects of the empirical-analytic sciences, and in his description of their aim as the discovery of nomological knowledge.

He distinguishes forms of knowledge involved in interpretive understanding and causal explanation. However, the danger is that critical social theory will be split into two components which cannot be reconciled : an investigation into causal relations which is not concerned with the subjective states of human agents; and the interpretive understanding of human actions and beliefs.

2.5 Phenomenological Trends

The word 'phenomenology' was used as early as 1765 in philosophical writings.

However, Hegel was the first to attach a well-defined meaning to it. In his *Phenomenology of Mind*, Hegel considers knowledge as it appears to consciousness. Phenomenology, for Hegel, is the science describing the development which natural phenomenal consciousness undergoes by way of science and philosophy toward the absolute knowledge of the Absolute. (29) He aimed, therefore, at phenomenal knowing through which we would arrive at true and authentic knowledge of Absolute Mind.

Even though Hegel's influence is obvious in the philosophical writings of contemporary phenomenologists, the word 'phenomenology' is no longer used in the sense that Hegel used it. Many regard phenomenology in the sense as meant by Edmund Husserl who is the so-called initiator of this school of thought. Although Franz Brentano did not himself claim to be a phenomenologist, his inclusion in the history of phenomenology is justified by deeper reasons which are found in Husserl's repeated acknowledgements of his debt to Brentano.

Brentano considered it his task to bring about a fundamental reformation of philosophy which, as a result of preoccupation with practical concerns, scepticism and mysticism, had undergone a series of declines from its status as a dignified conscientious attempt to achieve theoretical knowledge. Brentano concluded that psychology pointed the way for the necessary reform of philosophy.

Brentano's attempts to find a characteristic which separates the psychological from the non-psychological or 'physical' phenomena, culminated in the doctrine of intentionality as the decisive constituent of psychological phenomena. It allowed for a new type of experience giving access to immediate structural insights.

2.5.1 Edmund Husserl

Husserl viewed his work as a radicalization of Descartes' demand that all philosophical knowledge be founded in absolutely certain insight. He aimed to arrive at "philosophy as a rigorous science" by means of his phenomenology. Through a rigorously critical and systematic investigation, Husserl wanted his phenomenological philosophy to attain the goal that philosophy had aspired to from its very beginnings in Greece viz. to be an all-encompassing, intellectually justified knowledge of all that is. Thus he wanted to find a method which would lead to an absolutely valid knowledge of things. (30)

Husserl argues that although the natural sciences use refined methods and apparatus, they are based on presuppositions which are not clarified in these sciences themselves. Contrary to this, philosophy wants to reduce everything to primary, immediately-evident "presuppositions", which do not need clarification The non-philosophical sciences stem from the "natural attitude" in which man's perception and thinking are turned towards things which are given as unquestionably obvious. Judgements are based on perception. By induction and deduction, we proceed from these judgements to new knowledge :

> "In this way natural knowledge makes progress. Constantly more encompassing, it lays hold of hitherto obviously existing and given reality whose extent and content, elements, relationships and laws are to be more and more investigated." (31)

The natural sciences thus regard the world as a separate cosmic reality in which we can consider any part we want without changing the objective nature of what we consider. Husserl protests against the formalizing manner in which the natural sciences approached the human world. He preferred to regard the

world as a human *'lived-world'* - hence his concept *LEBENSWELT*, e.g. he would argue that Time is not necessarily divided into categories like hours, minutes and seconds, but one minute can be experienced as infinite when one is expectant or tense. The *Lebenswelt* is therefore an all-encompassing world within which different objects can be discerned and recognized by means of the intentional consciousness of man. (32)

Husserl believed that philosophy needed new starting points and an entirely new method which was fundamental and presuppositionless :

(a) *Original Intuition*

The starting point of Husserl's phenomenology is a field of primordial phenomena. Intuition implies that the subject and object are present to each other on the same level. Husserl believes that his "reductions" can lead us to the "lowest field of work." Reduction means that methodic procedure by which one places oneself in the "transcendental sphere" - the sphere in which we can perceive things as they are in themselves, independent of prejudice. It is a change of attitude through which we learn to see things we previously thought to perceive, in an original and radical way.

(b) *Eidetic Reduction*

This is a methodic procedure through which we raise our knowledge from the level of facts to the sphere of "ideas". By "essence" or "idea", Husserl, means "pure generalities" which put before our mind pure possibilities whose validity is independent of experience. (33)

(c) *Phenomenological Reductions*

These reductions can be divided as follows :

1) The phenomenological reduction in the strict sense which is also called the "bracketing of being".
2) The reduction of the cultural world to the world of our immediate experience (Lebenswelt).
3) The transcendental reduction which is to lead us from the phenomenal worldly "I" to transcendental subjectivity. This leads to the main epistemological problem in Husserlian theory viz. the solipsist paradox which will be explained below.

(d) *Intentionality*

The characteristic property of our consciousness is intentionality which directs this consciousness to that which it itself is not. It is essentially an act which gives meaning. All consciousness is consciousness of something. But consciousness cannot be anything other than openness, directedness to the other, and denial of self-foundation. Consciousness should therefore be understood as a going-out-of-itself.

The paradox in Husserl's philosophy consists of the following : The subject who is constituting his world is simultaneously *in* the world and is thus part of the world. The world thus loses its "an sich" quality and becomes an immanent quality of the consciousness of the subject. The fallacy of this view is proved when this remark is seen with reference to its consequence for regarding the world as a *social* world, therefore as an *intersubjectively constituted* world. (34)

2.5.2 Martin Heidegger

Heidegger stressed the subject's world (subject as "In-der-Welt-sein") as the primary basis of knowledge. Subject and world are one and therefore comprehension of "world" would involve comprehension by the subject of itself. This comprehension is an intuitive condition for existence "überhaupt". He saw the "knowing" act as a continuing "consciousness" or intuitive comprehension of the subject's own existence. We can therefore distinguish between two ways of acquiring knowledge : as Husserlian phenomenology or the Heideggerian as a hermeneutic method. This line of development was followed by later phenomenologists like Sartre, Merleau-Ponty etc. We shall examine the views of Sartre.

2.5.3 Jean-Paul Sartre

Sartre's Position within the Phenomenological Movement

In Sartre's earlier articles, he showed that he was clearly in agreement with Husserl's phenomenological philosophy in general and in particular with Husserl's view that Phenomenology entails important consequences for the sciences of man. However, Sartre denied the existence of a transcendental ego in addition to consciousness and that manifests itself in it. He held that there is no ego *in* consciousness, but only an ego *for* consciousness. Consciousness itself does not contain a transcendental ego. It is pure spontaneity, a mere activity transcending itself toward mundane things. In defence of this view, Sartre appeals primarily to our immediate experiences : in the unreflected experience we do not find an ego; it manifests itself only in reflection upon direct experiences.

Sartre also gives his attention to what he considers the most important

characteristic of consciousness. He divides being into two fundamental kinds :

(a) Being-in-itself is the self-contained being of a thing; the being of a thing always co-incides with itself.

(b) Being-for-itself is co-extensive with the realm of consciousness. Consciousness is oriented toward being other-than-itself; it does not constitute, but it reveals being.

However, consciousness is always consciousness of something, of something which itself is not consciousness - this implies the existence of the in-itself. Consciousness must therefore either constitute that which itself is not consciousness, or it is facing a transcendent real thing. Thus a contradiction in Sartre's hypothesis becomes apparent. Sartre admits that consciousness itself and that which is not consciousness must be real things in the world.

Sartre's development of the idea that consciousness is supported by a being which is not itself, was very much influenced by Heidegger's view on man as ek-sistence and Being-in-the-world.

Sartre derives two fundamental aspects of subjectivity viz. its negativity and its freedom. Consciousness grasps itself by negating the in-itself of its own being. Freedom then is the necessary correlate of the negativity of consciousness as the complete negation of the in-itself. (35) Man is not a thing - as nothingness in the realm of Being man is not yet determined. Man is therefore free. He has to create himself in his situation in freedom and complete responsibility.

Although Sartre initially does not criticize Husserl's view on reduction (epoché) and constitution, there is in his writings on intentionality an

implicit denial of the possibility of reduction. He believed that the Being of objects is either discovered, or it can never be found by any act of consciousness. The world cannot be in consciousness, as Husserl would have it, but consciousness is in the world, as Heidegger had shown.

Herbert Spiegelberg has condensed the most important constants of Husserl's phenomenology and hard-core existentialism which we will illustrate in the following table. (36)

PHENOMENOLOGY	EXISTENTIALISM
1) A rigorous science; aims at absolute certainty for its foundations and at freedom from presuppositions.	1) Does not aspire to be scientific. Systematic structures and absolute certainty are not its primary objectives.
2) Its subject-matter is the general essences of the phenomena of consciousness.	2) Its subject-matter is human existence or "human reality" and not consciousness.
3) It is based on the intuitive exploration and faithful description of the phenomena within the context of Lebenswelt.	3) Not restricted to any particular methods.
4) Uses special method of reductions which suspends beliefs associated with our natural attitude; traces back phenomena to the constituting acts in a pure subject.	4) Rejects phenomenological reduction as practised by Husserl, and the concern for transcendental subjectivity as the absolute foundation of all being.
5) Ultimate objective is the examination and justification of all our beliefs by the test of intuitive perception.	5) Ultimate objective is not theoretical justification but the awakening of a special way of life called "authentic existence".

Thus, although there are many connecting bonds between Husserl's theory and Sartre's theory, there are still differences between them. The two points of basic conflict centre about Sartre's rejection of the phenomenological reduction and the transcendental ego. These, according to Sartre, draw us away from the reality which intentionality gave.

Sartre sees in the major principles of phenomenology implicit clues to existential philosophy. In Sartre's philosophy, Husserl's original doctrine of the intentionality of consciousness includes the existential dimension as one of its possibilities. Sartre's rejection of the transcendental ego ignores its existential implications. Here, Sartre's inadequacies illuminate Husserl's achievements.

Sartre's attempt at re-defining the authenticity of Man through existentialism has to be appreciated for its contribution to philosophic thought. But he has constructed a system of thought which is given universal validity. Any such concrete attempt to envisage an absolute order of meaning and value which transcends our human context and resources is, in its very exercise, a self-defeating project.

We see thus that both Heidegger and Sartre relinquished the Husserlian aim of producing a transcendental philosophy as their interest in human experience, in the "lived-in world", indicates a movement from essence to existence. Brentano was concerned with the psychology of the self, whereas Heidegger and Sartre were preoccupied with the self-in-the-world. This preoccupation of Heidegger and Sartre does in a way take the Husserlian system back to where it came from, viz. to the description of self-experience as outlined by Brentano.

Of Husserl's leading disciples, it was only Schutz, whose ideas we will discuss in detail in the following chapter, who consistently attempted to apply phenomenological ideas in his attempt to resolve pre-existing problems of sociology. Schutz maintained a position in which phenomenology could provide the basis for a fully-fledged science of social conduct, and in which intersubjectivity does not appear as a philosophical problem, but as a sociological one.

Schutz's ideas influenced sociologists who wished to use methods in their empirical social research which were different from those prescribed by the existing positivist methodological criteria. These perspectives were influenced by German idealism, and by pragmatism which viewed human nature as grounded in the potential creativity of each human being, and which could be actualized and expressed only in interaction with other human beings in the social order. "Truth" was considered to be a social construct that emerges out of a continually changing socio-cultural environment. There was a strong pragmatist influence on Schutz which can be traced in the works of Charles Sanders Peirce and William James. However, he remained essentially a social phenomenologist.

The influence of pragmatism is more clearly detected in the work by early interactionists in which the concepts of consciousness, subjectivity and intentionality remain crucial epistemological concepts. In our final chapter we hope to shed more light on these issues.

NOTES AND REFERENCES

1. See, for example, the following publications :

   (a) Gouldner, A. (1970) : *The Coming Crisis in Western Sociology*, Basic Books, New York.

   (b) Friedrichs, R. (1970) : *A Sociology of Sociology*, Free Press, New York.

2. Giddens, A. (1976) : *New Rules of Sociological Method*, Hutchinson, London, p. 12.

3. There is a close interrelation of the description of facts and the formation of concepts. See for example Kuhn, T.S. (1962) : *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago, p. 56, for the account given of the discovery of oxygen and the overthrow of the phlogiston theory of combustion.

4. Von Wright, G.H. (1979) : Two Traditions. In Bynner, J. and Stribley K.M. (eds.), *Social Research : Principles and Procedures*, Longmans, London, p. 11.

5. Ibid, p. 12. The galilean tradition in science runs parallel with the advance of the causal-mechanistic point of view in man's efforts to explain and predict phenomena; the aristotelian tradition with man's efforts to make facts teleologically or finalistically understandable.

6. Comte, A. (1830) : 'Avertissement', Lecon 1, Sect. 10 as quoted by Bynner, J. and Stribley, K.M. (eds). (1979).

7. Ibid, see Sect. 6 on the notion of a 'physique sociale'.

8. Mill, J.S. (1843) : *A System of Logic*, Longmans, London.

9. In contrasting verstehen ('to understand') and erklären ('to explain'), both Droysen and Dilthey placed an emphasis on the imaginative reconstruction (nachbilden) of the experience of the other which is demanded of the observer who wishes to study human social life and history.

10. The word was originally coined for translating the English term 'moral science' into German.

11. Von Wright, G.H. : See (4)p. 14.

12. Keat, R. and Urry, J. (1975) : *Social Theory as Science*, Routledge and Kegan Paul, London, p. 1.

13. It is not our concern to enter into the controversial debate as to whether St. Simon or Comte was the originator of the main ideas of positivism.

14. Rousseau, De Maistre and Montesquieu had also thought of the social totality as an existence in its own right over and above the individual.

15. As quoted in Benton, T. (1977) : *Philosophical Foundations of the Three Sociologies*, Routledge and Kegan Paul, London, p. 30.

16. Keat, R. and Urry, J. : See (12) p. 72.

17. Comte, A. (1844) : *Discours sur le'esprit positif*, Paris, p. 20 as quoted by Keat, R. and Urry, J. (1975).

18. Ibid, pp. 12-13.

19. Ibid, p. 13. He does argue though that the scientific method is that of induction.

20. Comte does not however clarify what counts as adequate verification.

21. See Habermas, J. (1974) : *Theory and Practice*, Heinemann. (Published in U.S. by Beacon Press).

22. Habermas argues that Marx was wrong in concerning himself exclusively with work or labour.

23. Habermas's concept of interest does not relate to actual intentions. It is grounded in the general characteristics of human existence and not in an abstract realm of philosophical categories.

24. For his conception of interests, see Habermas, J. (1972) : *Knowledge and Human Interests*, Heinemann. (Published in U.S. by Beacon Press), chapter 9.

25. For example, many logical positivists of the 20th century propose the principle that all statements are either empirical (synthetic), or a priori (analytic), or meaningless. However, this principle does not conform to the two 'meaningful' statements which it allows. It would therefore be meaningless even if it were true. Habermas would regard this principle as a philosophical claim which could not be justified by the way which positivists allow as legitimate types of Knowledge.

26. Habermas, J. (1974) : 'Rationalism Divided into Two", trans. G. Adey and D. Frisby. In Giddens, A. (ed.) *Positivism and Sociology*, Heinemann, London, p. 216.

27. See :-

(a) Habermas, J. (1970a) : 'On Systematically Distorted Communication,' *Inquiry*, 13, 205-18; and

(b) Habermas, J. (1970b) : 'Towards a Theory of Communicative Competence,' *Inquiry*, 13, 360-75.

28. Habermas, J. (1965) : Erkenntnis und Interesse, *Merkur* Nr. 213, 19, pp. 1139-1153.

29. Hyppolite, J. (1946) : Genèse et structure de la phènomènologie de l'esprit, vol. 1, Paris, p. 10 as quoted by Kockelmans, J. (ed). (1967).

30. See Husserl, E., *Ideen*, Nachwort, vol. 3, pp. 138-141.

31. Husserl, E. (1950) : *Die Idee der Phänomenologie*, The Hague, p. 18.

32. Nel, B.F. : Phenomenology as Methodological Foundation for Social Research, *Journal, University of Durban-Westville*, Vol. 3, No. 3, p. 232.

33. Eidetic reduction is often erroneously regarded as the actual method of the phenomenologists.

34. See Luckmann, T. (1970) : "On the Boundaries of the Social World." In Natanson, M. (ed). *Phenomenology and Social Reality;* Den Haag.

35. See Kockelmans, J. (ed). (1967) : *Phenomenology*, Garden City, Anchor, New York, p. 320.

36. Kockelmans, J. : See (34) pp. 253-255.

CHAPTER THREE

TWO MAINSTREAM DEVELOPMENTS IN QUALITATIVE RESEARCH METHODOLOGY IN THE SOCIAL SCIENCES : A REACTION TO POSITIVIST DOMINATION

3.1 Preamble

The goal of conventional research is that of discovering and verifying scientific hypotheses. If, however, our aim is to reconstruct reality in order to learn to see the world of an individual or group from the "inside" or from the micro-level, we often have no way to do it scientifically, and neither can we prove in a rigorous way that it has been done. However, to many social scientists, it is essential that we gain access to the inside as they believe that without such access, there is something vital that we will not know.

Numerous methodological strategies have evolved from efforts to reconstruct the reality of the social scene, and most of them are cast within the theoretical framework of symbolic interactionism and ethnomethodology based respectively on pragmatism and social phenomenology as expounded in the previous chapter. (1)

In this chapter we will examine the nature of insider's knowledge, which will involve a detailed discussion of symbolic interactionism and ethnomethodology, and later chapter, why such knowledge is important for educational research methodology.

3.2 Symbolic Interactionism

Symbolic interactionism rejects the structural explanation of human conduct on the macro-level. Its adherents view it as a step away from the increasing

quantification of sociology as a discipline, and as such, a step in the right direction, and as the least biased mechanism for coming to grips with the real world.

Individuals are seen to be interacting and modifying their conduct regardless of position in the social structure, socio-cultural climates of vlaues and norms, or institutional settings. Turner states that :

> "Symbolic interactionists tend to conceptualize human interaction and society in terms of the strategic adjustments and readjustments of players in a game. While games have rules, symbolic interactionists are likely to focus attention on how players interact in ways that, depending upon the course of the interaction, create, maintain, and change the rules of the game." (2)

Human beings attribute meanings to social objects and act toward these objects in terms of these meanings. In the process of social interaction, these meanings are constructed and reconstructed. The external world has coherence only with specific regard to individuals who interpret externalities and impose meaning on them. (3) Human actions are shaped by the actual or anticipated response of others. Social reality is therefore unstable, since it is the result of ongoing negotiations between mutually involved sets of actors who are always engaged in interpreting, evaluating and defining processes. Only inductive procedures will help us to understand human behaviour.

Thus, symbolic interactionists reject social theories that attempt to build law-like propositions i.e. theories that proceed deductively. Human conduct has perculiarities and an ever-changing character. Conceptual generalization

and abstraction are abandoned. Concepts should perform a sensitizing function and aided by sensitizing, one can carefully describe the social world. To make sense out of data, the social researcher must take the role of others and insert himself imaginatively in the flux of social interchanges between actors. It is not possible for a social theorist to construct an objective, ever-lasting theoretical structure. All he can do is to be attentive to the subjective interpretations and emergent meanings that arise in human interaction.

Important amongst those who have contributed to the discourse field of symbolic interactionism are George Herbert Mead, Anselm Strauss and Erving Goffman. We will discuss the contributions of each.

3.2.1 George Herbert Mead (1863-1931)

Though the symbolic interactionist perspective is not exactly a unitary approach,(4) those who identify with it regard G.H. Mead as the theoretically central figure in the development of this school of thought. (5) Mead published little, and our acquaintance with his works has come through the writings of Herbert Blumer, one of Mead's chief disciples.

From those whom he called "The Romantic Philosophers," Mead took a related idea from the German idealistic tradition. (6) He felt that they had generalized and made a philosophical doctrine of the notion of the life process.

He wrote that pre-Kantian philosophy "assumed that the world was there and that human beings later came into it ... But, what the Romantic idealists insisted upon is that you cannot have an object without a subject." (7) Since there can be no consciousness which is not consciousness of something, subject and object are inevitably intertwined.

The German Kantian tradition insisted on the interplay between subject and object in the process of knowing and in the construction of the self. Mead states :

> "We can see that the self-process of the Romantic idealists - this fusion of the two phases of experience, the self-experience on the one hand and the subject-object experience on the other hand - was one which enabled them to insist not only that the subject involved an object but also that the object involved a subject." (8)

Thus, we see in Mead's work, that symbolic interaction is the interaction that takes place among the various minds and meanings that characterize human societies. Therefore, in a way, one can characterize Mead's work as neo-Kantian. It refers to the fact that social interaction rests upon a taking of oneself (self-objectification) and others (taking the role of the other) into account. (9)

Mead's work on human behaviour is conceptualized within a "phylogenetic" frame of reference, and his theories of individual and social behaviour rely heavily upon the principles of continuity and flux. He tended towards a concept of man in dialectic relation with social reality.

In the sense of starting from the observable activity of the ongoing social process, his social psychology is behaviouristic. However, Mead explains that it is not behaviouristic in the sense of ignoring the inner experience of the individual - the inner phase of that process or activity. On the contrary, it is particularly concerned with the rise of such experience

within the process as a whole. It simply works from the outside to the inside instead of from the inside to the outside, so to speak, in its endeavour to determine how such experience does arise within the process. (10)

Mead differentiates between humans and the remainder of the animal kingdom whose communication is limited to the conversation of gestures. Man, however, has the unique ability of using symbols. The difference between a gesture and a symbol for Mead can be illustrated by the difference between punching someone and shaking a fist at him. The former is a physical, observable response, but the latter communicates the *idea* of anger in the shaker's mind to the mind of another i.e. the person at whom the fist is being shaken, *interprets* it as meaning hostility.

Mead regards language to be the most important category of significant symbols, and argues that thinking can take place only by means of language. Man's use of language is a manifestation of his ability to think about himself as an object, which makes him the only self-reflexive animal, and one who is capable of purposive action. (11)

Mead's earlier articles are concerned with the educational problems facing the school systems at that time, especially in Chicago, and he criticized those who saw the educational process as a separate category in the child's life. Both he and Dewey stressed the need for a vocational system which would bring the everyday world of society closer to the world of the classroom. (12) In Mead's words the immediate task of the educational system was :

"To use the child's own impulse, his native interests, material which is

> worthy because it has meaning for him, and the nature for getting technique which springs from interest in what he does, and yet to make felt the authoritative discipline and criticism of human achievement, which is as real a part of the child's normal life as it is of the adult; though the incidence is not the same." (13)

It is clear in Mead's articles on problems concerning the school systems of the time, that ideally, the learning situation substitutes "the converse of concrete individuals for the pale abstractions of thought." (14) The relationship to the larger whole of society is crucial, for the child does not develop a social nature through learning, but learning presupposes a social nature.

These early articles indicate the evolvement of Mead's thoughts out of the pragmatic tradition in respect of the ways in which he came to define humans with respect to motivation. A consideration of some of the central matters in Mead's thoughts, viz. the self, the act, and social interaction, will yield a more detailed analysis of these ideas.

(i) *The Self*

Mead saw the human being as an organism having a self which is comprised of two component processes, the I and the ME. The possession of a self converts the human being into a special kind of actor, transforms his relation to the world, and gives his action a unique character. (15) It allows the human being to be an object to himself and provides him with a mechanism of self-interaction with which to meet the world. He can perceive himself, communicate with himself, and act toward himself. This mechanism is used in forming and guiding his conduct. Mead asserts :

> "The 'I' or the ego is identical with the analytic or synthetic processes of cognition, which in conflicting situations reconstructs out of the 'protoplasmic' states of consciousness both the empirical self (the 'me') and the world of object. The objective world is a mental construct and is defined in terms of the needs of the 'I' or the ego. It is a man's reply to his own talk. Such a me is not then an early formation which is then projected and ejected into the bodies of other people to give them the breath of human life. It is rather an importation from the field of social objects into an amorphous, unorganized field of what we call inner experiences. Through the organization of this object, the self, this material is itself organized and brought under the control of the individual in the form of so-called self consciousness." (16)

It must be stressed again that Mead saw the self as a *process* and not as a structure. If the self was lodged in a structure, it would not be able to exercise any effect on itself or on its operation i.e. it would miss the reflexive process which alone can constitute a self. Mead thus isolated the reflexive process in the human being. It takes the form of a person making indications to himself i.e. noting things and determining their significance for his line of action. The process of self-interaction puts the human being over and against his world instead of merely in it - it requires him to handle his world through a *defining* process instead of merely responding to it.

(ii) *The Act*

Action is built up in coping with the world. The human being makes indications to himself, interprets it, and then has to piece together a line

of action. In order to act, he has to identify what he wants, map out a line of behaviour, and note and interpret a line of behaviour. Although the human act is self-directed, the actor may construct an unsuccessful act by failing to note some things, by misinterpretation, poor judgement etcetera. However, his acts are still constructed by him on the basis of what he takes into account. He is not in the mere recipient position of responding to matters; he stands "over and against" them and has to handle them. He is therefore an active organism in his own right. Action is conduct constructed by the actor.

(iii) *Social Interaction*

Mead identified two forms or levels of interaction - non-symbolic interaction and symbolic interaction. In the former, we respond directly to another's gestures and actions; whereas in symbolic interaction, our action is based on the the meaning yielded by our interpretation of each other's gestures.

The following are important aspects of symbolic interaction :

(a) It is a formative process in its own right. The participants have to continually interpret each other's ongoing lines of action and thus build up their lines of action. They have to take account of each other's ongoing acts and have to re-organize and adjust their own wishes, intentions, feelings and attitudes. They have also to judge the fitness of norms, values and group prescriptions for the situation being formed by the acts of others.

(b) Through symbolic interaction, human group life takes on the character of an ongoing process - a continuing matter of fitting developing lines of conduct to one another. This dual process of definition and

interpretation not only sustains established patterns of joint conduct, but also opens them to transformation.

(c) Central in symbolic interaction is the process of interpretation and definition of one another's acts. Symbolic interpretation therefore covers relationships such as co-operation, conflict, consensus, exploitation, domination, disagreement etcetera viz. the full range of human relations.

We see thus, that for Mead, the individual is able to control purposively and organize his conduct; that there is a dialectical relationship between the "I" which gives the sense of freedom, initiative and self-conscious action; and the "ME", that organization of the generalized attitudes held by others and internalized by the individual. His theory of human behaviour is more than a theory of self development in that his philosophy was to provide a context within which the nature of self was bounded by time and space, and where the role of the future, and the past, is seen as an important variable in the motivational elements of behaviour which are dependent on societal as well as individual variables. The individual therefore interprets data presented to him in the social situation, and his choice of potential solutions is bounded by the given facts of his membership in the wider society, thus making him both determiner and determined. (17)

3.2.2 Anselm Strauss

Strauss asserts that most sociologists today are concerned primarily with how they can obtain accurate facts and test theory rigorously :

The discovery of theory from data systematically obtained from social research is called grounded theory. Strauss believes that as a result of the overemphasis

in current social research on the *verification* of existing theory, the generating of theory is often totally lost in specific researches. Barney Glaser and Anselm Strauss regard theory in social research as a strategy for handling data in research, providing modes of conceptualizing for describing and explaining. Theory must also be readily understandable and must therefore "fit" the situation being researched, and "work" when put into use. (18)

In order for theory to fit and work, they advocate as the best approach an initial, systematic discovery of the theory from the data of social research as this will result in the discovery of categories which will be understood by laymen who are involved in the area to which the theory applies; and social researchers in other areas will recognise an understandable theory linked with the data of a given area. (19)

Strauss believes that many highly empirical studies have at their conclusions tacked-on explanations taken from logically-deduced theories. This, he says, is due to the fact that authors of such studies have not been trained to generate theories from the data they are reporting. They are able to research and verify their facts, but unable to research and generate their explanations of them. In contrast, grounded theory is so closely linked to data that it usually cannot be replaced by another theory, or refuted by more data. (20) It also excludes use of theory for "exampling". (21)

Strauss maintains that the process by which a theory for sociology is generated, is inextricably bound with its adequacy. The usefulness of a theory must be judged by how it was generated, and the greater the degree that it has been inductively developed from social research, the better a theory it is likely to be. (22)

Glaser and Strauss state :

> "Generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research. Generating a theory involves a process of research." (23)

This means that the emerging theory actually guides and integrates the processes of generating theory and of social research. (24) In contrast, traditional methods of theory development rely on standard methods of social research that are not directly formulated, controlled by, or related to how the theory will be developed.

In addition to the three criteria already mentioned which grounded theory meets viz. that a theory must have fit and relevance, and that it must work, it meets also a fourth, that of being modifiable, based on ever-emerging notions from more data. Strauss maintains that despite the fact that basic social processes remain in general, their variation and relevance changes in our world. As the ability of a theory to work the data reveals itself in research, the theory has to be constantly modified. The recasting of the theory is done almost as the new data appears, and this maintains the tractability of grounded theory over social life, and hence its relevance. (25)

An important property of grounded theory is its transcending quality. Because it is generative in nature, it takes the researcher beyond the substantive area he is studying. Furthermore, as a general method of analysis, it can combine and integrate several forms of data collection such as case studies, experiments, surveys etcetera. Glaser states :

> "The generative nature of grounded theory constantly opens up the mind

> of the analyst to a myriad of new possibilities for research, for ideas, for other substantive areas of endeavour, for formal theories, for projects and for variations in method." (26)

Grounded theory also reveals its transcending nature in that it conceptualizes the data and raises thought about it to a higher level. By inclusion and integration at a higher level, it transcends previous theories and descriptions about an area by making these theories and descriptions part of data which are then compared to the emerging theory. The result is the generation of an integrated, dense theory with a much greater scope.

An important part of the grounded theory method is how to write theory i.e. writing of theory is part of the method itself. It is ideational in that "it is a sophisticated, careful method of idea manufacturing." (27) When grounding theory, emphasis is placed on thinking and generating ideas that fit and work the data, thus making the grounded theorist merely a theorist among theorists, but one who is theoretically sensitive to his data. (28)

Strauss feels that the clash between qualitative and quantitative methods and data concerns the primacy of emphasis on verification or generation of theory, but holds that both forms of data are useful for both verification and generation of theory. Both forms are necessary and should be used as "different forms of data on the same subject, which, when compared, will each generate theory." (29)

However, Strauss feels that it is the qualitative method that finds best the crucial elements of sociological theory, and that qualitative research is the

most "efficient way to obtain the type of information required and to contend with the difficulties of an empirical situation." (30)

3.2.3 Erving Goffman

The differences among the several diverse schools of thought in contemporary symbolic interactionism are on the basis of their conceptions of the central ideas of symbolic interactionism, and in preferred methodology. (31)

Goffman is the major exponent of the so-called dramaturgical approach in symbolic interactionism. The ideas of Mead, Durkheim and Simmel influenced his views on the reality-constructing behaviour of humans, and the significance of ritual and ceremony in human social life.

Goffman maintains that when human beings interact, they put on a "show" for others in the sense that each tries to "manage" the impressions the others receive of him or her. Goffman states :

> "The perspective employed in this report is that of the theatrical performance; the principles derived are dramaturgical ones. I shall consider the way in which the individual ... presents himself and his activity to others, the way in which he guides and controls the impressions they form of him, and the kinds of things he may and may not do while sustaining his performance before them." (32)

To put it differently, in our interaction with others, we put on 'performances,' and act out our 'parts' making use of a 'setting' and 'props'. Goffman assumes that an individual will have many motives for trying to control the impressions that others will receive of the situation when he appears

before them, and that it is to his advantage to present himself in ways that will best serve his ends. Goffman defines a situation as "an environment of mutual monitoring possibilities, anywhere within which an individual will find himself accessible to the naked sense of all others who are 'present', and similarly find them accessible to him." (33) The self is therefore an object about which the actor wishes to foster an impression.

Goffman recognises that the norms regulating social conduct are taken for granted and thus tend to escape notice. With regard to the extent that roles determine the behaviour of interactants, his approach reminds us that roles, norms and positions are simply frameworks within which human interaction takes place. He states that :

> "When an individual enters the presence of others, they commonly seek to acquire information about him or to bring into play information about him already possessed. Information about the individual helps to define the situation, enabling others to know in advance what he will expect of them and what they may expect of him." (34)

Acting on this information, the individual will tend to organize his behaviour in terms of what he feels others expect is appropriate for someone like him in that situation. He anticipates the responses that he wants, and in order to achieve them, he considers the meaning his behaviour will have for others, assesses his proposed behaviour in terms of the responses it will evoke in them, and then acts (or changes his actions) in order to achieve the responses he wants. The other actors in the situation do the same. In other words, in most social situations, people take account of each other and act according to their definitions of the situation.

Goffman sees individuals frequently involved in a "performance" which he defines as "all the activity of a given participant on a given occasion which serves to influence in any way any of the other participants." (35) In his view, when individuals come together they try to obtain information about one another or to use whatever information about one another which they already have. This information is derived from "sign - vehicles" which are of two kinds : signs "given" through linguistic means and signs "given-off" expressively. Where the individual is concerned, interested, or invests himself in the social situation, he generally has certain motives for trying to control the impression that others receive of the situation. Signs given and signs given-off together help to define the situation for the interactors. Each of us depends on a number of "sign vehicles" in making judgements about what we can expect of other people and what they can expect from us.

Within interaction, conscious or unconscious interpretation of other people's actions and intentions is inevitable. Goffman argues that in social encounters every person tends to act out a 'line' which is "a pattern of verbal and non-verbal acts by which he expresses his view of the situation, and by this, his evaluation of the participants, especially himself. Regardless of whether a person has consciously taken a line, he does so in effect, because the other people assume he is doing so, that he is taking a stand. So if he is to cope with their responses to him, he has to allow for the impression he has made on them. And so on." (36)

We will now discuss briefly the dramaturgical analyst and his technique. The dramaturgical analyst focuses on the creation of the character on the part of the actor and the reception on the part of the audience. Success or

lack of success (audience's acceptance or rejection of the character) permits the individual to direct his behaviour toward the most rewarding line of activity and to avoid unrewarding behaviour which will lead in his being "discredited". The consequences of activities thus depend upon others' perceptions of the act and *not* the actor's consciousness or the way in which he views the world. It is the actor's *impressions* which are of concern to the others. The analyst thus focusses on these impressions.

The power of dramaturgical analysis lies in the discrepancy between the perspective of the actor and that of the analyst. Theatrical similie is utilized in order to analyze how actors and audiences manage to produce, through their own activities, realities which they assume are a reality external to themselves. These similies allow the analyst to stop taking for granted what his subjects do and to begin relating what impressions the actor is relating and in that very act of creation, what the actor is communicating about himself.

Meaning simply "is", and thus becomes a matter of agreement. Thus the dramaturgist avoids the seemingly endless philosophical debates about meaning, the individual's perception of meaning etc. Instead, he relates perceptions of meaning to behaviour. The absolute nature of meaning is left to those disciplines whose province it is to deal with obscurities. Actors understand the world in certain interactive terms; thus the analyst relates actions to the interactional complex wherein they occur with all their value-laden, culture-defined imperatives. Meaning relates more to the ongoing quality of behaviour and depends in a sense on whether or not it will continue. Meaning, interaction and guideposts of behaviour that all in the culture take for granted, are in reality a *process*, and as such, are flexible and capable

of change through interpretation, and an aspect of collective agreements making up the understandable world. Thus interaction and meaning are viewed as a function of consciousness and agreement.

Goffman has been criticized by many commentators for his view of man which is that individuals are *always* concerned with presenting a convincing image to others, and that they are *always* concerned with controlling the image that others have of them. Since man always tries to present his best face in order to win approval and recognition from others, the human being is nothing more than an "impression-manager." Cuzzort refers to Goffman's views as "man as role-player and manipulator of props, costumes, gestures and words," and "humanity as the big con." (37)

Blumer states that the weaknesses in Goffman's approach "stem from the narrowly constructed area of human group life that he has staked out for study. He has limited the area to face-to-face association with a corresponding exclusion of the vast mass of human activity falling outside of such association. Further, he has confined his study of face-to-face association to the interplay of personal positioning to the cost of ignoring what the participants are doing." (38)

It is our opinion that in fairness to Goffman, his image of humans in society should be seen in view of the changing character of American society and its embracement of a market-mentality in a society which is controlled by large-scale bureaucratic organizations. (39) Having little influcence over these organizations, and experiencing a diminished sense of power and worth within these organizations to whom they are readily changeable units, individuals try to manage the impressions that will increase or maintain their

status; and are more concerned with presenting their best faces in an attempt to win recognition and approval from one another. It is in this sense that they become concerned with the appearance of things, more other-directed.

Several writers have discussed the affinities between ethnomethodology and symbolic interactionism. (40) We shall now examine ethnomethodology as one of the mainstream developments in qualitative research methodology.

3.3 Ethnomethodology

It is relevant for our purposes that we remark on some ideas of the exponents of the ethnomethodological school of thought. Prominent figures in this school are Alfred Schutz and Cicourel.

3.3.1 Alfred Schutz (1899-1959)

Schutz was influenced both by Husserl and by Max Weber, an eminent sociologist of that time.

The phenomenological tradition regarded knowledge as an act of consciousness and attempted to ground it. For Husserl, the world is experienced and is made meaningful in consciousness. As we have seen in Chapter 2, phenomenological philosophy tries to describe the everyday experience of the 'life-world', the world given in immediate experience. All consciousness is 'intentional' in the sense that consciousness always has an object that constitutes it. Husserl maintained that empiricism has failed to show how thought proceeds from specific experiences to abstract classification, and therefore aimed to establish a scheme that transcends empirical knowledge.

In the epoché, we 'bracket' all empirical particulars in order to penetrate the essence of consciousness e.g. in our 'lived-in world' with our 'natural attitude', we must clear away assumptions about ourselves, other people and the physical world. Only then will subjectivity in its pure form be revealed. After freeing ourselves from all bias and being able to look at existence in its most essential aspects, we can re-emerge and reconstitute the real historical world in all its complexity. (41)

Through Alfred Schutz, phenomenology had its main impact on sociology. His earlier works depict a synthesis of Weber's approach to the methodology of the social sciences and Husserl's phenomenology. (42) Schutz tried to apply phenomenological ideas to resolve problems in sociology, and attempted to make phenomenology provide the basis for a science of social conduct. He focussed on intersubjectivity as a social, and not as a philosophical, problem. By inverting Husserl's epoché, man with the 'natural attitude' does not suspend belief in material and social reality, but suspends *doubt* that it is anything other than how it appears.

Schutz focussed on intersubjectivity, on how we understand each other, and how our perceptions and conceptions of the world are similar. He discusses the life-world (Lebenswelt) which is also referred to as the 'everyday world' and as the "commonsense world". In this Lebenswelt are the physical and social objects within which men live and pursue their routine activities. 'Commonsense man' who has a 'natural attitude' takes this world for granted and does not question the meaningful structure of it. He does not try to change or interpret this world, but merely lives in it and tries to make his way in it. He experiences this world as one that is already organized; it was here before he was born. As most knowledge is handed down to us, we experience it as objective truth, as detached from us, as being the same for everyone.

We each have a unique biographical situation. A fundamental part of our knowledge is acquired from adults who bring us up. They in turn have their own qualities and location in society which leaves an imprint upon us. Our biographical situation has a 'stock of knowledge' and since no two people have the same biographical situation, our stocks of knowledge differ, and we view the world with somewhat different perspectives.

We cannot know everything about everything as knowledge is socially distributed. Knowledge is objective and external to the individual and this depends on it being shared with others. In our Lebenswelt, we meet others and interact on the basis of the reciprocity of perspectives. We assume that if we changed places, we should perceive as the other does now. (43)

Schutz, in his study of the 'everyday world', complemented Weber's account of 'meaningful action', and thus provided an adequate philosophical grounding for Weber's sociology. Schutz concerned himself with two questions posed by Weber's conception of social action viz. in *action*, how does the actor "attach a meaning" to what he does; and in *social action*, how does the actor experience others as persons separate from himself, but with their own subjective experiences.

Schutz attempted to solve the problem of relativity by substituting it with the notion of 'relevance' as actual focus of interest. Our life process involves constantly shifting systems of relevance which depend on the overlapping and interweaving of the agent's hierarchy of projects. He states that :

> "We are involved in the one actual and many marginal topical relevances with layers of our personality on different levels of depth." (44)

We can examine phenomenologically the understanding of the conduct of others as a process of typification. Schutz explains that :

> "To a certain extent, sufficient for many practical purposes, I understand their behaviour, if I understand their motives, goals, choices and plans originating in their biographically determined circumstances. Yet only in particular situations, and then only fragmentarily, can I experience the others' motives, goals, etc. - briefly, the subjective meanings they bestow upon their actions, in their uniqueness. I can, however, experience them in their typicality." (45)

In order to organize reality, we have to classify and group. Typifications display the structure of the life world and are socially learned and handed down to us. We view unique qualities against a background of typification :

> "The typifying medium *par excellence* by which socially derived knowledge is transmitted is the vocabulary and syntax of everyday language. The vernacular of everyday life is primarily a language of named things and events, and any name includes a typification and generalization referring to the relevance system prevailing in the linguistic in-group which found the named thing significant enough to provide a separate term for it." (46)

Typifications can be seen as ideal-types and are an inherent feature of our everyday knowledge. By this process of typification the actor applies learned interpretative schemes to grasp the meanings of what others do. From the "we-relationship", or the social relation of the directly-experienced other, the actor derives all other notions of social forms that he applies in his everyday social life. (47) An actor brings his stock of knowledge or

"common-sense understandings" into any face-to-face encounter, and uses it to calculate the probable response of the other to his actions, and to communicate with him. These stocks of knowledge are pragmatic in the sense that they provide the actor with recipes for responding to others.

We accumulate experience as our biographies unfold, and through a process of sedimentation, we assimilate new layers of knowledge into old typifications, or form new ones. Our primary world is an intersubjective one of everyday life, a natural attitude, and pragmatic interests. However, we also live in other worlds or multiple realities of finite "provinces of meaning" e.g. religious experience, childhood, dreams, art, science etc. The stocks of Knowledge operate within these different provinces of meaning, and the social actor has the competence to shift between these provinces of meaning, but each transfer of attention or response is experienced by the actor as a "shock". To put this differently, with 'epoché of the natural attitude,' we suspend doubts that things may be other than what they seem. We doubt within the 'finite provinces of meaning,' in which we suspend our commonsense beliefs of the real world. We experience a 'multiple reality' as 'real' when it has our attention. We progress from one province of meaning to another by a 'leap' of consciousness. (48)

The sociologist works in a province of meaning viz. that of social science. The reality in this province of meaning bears a sharp contrast to the everyday world where the individual's stock of everyday knowledge serves practical purposes and is inconsistent, incoherent and fragmentary. Scientific knowledge is the opposite of this, and because it serves intellectual interests, it has to satisfy the positive requirements in the scientific world viz. that of consistency, clarity and coherence. The social scientist has to construct

typifications of the typifications that his subjects make; he builds ideal-types of ideal-types which Schutz calls "constructs of the second degree." (49)

The relevances of lay members of society are geared into the practical tasks of day-to-day life. On the other hand, the relevance of the sociological observer are cognitive and theoretical. Schutz is of the opinion that the disinterested observer is : "concerned with problems and solutions valid in their own right for everyone, at any place, and at any time, wherever and whenever certain conditions, from the assumptions of which he starts, prevails. The 'leap' into theoretical thought involves the resolution of the individual to suspend his subjective point of view." (50)

The method of most interpretative approaches in the social sciences is to establish theoretical constructs of 'typical modes' of conduct so as to illuminate the subjective grounds of action. Schutz states that :

> "Every social science, including interpretative sociology, ... sets as its primary goal the greatest possible clarification of what is thought about the social world by those living in it." (51)

For Schutz, the basic epistemological problem of social science is this - can they be possible; as sciences of subjective meanings? They try to make objective meaning claims, but these claims have been created within the context of certain human activity, and cannot be understood apart from them.

He argues that since one of the important aims of sociology is the reconstruction of the ways in which agents explain their actions, the concepts used by the sociologist must not be radically different from those of the

agents. His models, which are 'constructs' created by him and which are distinct from the actual ontological conditions of individual everyday existence, and the concepts he uses, must obey a 'principle of adequacy' in that they must relate the motions actors themselves use in building a meaningful social world.

Schutz states that social-scientific concepts "must be constructed in such a way that a human act performed within the real world by an individual actor as indicated by the typical construct would be understandable to the actor himself as well as to his fellow - man in terms of common-sense interpretations of everyday life." (52)

3.3.2 Aaron Cicourel

We have seen that one of Schutz's primary concerns was the relationship between actors' concepts and those of the social scientist. In his view, positivism's attempt to formulate a neutral language of observation not only created significant tensions between actors' concepts and those of social scientists, but was in fact an attempt to evade the socially grounded nature of knowledge. Schutz believed that in order to achieve successful understanding, the social scientist should aim to display the implicit meanings that enter into the actors' worlds. His concern with how 'objectivity' or 'truth' are established within a natural life world and its socially organized setting, indicates that no one form of understanding is absolutely superior to any other.

Schutz's work inspired in part the growth of ethnomethodology which concerns itself with the empirical examination of the processes through which meanings are produced in social practice in order to elucidate human interaction.

As such, rather than addressing meanings themselves, its concern is mainly to describe the procedures of meaning production in any social activity. All knowledge is seen to be communally grounded in human practice.

Ethnomethodologists are concerned with how individuals plan and explain their own behaviour; how they determine what other persons are doing and saying. It does not offer a method but a way of thinking about and interpreting the phenomena of everyday life. It is interested in the procedures which provide people an understanding of themselves and each other; the principles which people utilize in the formulation of various practical judgements; and the methods by which people construct theories that allow them to engage in ordinary everyday activities.

Ethnomethodology emphasizes the variability of meanings in every social situation. Humans have the ability to generate 'new' sentences and meanings and can, therefore, not be generalized from one situation to another. The key term used is 'indexicality'. Conversations convey more than actually is, or can be said. They contain terms that are not explicitly defined in the particular situation. Participants draw on their stock of knowledge, including linguistic knowledge, and on their exploration of the situation at hand, in order to achieve working definitions of such 'indexical experessions.' (53)

Cicourel wrote :

"My basic assumption is that the clarification of sociological language is important because linguistic structure and use affects the way people interpret and describe their world. Since sociologists have evolved their own theoretical terminologies and frequently discuss, on the one hand, in these varying terms the language and substance of each others' theories and on the

other hand, the language of persons in everyday life whose behaviour they are interested in explaining and predicting, it is quite likely that the syntax and meaning of these languages will become entangled." (54)

Cicourel used this argument to develop a critique of sociological research. When one engages in social research, there will always exist what are, from the researcher's point of view, non-relevant factors which influence the respondent's report. Cicourel emphasized that data-collection activities involve the same relevancies and the same social processes found in other social situations. In, for example, the survey interview situation, interviews and respondents employ the same mechanisms that they employ in many other social situations :

> "Canons of research demand that the interviewer operate somewhat like a computer with all the appearances of a fellow human being, but, so far as we know, persons in everyday life find it impossible either to present themselves as both or to receive presentations of others (regardless of the form it takes) which conform to the strict canons of scientific inquiry." (55)

Cicourel thus points out that just as interviewers and respondents cannot avoid mechanisms which produce biases in everyday social activities, they cannot avoid mechanisms which produce biases in data-collection activities. When extrapolating from the interview to the real world, it must be remembered that the interview is itself a part of that real and social world. Whatever methods are used, "researchers in the social sciences are faced with a unique methodological problem : the very conditions of their research constitute an important complex variable for what passes as the findings of their investigations." (56)

Cicourel contended that it is not necessary to sort out the 'confusion' of first- and second-degree constructs with which sociologists work. Since sociology draws heavily on 'everyday' explanations, sociology itself is just another life-world created by its members, and is therefore equally valid to any other socially constructed reality.

Conventional sociology has also been accused by ethnomethodologists of abstracting the concept of 'role' and treating roles as if they were things which make up a static social structure. Subjects are portrayed by social scientists as 'judgemental dopes' or 'cultural dopes' whom Garfinkel defines as men who produce "the stable features of the society by acting in compliance with pre-established and legitimate alternatives of action that the common culture provides." (57)

Since knowledge of social behaviour is obtained by means of symbols or language, it is imperative that one uses the same language as in the intended field of research in order to give a true account of reality. Cicourel states :

> "If it is correct to assume that persons in everyday life order their environment, assign meanings or relevances to subjects, base their social actions on their common-sense rationalities, then one cannot engage in field research or use any other method of research in the social sciences without taking the principle of subjective interpretation into consideration." (58)

We would like to comment on two significant departures of ethnomethodology from the general interactionist tradition. One of these is indicated by Dreitzel when he notes that the ethnomethodologists, unlike most interactionists,

maintain that "the social order, including all its symbols and meanings, exist not only precariously but has no existence at all independent of the members' accounting and describing practices". (59) The focus of ethnomethodology is "not on activity but rather on the process by which members manage to produce and sustain a sense of social structure." (60)

Secondly, in the work of Cicourel we find indications of the ways in which sociologists construct with each other a flimsy social reality which often leads to the assumption by sociologists of certain givens. This assumption thwarts efforts to understand social conduct from the perspective of the actor.

Our discussion of the symbolic interactionist and ethnomethodological frameworks shows that both direct attention to the social deprivation of man's unique attributes; and represent mind and self as society in microcosm. In numerous ways they implicate the individual with society and society with the individual. Hence, both paradigms rely heavily on sympathetic introspection and on participant observation as techniques for social research, and implement everyday language in their interpretation of everyday reality.

Subtle epistemological differences do exist between these frameworks, but we will not analyse them in great depth. However, it is necessary to remark on these because the confusion between symbolic interactionist approaches and ethnomethodological approaches can possibly be attributed to an ignorance of these differences.

In the analysis of the relationships between "man and the world" and "subject and object", symbolic interactionism takes the "Act" as its premise before

embarking on its analysis of symbols which are seen to generate meaning. Ethnomethodology takes "Intentionality" as its premise in its analysis of the processes by which people constitute meaning in the social world. The concept 'meaning' is evident in both frameworks, but again meaning operates in different ways in their analysis of the relationship.

The concept 'reciprocity' is a common factor in symbolic interactionism and ethnomethodology, but the 'constitution of the world' seems to be the actual difference between the two conceptions of man and reality.

In phenomenology, constitution implies meaning once intentionality constitutes meaning. We do not think that Mead will have any quarrel with such a statement except that meaning seems to be more of a second-order concept. In other words, in Mead's theory, it does appear as if meaning is not seen as an immediately given characteristic of the mentioned relationship. Mead uses the term "gesture" as a starting point, but it is only when the gesture becomes a significant symbol, that meaning enters.

NOTES AND REFERENCES

1. These approaches have their roots in the early works of George Herbert Mead, John Horton Cooley and Herbert Blumer, and in the later works of Anselm Strauss, to mention but a few.
2. Turner, J. (1974) : *The Structure of Sociological Theory;* Homewood, Ill : Dorsey, p. 178.
3. This is similar to Sartre's position in defining 'fragility'. Sartre points out that form and things external to man exist only in being interpreted. His definition of the term 'destruction' suggests that what we define as destruction is only a change in the ordering of forms as far as the objects themselves are concerned, e.g. a building that is blown up does no violence to the essence of the matter of the building, but only brings about a change in its form, and, by implication, its function. The "destruction" of the building is therefore a man-made imposition of meaning on a particular ordering of form.
4. Some variants have been identified, for example :
   (a) Kuhn, M.H. (1964) : Major Trends in Symbolic Interactionist Theory in the past Twenty-Five Years, *Sociological Quarterly* 5 (Winter) : pp. 61-84.
   (b) Meltzer, B.N. and Petras, J.W. (1970) : *The Chicago and Iowa Schools of Symbolic Interactionism.* In Shibutani, T. (ed.), *Human Nature and Collective Behaviour,* Englewood Cliffs : Prentice-Hall, pp. 3-17.
5. Other important founders of symbolic interactionism are C.H. Cooley, W.I. Thomas and F. Znaniecki. The most prominent contemporary exponents of this school of thought are H. Blumer and A. Cicourel.
6. Fichte, Schelling, Hegel and partly Kant.
7. Mead, G.H. (1936) : *Movements of Thought in the Nineteenth Century;* edited by M.H. Moore, University of Chicago, p. 167.

8. Ibid., p. 168.
9. For a more detailed explanation See Meltzer, B.N., Petras, J.W., and Reynolds, L.T. (1975) : *Symbolic Interactionism : Genesis, varieties and criticism*, Routledge and Kegan Paul, London.
10. Mead, G.H. (1934) : *Mind, Self and Society*, University of Chicago Press, Chicago, pp. 7-8.
11. Because the "I" is able to regard the "ME" as object, we can anticipate our future actions, examine possible outcomes of a number of alternative courses of action, and decide which of these to implement.
12. Symbolic interactionism grew out of the pragmatist philosophy and psychology of William James (1842-1910) and John Dewey (1859-1952).
13. Mead, G.H. (1907) : 'Policy of the Elementary School Teacher,' *Elementary School Teacher*, 8 : 281-4, p. 284.
14. Mead, G.H. (1910) 'Psychology of Social Consciousness Implied in Instruction', *Science*, 31: 688-693.
15. Blumer, H. (1971) : Sociological Implications of the thought of G.H. Mead, *School and Society*, Open University Reader, p. 16.
16. Mead, G.H. (1912) : 'The Mechanism of Social Consciousness,' *Journal of Philosophy*, 9 : 401-6, p. 405.
17. Meltzer, B.N. et al : See 9. pp. 41-2 for a more detailed explanation.
18. By "fit" they mean that the categories must be readily (not forcibly) applicable to and indicated by the data under study; by "work" they mean that they must be meaningfully relevant to and be able to explain the behaviour under study, predict what will happen, and interpret what *is* happening.
19. The researcher, on approaching his area of study, must have a perspective as this will enable him to see relevant data and abstract significant categories from his examination of the data. He does not approach reality as a tabula rasa.

20. Glaser, B.G. (1978) : *Theoretical Sensitivity*, The Sociology Press, California. Glaser cites Weber's theory of bureaucracy and Durkheim's theory of suicide as two of the most striking examples.
21. Strauss points out that a researcher can easily find examples for his logically deduced theory *after* the idea has occurred. This idea however, has *not* been derived from the example, and gives the *erroneous* image of a proof, since the example was selectively chosen to confirm the idea. This does not occur in grounded theory which is derived from data, and *then* illustrated by characteristic examples of data.
22. Clarity, scope, logical consistency, its "fit" and its ability to "work", are other canons for assessing theory.
23. Glaser, B. and Strauss, A. (1967) : The Discovery of Grounded Theory : Strategies for Qualitative Research. In Becker, H.S. (ed.), *"Observations"*, Aldine, Chicago, p. 6.
24. This refers to the manner in which the analyst collects and codifies data, integrates categories and constructs theory.
25. In contrast, it takes a long period of time to change a hypothesis in a verificational study. Thus the hypothesis can easily lose its meaning as the world passes it by.
26. Glaser, B.G. : See 20. p. 6.
27. Ibid., p. 7.
28. It is not our concern to discuss in detail the views of Strauss on the actual systematization of the collection, coding and analysis of data for the generation of theory.
29. Glaser, B. and Strauss, A. : See 23. p. 18.
30. Ibid., p. 18.
31. Some of the diverse schools are H.G. Blumer's Chicago School, M.K. Kuhn's Iowa School, and H. Garfinkel's ethnomethodology.

32. Goffman, E. (1959) : The *Presentation of Self in Everyday Life*, Doubleday; Garden City, p. xi.
33. Goffman, E. (1972) : The Neglected Situation. In P.P. Giglioli (ed.), *Language and Social Context*, Penguin, Harmondsworth, Middlesex, p. 63.
34. Goffman, E. : See 32. p. 1.
35. Ibid., p. 15.
36. Goffman, E. (1955) : On Face-Work, *Psychiatry*, 18,3: 213-31, p. 213.
37. Cuzzort, R.P. (1969) : *Humanity and Modern Sociological Thought*; Holt, Rinehart and Winston, New York, pp. 175-92.
38. Blumer, H. (1972) : 'Action vs Interaction', review of Relations in Public, by E. Goffman, *Society*, 9 (April) : 50-3, p. 52.
39. In Goffman's theory, bureaucratic structures seem to be inflexible, and his social psychology is concerned mainly with adjustments people make to such structures. Goffman regards social stratification and social class as fixed and unchanging thereby exerting a constant influence. This contrasts with the views of Anselm Strauss who regards man as an active creator of society, and therefore does not regard social structure and social organization as constant and unalterable influences, but assumes that structural variables exert minimal influence or none at all.
40. See for example :
    (a) Wallace, W.L. (ed.), (1969) : *Sociological Theory*, Aldine, Chicago.
    (b) Denzin, N.K. (1969) : 'Symbolic Interactionism and Ethnomethodology. A Proposed Synthesis,' *American Sociological Review*, 34, 922-34.
    (c) Dreitzel, H.P. (ed.), (1970) : *Recent Sociology*, No. 2, Macmillan, London.

41. This view poses some difficulties, one of them being that once we have escaped into the 'self-contained realm' of consciousness, we have no means of philosophically validating the existence of the world from it, because it has no point of contact with the world. Husserl later emphasized the "lived-in world" which he had previously dismissed in the transcendental epoché, and even though this brought him closer to historical actuality, his analysis of the "lived-in world" remained on the level of transcendental philosophy because existence within it was to be constituted phenomenologically. Therefore the problem of intersubjectivity remains.
42. After emigrating to the United States, he incorporated the main ideas of William James and George Herbert Mead and other American writers into his later writings.
43. This is similar to Mead's view of 'taking the role of the other.' However, when we fail to anticipate the others' reactions, the assumption of the reciprocity of perspectives is challenged.
44. Schutz, A. (1970) : *Reflections on the Problem of Relevance*, New Haven, p. 120.
45. Schutz, A. (1954) : 'Concept and Theory Formation in the Social Sciences,' *Journal of Philosophy*, 51, 257-73; p. 267.
46. Schutz, A. (1964) : *Collected Papers II : Studies in Phenomenological Philosc* Martinus Nijhoff, The Hague, p. 14.
47. Others whom we do not meet, or whom we meet impersonally or fleetingly, are functional ideal-types.
48. In this view - this theory of multiple realities connected by 'leaps of consciousness' - the metaphysical aspects of phenomenological philosophy show through.

49. Multiple realities show the relativity and subjectivity of truth, and point to the equal validity of all perspectives on reality.
50. Schutz, A. : See (45) p. 248.
51. Schutz, A. (1972) : *The Phenomenology of the Social World;* trans. by G. Walsh and F. Lehnert, Heinemann, London, p. 220.
52. Schutz, A. : See 45. p. 247.
53. This process is called 'glossing', and the working definition 'glosses'.
54. Cicourel, A. (1964) : *Method and Measurement in Sociology;* Free Press, New York, p. 1.
55. Ibid., p. 101.
56. Ibid., p. 39.
57. See Garfinkel, H. (1967): *Studies in Ethnomethodology,* Englewood Cliffs : Prentice-Hall, p. 68. However, ethnomethodologists maintain that people take an active, meaningful part in roles and do not automatically play roles like puppets.
58. Cicourel, A. (1964) : *Method and Measurement in Sociology.* Free Press, New York, p. 61.
59. Dreitzel, H.P. : See (40c), p. XV.
60. Mullins, N.C. with the assistance of Mullins, C.J. (1973) : *Theories and Theory, Groups in Contemporary American Sociology,* Harper and Row, New York, p. 195.

CHAPTER FOUR

THE HISTORY AND PRESENT POSITION IN EDUCATIONAL RESEARCH METHODOLOGY.

4.1 Introduction

Educational research occupies an important position in the social sciences today and has been accompanied by a parallel growth in the use of research for educational policy-making. The trends and theories can be grouped under the following headings :

A. Functionalist theories of Education.

B. Marxist Perspectives of Education.

C. The Interpretive approach to Education.

Amongst the classical sociologists of the nineteenth - and twentieth centuries who made important contributions to education, Emile Durkheim (1858-1917) features prominently. His views have been taken up and developed by the 'modern Durkheimians.' (1) Before the 1950's, not much was achieved in the sociology of education in terms of assessing educational research. However in the 1950's there was a influx of social scientists into the field of educational research. Headed by sociologists, they were determined to apply the social scientific method of scientific precision and detachment in their treatment of educational institutions. (2) During this time Talcott Parsons was the dominant figure in functionalist sociology, and work in education tended to be of two types :

(a) The tradition of 'political arithmetic' was concerned with the problem of social class and educational attainment;

(b) The functional theory was used to relate education to the economy, social mobility and the political order. It was applied to the study of school organization and, through role-theory, to teacher-pupil interaction.

As a result of the major empirical and logical difficulties encountered by functionalism, new alternative approaches developed. There were in Britain sociologists who were working in other traditions and whose choice of problems were influenced by socialism. These sociologists were critical of functionalism e.g. Floud and Halsey said :

> "The structural functionalist is preoccupied with social integration based on shared values - that is with consensus - and he conducts his analysis solely in terms of the motivated actions of individuals. For him, therefore, education is a means motivating individuals to behave in ways appropriate to maintain the society in a state of equilibrium. But this is a difficult notion to apply to developed especially industralized societies, even if the notion is interpreted dynamically. They are dominated by social change, and 'consensus' and 'integration' can only be very loosely conceived with regard to them." (3)

Another development in the 1960s in mainstream social sciences was the resurgence of various forms of Marxism, phenomenology and interactionist theory in Europe and America. In social action theory and phenomenology example, Berger and Luckmann, and Dawe and Cicourel had the major impact on the sociology of education. Broadly speaking, two forms of the interpretive approach developed:

(a) One trend drew on interactionism and ethnomethodology and phenomenology, for in order to study the 'micro' social processes in the classroom and school. This trend began analyzing in detail classroom interaction, teachers' and pupils' "definitions of the situation", and the role of language.

(b) From the second trend emerged the 'new' sociology of education which concerned itself with knowledge as a social construct. (4)

Controversy between Marxists and functionalists, and between the "old" and the "new" sociology of education created a crisis in educational research. In this chapter we will try to place some of the debates in their social and historical context. We will also focus on a few important problems in educational research with the intention of showing that an awareness of the social settings from which these problems emerge can contribute to a deeper understanding of them. More attention will be given to the interpretive approach to education.

4.2 The Functionalist Tradition

Emile Durkheim, the 'founding father' of sociology, made a thorough study of education and based on his theory of man and society, concluded that education is essential if society is to remain orderly. (5) In his thinking about education and his study of society, he applied the methods of natural science. One of his major aims was to discover how in the complex modern world, an orderly society was maintained.

In *The Rules of Sociological Method*, Durkheim argues that even though society is made up of individuals, it is different and distinct from its component parts. (6) Language, legal, and moral *systems* rather than individuals should be studied. He sees society as a reality in its own right, with an existence that is independent of, and external to, individuals. (7) Society has its own 'laws' of evolution; it changes people but is not changed by them, and thus, society is in a way analogous to 'nature'. It becomes the business of the social scientist to study and understand the laws of society.

Since society is real, moral systems and values, social institutions, customs etcetera-the social facts - must be treated like things in nature. When we are examining the phenomenon education, we must first define it and then seek an explanation of it that is both 'causal' and 'functional.' He insists that the causal explanation must be in terms of 'impersonal' social forces and not in terms of the purposes, intentions and actions of individuals or of identifiable groups of individuals. (8)

The implication of this view is that education should be examined in terms of its relation to the political system, the class system, the economy and its usefulness to society rather than the individual. Since education is essential, according to Durkheim, for society to remain orderly, the sociologist has to consider the part it plays in maintaining social order and social stability.

4.2.1 Approach to Education

By the 1950s it was structural functionalism, as formulated by Talcott Parsons, that sociologists of education used as their theoretical framework and conceptual guide. Parsons stressed "the sharing of common values" as is made very evident in the following passage :

"Probably the most fundamental condition underlying this process (of education) is the sharing of common values by the two adult agencies involved - the family and the school, in this case the core of the shared value of achievement. It includes, above all, recognition that it is fair to give differential rewards for different levels of achievement, so long as there has been fair access to opportunity, and fair that these rewards lead to higher-order

opportunities, for the successful. There is thus a basic sense in which the elementary school class is an embodiment of the fundamental American value of equality of opportunity, in that it places value *both* on initial equality and on differential achievement." (9)

Parsons claims that the extension of equality of opportunity by education has caused differences in educational attainment which have introduced new forms of inequality. (10) As these inequalities are a potential source of conflict and division in society, the major function of education is to legitimate these inequalities through the process of 'socialization' by making them acceptable i.e. to inculcate the view in members of society that it is proper for those who do well in education to be rewarded, that they have earned higher income, status and position in the system of social stratification. The ideology of 'equal opportunity' and 'achievement', a major element of the 'common culture' which holds society together and creates order and maintains stability, has to be spread by education. (11)

Parsons states that the school's function is "the socialization of individuals and ... their allocations to roles within society." (12) Education must contribute to the maintenance of a value consensus in society. The shared values, norms, and beliefs will manifest themselves in the social system which will then shape the personalities of individuals in accordance with the demands of their culture and of their social roles. Through socialization the values of society will be inculcated into individuals - they will play their roles properly, and hence social order and stability will be maintained. The individual internalizes society's values, and what society expects of him (role - expectation) has to be fulfilled because he feels a 'need' to do so.

TABLE 4.1

SOURCE : D. Blackledge and B. Hunt, Sociological Interpretations of Education, (Croom Helm Ltd, Beckenham Kent, 1985), p. 73.

Education plays a major role in this process and in addition, equips people with technical and social skills. Parsons asserts that all pupils begin from a basis of equality, but there is much evidence to the contrary which suggests that in the preparation of children for education, there is a great deal of difference. (13) However, research conducted by R. Rist in his three-year study of a school in St. Louis, U.S.A., destroys Parsons' thesis that school is organized on the basis of equality. Rist shows that teachers assumptions and preconceptions often influence their assessment of pupils' abilities. (14)

In the 1950s the "cold war" between the United States and the Soviet Union and the development of nuclear weapons provided evidence that technological superiority led to military dominance. Systems of education had to produce scientists and engineers, and this led to a concern for the preservation of "human resources". The brand of functionalist theory - technological functionalism - used in educational research at this time, saw the expansion and increasing differentiation of the educational system as inevitable outcomes of technologically determined changes in occupational structure. (15) The

methodology used in Britain in the sociology of education can be termed political arithmetic. The institutionalization of the sociology of education was facilitated by borrowing theories and procedures.

4.2.2 Assessment of the Functionalist approach to education

We will examine briefly some of the main ideas of functionalism on consensus, change and approval-seeking.

(i) *Consensus*

It would be difficult to find in, for example, Britain, values which are common to all members of society. British society can be seen as a series of social groups each with its own value systems with no values common to all groups. Thus education cannot, as Parsons says it does, transmit such values. Education may transmit the values of the dominant group. One has also to consider that educational theories derive from general social and political ideologies and thus as these rise or decline in importance, changes in the structure of the educational system and educational provision are bound to occur.

(ii) *Change*

Because of the undue emphasis on equilibrium, functionalism is unable to deal with the issue of social change. Society is seen to be a stable entity where everyone has a clear idea of his role in the various social institutions. Some critics feel that the functionalist theory of social stability contains inadequacies. (16)

(iii) *Approval Seeking*

The structural notion of roles is tied up with the view that we play our roles

in order to gain the approval and esteem of others. However, Peter Woods in his chapter on 'Pupil Adaptations' in the book *The Divided School*, and Viv Furlong point out that though the teachers' approval is an important motivating factor in pupils' behaviour, there are several other motives which indicate that approval-seeking is not the primary motive in many instances for pupils' conduct. (17) It is also often the case that when we do what one set of people expect of us, we disappoint and risk the disapproval of another set of people. The functionalists, because of their assumption of a consensus of role-expectations in society, do not even consider such possibilities. In the words of Dennis Wrong, functionalism presents 'an extremely one-sided view of human nature.' He continues his argument by stating : "Modern sociology, after all, originated as a protest against the partial views of man contained in such doctrines as utilitarianism, classical economics, social Darwinism, and vulgar Marxism. All of the great nineteenth - and twentieth century sociologists saw it as one of their major tasks to expose the unreality of such abstractions as economic man, the gain-seeker of the classical economists; political man, the power-seeker of the Machiavellian tradition of political science; self-preserving man, the security-seeker of Hobbes and Darwin; sexual or libidinal man, the pleasure-seeker of doctrinaire Freudianism; and even religious man, the God-seeker of the theologians. It would be ironical if it should turn out that they have merely contributed to the creation of yet another reified abstraction in socialized man, the status-seeker of our contemporary sociologists." (18)

4.2.3 Summary

It has been pointed out by Weber that functionalist theory gives no causal explanation, but it can provide us with a framework in that it can suggest certain functions and specify certain relations between education and

other parts of society. (19) However, functionalism as the dominant theory in educational research was rejected, and a number of new approaches developed along different theoretical lines. It was necessary to observe the interaction of people and discover how they thought and felt since it was people in interaction who made society. In education this meant observing face-to-face interactions or involvement in interactions in studying teachers' and pupils' definitions of learning, intelligence, the good and the bad pupil etcetera.

4.3 The Marxist Perspective

In Chapter two, we concentrated on Habermas because he is the most explicit contemporary neo-Marxist. However, we will attempt to illustrate that in educational research, neo-Marxist views are more often interwoven with other Marxist branches of thought.

Some of the ideas of functionalism were adopted by the Marxists and then adapted to the Marxist conception of society. Like structural functionalism, the Marxist approach tries to explain how education contributes to the status quo.

The main ideas and issues within Marxist theory can be seen as two parts, the first of which is our major concern :

(a) The theory of society and history (historical materialism) which concerns itself with how society changes and how the various parts are related to one another; and

(b) The concept of man and human nature which is linked with a theory of the good society.

4.3.1 Historical Materialism

Production is fundamental because everything in society is related to it, or derives from it. The two major parts of society are the economic structure or 'foundation', and the 'superstructure' of other social institutions and practices such as education, politics, men's ideas, beliefs and values etc. Marxists believe that the superstructure is related to economic activity but they differ in their views about the nature of this relationship. (20)

On examining the writings of Marx and Engels which provide evidence for an economic determinist interpretation of historical materialism, one finds that it is denied by historical materialism that individuals can control their destiny. (21) They are controlled by certain objective, impersonal forces or processes, and are not the creators of these processes. Thus the world of nature points the way in which society can be studied. Natural scientists try to discover the 'causes' of events and 'laws' of nature. Social scientists can therefore formulate certain 'laws' of society and social change which will not only explain to us what is happening in the world, but will also tell us what is going to happen. Newton and Darwin had provided us with the laws of nature and of biological evolution; Marx believed that he had discovered the laws of social evolution.

Structural Marxists, of whom Louis Althusser is the most notable exponent, combine a determinist view of the social process with an 'interaction' view of the relationship between the base and the superstructure.

Voluntarist Marxists e.g. the Italian Marxist Antonio Gramsci, do not see Marxism as a 'science of society' which uses natural science as its model.

They hold that economic changes do not provide sufficient conditions for change to a superior society. Technological changes are important but do not in themselves lead to major sociological changes. These sociological changes occur when there are also certain 'subjective' conditions. In order to achieve a superior social and political system, men have to *consciously* intervene at appropriate moments of history and make use of the opportunity which economic progress offers us.

4.3.2 The Marxist Analysis of Education

The theories of 'direct reproduction' hold that education 'reproduces' or helps maintain the capitalist economic system. In this section, we will consider some of the works which have attracted most attention within the sociology of education.

(i) *S. Bowles and H. Gintis* (22)

These authors maintain that education can only be properly understood in the context of society of which it is a part. It is argued that education in the United States tries to reproduce the capitalist system and thus maintains and reinforces existing social order :

"education and state policy are relatively powerless to rectify social problems within the framework of a capitalist economy." (23) Thus education cannot act as a force for social change. (24) These authors are of the opinion that "the educational system is an integral element in the reproduction of the prevailing class structure of society." (25) Like Parson's analysis where he sees the functions of education to be socialization and selection, Bowles and Gintis feel that education legitimates the class structure and prepares young people for work in a capitalist economy. Unlike

Parsons, they disapprove of the social system into which children are being socialized and selected. The education system transmits the 'technocratic-meritocratic' ideology or the 'ideology of equal educational opportunity and meritocracy.' They take ability as synonymous with I.Q. but do not feel that this is an important criterion for success. Rather, it is a person's socio-economic background which is important for success.

With regard to socialization, the second method of reproduction, they say of school that it "tailors the self-concepts, aspirations, and social class identifications of individuals to the requirements of the social division of labour." (26) By crushing creativity and spontaneity, and rewarding passivity and obedience, schools destroy the capacity for self-determination and teach people to be 'properly subordinate'. Thus they are rendered incapable of controlling their economic and social activities. All this is attained through the 'correspondence principle', (27) which is explained in the following way :

"the educational system operates in this manner not so much through the conscious intentions of teachers and administrators in their day-to-day activities, but through a close correspondence between the social relationships which govern personal interaction in the work place and the social relationships of the educational system. Specifically, the relationships of authority and control between administrators and teachers, teachers and students, and students and their work replicate the hierarchical division of labour which dominates the work place." (28)

The process of socialization therefore takes place through the hidden curriculum, the 'form' of the education system rather than through the 'content' of the education system. Bowles and Gintis draw upon some pieces of research

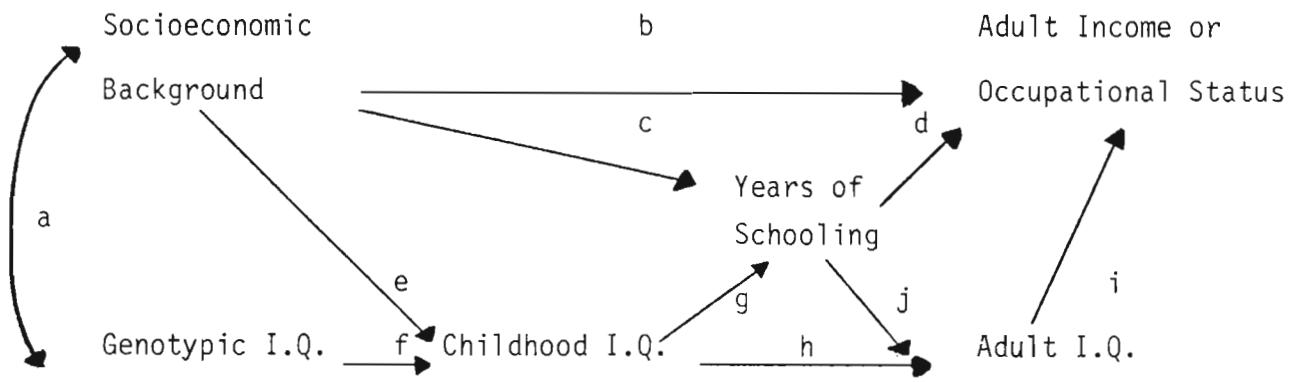
which show that education consistently rewards the same types of behaviour and personality traits viz. perseverence, dependability, punctuality, and identification with the organization.

Bowles and Gintis argue that their study has established 'a strong *prima facie* case for the causal importance of economic structure as a major determinant of educational structure.' (29) Their case can be represented as follows :

1) What education does -------- reproduction.
2) How education reproduces ------- the correspondence principle.
3) Forces responsible for reproduction ------- economic structure.

They try to demonstrate statistically, by means of a 'path diagram', their belief that it is erroneous that economic rewards are based on ability, but that they are in fact determined by social class background :

TABLE 4.2



SOURCE : S. Bowles and H. Gintis, Schooling in Capitalist America, RKP, London, 1976, p. 133.

Using survey data, they calculated the strength of various influences. They found that I.Q. is less influential than background in determining adult income. However, Coxhead found that there is no path between background and adult I.Q. (30 Coxhead's calculations indicate that Bowles and Gintis did not prove their case, but their thesis itself, viz. that education, by being presented as a ladder for able people, legitimates the class system - has not been disproved. (3

(ii) *Louis Althusser*

Althusser's analysis of education is similar to that of Bowles and Gintis. (32) Education and all components of the superstructure are said to be elements of the 'State Apparatus'. The institution of education is regarded as an Ideological State Apparatus (ISA), which together with other ISA's such as the religious, the political, communications, the cultural etc., maintain the capitalist system of exploitation in the following manner :

(a) Teaches the skills and techniques appropriate to the child's future job.

(b) Imparts the 'rules of good behaviour' or attitudes which are suitable for the child's later economic role.

(c) Teaches children the ruling ideology of capitalist society both directly and indirectly. He states that education "drums into them, whether it uses new or old methods, a certain amount of 'know-how' wrapped in the ruling ideology (French, arithmetic, natural history, the sciences, literature) or simply the ruling ideology in its pure state (ethics, civic instruction, philosophy)." (33)

Althusser believes that the 'universally reigning ideology of the school' obscures this role of the educational system. Teachers are seen to be at the mercy of the system, forced to perform these functions. It has been

pointed out that Althusser's analysis is similar to that of Durkheim's and Parsons in his concern with explaining the social order. (34) He sees no need to investigate the perceptions of teachers and pupils. It is assumed that the process of socialization is successful, and that men can do nothing about the pressure exerted by the state.

(iii) *Resistance, Relative Autonomy and Voluntarism*

In recent years in Marxist sociological theories of education, 'resistance' within education to the process of the reproduction of capitalism has been stressed. These studies show the relative autonomy of education and are much more voluntaristic in nature. (35) These studies consider 'resistance' to the demands of the capitalist economic structure as a fundamental feature of the educational system. They argue that there exists oppositional cultures within the education system. Therefore, schools cannot simply mould their pupils to fit the 'needs' of contemporary society. Opposition is a manifestation of the attitudes and values found in working-class culture. Human will and agency and structure are important. It is not the operation of impersonal economic forces which make human beings act the way they do. Pupils creatively adapt to the environment. Reproduction does take place but in an 'indirect' way, alongside or through the process of resistance.

4.3.3 Summary

We see thus that the Marxists have produced a number of variations on a common theme.

Bowles and Gintis maintain that through a correspondence between the social relations of production and the social relations of education, education prepares pupils to be workers, but empirical evidence does not support a theory of correspondence between the organization of education and the demands of the capitalism economy. (36)

Erben and Gleeson point out that Althusser's view resembles the functionalist view of Durkheim and Parsons who are also concerned with explaining the existence of social order. There is an implicit assumption that the process of socialisation is successful.

The Marxists in their concern for explaining the existence of social order, concentrate on reproduction to show how social order is maintained. Education is seen to help maintain the status quo. An examination of the Marxist analyses of education reveals that despite differences, there are clear similarities with functionalists - both assume that education is successful in its socialisation and legitimating functions.

4.4 Interpretive Approaches to Education

The "micro" sociological approaches developed as a reaction to the lack of relevance and unacceptable assumptions of the 'macro' approaches. They share several assumptions which we will discuss briefly :

If we want to understand education, we must begin by looking at everyday activity since every aspect of society is built upon how people act in everyday life. It is the day-to-day activities of teachers, pupils, inspectors, administrators etc. that keeps education going, and it is changes in these activities that bring about changes in education and society. (37)

Even though constraints and our background influence the way we act, there is always some degree of autonomy and freedom present in our everyday activity. Put differently, we can and do create our own activity to some extent. (38)

The term 'meaning' in interpretive theory includes such notions as aims, intentions, significance and reasons. Actors construct meanings from culture and society i.e. the meanings are personal to the actor. In order to understand everyday activity, we therefore must grasp the meanings that people give to their behaviour.

Since most of our everyday activity involves interaction with other people, we have to give meaning or interpret the behaviour of the people with whom we interact. To illustrate this, let us consider an example : The teacher asks a question and pupils put up their hands. The teacher has to interpret the pupil's action. Does he know the answer? Is he afraid of being detected? Does the pupil not want to appear stupid? The teacher's interpretation will affect his subsequent action e.g. if he thinks the pupil is trying to avoid detection, he will probably ask him for the answer. What is significant is that what the teacher 'already knows' about the pupil, e.g. age, sex, race, intelligence, motivation etc., will affect the teacher. If the teacher 'knows' that the pupil is lazy and poorly motivated, this will affect his interpretation of his action. Put differently, we have 'typifications' of people which we use to interpret their behaviour.

Among other elements which will affect our interpretation of action are our 'categories' of activities. We may, for example, have a set of assumptions according to which we categorize what constitutes 'messing about' or 'working'. We do not examine these assumptions because we regard them as common sense and they are therefore taken-for-granted. However, it is essential to our understanding of how a person comes to act in the way that he does, to investigate the common-sense assumptions which are being used.

The actors' meanings and interpretations are *not* constant and unchanging. We often modify our views. Over a period of time, and through the continuous process of 'negotiation' of meaning, actors come to have shared understandings and meanings.

The interpretive approach demands that we adopt the 'subjectivist' method in order to understand how an actor defines the situation. The danger is that when we are observing behaviour our interpretation of it may be affected by our own preconceived ideas if we enter the field with these in mind. Similarly, we are liable to misinterpret behaviour if we have notions of 'ability', 'work', 'messing about' etc. The interpretive approach argues that we must 'bracket out' our own assumptions and typifications in order to elicit the actors' views and to be true to the meanings and understandings of those whom we are observing.

A difficult problem to deal with methodologically is that of observer bias. One cannot avoid entering a situation with certain preconceptions and assumptions. Theory should function to sensitize us to aspects of the actors' subjective make-up. The researcher's job is to give meaning to the actors' meanings by locating them within the wider context of society. The observer cannot merely describe activity - he has to structure the data he presents.

4.4.1 Variations within micro approaches

We will focus on studies in the British context since the micro approach in sociology has generated an extensive literature in Britain and represents an extensive critique of traditional research and an attempt to provide a new paradigm for understanding schooling.

Despite the fact that the various micro approaches share several of the assumptions discussed above, variations do exist among them.

(i) *The Interactionist Perspective*

Teachers and pupils want to achieve different goals. The relationship between them is therefore seen to be a situation of conflict. Each party tries to impose its definition of the situation on the other. Since the teacher's domination is never total, negotiation has to take place.

(ii) *The Phenomenologist Perspective*

The actor's knowledge of other people involved in the situation is important, and phenomenologists therefore try to elicit this knowledge. Actors use a set of categories by which they interpret the behaviour of others and come to 'know' them. (39) Phenomenologists argue that it is important to examine the taken-for-granted language and its implicit meanings in order to grasp the actors' definitions of the situation.

(iii) *The Ethnomethodologist Perspective*

The focus of interest is the procedures and processes which - actors use in order to make the world intelligible.

We note then, that there are differences in emphasis within these approaches. Since interaction and phenomenology share much common ground, we will not distinguish between the two in our exposition. The ethnomethodological position will be dealt with separately.

4.4.1.1 Symbolic Interactionism in Educational Research

In this section we will examine the ideas of David Hargreaves, particularly those expounded in his book *Interpersonal Relations and Education*, Martyn Hammersley and Peter Woods.

(i) *David Hargreaves*

Hargreaves draws on the idea of G.H. Mead, which we have dealt with in detail in Chapter 3, especially those dealing with 'the self'. He discusses its development and traces implications for the analysis of the relationship of the teacher and pupil.

Hargreaves' exposition of the symbolic interactionist approach reveals the complexities involved in the interaction process, and points to the amount of knowledge sociologists need in order to understand it. We will examine his application of the symbolic interactionist theory to the classroom and in particular, to teacher-pupil relations.

The scene that Hargreaves sets when applying the theory of symbolic interactionism to teacher-pupil relations is that of pupils who are compelled to come to schools where teachers wield the power to determine and enforce their definition of the situation on pupils. Hargreaves says : 'Obviously the teacher's first step is to define the situation ... in a way he regards as adequate. His definition of the situation must be congruent with his conception of his classroom role.' (40)

Hargreaves suggests that there are three general types of self-conception which he calls 'liontamers', 'entertainers' and 'romantics'. The

'liontamer' regards education as a process where wild and untamed pupils have to be civilized, driven to learn what the teacher believes is good for them, disciplined, and frequently tested. The 'entertainer' tries to make learning interesting by engaging pupils in themes and using a variety of audio-visual techniques and carefully contrived 'discovery methods'. He is friendly and informal with pupils. The 'romantic' believes that it is part of the human condition to want to learn and that his role is to facilitate such learning. He will construct the curriculum together with his pupils and try to establish a relationship based on trust with them. For the 'romantic' the important thing is for the pupil to 'learn how to learn.'

Hargreaves insists that these three 'types' of teachers are stereotypes, and says of them :

> "They are artificial constructions, derived from actual teachers, but the types are not to be found in this form in the real world. Each is thus a collection of fragments of real teachers, but it would be a disastrous mistake to think that the teaching profession can be divided neatly into three groups." (41)

Teachers have also to fulfil the sub-roles of the 'disciplinarian' and 'instructor'. The first involves the teacher's responsibility for defining and enforcing rules and organizing activities within the classroom. The second involves determining what should be learned and how it should be learned, and what is to be regarded as proof of learning. However, in practice, says Hargreaves, these roles fuse together, and he suggests that there are several ways in which teachers interpret and perform these two basic sub-roles. (42)

An important implication of Hargreaves' discussion of sub-roles is that a teacher is not totally free to define the situation as he wills. Constraints and expectations force him to include in his self-conception the functions of disciplining and instructing. Thus when we want to understand the interaction of teacher and pupil, we must bear in mind that the individual's conception of his role is only a part of what has to be considered. (43)

Hargreaves makes a significant point when he says that a teacher's self-definition implies an ideal pupil role which is congruent with and supportive of the self-definition. A teacher may not expect a pupil to conform to his ideal pupil, and he may find that he is forced to adopt roles different to his ideal by the way pupils respond to him. Pupils who adopt the ideal role are defined as 'good'; those who do not are 'bad'. Conformity to the disciplinary and instructional aspects of the teacher's sub-roles are important factors in judging pupils. Hargreaves states that :

> "we can say that the teacher defines the situation in terms of his own roles and goals, especially as they relate to his instructional and disciplinary objectives, and assigns to the pupils roles and goals that are congruent with his own. He selectively perceives and interprets pupil behaviour in the light of his definition of the situation. On the basis of further interaction with the pupils and repeated perceptions of them, he develops a conception of individual pupils (and classes) who are evaluated, categorized and labelled according to the degree to which they support his definition of the situation. He then responds to pupils in the light of these evaluative labels." (44)

It is difficult for teachers to recognize and understand the complex attitude that pupils exhibit. According to Hargreaves, it is most important for pupils

to please the teacher. This involves considerable skills in balancing out pleasing the teacher with the need to get approval from friends. In other words, a pupil has to have a set of skills to meet the expectations of the teacher and a set of strategies which "will allow him to depart from these regulations without incurring disapproval or to give the impression that he is meeting the expectations when he is unable or unwilling to do." (45)

Hargreaves feels that pupils do not really want to please the teacher but feel that they *have* to do it. He notes that teachers often fail to see that pupils are, in fact, putting on a front. Teachers discourage the expression of real feelings such as boredom and frustration in pupils by telling them to 'pay attention' or to 'stop messing about.' Providing the teacher with the right answer is an important way to please him, but often this involves a 'recipe' where no 'real' learning is required e.g. in mathematics, a pupil can develop ways of getting the right answer without really understanding the problem.

He mentions alternatives to pleasing the teacher and uses as an example the delinquent who substitutes pleasing the teacher with the goal of annoying the teacher. (46) The delinquent can in other situations adopt an attitude of 'expedient compliance.' The pupil who is not concerned about pleasing the teacher but who does so in order to avoid trouble, adopts what Hargreaves calls the alternative of 'indifference.'

After dealing with the teachers' and pupils' definitions separately, Hargreaves then brings them together in his analysis of their interaction.

A state of 'concord' exists when teachers' and pupils' definitions are congruent, and a state of 'discord' exists when the definitions are incompatible. However, Hargreaves says that a state of 'pseudo-concord' exists in most classrooms where the definitions of situations are partly compatible. Pupils do have some power to resist the imposition of a definition on them. Teachers and pupils therefore have to 'negotiate' and modify their demands. A variety of categories are used by both teachers and pupils to promote their own definition or to modify the others' views. Hargreaves says that among the teachers' 'negotiative techniques' are the use of promises and threats, appeals to higher authority such as the principal of the school, divide and rule etc. Among the pupils' techniques we also find appeals to authority ('my mum says'), appeals to justice, attrition etc. A reasonably orderly classroom results from the interplay of strategies, and a shared understanding of what is going on, results.

Hargreaves' belief that the state of 'pseudo-concord' is the typical situation, implies that the process of negotiation is a continuous one. He clearly states that the classroom is a place of conflict - teachers and pupils try to impose their definitions of the situation on one another and devise techniques and strategies in order to achieve their goals. Hargreave's ideas have provided us with a clear and intelligible approach to the analysis of teacher-pupil relations and indicate to us that the interpretive approach can be used to develop a better understanding of the classroom and school.

In order to clarify the role of the researcher in the analysis of interpersonal relationships, we need still to examine some studies about teachers and pupils which have been conducted using the micro interpretive approach.

We feel that this clarification is essential since many questions remain unanswered e.g. Should the researcher be a detached, unbiased observer? Is it possible to describe without interpreting? How is the relation of education to such things as the economy brought about in the interaction process?

(ii) *Martyn Hammersley* (47)

Under the heading 'definition of the teacher's role,' Hammersley suggests that teachers' perspectives can be seen to be composed of several aspects which can be further subdivided - teachers may consider that there is a special expertise to teaching which ordinary people do not have (authoritative role) or teachers may regard teaching skills as something that all people have (no distinct role); they may consider themselves to be experts in areas of knowledge (curriculum) or in teaching method (method); the teacher may regard his role to be one of developing the whole child (wide) or he may be concerned with teaching a specific skill or subject (narrow); teachers may feel that they have to control many aspects of pupils behaviour (high control) or allow pupils a great deal of freedom (low control); the same criteria may be used to judge all pupils (universalistic) or pupils may be judged according to age, background, ability etc. (particularistic); and teachers may see knowledge as a given body of facts which have to be mastered (product) or they may concern themselves primarily with the processes of thinking (process).

Hammersley suggests that in the teacher's 'conceptualization of pupil action', teachers may regard pupils as adults, or as pupils who have special rights because they are young, or consider that pupils are learning to become adults but do not have all adult rights and responsibilities. Teachers may regard

pupils as being determined by inheritance or background in what they do, or children may be understood as having free will and thus deserving praise or blame (individualistic).

TABLE 4.3 : HAMMERSLEY'S TYPOLOGY

1 *Definition of the teacher's role*

a) authoritative role ◂-▸ no distinct role
b) curriculum ◂--▸ method
c) narrow ◂--▸ wide
d) high degree of teacher control ---- low control
e) universalistic ◂--▸ particularistic
f) product ◂--▸ process

2 *Conceptualisation of pupil action*

a) licensed child ◂--▸ apprentice adult ---- adult
b) individualistic ◂--▸ deterministic vocabulary of motives
c) pessimistic ◂--▸ optimistic theory of human nature

3 *Conceptualisation of knowledge*

a) distinct curriculum ◂--▸ no distinct curriculum
b) knowledge objective and universally valid ---- knowledge personal and/or tied to particular purposes or cultures
c) hierarchical structure ◂--▸ no hierarchy
d) discipline-bound ◂--▸ general

4 *Conceptualisation of learning*

a) collective ◂--▸ individual
b) reproduction ◂--▸ production
c) extrinsic ◂--▸ intrinsic motivation
d) biological ◂--▸ cultural learning path
e) diagnosis ◂--▸ pupil intuition
f) learning by hearing about ◂--▸ learning by doing

5 *Preferred or predominant techniques*

a) formal ◂--▸ informal organisation
b) supervision and intervention ◂--▸ participation and non-intervention
c) imperative mode plus positional appeals ◂--▸ personal appeals
d) class tests ◂--▸ assessment compared to past performance ◂--▸ no formal assessment
e) grouping ◂--▸ no grouping
f) grouping by age and ability ◂--▸ random, friendship or pupil-choice grouping

SOURCE : M. Hammersley, 'Teacher Perspectives', Unit 9 of E202, *Schooling and Society* (Open University Press, Milton Kevnes, 1977), p. 37.

It is clear that teachers have a variety of subjective understandings about their job. In trying to elicit these subjective understandings, it is interesting to note that Hammersley groups the views of teachers into sub-headings like 'definition of teacher's role' and 'conceptualisation of knowledge. This indicates that part of the sociological researcher's job is to organize and describe the various aspects of the teacher's subjective outlook. It also indicates that the sociologist has to make sense of the way actors make sense of the world, by selecting and shaping what he presents. At the same time, he has to remain true to the actor's subjective understandings. Hammersley is obviously of the opinion that it is necessary to place the actor's meanings into a typology in order to clarify them.

(iii) *Peter Woods* (48)

Woods tries to bring together in an organized way the different pieces of research about pupils' views of schooling. He focuses on how the context of action is defined; 'the frameworks through which people make sense of the world'; and on cultures including beliefs, values, speech patterns and forms of understanding. (49) He suggests that perspectives which are derived from cultures are linked to action through 'strategies'.

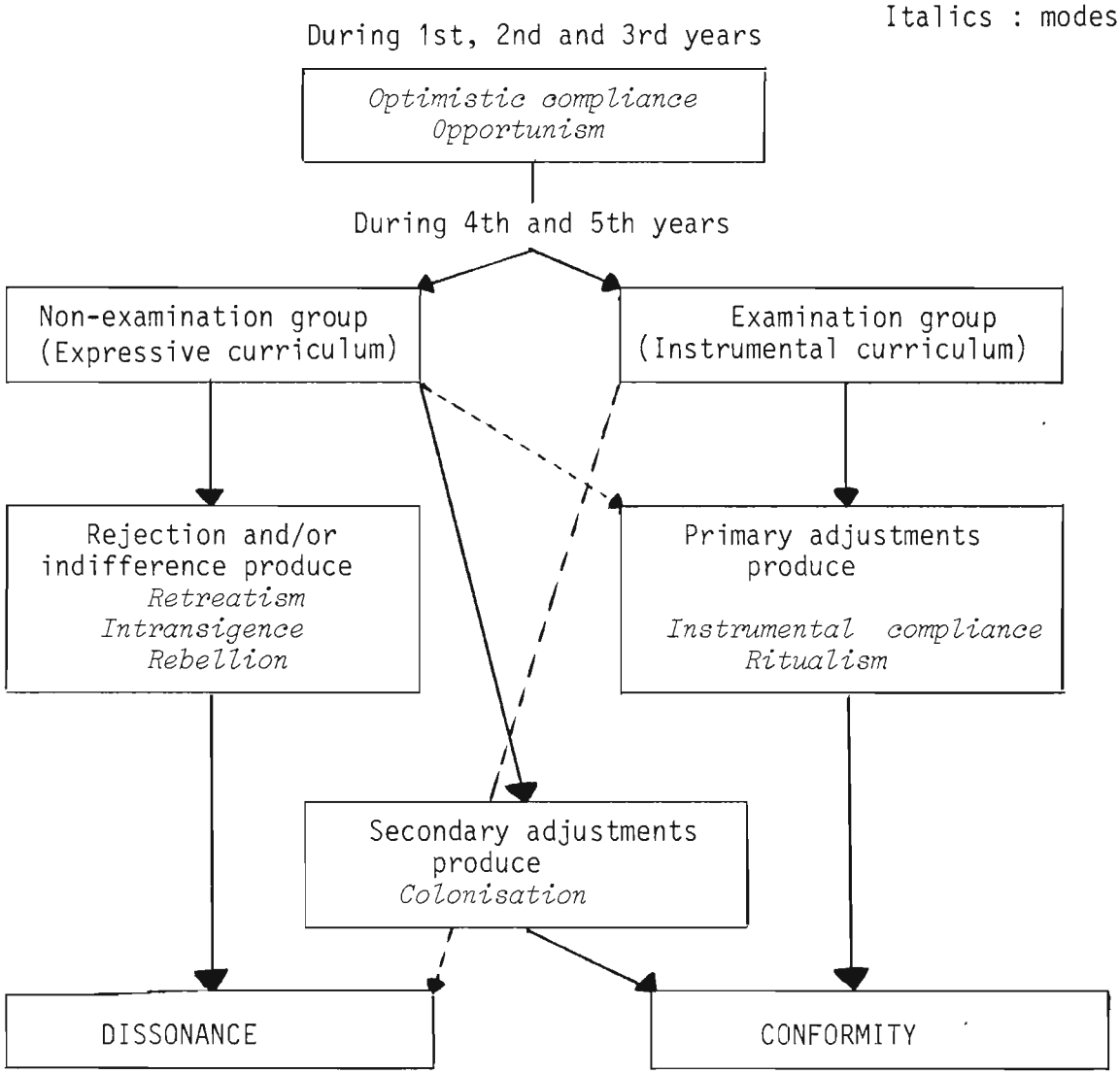
Operating with a 'conflict model of the school', he sees the school situation as one where a continuous process of negotiation takes place between teachers and pupils who have rather different personal aims. (50) It is within this 'conflict' framework, Woods suggests, that pupils develop cultures which then giver rise to perspectives.

Woods notes that several studies have identified a pro-and anti-school culture in secondary schools which are vaguely related to social class. Middle-class

children who are successful in education are usually pro-school. Gender also affects the response of boys and girls to school subjects. However, Woods points out that "individuals do not slavishly follow sub-cultural norms, nor imprint masculinity or femininity upon themselves without reflection. They do have choices." (51) It becomes essential then to find some way of conceptualizing pupils' personal interests. Woods developed a model of pupil adaptations where he suggests eight possible modes of adaptation : ingratiation, compliance - optimistic and instrumental - ritualism, opportunism, retreatism, colonisation, intransigence and rebellion. In his chart below, he outlines what he considers to be the predominant forms of adaptation.

TABLE 4.4 : WOODS'S MODES OF ADAPTATION

KEY : _____ main routes
------ lesser tendencies
Italics : modes of adaptat



SOURCE : P. Woods, *Sociology and the School. An Interactionist Viewpoint*

In the early years, pupils have a positive attitude towards the goals and means of the school. In their fourth and fifth years they are divided into examination and non-examination forms, and develop either towards a conformity mode or a dissonance mode. The instrumentally compliant regard what they are doing as useful to get a job. Ritualism implies that pupils identify with the means, but are indifferent to the school's goals. In the dissonance mode, the retreatist is either indifferent to or rejects the means and goals of the school. He finds no substitute goals and is the bored pupil who 'messes about' to pass the day. The intransigent pupil is indifferent to the goals and detests the means. He disrupts lessons, misbehaves in public and adopts the styles of sub-cultural groups such as the skinheads. The rebellious pupil also rejects the goals and means but substitutes his own goals. (52) He is not seen to be as great a threat as the intransigent pupil.

We see thus that in his attempt to elicit pupils' views of their role or pupil self-conceptions, Woods notes the influence of class and gender factors and then tries to explain the various self-conceptions which develop by examining the pupils' reaction to the official aims and means of the school. A major methodological point raised by Woods' research is that an observer's role involves attempts to classify and define actors' definitions of goals.

4.4.1.2 Ethnomethodology and Educational Research

As we have noted in Chapter 3, the ethnomethodologists emphasize a 'subjectivist' approach and regard the understanding of meaning as essential. A distinction is made between 'topic' and 'resource' and when applied to the social world, the topic is a piece of interaction, and the resource refers to what people use to make sense of the interaction. It follows then that the researcher

who is also a member of society, has to use his own resources in order to make sense of the interaction he observes, and in doing so, may distort the way that the actors make sense of their interaction. If his intention is to grasp the resources of the actors, he has to put to one side his own resources.

Actors do not see every piece of interaction separately, but link them together by using 'methodic practices'. The ethnomethodologist is interested in how actors link each interaction together in order to make sense of them. Language is very important in this linking process. Since any word can have several meanings, ambiguities can arise in sentences. These can be reduced by the actors' understanding of the context. 'Indexicality' is the procedure of relating context to meaning. Among the methodic procedures used by hearers to make sense of the event are the following :

Retrospective methods - actors take present meaning and relate it to remembered past events to make sense of it.
Prospective methods - members assume that what follows will clear up ambiguities.
Relating people to categories which exist in the culture. Examples of categories are teacher, pupil, policeman, priest. Associated with these categories are rights and duties. Since people can be placed in many categories, the speaker has to 'membership' himself and his hearers i.e. he has to indicate the categories of himself and his hearers.

(i) *George Payne*

We will now examine briefly an ethnomethodological analysis of the classroom by George Payne. (53) Payne analyses the first few sentences in a lesson in

order to show how the lesson is created. The first sentence is :

Teacher : E:r ... come o:n settle down ... no one's
sitting down till we're all ready. (54)

The order ('come o:n') indicates that membershipping is taking place. The teacher is the one who has given the order, and the hearers (pupils), have to obey. Thus the speaker has referred to the cultural categories of teacher and pupil and the relationship between them. The term 'no one' reinforces the membershipping. It is not understood as everyone in the world, but it is made sense of by recognizing that it refers to and creates the category 'pupils'. The phrase 'till we're all ready' includes the speaker (teacher) in the relationship, and gives him the opportunity to decide the next action. The word 'we' points to some future collaborative action and the pupils have to employ prospective methodic practices to make sense of what is happening and to link it with the events that follow.

We see then the line taken by the ethnomethodologists. It is assumed that all events are created by the actors. The ethnomethodologist tries to unravel the procedures through which actors make sense of their interaction.

4.5 Assessment

The functionalists and Marxists share several assumptions. Education can be understood only when it is located within the wider society. For Durkheim it is society that dominates the everyday activities of teachers, pupils and administrators; for the functionalists it is the needs of society; and for the Marxists it is the economy, the class system or ideology. It is therefore possible to *predict* the outcome of education as it leads to the maintenance of the status quo. Human beings are regarded as little more

than products of socialization, and human creativity and human freedom are completely ignored, as are the richness and complexity of human life. They provide a general framework with which to analyse education, but this framework certainly does not help us to grasp the reality of life in schools and to understand day-to-day classroom encounters. In short, these approaches do not help us to understand what makes teachers and pupils 'tick'.

The interactionists admit that the problem of observer bias is difficult to deal with and suggest that it is impossible to enter any situation without preconceptions or assumptions. The researcher must attempt to elicit the actors' views uncontaminated by his own and remain true to the meanings and understandings of those whom he is observing. Peter Woods writes :

> "Of course we shall never be able to get into another's mind to see exactly how it is working ... and indeed it is often difficult to analyse our own thoughts and actions. But close observation and sympathetic interviewing over a lengthy period - a popular time span is a year - and in a variety of contexts can bring us close to an appreciation of that interpretive work, that construction of meanings that is at the heart of social life." (55)

The ethnomethodological concepts concerning everyday social reality imply a distinctive logic of inquiry. Since the methods based on this logic are different from ordinary sociological methods, we have to grasp the methods and methodology of ethnomethodology in order to understand it. Points underlying ethnomethodological methodology include the following : a claim to a research style in line with their subject matter (56); a committment to

investigating the 'phenomenon of everyday life' on their own terms i.e. to respect the integrity of phenomena (57); to describe, conceptualize and investigate what is taken for granted in daily life; inquiry into the "we agree" implied in all social action and social settings, the "we agree" representing an achievement of provisional unity that ethnomethodologists adopt as a topic (58); and a dogma-free methodology with which one can demonstrate empirically the formal properties of practical activities. (59)

Ethnomethodological methodology demands that researchers should be aware of the part that commonsense understandings play in all inquiry and it focuses attention on the interpretive procedures which are inherent in all inquiry. These common-sense understandings that inform social-scientific inquiry are incorporated into ethnomethodology. It is recognised that valid, reliable communication with members "presupposes an understanding of their language, their own understandings of what the people doing the observations are up to, and so on almost endlessly." (60)

Martyn Hammersley suggests that the differences in these approaches can be thought of in the following ways :

1) In sociological research, should one assume determinism (macro), or free will (micro)?
2) Is the goal of sociology to produce generalized explanations which abstract from the details of social phenomena (macro), or is it to document the process of social life in all its detail and complexity (its 'richness' if you like)? (micro)
3) Can theories be tested against empirical data (macro), or can one only judge them by their internal coherence since all data are theory - laden (micro)?

4) Do sociologists produce scientific theories which document what is 'really' going on while participants' views are simply myth or ideology? (macro). Or must sociologists' accounts in some sense build upon the interpretations of participants (micro)?

5) Can social events best be explained as the product of the structure of national (or international) society (macro), or can valid explanations be provided which appeal to the features of relatively small - scale organizations and groups or even the characteristics of individual people (micro)? (61)

Hammersley's distinction between macro-studies and micro-studies reflects the opposition between the two perspectives discussed in this chapter : the institutional (positivist) approach on the one hand, and the interactional (interpretivist) approach on the other. The positivists emphasize the search for generalizations and seek explanations and predictions of human behaviour. The symbolic interactionists and ethnomethodologists view human action as meaningful and context-bound, and the task of the researcher is to elucidate the actors' meanings which constitute the social world.

Hammersley's views represent the traditional micro-macro dichotomy in which the individual is seen as 'micro', and the collective as 'macro'. People tend to think of issues as 'microscopic' problems and 'macroscopic' problems, and believe that they ought to be treated differently, with different methods. This attitude highlights the underlying assumption that complexity has something to do with size and scale.

Knorr-Cetina suggests that finding "sameness" in phenomena, would facilitate the finding of solutions. (62) Her view is indicative of a more recent

tendency in the sociology of science which discards traditional divisions and "received" notions of science, and is critical of the traditional micro-macro dichotomy. For example, Bruno Latour whose approach is related to the constructivist/contextual school of thought, has shown that the micro-analyst, while still remaining faithful to his method, can tackle macro-issues as well. (63)

The example Latour uses is that of Pasteur, the French scientist who tackled the macroissue of the anthrax disease. By doing lab experiments on microbes, Pasteur ended up modifying many details of the whole of French society. In his example, Latour uses the inside/outside dichotomy to illustrate how society can be modified by "displacing some actors." In doing this, he illustrates how, through inversion of scales, macro problems can become micro problems, and vice versa. Latour's ideas indicate strongly that research on the macro-level does not necessarily exclude microanalysis and qualitative methodology.

NOTES AND REFERENCES

1. Examples are David Hargreaves who has drawn upon Durkheim's concepts in his analysis of contemporary education, and Basil Bernstein whose writings on educational change feature some of Durkheim's central ideas.
2. Karabel, J. and Halsey, A.H. (eds.) (1977) : *Power and Ideology in Education*, Oxford University Press, p. 2.
3. Floud, J. and Halsey, A.H. (1958) : 'The Sociology of Education : A Trend Report and Bibliography." *Current Sociology*, 7, p. 171.
4. See Young, M.F.D. (ed.) (1971) : *Knowledge and Control*, Collier-Macmillan, London.
5. Durkheim believed that education must teach self-discipline and that the core curriculum be based on science.
6. He argues that the subject matter of sociology is 'society' and this 'social' dimension of things makes it different and distinct from the 'individual' dimension. A study of the individual person does not enable us to anticipate the differences and variety of social phenomena.
7. 'Sui generis' as he usually says.
8. Durkheim, E. (1964) : *The Rules of Sociological Method*, Free Press, New York, p. 90.
9. Parsons, T. (1961) : 'The School Class as a Social System'. In A.H. Halsey, J. Floud and C.A. Andersons (eds.), *Education, Economy and Society*, p. 445.
10. Parsons, T. (1971) : *The System of Modern Societies*, Prentice-Hall, Englewood Cliffs, p. 95.
11. The notion that there must be some sort of consensus for society to be stable was stated in the early 19th century by Auguste Comte.

12. Parsons, T. : See (9) p. 445.

13. See Davie, R. and Butler, N.R. (1972) : *From Birth to Seven, Second Report of the National Child Development Study*, Longman, London.

14. See Rist, R. (1977) : *'On Understanding the Process of Schooling : The Contributions of Labelling Theory*,' in (2), p. 298.

15. Karabel, J. and Halsey, A.H. : See (2) pp 8-9.

16. Cohen, P. (1968) : *Modern Social Theory*, Heinemann, London, p. 58.

17. (a) Woods, P. (1979) : *The Divided School*, Routledge and Kegan Paul, London.

    (b) Furlong, V. (1977) : 'Anancy Goes to School : A Case Study of Pupils' Knowledge of their Teachers.' In P. Woods and M. Hammersley (eds.) : *School Experience : Explorations in the Sociology of Education*, Croom Helm, London, p. 183.

18. Wrong, D. (1966) : 'The Oversocialized Conception of Man in Modern Sociology.' In L. Coser and B. Rosenberg (eds.) *Sociological Theory*, Collier-Macmillan, London, pp. 117-8.

19. Weber, M. (1964) : *The Theory of Economic and Social Organization*, Free Press, New York, p. 103.

20. For example, some believe that the economic base determines the superstructure, e.g. a society's educational system is a direct consequence of the nature of its economic system. Others argue that there is a dialectical relationship between the two - the economic base conditions and is in turn conditioned by the superstructure, and they therefore have a reciprocal influence. Those who adopt the latter interpretation say that the superstructure has 'relative autonomy.'

21. See, for example

    (a) Marx, K. (1963) : The Poverty of Philosophy - Quoted in Plamenatz, *Man and Society*, 2 vols, Longman, London, vol. 2, p. 275.

    (b) Marx, K. (1968) : Wage Labour and Capital in *Selected Works*, 2 vols, Longman, London, vol. 1, p. 81.

    (c) Marx, K. and Engels, F. : The Communist Manifesto in *Selected Works*, p. 38.

22. Bowles, S. and Gintis, H. (1976) : *Schooling in Capitalist America*. Routledge and Kegan Paul, London.

23. Ibid., p. 20.

24. Their main points on capitalism are summarized in Chapter 3 of (22).

25. Bowles, S. and Gintis, H. : See (22) pp. 125-6.

26. Ibid, p. 129.

27. Marx uses this term in Marx, K. (1970) : *A Contribution to the Critique of Political Economy*, Progress Publishers, Moscow. When he speaks of the 'relations of production' being 'the real foundation on which rises the legal and political superstructure to which correspond definite forms of social consciousness.'

28. Bowles, S. and Gintis, H. : See (22) pp. 11-12.

29. Ibid, p. 224.

P.T.O./30...

30. See Coxhead, P. (1977) : 'Some Comments on Bowles and Gintis,' Appendix to Unit 13 of E202, *Schooling and Society*, Open University Press, Milton Keynes, p. 71.
31. Coxheads' findings merely cast doubt upon the evidence to support this thesis.
32. See Althusser, L. (1972) : 'Ideology and Ideological State Apparatuses', in B.R. Cosin : *Education : Structure and Society*, Penguin, Harmondsworth.
33. Ibid, p. 260.
34. See Erben, M. and Gleeson, D. (1977) : 'Education as Reproduction,' in M. Young and G. Whitty (eds.), *Society, State and Schooling*, Falmer Press, Lewes.
35. See, for example :
    (a) Apple, M. (1982) : *Education and Power*, Routledge and Kegan Paul, London.
    (b) Apple, M. (1982) : *Cultural and Economic Reproduction in Education*, Routledge and Kegan Paul, London.
    (c) Finn, D., Grant, N. and Johnson, R. (1978) : 'Social Democracy, Education and the Crisis' in the Centre for Contemporary Cultural Studies, the University of Birmingham, *On Ideology*, Hutchinson, London.
    (d) Centre for Contemporary Cultural Studies (CCCS), University of Birmingham (1981) : *Unpopular Education : Schooling and Social Democra in England, since 1944* Hutchinson, London.
36. See Reynolds, D. (1984) : 'Relative Autonomy Reconstructed,' in L. Barton and S. Walker (eds.), *Social Crisis in Education*, Croom Helm, London.

37. For a detailed discussion of these assumptions, see Blackledge, D. and Hunt, B. (1985) : *Sociological Interpretations of Education*, Croom Helm, London, pp. 234-237.
38. One of the best sources on this aspect is (4).
39. For example, a teacher may consider a pupil to be 'clever' or 'dull'. We have to discover the process by which the label is given.
40. Hargreaves, D. (1975) : *Interpersonal Relations and Education*, Student Edition, Routledge and Kegan Paul, London, p. 116.
41. Ibid, p. 163. He therefore does acknowledge that all teachers are unique in certain ways.
42. Ibid, p. 120.
43. In a sense, the situation has to be regarded as independent of and limiting to the individual's definition.
44. Hargreaves, D. : See (40) pp. 129-30.
45. Ibid, p. 151.
46. This is usually done to the weaker members of staff.
47. See Hammersley, M. (1977) : 'Teacher Perspectives', Unit 9 of E202 *Schooling and Society*, Open University Press, Milton Keynes.
48. See Woods, P. (1983) : *Sociology and the School : An Interactionist Viewpoint* Routledge and Kegan Paul, London.
49. Ibid, p. 7.
50. (a) The 'conflict framework' was also used by Delamont, S. (1976) : *Interaction in the Classroom*, Metheuen, London, in which she discusses interaction under the heading of 'Let battle commence : strategies for the classroom.'

    (b) Waller, W. (1932) : *The Sociology of Teaching*, Wiley, New York, suggests that teachers are engaged in a continuous struggle to control and educate pupils.

51. Woods, P. : See (48), p. 89.
52. Woods mentions girls who use the school scene to talk about the opposite sex and future marriage. They show interest in only those aspects of the curriculum which relate to their personal interests.
53. See Payne, G. (1976) : 'Making a Lesson Happen', in M. Hammersley and P. Woods (eds), *The Process of Schooling*, Routledge and Kegan Paul, p. 33.
54. Ibid., p. 34.
55. Woods, P. : See (48) p. 17.
56. Turner, R. (1974) : "Introduction". In Roy Turner (ed.), *Ethnomethodology*, Penguin, Baltimore, p. 11.
57. Douglas, J. (1970) : *'Understanding Everyday Life.'* In J.D. Douglas (ed.), Aldine, Chicago, p. 16.
58. Blum, A.F. (1974) : *Theorizing*, Heinemann Educational Books, London, p. 3.
59. See Garfinkel, H. (1952) : *The Perception of the Other : A Study in Social Order.* Ph.D. Diss., Harvard University, p. 201, where Garfinkel notes that Husserl's studies and the phenomenological attitude itself offers grounds for a dogma-free methodology.
60. Douglas, J. : See (57) p. 9.
61. See Hammersley, M. (1984) : 'Some Reflections on the Macro-Micro Problem in the Sociology of Education,' *Sociological Review*, vol. 32, no. 2, pp. 317.
62. Knorr-Cetina, K.D. (1981) : *The Manufacture of Knowledge : Toward a Constructivist and Contextual Theory of Science*, Pergamon, Oxford, p. 15.
63. Latour, B. (1983) : 'Give Me a Laboratory and I will Raise the World,' in Knorr-Cetina, K.D. and Mulkay, M. (eds.) : *Science Observed. Perspectives on the Social Study of Science*, Sage Publications, London.

CHAPTER FIVE

THE SOCIOLOGICAL ALTERNATIVE?

5.1 Preamble

In Chapter two, our examination of the history of the philosophical foundations of qualitative methodology revealed that the central debate within the philosophy of the social sciences concerns the methodological unity of natural and social science and that it is the so-called positivists who have dictated the way in which this debate has been conducted. Our examination of the history of the dialectical, phenomenological and pragmatist trends in research methodology pointed to different conceptions of science which could be explored as appropriate frameworks for the social sciences.

In Chapters three and four we outlined the development of symbolic interactionism and ethnomethodology and their applications in educational research and found that these interpretivist schools stress the activity of human agents in constructing their meaning systems and negotiating 'definitions of the situation.' It appears to us that they deny the existence of an objective reality which the researcher can come to know since social phenomena are essentially 'subjective' or 'value-impregnated' because of the nature of purposive human action. Therefore any attempt to exclude subjective interpretations inevitably also eliminates every genuine social fact. According to this view, "non-objective" techniques of enquiry should be developed to include the ability and willingness of the social scientist to project himself empathetically into the phenomena he is studying and this alone will lead him to hypotheses with real explanatory power.

In our discussion of the traditional dichotomy between the micro- and macro

approaches, we noted that the constructivist epistemology calls into question the claim of so-called positivists in both the natural and social sciences to be able to conduct "neutral" research as scientific "observers." But, we ask, are "meaning systems" not "out there" in the social world? Can they not be captured by insightful researchers in a way that is not significantly different from the way physicists and chemists attempt to capture structures and processes that are alleged to be "out there" in the physical world? These questions make it imperative for us to examine the sociology of knowledge which resulted in a critical reassessment of the origins of knowledge and therefore of science (education) and consequently also of research (in education)

5.2 The Sociology of Knowledge

The long history of the sociology of knowledge can have its origins traced back as far as the writings of Francis Bacon, and elements of it were also present in the works of some of the "founding fathers" of sociology such as Marx and Durkheim. Whereas the early sociologists of knowledge treated the topic in a 'general' way, modern practitioners concentrate on detailed bodies of specific knowledge and belief. The field is characterized today by a number of diverse approaches, aims and interpretative schemes, and the only clear distinction that can be made is between popular belief and commonsense or everyday language on the one hand, and systematized specialized knowledge on the other. (1)

Krohn regards the question of the distinction between the logic of proof and the discovery process of new knowledge as central to the sociology of Knowledge. (This distinction emerged as a result of a division which occurred in the historical development of science. New discoveries after the 17th century resulted in the abandonment by the natural sciences of the scientific methods

and styles used by the traditional academic generations. Terms such as "insight" and "intuition" were also rejected. This exclusion of the emotional and social dimensions of humanity resulted in the unavoidable loss of "meaning". The attitude that an approach should be either intuitive or empirical hindered research in the socially determined and constructed foundations of knowledge, and has penetrated further into the distinction between man and nature. (4) We are still confronted today with the problem of how to investigate in a "scientific" manner that which is considered to be a humanly relevant problem.

Mulkay notes that the central concern of sociologists of knowledge has been to show how specialised bodies of knowledge are influenced by the social and cultural contexts in which they are produced. (5) This concern leads immediately to more specific questions such as : What kinds of social and cultural factors exercise an influence on mental productions? What kinds of connections are there between them? Which mental productions are open to sociological analysis?

Mulkay notes further that an examination of the areas of knowledge which have been subjected to empirical analysis reveals that although sociological studies of scientists and the scientific community have been done, it is only recently that there has been the empirical investigation from a sociological perspective of scientific knowledge and its construction. Most sociologists of knowledge "have argued strongly ..., that the substance of scientific knowledge is independent of social influence and they have tried to justify this assertion on philosophical grounds. They have claimed, in short, that science is a special sociological case because it has a special epistemological basis." (6)

A brief examination of some of the major contributions to the sociology of knowl and the sociology of science reveals that this has in fact been the case -

science *has* been regarded as a special sociological case. Durkheim and Marx as mentioned before are among the major contributors in the nineteenth century to the sociology of knowledge. Although there are important analytical differences in their ideas, they do agree on some points :

(i) Science flourishes in large-scale industrial societies.

(ii) Scientists create distinct communities which regulate the production of certified knowledge.

(iii) The actual content of science is independent of social influences.

(iv) Scientific research communities have special social characteristics which inhibit the influence of distorting factors such as bias, prejudice and irrationality on the members' technical work and are therefore crucial in enabling scientists to generate objective knowledge. (7)

Karl Mannheim is regarded as a central figure in the sociology of knowledge. (8) His sociology of knowledge involves a number of ideas taken from Marxism, especially Marx's notions of the "existential base" and class groupings. By means of several empirical studies, he provided historical documentation of the connections between thought and social factors. By combining the Marxist notions he had adopted with elements from the German academic tradition of neo-Kantian thought, he made a radical distinction between the methods and concepts of the natural sciences, and those of the social sciences and historical thought. (9)

The concepts appropriate to the study of the natural world are described as being "timeless and static". (10) One can obtain valid knowledge about such objective phenomena only by detached, impartial observation, by reliance on sense data, and by accurate measurement. (11) However, a proper investigation

of cultural products cannot be undertaken by methods of detached observation because an understanding of cultural phenomena involves interpretations of participants' meanings which cannot be observed like objects in the external world. Since each historical period and each social group has distinctive values and meanings, the analyst begins his investigation from his own culturally specific framework of meanings. The interpretation of meanings must therefore deal with the unique features of each cultural epoch. (12) Mannheim states that since there can be no detached, uniform observation of cultural products, their meaning must be acquired by means of involvement and sympathetic understanding. (13)

Mulkay states that the basic epistemological problem faced by Mannheim is that of relativity. If social thought, which lies outside the exact sciences, is relative to a particular social position and has to be investigated from a particular perspective, then it appears that there are no general criteria for judging the validity of each assertion. (14) More importantly, since the sociology of knowledge is itself a part of the domain of "social thought", there is no way in which it can assess its own claims, including its central claim, that all social knowledge is existentially determined.

In his attempt to reject this conclusion, Mannheim had to formulate an alternati epistemology to show that although the cultural sciences lie outside the domain of the exact sciences, their assertions can still provide true knowledge. This he did by changing his conception of "objectivity". He asserted that the "objective" conclusions about particular phenomena must be regarded as incomplete and as the product of a specific perspective, and, as such, open to revision in new social situations where other perspectives come into being.

If different observers are working within a common frame of reference, objectivity must be conceived as the application of agreed criteria of adequacy to particular knowledge claims. (15)

Mulkay summarises Mannheim's contributions as follows :

> Mannheim had tried to restrict the scope of "positivist epistemology" to the sphere of the natural sciences. He outlined an alternative, "relational" epistemology for socio-historical, existentially determined thought. But, by not claiming that knowledge of the physical world, like that of the social, depends on the questions we pose and on the socially derived perspectives of the knowers, he did not open the door to a fully-fledged sociology of science. (16)

The uncertainty among sociologists of knowledge about the nature of science has been explained to be "largely because sociologists of knowledge have been unable to offer a serious alternative to the standard epistemological view of science that they have been propelled into a position from which scientific knowledge and the intellectual activities of scientists have to be treated with special deference." (17)

The standard view of scientific knowledge regards the natural world as real and objective. Science can provide an accurate account of the objects, processes and relationships which occur in the world of natural phenomena, because science has evolved stringent criteria to evaluate empirical claims. The validity of the factual foundation of scientific knowledge is thus guaranteed and devoid of subjective factors such as personal-prejudice and self-interest which could distort scientists' perception of the social world.

Scientific knowledge is rooted in empirical evidence making it necessarily independent of the society in which it was made available. Since the content of scientific knowledge is determined by the nature of the physical world itself, the social origin of scientific knowledge is irrelevant to its content. (

It should be evident from our discussion thus far that concepts of "knowledge" would necessarily influence views on science. Due to this, we have to deal with the social perspectives on science in order to look more closely at scientific activities in education as embodied in research processes.

5.3 The Sociology of Science

Our starting point will be the nineteenth century context of Western Europe when marked social changes were brought about by the growth of industrial society. The basis of the modern trend of sociological thought was a response to these changes and to the intellectual achievements of the physical and biological sciences. Sociology was born and attempted a rigorous explanation of the characteristics of nineteenth century European society. (19) The foundin fathers of sociology noted that one of the most socially distinctive features of industrial society was the existence of a separate community which was intent on the pursuit of the systematic knowledge of the natural world. These founding fathers were also concerned with establishing the legitimacy of their own methods and with establishing the scientific nature of their intellectual endeavours. (20)

5.3.1 The Development of the Speciality

Even though the intellectual and social importance of science was recognized, science as a topic for substantive sociological study was neglected. (21) One of the reasons for this neglect is that most early sociologists entered

the discipline from the humanities, and since most of them had no expert knowledge of the advanced sciences, sociology and natural science were kept organizationally apart. Merton states :

> "Physical and biological scientists have typically had their rigorous training confined to the specialized skills and knowledge of their fields, and few have had more than a slight acquaintance with social science. Social scientists, similarly, have typically had little training in one or another branch of the more exact sciences or even in the history of science, and consequently feel reluctant to take up a specialization for which they see themselves as unprepared. In the meantime, the sociology of science falls unnoticed between these two academic stools."

Thus the unfamiliar technical culture of science made it difficult for sociologists to absorb science as an essential part of sociological research. Drawing their conceptions of science mainly from the writings of philosophers, they regarded scientific knowledge in crudely positivist or logical-positivist terms. Genuine scientific knowledge was seen to have its basis on impartial observation of the real, objective world, and was validated by the application of universal, unchanging criteria. Consequently, genuine scientific knowledge was regarded as independent of the social position or personal committments of the knower. (23)

Science was treated as a special kind of social phenomenon, as a paradigm of genuine knowledge in modern society, and was excluded from analytical consideration, and regarded to be outside the realm of sociological analysis. One of the reasons for this is, possibly, that it was essential for sociologists to identify some class of knowledge-claims which was validly independent of

variations in the social context. (24) If all knowledge-claims and all judgements of validity are conditioned by social determinants, this would include the claims of the sociologists as well, and sociological propositions would no longer be accurate accounts of the real social world, but would have to be treated merely as by-products of the sociologist's social position.

In the attempts of the major figures in the sociology of knowledge to solve the problem of the relativity of ideas, scientific knowledge continued to be regarded as independent of its social context. For example, Mannheim states :

> The particularity of the theory of knowledge holding sway today is now clearly demonstrable by the fact that the natural sciences have been selected as the ideal to which all knowledge should aspire. It is only because natural science, especially in its quantifiable phases, is largely detachable from the historical-social perspective of the investigator that the ideal of true knowledge was so construed that all attempts to attain a type of knowledge aiming at the comprehension of quality are considered as methods of inferior value. (25)

Since the work of many sociologists was modelled on this privileged epistemological status of scientific knowledge, sociologists could present their own (supposedly scientific) claims as open to objective test and independent of social influences, and thus avoid the danger of their own self-refutation. They regarded forms of "knowledge" which could not claim to be scientific, as open to sociological interpretation.

The rapid growth of interest in the sociology of science during the 1960s and the 1970s can be accounted for by changes in the wider society which was

becoming concerned with questions of science policy. Science had projected an image of itself as an esoteric discipline which would generate objective, practically effective knowledge as long as it was not regulated from the outside. (26) Since social influences could not direct the accumulation of objective knowledge, there was no need for a systematic study of the social aspects of science as a basis for science policy.

However, after World War II, and especially after the date of the first Sputnik in 1957, there were immediate calls for developing an organized, national policy for science. Prior to Sputnik, political and administrative decisions about science were made with the guidance and advice of physicists who had been part of the Atomic Programme of World War II and of the scientific elite. (27) Several factors in the 1960s brought this approach to science policy under attack. People started to become aware that science-based technologies were responsible for environmental damage and social disruption; the massive expenditure on military research made the consequence of a war between East and West even more destructive; and technological spin-offs from scientific research were not that frequent. It became necessary to limit the rate of growth of the scientific budgets. The idea that the scientific community had stressed, viz. that progress of science would improve social welfare, did not seem to be materializing. A study of the social aspects of science by non-scientists began in this context, and was supported by those who felt that it was now necessary to reconsider the assumptions about the nature of science.

In the United States, Robert Merton, one of the most influential scholars in the functionalist tradition, undertook empirical and analytical investigations in the sociology of science. He had already extended the insights of Weber

and Durkheim with respect to the social conditions which seemed essential to the production of scientific knowledge, and proceeded with his research by means of quantitative evidence using the same frame of reference provided by the traditional sociology of knowledge to "prove" that the social structure of science was in fact "organized in accordance with that kind of universalistic ethos which Merton had taken to be a pre-requisite for the creation of objectively certified knowledge." (28)

However, in Western Europe, the sociology of science developed along different lines. German historians never deviated too far from hermeneutics and the concept of "meaning". This provided a strong anti-positivist base, and a critica stance was adopted towards the Mertonian approach, and these sociologists were bent on redefining the framework of analysis within which the sociology of science should proceed. Their task was made easier by the availability of the work of Thomas Kuhn which they took as their main point of departure. Whereas Merton had made a definite distinction between the cognitive and social processes of science, Kuhn's work implied the possibility of alternative epistemological assumptions. Merton's work did not explore cognitive processes and products themselves, whereas Kuhn's ideas implied that the cognitive, social and moral aspects of science were linked together in a complex way.

European sociologists who were doubtful of the value of functional analysis and quantitative methods of examining the connection between cognitive and social processes, felt that Kuhn's work made possible analytical issues which were not possible in the Mertonian school. Kuhn had supplied a flexible interpretative resource for investigations of the social production of scientific knowledge.

5.3.2 The Social Construction of Scientific Knowledge

The Trend Report by Michael Mulkay mentions two dominant schools of thought in the sociology of science. These two schools are labelled an institutional and an interactional approach respectively. Ben-David described the difference as follows :

> "Authors using the interactional approach observe the way scientists act toward each other, such as their division and co-ordination of work in laboratories, patterns of scientific quotations and habits of consultation. The institutional approach relates science to variables that, from the point of view of individual scientists, are given; examples of these variables are the definition of the scientists' roles in different countries, the size and structure of scientific organizations, and different aspects of the economy, political system, religion and ideology." (29)

According to Ben-David, no attempt had been made until 1970 to interpret the production of scientific knowledge from an interactional perspective. The institutional perspective was stronger and had tried to establish systematic connections between broad social factors and the cognitive content of science. He outlines his views on the relationship between scientific knowledge and philosophical thought. (30) He contends that the institutional approach to analysis of scientific knowledge tries to establish the 'social determination of science.' To do this, it has to show that there is a systematic relationship between the conceptual structure of philosophies prevailing at particular times and variables of the social situation; and it has to show also that there is a systematic relationship between those philosophies and scientific ideas. He emphasizes that for such sociological

analysis to be satisfactory, it has to demonstrate that both these relationships are regular and systematic.

The following passage illustrates the argument Ben-David uses to conclude that the relationship between science and philosophy is *not* systematic :

> "In the same period when holistic philosophies seemed to provide inspiration for new thinking in physics, the sciences of biology and chemistry were more fruitfully inspired by atomistic philosophies. This shows that the question of which philosophy was or was not useful to scientific growth depended on (a) the state of the particular science and not some common underlying state of social affairs or spiritual culture and (b) the discernment of the scientists in using the philosophical ideas in contexts determined by the problems inherent to their scientific specialities." (31)

He continues his argument along the lines that scientists borrowed points of views or hunches from the philosophies in terms of their usefulness in the solution of specific scientific problems, and not for any socially determined perspective or motive, and thus did not adopt philosophical *systems*. Thus, even though he accepts the existence of connections between science and philosophy, he feels that these connections are irregular and unpredictable.

However, others have argued that if we wish to understand such connections, it is essential that we deal with the kind of variable elements identified by Ben-David, and take into account both the cognitive and social dynamics of specialized areas of scientific endeavour and the social relationships which link scientists to external cultural resources. (32) Attempts have

been made since the 1970s to explore how the production of scientific knowledge can be interpreted in sociological terms e.g. the "strong programme" as advocated by Barry Barnes and David Bloor. (33)

Barnes understands knowledge to mean "accepted belief" and not "correct belief." (34) The class of beliefs which scientists accept as true should not be given a special sociological status. The task of the sociologist of knowledge is to show how people come to accept certain ideas as true and others as false. In the analysis, judgements about the validity of these ideas must not be introduced. Bloor states that the sociology of scientific knowledge must be "impartial with respect to truth and falsity, rationality or irrationality, success or failure. Both sides of these dichotomies will require explanation." (35)

Barnes' main points can be summarized as follows : Most of the beliefs which constitute accepted scientific belief are theoretical i.e. they are not entirely the product of experience (36); the very meaning of scientific terms is established by their place in a theory; and factual statements acquire their meanings in terms of particular theoretical orientations. Without being able to construct a systematic and empirically detailed alternative to the simplistic versions of the institutional determination of scientific knowledge, Barnes offers a general guide to further empirical investigation when he states that ideas are to be regarded as "tools with which social groups may seek to achieve their purposes in particular situations ... ideas are related to social structure by examining the perceived situation of actors in particular collectivities, and their perceived problems and aims. Beliefs which "work" in one situation may be quite inappropriate in another. The connection between interests and ideas is contextually mediated." (37)

Bloor writes that "the sociology of knowledge must locate causes of beliefs, that is, general laws relating beliefs to conditions which are necessary and sufficient to determine them." (38)

Although Barnes and Bloor both equate all forms of adequate explanation with causal (deterministic) analysis, it must be conceded that they *do* place stress upon actors' reasons and interests on men's active construction of their social world.

At this stage in our discussion on the social construction of scientific knowledge, it would be appropriate to examine a few of the recent case studies of scientific development which draw attention to features that indicate that there is no clear separation in science between the negotiation of social meaning and the assessment of knowledge-claims.

5.3.2.1 Empirical Studies of Scientific Development

Some of the recent case studies are based on "observing" groups of scientists in their laboratories over long periods e.g. the study conducted by Karin Knorr-Cetina who belongs to the so-called "constructivist" or "contextual" school of thought. (39) Knorr-Cetina emphasizes that science cannot be understood primarily on the level of ideas. Scientists are engaged in research practices which occur in, and are linked to, specific organizational contexts. If we want to understand how scientific knowledge-claims are produced, we have to take into account these practices and organizational contexts. She contends that when we observe scientific research practice, it is inappropriate to portray scientists as "subjecting descriptive hypotheses to objective test." She observes further that :

> "... when looking at actual laboratory practice, it becomes clear

> that the stakes are not defined in terms of the correspondence-theory of truth ... Instead, the process of inquiry appears to be *constructive;* that is, oriented towards 'making things work' successfully and embedded in a reality which is highly artificial and essentially self-created. In contrast to truth, success has a definite meaning for the individual scientist ..." (40)

Knorr-Cetina claims that 'success' to the individual scientist means using opportunities which arise out of routine research practice to contribute to the professional literature. Scientists have therefore to produce a distinctive research product. A scientist might recognise the possibility of producing an original result through an unexpected observation, or while talking to colleagues or reading a research paper. She will then, using local resources and competences, engage in a relatively long period of sustained 'tinkering' during which she will try to 'make things work' to her own satisfaction. Colleagues will often discuss ongoing research with the individual scientist and with the group, but this must not be seen as application of universal, impersonal criteria of adequacy to the research in question because each research locale seems to develop its own technical culture. Knorr-Cetina explains that "What is of interest here is a phenomenon almost completely ignored in the literature on science : research sites develop local interpretations of the scriptures, an exegetical know-how referring to what is meant and how it ought to be translated into practice." (41)

The end-product of much of such opportunistic scientific research has a strong personal flavour because of its dependence on the unique situations of particular scientists working in local variants of a research tradition, *but* very few obvious traces of a personal dimension are allowed to remain in the formal research paper.

Knorr-Certina is of the opinion that if a scientist wants to achieve the success of publication, her research paper must be distinctive. She can achieve this by identifying and investigating a topic which has not been explored in literature. Alternatively, scientists can strive for what Knorr-Cetina calls 'discriminant value' i.e. they publish findings that negate or modify a prior claim. Such distinctive products of scientists with this 'discriminant value' have the "power to *discriminate* both in the sense of *distinguishing* between the new product and those relevant in an existing area, and in the sense of *reclassifying* the latter as inferior, outdated, or holding only under special conditions." (42) Thus, what scientists see as opportunities for success, and the knowledge - claims they produce, is influenced to a great degree by their variable readings of existing literature. (43) When a scientist identifies a new topic, she avoids making claims which resemble too closely already published work; when shecontrasts her findings with some other published work, she tries to provide a background from literature for her negation or modification of that work. However, Knorr-Cetina suggests that the existing corpus of results can be used with great flexibility. She sees it as a resource for "metaphorical reasoning" which researchers use to transfer techniques, observations and interpretative notions in a creative endeavour from one problem to another. There is therefore, little concern with cross-checking others' claims, because if the claims are merely replications of prior results, they are usually not published.

Despite the formal appearance of products which make up research literature, they are not merely simple descriptive accounts about observed regularities which are accessible to all competent investigators and which can be checked and sanctioned by them. Knorr-Cetina stresses that these products of research are variable and anarchic :

> "Furthermore, most published results cannot be easily re-generated,

> or validated - a fact which may be surprising to the outsider. Hence what is selected will not depend on the evaluation of a product in itself; instead it depends on whether a result fits into the framework of a current undertaking and works out successfully in instrumental manipulation." (44)

Knorr-Cetina's argument can be summarized as follows :

Scientists are not concerned with measuring their products against objective criteria, or with identifying valid contributions and testing the claims of others, but seek instead to identify products or aspects of products which they find useful for their own research purposes. Products that do receive special attention are those which can be made to 'work' by numerous researchers who are each involved with their own specific research. In fact, most products are ignored. The scientist who produces a successful item will earn sufficient credit which sets in motion a self-reinforcing process. As a result of this, he attains increased access to research facilities, and thus to opportunities to generate and pursue more opportunities for successful scientific work.

Knorr-Cetina's study is based on direct observation of scientists in local research sites and, as such, offers limited insights into the dynamics of research networks. However, it is interesting to note that almost all studies of research networks that have been done reach conclusions which are compatible with her analysis. As an example we will look briefly at a study done by Harry Collins, whose approach is classified as the "Bath School". (45) This case study concerns research into gravitational waves in which Collins tries to show how scientific belief is a contingent outcome of social negotiation. (46)

Collins concludes that the debate over competing claims was greatly influenced by social factors and personal choices. Established knowledge and formal criteria did not provide a means of distinguishing valid from invalid claims. Participants agreed that Einstein's general theory predicted gravitational waves, that certain catastrophic astrophysical events should release such waves, that a certain kind of observational apparatus was required, and that there was a need for controlled experiment and for theoretical interpretation consistent with the experimental evidence. However, consistent with Knorr-Cetina's views of scientific production, it was found that most of the participants were fundamentally uncertain about how they could demonstrate the existence of gravitational waves. The network itself was greatly divided about the meaning of its members' experimental results. Collins demonstrates that there was no common assessment of experimental procedures and results e.g. what one scientist found impressive, was said to be interesting by another, and dismissed as an outright fraud by yet another. Nobody attempted to repeat in detail the original experiment since there was no point in duplicating a result which had no scientific meaning. Scientists seemed more concerned with finding a new kind of observation which would be recognized as a more competent measure of gravitational waves. Collins suggests that the participants, in believing that they were checking the original knowledge-claim and the findings on gravitational waves, were only doing so indirectly by entering into "negotiations about the meaning of a competent experiment." (47) For replication to be useful as a criterion for assessing knowledge-claims, there has to be agreement about the adequacy of experimental procedures, the meaning of observations, etcetera. In other words, replication is only useful as a criterion *after* much cognitive consensus is reached. Replication can occur only when participants have decided what can count as reliable and equivalent observations. This was not possible in the field of gravitationa waves.

Collins' views of the cognitive negotiation in his study are consistent with Knorr-Cetina's emphasis on opportunism, cognitive variability and on the idiosyncracies from which much of the distinctive value of scientific products are derived. Some of the general assumptions which the participants appear to share and which they brought to the study of gravitational waves, include varied interpretative resources as Einstein's theory and belief in experimental methods. Even though the participants see a limited range of empirical variables as related, they interpret them differently and employ them selectively in arguments on the basis of the knowledge-claims favoured by the various participants. It therefore appears that each scientist had first committed himself to a particular line of interpretation, and then selected from the repertoire the resources which could be made to work in support of that interpretation. Thus particular researchers use their expertise and the available technical culture to support their own claims. No clear distinction is made between technical and non-technical criteria of evaluation by those involved, and participants say that the merit of knowledge - claims depends on personal considerations such as the experimenter's reputation, his access to 'inside information', his capabilities, honesty, social location etcetera.

The social and technical culture of science appears to provide members with flexible symbolic resources. These are used to devise a number of interpretative positions in connection with a common research problem. Through the processes of symbolic interpretation and negotiation, the meaning of the orthodox cultural repertoire is re-established in each emergent field. Collins states that "any consensus which ensues is conceivable only as a socially organized upshot of contingent courses of linguistic, conceptual, and social behaviour." (4

Consensus has to be reached before a knowledge-claim can enter the realm of certified knowledge. An interesting case study done by Brian Wynne on Barkla and the J phenomenon, gives us some insight into the nature of scientific consensus. (49)

Wynne's central claim is that scientific consensus, and consequently scientific knowledge, is not achieved by means of conclusive proof and disproof. Even though intellectual committments are made regularly, they are not achieved by the application of any set pre-established formal criteria. The adoption or rejection of research programmes is influenced by the local interests and traditions of research practice of the scientists. The contingent character of scientific consensus can be observed when in the event of being threatened, scientists bolster their cognitive committments by means of rhetorical devices.

Barkla and Compton had both researched the J phenomenon which concerned a new set of X-ray emissions, the 'J radiations', which emanated from the electrons of a specific 'shell' or series in the atom. (50) Physicists were generally agreed about the inadequacy of Barkla's work and the validity of Compton's. Critics of Barkla attempted to replicate his work using different research techniques on the grounds that Barkla's methods were unreliable. Barkla did not consider the results of these critics to have any bearing on the validity of his findings because the research techniques employed by his critics excluded that very technical element which he regarded as essential and as such, was not a replication of his work. (51)

A number of non-technical tactics were used by Barkla's critics in their attempts to maintain the existing consensus. They tried to undermine his

professional credibility by accusing him of sticking to an out-of-date theory. Barkla's competence was questioned by drawing attention to a mistake made by two of his students. Wynne maintains that Barkla's claims were never conclusively disproved.

Wynne argues that most scientists had become committed to a research practice based on the spectrometer which inclined them towards Compton's theory and away from Barkla's style of work and thinking. The spectrometer turned out to be a productive source of precise routine measurements, as did Compton's theory, and this made possible widespread agreement at both practical and interpretative levels. Barkla, however, threatened this consensus because of several reasons : not only was he an eminent physicist and Nobel Prize winner and head of a major department, but he had, using radically different techniques and terminology, been consistently productive over a long period of time. His work indicated in a most disturbing fashion, that the current orthodoxy was open to question by a man of established scientific repute. Although a widespread belief was formed among physicists that Barkla's work was shown to be conclusively wrong, Wynne maintains that an examination of the records reveals that there was no such firm refutation. But, a highly selective employment of cultural resources, both technical and 'social', served to undermine Barkla's work and reputation. Believing in the idea of the 'conclusive refutation', enabled scientists to continue believing in the traditional versions of scientific reality.

An important implication of Wynne's study is that scientific consensus must be seen as both socially and intellectually constructed.

5.3.2.2 Synthesis of main points emerging from the case studies

The three case studies which we have discussed indicate a line of approach which treats scientific belief as a contingent outcome of social processes. The formal criteria e.g. replicability, are seen to acquire meaning through the informal committments of scientists which derive from participants' involvement in practical traditions. Scientific knowledge - claims are seen as inherently inconclusive. Particular claims are advocated on the basis of scientists' position in a social setting. Thus, in addition to formal demonstration based upon evidence, agreement is reached through informal negotiation in which non-technical and 'social' considerations play an important part. Traditional versions of scientific rationality exist within the research community itself, but are adopted by scientists only in certain circumstances, e.g. when they want to present specific knowledge-claims as definitive. (52)

Thus it can be concluded that the impersonal debates which take place in the formal context of professional journals are given their full meaning by, and can only be understood, in terms of their relation to the variable processes of interpretation and negotiation which occur in less formal contexts.

Many social-scientists have made a distinction between the context of discovery and the context of verification, the central idea being that the nature of social action, normative regulation and cognitive control when scientists are producing their results, differs radically from that when they are verifying their results. (53) It is contended that unlike the production of claims which may be socially and/or psychologically contingent, the process of validation is a separate social phase or context which involves the transference of scientific results from the private domain of the individual

researcher to the public of the research community where these results are handled in a highly impersonal manner :

> "Objectivity enters science ... through the process by which theories are tested, justified or judged. Those processes do not, or at least need not, involve subjective factors at all. They can be governed by a set of (objective) criteria shared by the entire group competent to judge." (54)

The unsatisfactory nature of this conception of social contexts in science has been made clear by the case studies we have discussed. Research networks are composed of numerous members each being at different points during the entire sequence from initial conception to dissemination and response, and one can therefore *not* separate these contexts. Our case studies have also shown that a researcher's attempts to construct his own claims colours his view of the knowledge-claims of others. He does not, when judging the work of others, put aside his own research practices, social interests and interpretative convictions. Indeed, these factors contribute to moulding the collective assessment of knowledge-claims.

The traditional conception of the two distinct contexts in scientific research, viz. the context of discovery and the context of verification, raises several interesting questions : why is the content of scientific discourse so misleadingly limited when recent studies have shown clearly that the creation of scientific knowledge is actually a variable and contingent process? Why does terminology used in formal scientific discourse either hide from view or eliminate the personal, social and contingent elements?

Although the cases discussed, and particularly Knorr-Cetina's work, provide

a detailed description of scientific conduct, Knorr-Cetina's statement : "as befits the nature of the study, each example stands as an illustration of others of its kind," points out that as much of the empirical material upon which these analyses are based are inaccessible to the reader, we have to take much of the analysis on trust. (55) Mulkay suggests that even though the conclusions of these case studies should be treated as tentative, they cannot be ignored, since the evidence produced in these and similar studies demands further analysis and empirical investigation. (56) For example, it would be more enlightening if in future, analysts active in this field, can give us full empirical documentation for each of their claims by greater involvement in empirical research. Then, the danger of the observer/participant observer of construing his findings as he wishes with the reader being unaware of much of the interpretative work being carried out, would be greatly diminished.

In our discussion on the sociology of knowledge and the sociology of science, we have distinguished between two dominant competing traditions - broadly categorised as the "standard" philosophical view of science (positivist) and the constructivist (interpretivist) respectively. We will now turn our attention to research within education which can be seen to fit into one of these two categories.

5.4 Research in Education and the Positivist and Interpretivist Traditions of Epistemology

The positivist epistemological position seeks generalizations, prediction and control in its explanations of social behaviour. (57) The interpretivist position into which much of the "new" sociology of education falls, suggests that the researcher's task is to elucidate the way in which the social world

is constituted by actors' meanings, and it challenges the claim of positivists in both the natural and the social sciences that researchers can conduct "neutral" research as scientific "observers".

We ask the following question : Is it possible for the educational researcher to be 'objective' in his observation in his attempt to grasp the reality of the phenomenon he is researching? We will attempt an answer by outlining the two epistemological positions mentioned above, and comparing them.

The objectivist position is indicated in many current textbooks in the field of educational research as the following passages illustrate :

(i) "Research may be defined as the application of the scientific method to the study of a problem ... research is universally a systematic and objective search for reliable knowledge ... when the scientific method is applied to educational problems, educational research is the result." (58)

(ii) "Educational research is ... objective in its collection, analysis and evaluation of data." (59)

(iii) "Educational research involves objective measurement." (60)

These passages reflect the objectivist standpoint that for evidence to be objective, there has to be a clear separation between the researcher and the phenomenon he is researching. Subjective response on the part of the researcher is totally opposed. It is assumed that it is possible, as Cunningham states, "for the descriptions and explanations of a subject matter to reveal the actual nature of that subject matter ... as they exist independently of an enquirer's thoughts and desires regarding them." (61)

While not denying the possibility of an *ontological* separation between the researcher and the object of research, the constructivist does not see this viewpoint as significant for epistemology as he believes that it is impossible to have an *epistemological* separation between the researcher and the object of research. For example, Piaget states that "... it is impossible to talk about objectivity or object without referring back to the previous condition of cognitive organization." (62) Piaget therefore sees knowledge as an operation that constructs its objects and as an interpretative activity in which we can come to know only constructed realities and not independent realities. (63) There can be different perceptions of the "same" phenomenon since we have different cognitive schemes. Thus, what we can come to know in research is the product of an interaction between the researcher and the phenomenon he is researching which is partly constituted by the theories (conceptual schemes) which the researcher brings into his research.

The objectivist's argument that the social and political context and the researcher's subjective interests should not contaminate his research activities has been rejected by Kuhn who regards feelings and interests of researchers as an integral part of research activities. Kuhn argues that the paradigms by which researchers try to mediate between their problems and their solutions of these problems embody sets of assumptions, norms, and the available instrumentation of a community of researchers at a particular time. (64) As such, theories are products of a research community in a particular social and political context. Thus social and political factors are intrinsic to research. Theories are influenced by the way in which we perceive the world and our "factual" statements (i.e. the knowledge we have) are made in a certain social and historical context. Kuhn argues that facts, through their link with prevailing theories, are linked also with the psychological, social, material and historical conditions of the researcher and his time.

The objectivist view makes possible a number of interpretations of a given "reality". The criterion used to judge one interpretation as better than another is the extent to which it "fits" more or less closely to the way the world "really" is. (65) Thus the concern of much research work in educational psychology with measurement and the use of correlational and statistical techniques indicates an epistemological emphasis on falsification and corroboration which rests on a correspondence theory of truth. "Fit" is used as the criterion for judging truth. The inadequacy of "fit" as such a criterion is highlighted by the constructivist's view that since reality is socially constructed, it follows that criteria of theory choice must themselves be constructed. Hence it is not possible to have an absolute and eternally valid criterion for choosing between alternative constructions.

In objectivist educational research, testing is seen as an instrument which the researcher can use to measure what is already there. For example, I.Q. and attitude tests are considered to be good to the extent that they eliminate "experimental bias." They are then used as instruments to measure more or less accurately an "intelligence" or an "attitude" which exists in some sense. It is assumed that these instruments do not affect what they are measuring. The same results can be obtained through the application of different but reliable and valid instruments. These instruments are therefore considered to be a means of access to the phenomenon.

This is a major point of contention between the interpretivist and objectivist paradigms. The interactionist epistemology argues that the instruments are part of the constructed reality of the psychologist's world. Knowledge produced by theories cannot be separated from the theories and manipulations which have produced it. In the constructivist/interactionist view, it is

impossible to conduct "objective research" in the sense of revealing "something" that is already there without it being affected by the activities of the researchers. Bridgman states : "The object of knowledge and the instrument of knowledge cannot legitimately be separated but must be taken together as one whole." (66)

From our discussion thus far, we see that knowledge, while it is being produced, is shaped by the theories and the techniques and instruments used to produce it. Research can therefore not be objective in the sense of being value-free.

In present society science enjoys a high status of knowledge. Empirical science claims to separate fact from value, thus eliminating subjectivity from scientific enquiry and making neutral research possible. These claims of science have led to science being regarded as an activity concerned with technical questions in respect of practical **policies**. Science is not concerned with ends but with means. (67)

Fay argues that it is not possible to distinguish between means and ends in this way :

> "... every means is an end relative to the means required to achieve it, so that any given course of action may be either a means or an end depending upon the point of view which one adopts ... (so) that even so-called "means" relfects the values ... of the person who supports it." (68)

A great deal of funded educational research is seen to be, in the above-mentioned author's view, "technical" enquiry in which the researcher is asked

to produce findings which make possible the achievement of "educationally worthwhile ends." The researcher has to keep out his values so that his findings can be used as a basis for policy decisions which have values independent of the research. The research thus has to be objective and neutral and "scientific". However, we have noted that research embodies values through the choice of theories.

In research in the objectivist paradigm, the interpretative nature of facts is hidden by the view that the methods and knowledge of researchers can be objective and neutral. In most current research, it is believed that the "facts" which can be discovered through enquiry have an existence which is independent of enquiry. These "facts" are "discovered" in a value-free way, and because they are reported simply as a result of enquiry and not as relative to and modified by particular (value-laden) frameworks of enquiry, they acquire a permanence which they do not merit. Since educational research is used mainly to prescribe for educational practice, this disguising of the origin of "facts" in theories is important in the sense that people will have more confidence in prescriptions which are based on unchanging, permanent facts. We have less confidence in prescriptions which are based on facts considered to be a construction of reality at a given stage in history, since such prescriptions are changeable. The constructivist maintains that it is a serious mistake to deny the historical and social roots of research since meaningfulness is inextricably bound with values.

In the light of the inseparability of meaning and value, we feel that it is therefore necessary for us to reconsider our conception of objectivity in a move towards recognizing that knowers and known are locked in a mutually

determining relationship. We have to accept the subjectivity of thought. The notion of objectivity as neutrality should be replaced with the notion of objectivity involving self-reflection and self-criticism. Educational researchers should be aware of the social, moral and political values which are embedded in their theories and instrumentation as these shape and inform their research. More importantly, they must accept responsibility for the value-ladenness of their educational research findings.

We have outlined the different concepts of objectivity held by the positivist and interpretivist traditions. The important social and political consequences of educational research makes it imperative that researchers in education should be aware that the idea of objectivity as neutrality and thus as value-free research is theoretically inadequate. We are of the opinion that the constructivist/interpretivist concept of objectivity, which is understood as critical self-reflexivity, has definite possibilities for future responsible research in education as it is based on a justifiable epistemology which will lead to research which is both objective and value-laden.

We need to consider the questions of validity and replicability in educational research. Phillipson has made the following observation about the positivist distinction between the context of discovery and the context of justification :

> "Conventional sociology works largely in terms of this distinction between the two contexts; the processes by which the sociologist initially constructs an abstract view of social phenomena are viewed as independent of the means he subsequently adopts for testing his ideas. The means, conventional research procedures, are viewed as neutral ways of disconfirming or supporting his ideas." (69)

The criterion of 'replicability' is used by scientists to decide whether or not particular empirical claims should be accepted. If empirical results cannot be reproduced under specified conditions they are regarded as untrustworthy. However, Mulkay points out that "what is to count as a 'replication' depends on scientists' theories about the phenomena under study and on their view of the factors which may influence the observational situation. Consequently, as theoretical frameworks evolve and experimental techniques develop, so the way in which the general criterion of 'replicability' is applied in any given area necessarily alters." (70)

The problem we are therefore faced with concerns the validation of educational research findings. If replication is considered to be a criterion, the replicator should not investigate the same area with the aim of generating confirmatory findings, although it is possible that research on similar aspects can confirm findings of a previous work. Educational researchers should be conscious of their values and the role they play in their research when reporting their findings, and competing accounts should be judged against one another. This *brings us* to the problem of relativism.

Knorr-Certina and Mulkay make a distinction between the concept of epistemic relativism, in which knowledge is recognized as rooted in a particular time and cultural context, and judgemental relativism in which the claim is made that since all forms of knowledge are considered to be "equally valid", it follows that they cannot be compared or discriminated amongst. (71) However, the authors point out that judgmental relativism does not manifestly follow from epistemic relativism, and one can discriminate between the different forms of knowledge with a view to their relevance and adequacy in regard to a specific goal.

Hence one's choice will always be relative to socially and historically situated interests. Mannheim had made a similar observation when he wrote that "the very principles, in the light of which knowledge is to be criticized, are themselves found to be socially and historically conditioned." (7 He argued that a broader epistemology recognizing the partial character of all human perspectives would result in an epistemological position from which one assumes "the inherently relational structure of human knowledge (just as the essentially perspectivistic nature of visually perceived objects is admitted without question) ... It is not intended to assert that objects do not exist or that reliance upon observation is useless and futile but rather that the answers we get to the questions we put to subject matter are, in certain cases, in the nature of things, possible only within the limits of the observer's perspective." (73) We have therefore to change our conception of objectivity.

Mannheim makes a distinction between relativism and relationism. (74) Relativism is a consequence of the traditional concept of truth. If we adhere to the static concept of truth as an objectivity outside man and history, as something that exists in a metaphysical way independently of man's thought, then we will encounter the problems of relativism. However, if we think dynamically and historically, if we look at the relationship between knowledge and relevance in terms of relationism, then we will see that truth and validity are situationally determined, and that theories and thoughts and opinions are true and valid only "for the time being." But this poses a further problem. If knowledge is perspectivistically and situationally determined, it is still possible to speak of *objectivity* in relationism?

Mannheim is of the opinion that a new concept of objectivity will answer this question. He emphasizes two points against the traditional static and absolutist concept of objectivity.

(i) People in a particular historical situation can enter into a collective "universe of discourse" in order to establish a collective perspective of relevance which, because it is essentially *their* creation, will not be an abstract relevance. Within this framework of reference, diverse opinions can be tested for their truth and validity : "in so far as different observers are immersed in the same system, they will on the basis of the identity of their conceptual and categorical apparatus and through the common universe of discourse thereby created, arrive at similar results, and be in a position to eradicate as an error everything that deviates from unanimity." (75)

(ii) It is also possible that opinions about relevance, although they come from different perspectives, will be valid. It is therefore necessary that the results of each perspective should be translated into the others and reconciled at a more general level if we are to find a "common denominator." When a choice has to be made between perspectives, priority is given to that "which gives evidence of the greatest comprehensiveness and the greatest fruitfulness in dealing with empirical materials." (76) Mannheim is of the opinion that this task can be accomplished by the "Sozial freischwebende Intelligenz", the intellectuals who are not too heavily burdened by the group's interest in their social environment. (77)

We are of the opinion that Mannheim's epistemology for social knowledge contains elements for a new philosophy of science, and hence for research in

education. Educational researchers will have "to reckon with situational determination as an inherent factor in knowledge, as well as with the theory of relationism and the theory of the changing basis of thought ... we must reject the notion that there is a 'sphere of truth in itself' as a disruptive and unjustifiable hypothesis." (78)

5.5 Conclusions and Recommendations

In stating our problem at the beginning of this dissertation, we examined some of the characteristics of qualitative and quantitative research methodology and their associated techniques of social research. We demonstrated that there is a tendency in the debate between these two methodologies to confuse epistemological and technical issues. In order to make research perspectives in the social sciences clearer, we investigated the philosophical underpinnings of the two methodologies in Chapter Two.

It emerged that the main epistemological problem in Husserlian theory is that in the end, it had fallen prey to a so-called subjectivistic solipsism which resulted in many controversies among disciples after Husserl. It was mainly due to the writings of Schutz, who attempted to formulate an encompassing explanatory theory of social conduct based on phenomenology, that solipsistic barriers were broken : the concept of intersubjectivity served to displace the age old subject-object problem. This displacement consequently resulted in the spawning of many new perspectives on social research. The example of Mead and symbolic interactionism serves to illustrate this point. The counter-influence which Schutz and Mead had on each other, resulted in a blending of ideas between phenomenology and symbolic interactionism. Influenced by pragmatism, Schutz moved away from the search for the "essences" of the

"Lebenswelt", and concentrated on social interaction within certain socio-historic contexts, and attempted to discover meanings of actions within these boundaries.

We remarked briefly on the subtle epistemological differences which exist between the symbolic interactionist and ethnomethodological frameworks. However, we also pointed out some of the similarities in these two paradigms viz. the evidence of the concept "meaning" in both frameworks; the central theme of the intersubjective constitution of a social reality which runs through both perspectives; their reliance on participant observation as a technique for social research; and the use of everyday language in the interpretation of everyday reality.

Our examination in Chapter four of the application of the so-called "positivist", symbolic interactionist and ethnomethodological approaches in educational researc served to highlight the distinction that is made with regard to micro and macro approaches in social science research. Noting that the constructivist epistemology calls into question the claim by the so-called positivists to be able to conduct "neutral" research as scientific "observers", we under-took an examination of the sociology of knowledge and the sociology of science in order to evaluate the status of the knowledge-claims made by both approaches.

Our study has not resulted in any conclusive findings which could solve all the problems related to objectivity, validity and relevance in research in the social sciences, but from what has emerged, we would like to make the following *recommendations* :

1. The value of epistemological analysis ought not to be underestimated as this will solve the problems of, for example :-

- confusions between technique and methodology;
- epistemological discrepancies which are evident, for example, in triangulation.
- methodological confusions e.g. in South African Education, phenomenology is often not regarded as an epistemological position, but erroneously as a research method.

2. Instead of just teaching a number of research methods from standard textbooks, more methodological guidance should be given to students, with emphasis on the epistemological foundations of each.

3. We believe that there is a need for more sociological studies on research of the type conducted by Knorr-Cetina *et al* as such studies would serve to demystify scientific knowledge. Empirical studies which have been done in the field of the sociology of science have taught us significantly about the social character of scientific knowledge. We are therefore of the opinion that these studies give us a much clearer idea about the complex issues involved, and point out the way we might proceed in resolving them.

NOTES AND REFERENCES

1. Berger, P. and Luckmann, T. (1967) : *The Social Construction of Reality*, Allen Lane, London.
2. See Krohn, R. (1975) : *Wissenssoziologie und Wissensschaftssoziologie Entwicklung eines gemeinsamen Untersuchungsrahmens*. In : Wissensschafts-soziologie. Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderheft, p. 40.
3. Ibid., p. 9.
4. Ibid., p. 92.
5. Mulkay, M. (1979) : *Science and the Sociology of Knowledge*, Allen and Unwin, London, p. 1.
6. Ibid., p. 2.
7. Ibid., p. 10.
8. See Curtis, J.E. and Petras, J.W. (1970) : *The Sociology of Knowledge*, Praeger, New York.
9. Mannheim, K. (1952) : *Essays on the Sociology of Knowledge*, Routledge and Kegan Paul, London, p. 5.
10. Mannheim, K. (1936) : *Ideology and Utopia*, Harcourt, New York, p. 116.
11. Mannheim, K. : See (9) pp. 4 - 16; and (10) pp. 168-9.
12. Mannheim, K. : See (9) p. 61.
13. Mannheim, K. : See (10) p. 170.
14. Mulkay, M. : See (5) p. 12.
15. Mannheim, K. : See (10) pp. 300-1.
16. Mulkay, M. : See (5) p. 16.
17. Ibid., p. 19.
18. Ibid., pp. 19-21.
19. We will not elaborate on the reasons for the birth of sociology during this time period as this is an interesting study on its own.

20. See, for example, the following writings where references are made to the character of Science as a specialized social activity :

(a) Durkheim, E. (1915) : *The Elementary Forms of Religious Life*, Allen and Unwin, London. In contrasting science with religion, Durkheim discusses science as a topic for sociological analysis, and sees science as an objective account of the real world.

(b) Tenbruck, F.H. (1974) : 'Max Weber and the Sociology of Science : A Case Reopened', *Zfs* 3,3 : 312-320 where it is argued that Weber had sketched out a programme for the sociology of science which is essential for an understanding of the historical development of science.

(c) Weber, M. (1958) : 'Science as a Vocation', In Gerth, H. and Mills, C.W. (eds.), *From Max Weber*, Oxford University Press, New York, for Weber's lecture on the nature of the scientist's role.

21. Sociologists failed to examine science as an institutional arrangement or to investigate directly the character of science as a social or cognitive phenomenon.

22. Merton, R. (1973) : *The Sociology of Science*, The University of Chicago Press, Chicago and London. p. 217.

23. Galileo had contended that the judgement of man had nothing to do with the conclusions of science which are true and necessary. Sociologists generally agreed with this and sought an analysis of the nature of science as a social phenomenon which was consistent with these epistemological assumptions.

24. See Bloor, D. (1976) : *Knowledge and Social Imagery*, Routledge and Kegan Paul, London, pp. xi - 156, where Bloor attempts to establish that no realms of human knowledge can be exempted from sociological analysis.

25. Mannheim, K. : See (10) pp. 290-1.

26. See Tobey, R.C. (1971) : *The American Ideology of National Science*, The University of Pittsburgh Press, Pittsburgh.

27. Salomon, J.J. (1977) : 'Science Policy Studies and the Development of Science Policy.' In Spiegel, R.I. and Price, D.S. (eds.) *Science, Technology and Society*, Sage Publications, London and Beverley Hills, pp. 52-55.

28. Mulkay, M. (1980) : Trend Report Part One : Sociology of Science in the West, *Current Sociology*, Vol. 28, No. 3, p. 9.

29. Ben-David, J. (1971) : *The Scientist's Role in Society*, Englewood Cliffs, Prentice-Hall, New Jersey, p. 12.

30. Ibid., p. 8.

31. Ibid., p. 11.

32. See Holton, G. (1973) : *Thematic Origins of Scientific Thought*, Harvard University Press, Cambridge, Mass.

33. The epistemological thread which runs through the "strong programme" is the notion of scientific rationality as linked to rationality in a sociological sense. A modified version of this programme is often identified as the "Bath School" or "mild programme".

34. Barnes, R. (1974) : *Scientific Knowledge and Sociological Theory*, Routledge and Kegan Paul, London. p. ix.

35. Bloor, D. : See (24) p. 5.

36. Barnes, B. : See (34) p. 9 where he states that "theories are imposed upon reality rather than deriving from it."

37. Ibid., p. 116.

38. Bloor, D. : See (24) p. 3.

39. See Knorr-Cetina, K. (1977) : 'Producing and Reproducing Knowledge : Descriptive or Constructive?', *Social Science Information* 16, pp. 669-696.

40. Ibid., p. 670.

41. Ibid., p. 676.

42. Ibid., pp. 682-3.

43. See Gilbert, G.N. (1977) : 'Referencing as Persuasion,' *Social Studies of Science* 7, which deals with citing. References are seen as aids to increase a paper's persuasive power and research papers themselves are seen as instruments of persuasion.

44. Knorr-Cetina, K. : See (39) p. 689.

45. This approach has focussed on modern episodes of discovery and replication in the social sciences. It was identified by Chubin, D. and Restivo, S. (1983) : The 'Mooting' of Science Studies : Research Programmes and Science Policy. In Knorr-Cetina, K. and Mulkay, M (eds) *Science Observed. Perspectives on the Social Study of Science*, Sage Publications, London.

46. See Collins, H. (1975) : 'The Seven Sexes : A Study in the Sociology of a Phenomenon, or The Replication of Experiment in Physics,' *Sociology 9* pp. 205-224.

47. Ibid., p. 216.

48. Ibid., p. 215.

49. See Wynne, B. (1976) : 'C.G. Barkla and the J Phenomenon,' *Social Studies of Science 6*, pp. 307-347.

50. Barkla's theory was formulated in terms of the 'classical' interpretation of X-ray scattering, and was widely accepted until the early 1920s when physicists who were now using the spectrometer because of its precision and the vast amount of experimental work it opened up, failed to confirm Barkla's results. However, from Barkla's point of view, this was to be expected. He reasoned that the beams which he wished to measure were of such a low intensity, that they would not be detected by the new observational techniques, and due to this,

Barkla chose to use 'old-fashioned' absorption methods which were difficult to manipulate experimentally, but which had the crucial advantage of being more sensitive to low-intensity emissions. Wynne maintains that Barkla's reasoned technical strategy was not fully considered in assessments of his work.

51. This is an example of how scientists make committments to particular kinds of research practice and then generate results which are acceptable only within the terms of reference of that committment. Wynne's study furnishes us with evidence of Knorr-Cetina's observations viz. that local, intralaboratory traditions of research practice exist, and are associated with the use of distinctive techniques.

52. See Hirsch, H. and Nowotny, H. (1977) : 'Information and Opposition in Austrian Nuclear Energy Policy,' *Minerva*, 15, pp. 316-334.

53. See Zuckerman, H. (1977) : 'Deviant Behaviour and Social Control in Science,' in E. Sagarin (ed.), *Deviance and Social Change*, Sage, London and Beverley Hills.

54. Kuhn, T. (1977) : *The Essential Tension*, The University of Chicago Press, Chicago and London. p. 327.

55. Knorr-Cetina, K. : See (39) p. 670.

56. Mulkay, M. : See (5) p. 92.

57. Much of current psychological research in education is based on the positivist tradition.

58. Ary, D., Jacobs, L. and Razavich, A. (1972) : *Introduction to Research in Education*, Holt, Rinehart and Winston. p. 21.

59. Malmquist, E. and Grundrin, H.H. (1975) : *Educational Research in Europe Today and Tomorrow*, GWK Gleerup. p. 23.

60. Mussen, P.H., Conger, J.J. and Kagan, J. (1974) : *Child Development and Personality*, Harper International. p. 3.

61. Cunningham F. (1974) : *Objectivity in Social Science*, University of Toronto Press. p. 4.

62. Piaget, J. (1971) : *Biology and Knowledge* Edinburgh University Press., p. 65.

63. Although we are aware that Piaget concentrated essentially on cognitive issues, some of these are useful concepts.

64. See Kuhn, T.S. (1962) : *The Structure of Scientific Revolutions*, University of Chicago Press.

65. Popper, K. (1972) : *Objective Knowledge*, Oxford University Press. p. 196.

66. See Bridgman, P.W. (1958) : 'Remarks on Niels Bohr's Talk,' *Daedalus*, Spring.

67. If educational researchers working within the positivist paradigm can manage to get their claims that their research is "scientific" accepted, their work is legitimated.

68. Fay, B. (1975) : *Social Theory and Political Practice*, Allen and Unwin, London, p. 51.

69. Phillipson, M. (1972) : Theory, methodology and conceptualization. In Filmer, P. et al. *New Directions in Sociological Theory*, Collier-Macmillan, London. p. 95.

70. Mulkay, M. : See (5) p. 50.

71. Knorr-Cetina, K. and Mulkay, M. (1983) : *Science Observed : Perspectives on the Social Study of Science*, Sage Publications, London, pp. 5-6.

72. Mannheim, K. (1960) : *Man and Society in an Age of Reconstruction*, Routledge and Kegan Paul, London, p. 228.

73. Mannheim, K. : See (10) p. 300.

74. See Zijderveld, A.C. (1972) : *De Relativiteit van Kennis en Werkelijkheid*, Boom, Meppel.

75. Mannheim, K. : See (71) p. 300.

76. Mannheim, K. : See (10) p. 301.

77. Mannheim, K. : See (71) pp. 153-164.

78. Mannheim, K. : See (10) p. 305.

BIBLIOGRAPHY

1. APPLE, M. (1982a) : *Education and Power*, Routledge and Kegan Paul, London.

2. APPLE, M. (1982b) : *Cultural and Economic Reproduction in Education*, Routledge and Kegan Paul, London.

3. ARY, D.; JACOBS, L. AND RAZAVICH, A. (1972) : *Introduction to Research in Education*, Holt, Rinehart and Winston.

4. BARNES, B. (1974) : *Scientific Knowledge and Sociological Theory*, Routledge and Kegan Paul, London.

5. BARTON, L. AND WALKER, S. (eds.) (1984) : *Social Crisis in Education*, Croom Helm, London.

6. BECKER, H.S. (ed.) (1967) : *'Observations'*, Aldine, Chicago.

7. BEN-DAVID, J. (1971) : *The Scientist's Role in Society*, Englewood Cliffs, Prentice-Hall, New Jersey.

8. BENTON, T . (1977) : *Philosophical Foundations of the Three Sociologies*, Routledge and Kegan Paul, London.

9. BERGER, P. AND LUCKMANN, T. (1967) : *The Social Construction of Reality*, Allen Lane, London.

10. BLACKLEDGE, D. AND HUNT, B. (1985) : *Sociological Interpretations of Educatio*: Croom Helm, London.

11. BLOOR, D. (1976) : *Knowledge and Social Imagery*, Routledge and Kegan Paul, London.

12. BLUM, A.F. (1974) : *Theorizing*, Heinemann Educational Books, London.

13. BLUMER, H. (1971) : Sociological Implications of the thought of G.H. Mead, *School and Society*, Open University Reader.

14. BLUMER, H. (1972) : 'Action vs. Interaction,' review of Relations in Public, by E. Goffman, *Society*, 9 (April).

15. BORING, E.G. (1953) : 'The role of theory in experimental psychology,' *American Journal of Psychology*, 66.

16. BOWLES, S. AND GINTIS, H. (1976) : *Schooling in Capitalist America*, Routledge and Kegan Paul, London.

17. BRIDGMAN, P.W. (1958) : 'Remarks on Niels Bohr's Talk,' *Daedalus*, Spring.

18. BRYMAN, A. (1984) : 'The debate about quantitative and qualitative research : a question of method or epistemology,' *The British Journal of Sociology*, Vol. XXXV, no. 1.

19. BURREL, G. AND MORGAN, G. (1979) : *Sociological Paradigms and Organisational Analysis*, Heinemann Educational Books, London.

20. BYNNER, J. AND STRIBLEY, K.M.(eds.) (1979) : *Social Research : Principles and Procedures*, Longmans, London.

21. CENTRE FOR CONTEMPORARY CULTURAL STUDIES (CCCS), University of Birmingham (1978) : *On Ideology*, Hutchinson, London.

22. CENTRE FOR CONTEMPORARY CULTURAL STUDIES (CCCS), University of Birmingham (1981) : *Unpopular Education : Schooling and Social Democracy in England since 1944*, Hutchinson, London.

23. CICOUREL, A. (1964) : *Method and Measurement in Sociology*, Free Press, New York.

24. COHEN, L. AND MANION, L. (1980) : *Research Methods in Education*, Croom Helm, London.

25. COHEN, P. (1968) : *Modern Social Theory*, Heinemann, London.

26. COLEMAN, J.S. et al (1968) : *Equality of Educational Opportunity*, U.S. Govt. Printing Office, Washington.

27. COLLINS, H. (1975) : 'The Seven Sexes : A Study in the Sociology of a Phenomenon, or The Replication of Experiment in Physics,' *Sociology*, 9.

28. COSER, L. AND ROSENBERG, B. (eds.) (1966) : *Sociological Theory*, Collier-Macmillan, London.

29. COSIN, B.R. (1972) : *Education : Structure and Society*, Penguin, Harmondsworth.

30. COXHEAD, P. (1977) : 'Some Comments on Bowles and Gintis,' Appendix to Unit 13 of E202, *Schooling and Society*, Open University Press, Milton Keynes.

31. CUNNINGHAM, F. (1974) : *Objectivity in Social Science*, University of Toronto Press.

32. CURTIS, J.E. AND PETRAS, J.W. (1970) : *The Sociology of Knowledge*, Praeger, New York.

33. CUZZORT, R.P. (1969) : *Humanity and Modern Sociological Thought*, Holt, Rinehart and Winston, New York.

34. DAVIE, R. AND BUTLER, N.R. (1972) : *From Birth to Seven*, Second Report of the National Child Development Study, Longman, London.

35. DELAMONT, S. (1976) : *Interaction in the Classroom*, Metheuen, London.

36. DENZIN, N.K. (1969) : 'Symbolic Interactionism and Ethnomethodology : A Proposed Synthesis,' *American Sociological Review*, 34.

37. DENZIN, N.K. (1970) : *The Research Act*, Aldine, Chicago.

38. DOUGLAS, J.D. (ed.) (1970) : *Understanding Everyday Life*, Chicago : Aldine Publishing, Routledge and Kegan Paul, London.

39. DOUGLAS, J.D. (1976) : *Investigative Social Research*, Sage, Beverley Hills.

40. DREITZEL, H.P. (ed.) (1970) : *Recent Sociology*, no. 2, Macmillan, London.

41. DURKHEIM, E. (1915) : *The Elementary Forms of Religious Life*, Allen and Unwin, London.

42. DURKHEIM, E. (1964) : *The Rules of Sociological Method*, Free Press, New York.

43. FAY, B. (1975) : *Social Theory and Political Practice*, Allen and Unwin, London.

44. FILMER, P. et al (1972) : *New Directions in Sociological Theory*, Collier-Macmillan, London.

45. FILSTEAD, W.J. (ed.) : *Qualitative Methodology : Firsthand Involvement with the Social World*, Markham Pub. Co., Chicago.

46. FLOUD, J. AND HALSEY, A.H. (1958) : "The Sociology of Education : A Trend Report and Bibliography," *Current Sociology*, 7.

47. FRIEDRICHS, R. (1970) : *A Sociology of Sociology*, Free Press, New York.

48. GARFINKEL, H. (1952) : *The Perception of the Other : A Study in Social Order*. Ph.D. diss., Harvard University.

49. GARFINKEL, H. (1967) : *Studies in Ethnomethodology*, Englewood Cliffs : Prentice-Hall.

50. GERTH, H. AND MILLS, C.W. (eds.) (1958) : *From Max Weber*, Oxford University Press, New York.

51. GIDDENS, A. (ed.) (1974) : *Positivism and Sociology*, Heinemann, London.

52. GIDDENS, A. (1976) : *New Rules of Sociological Method : a Positive Critique of Interpretative Sociologies*, Hutchinson, London.

53. GIGLIOLI, P.P. (ed.) (1972) : *Language and Social Context*, Penguin, Harmondsworth, Middlesex.

54. GILBERT, G.N. (1977) : 'Referencing as Persuasion,' *Social Studies of Science*, 7.

55. GLASER, B.G. (1978) : *Theoretical Sensitivity*, The Sociology Press, California.

56. GOFFMAN, E. (1955) : On Face-Work, *Psychiatry 18*, 3.

57. GOFFMAN, E. (1959) : *The Presentation of Self in Everyday Life*, Doubleday : Garden City.

58. GOULDNER, A. (1970) : *The Coming Crisis in Western Sociology*, Basic Books, New York.

59. HABERMAS, J. (1965) : Erkenntnis und Interesse, *Merkur*, Nr. 213, 19.

60. HABERMAS, J. (1970a) : 'On Systematically Distorted Communication,' *Inquiry*, 13.

61. HABERMAS, J. (1970b) : 'Towards a Theory of Communicative Competence,' *Inquiry*, 13.

62. HABERMAS, J. (1972) : *Knowledge and Human Interests*, Heinemann, (Published in U.S. by Beacon Press).

63. HABERMAS, J. (1974) : *Theory and Practice*, Heinemann, (Published in U.S. by Beacon Press).

64. HALSEY, A.H.; FLOUD, J. AND ANDERSONS, C.A. (eds.) (1961) : *Education, Economy and Society*, The Free Press, New York.

65. HAMMERSLEY, M. AND WOODS, P. (eds.) (1976) : *The Process of Schooling*, Routledge and Kegan Paul, London.

66. HAMMERSLEY, M. (1977) : 'Teacher Perspectives', Unit 9 of E202, *Schooling and Society*, Open University Press, Milton Keynes.

67. HAMMERSLEY, M. (1984) : 'Some Reflections on the Macro-Micro Problem in the Sociology of Education,' *Sociological Review*, vol. 32, no. 2.

68. HARGREAVES, D. (1975) : *Interpersonal Relations and Education*, Student Edition, Routledge and Kegan Paul, London.

69. HIRSCH, H. AND NOWOTNY, H. (1977) : 'Information and Opposition in Austrian Nuclear Energy,' *Minerva 15*.

70. HOLTON, G. (1973) : *Thematic Origins of Scientific Thought*, Harvard University Press, Cambridge, Mass.

71. HUSSERL, E. : *Ideen*, Nachwort, vol. 3.

72. HUSSERL, E. (1950) : *Die Idee der Phänomenologie*, The Hague.

73. KARABEL, J. AND HALSEY, A.H. (eds.) (1977) : *Power and Ideology in Education*, Oxford University Press.

74. KEAT, R. AND URRY, J. (1975) : *Social Theory as Science*, Routledge and Kegan Paul, London.

75. KNORR-CETINA, K.D. (1977) : 'Producing and Reproducing Knowledge : Descriptive or Constructive?', *Social Science Information, 16.*

76. KNORR-CETINA, K.D. (1981) : *The Manufacture of Knowledge : Toward a Constructivist and Contextual Theory of Science*, Pergamon, Oxford.

77. KNORR-CETINA, K.D. AND MULKAY, M. (eds.) (1983) : *Science Observed Perspectives on the Social Study of Science*, Sage Publications, London.

78. KOCKELMANS, J. (ed.) (1967) : *Phenomenology*, Garden City, Anchor, New York.

79. KROHN, R. (1975) : *Wissenssoziologie und Wissensschaftssoziologie Entwicklung eines gemeinsamen Untersuchungsrahmens*. In : Wissensschaftssoziologie. Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderheft.

80. KUHN, M.H. (1964) : 'Major Trends in Symbolic Interactionist Theory in the past Twenty-Five years,' *Sociological Quarterly 5 (Winter).*

81. KUHN, T.S. (1962) : *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago.

82. KUHN, T. (1977) : *The Essential Tension*, The University of Chicago Press, Chicago and London.

83. LIGHT, D. (1979) : 'Surface Data and deep structure : observing the organization of professional training,' *Administrative Science Quarterly*, vol. 24, no. 4.

84. LIN, N. (1976) : *Foundations of Social Research*, McGraw-Hill, New York.

85. LINCOLN, Y.S. AND GUBA, E.G. (1985) : *Naturalistic Inquiry*, Sage, Beverly Hills.

86. MALMQUIST, E. AND GRUNDRIN, H.H. (1975) : *Educational Research in Europe Today and Tomorrow*, GWK, Gleerup.

87. MANNHEIM, K. (1936) : *Ideology and Utopia*, Harcourt, New York.

88. MANNHEIM, K. (1952) : *Essays on the Sociology of Knowledge*, Routledge and Kegan Paul, London.

89. MANNHEIM, K. (1960) : *Man and Society in an Age of Reconstruction*, Routledge and Kegan Paul, London.

90. MARSH, C. (1979) : 'Problems with surveys : method or epistemology,' *Sociology*, vol. 13, no. 2.

91. MARX, K. (1968) : Wage Labour and Capital in *Selected Works*, 2 vols, Longman, London.

92. MARX, K. (1970) : *A Contribution to the Critique of Political Economy*, Progress Publishers, Moscow.

93. MEAD, G.H. (1907) : 'Policy of the Elementary School Teacher,' *Elementary School Teacher*, 8.

94. MEAD, G.H. (1910) : 'Psychology of Social Consciousness Implied in Instruction,' *Science*, 31.

95. MEAD, G.H. (1912) : 'The Mechanism of Social Consciousness,' *Journal of Philosophy*, 9.

96. MEAD, G.H. (1934) : *Mind, Self and Society*, University of Chicago Press, Chicago.

97. MEAD, G.H. (1936) : *Movements of Thought in the Nineteenth Century;* edited by M.H. Moore, University of Chicago.

98. MELTZER, B.N.; PETRAS, J.W., AND REYNOLDS, L.T. (1975) : *Symbolic Interactionism : Genesis, varieties and criticism*, Routledge and Kegan Paul, London.

99. MERTON, R. (1973) : *The Sociology of Science*, The University of Chicago Press, Chicago and London.

100. MILL, J.S. (1843) : *A System of Logic*, Longmans, London.

101. MULKAY, M. (1979) : *Science and the Sociology of Knowledge*, Allen and Unwin, London.

102. MULKAY, M. (1980) : Trend Report Part One : Sociology of Science in the West, *Current Sociology*, vol., 28, no. 3.

103. MULLINS, N.C. with the assistance of MULLINS, C.J. (1973) : *Theories and Theory Groups in Contemporary American Sociology*, Harper and Row, New York.

104. MUSSEN, P.H.; CONGER, J.J. AND KAGAN, J. (1974) : *Child Development and Personality*, Harper International.

105. NATANSON, M. (ed.) (1970) : *Phenomenology and Social Reality*, Den Haag.

106. NEL, B.F. (1980) : Phenomenology as Methodological Foundation for Social Research, *Journal University of Durban-Westville*, vol. 3, no. 3.

107. PARSONS, T. (1971) : *The System of Modern Societies*, Prentice-Hall, Englewood Cliffs.

108. PATTON, M.Q. (1975) : *Alternative Evaluation Research Paradigms*, University of North Dakota Press, N. Dakota.

109. PIAGET, J. (1971) : *Biology and Knowledge*, Edinburgh University Press.

110. PLAMENATZ, J. (1963) : *Man and Society*, Longmans, Green, London.

111. POPPER, K. (1972) : *Objective Knowledge*, Oxford University Press.

112. REESE, W.L. (1980) : *Dictionary of philosophy and religion*, Atlantic Highlands, NJ : Humanities.

113. RIST, R.C. (1977) : 'Overview - on the relations among educational research paradigms : from disdain to detente,' *Anthropology and Education Quarterly*, vol. 8.

114. RUTTER, M. et al (1979) : *Fifteen Thousand Hours*, Harvard University Press, Cambridge.

115. SAGARIN, E. (ed.) (1977) : *Deviance and Social Change*, Sage, London and Beverley Hills.

116. SCHUTZ, A. (1954) : 'Concept and Theory Formation in the Social Sciences,' *Journal of Philosophy*, 51.

117. SCHUTZ, A. (1964) : *Collected Papers II : Studies in Phenomenological Philosophy*, Martinus Nijhoff, The Hague.

118. SCHUTZ, A. (1970) : *Reflections on the Problem of Relevance*, New Haven.

119. SCHUTZ, A. (1972) : *The Phenomenology of the Social World;* trans. by G. Walsh and F. Lehnert, Heinemann, London.

120. SHIBUTANI, T. (ed.) (1970) : *Human Nature and Collective Behaviour*, Englewood Cliffs, Prentice-Hall.

121. SMITH, H.W. (1975) : *Strategies of Social Research : The Methodological Imagination*, Prentice Hall, London.

122. SNIZEK, W.E. (1976) : 'An empirical assessment of "Sociology : A Multiple Paradigm Science,"' *The American Sociologist*, vol. 11, no. 4.

123. SPIEGEL, R.I. AND PRICE, D.S. (eds.) (1977) : *Science, Technology and Society*, Sage Publications, London and Beverley Hills.

124. TENBRUCK, F.H. (1974) : 'Max Weber and the Sociology of Science : A Case Reopened,' *Zfs*, vol. 3, no. 3.

125. TOBEY, R.C. (1971) : *The American Ideology of Natural Science*, The Univ. of Pittsburgh Press, Pittsburgh.

126. TROW, M. (1957) : 'Comment on participant observation and interviewing,' *Human Organization*, vol. 16, no. 3.

127. TURNER, J. (1974) : *The Structure of Sociological Theory*, Homewood, Ill., Dorsey.

128. TURNER, R. (ed.) (1974) : *Ethnomethodology*, Penguin, Baltimore.

129. VAN MAANEN, J. (1979) : 'Reclaiming qualitative research for organizational research : a preface,' *Administrative Science Quarterly*, vol. 24, no. 4.

130. WALLACE, W.L. (ed.) (1969) : *Sociological Theory*, Aldine, Chicago.

131. WALLER, W. (1932) : *The Sociology of Teaching*, Wiley, New York.

132. WARWICK, D.P. AND LININGER, C.A. (1975) : *The Sample Survey : Theory and Practice*, McGraw-Hill, New York.

133. WEBB, E.J. et al (1966) : *Unobtrusive Measures : Non-reactive Research in the Social Sciences*, Rand McNally, Chicago.

134. WEBER, M. (1964) : *The Theory of Economic and Social Organization*, Free Press, New York.

135. WHYTE, W.F. (1976) : 'Research Methods for the study of conflict and co-operation,' *The American Sociologist*, vol. 11, no. 4.

136. WOODS, P. AND HAMMERSLEY, M. (eds.) (1977) : *School Experience : Explorations in the Sociology of Education*, Croom Helm, London.

137. WOODS, P. (1979) : *The Divided School*, Routledge and Kegan Paul, London.

138. WOODS, P. (1983) : *Sociology and the School : An Interactionist Viewpoint*. Routledge and Kegan Paul, London.

139. WYNNE, B. (1976) : 'C.G. Barkla and the J Phenomenon,' *Social Studies of Science*, 6.

140. YOUNG, M.F.D. (ed.) (1971) : *Knowledge and Control*, Collier-Macmillan, London.

141. YOUNG, M. AND WHITTY, G. (eds.) (1977) : *Society, State and Schooling*, Falmer Press, Lewes.

142. ZELDITCH, M. (1962) : 'Some methodological problems of field studies,' *American Journal of Sociology*, vol. 67, no. 5.

143. ZIJDERVELD, A.C. (1972) : *De Relativiteit van Kennis en Werkelijkheid*, Boom, Meppel.