Subject Identity And School Knowledge.

Thesis

How to cite:

For guidance on citations see FAQs.

© 1977 David Smetherham

https://creativecommons.org/licenses/by-nc-nd/4.0/

Version: Version of Record

Link(s) to article on publisher’s website:
http://dx.doi.org/doi:10.21954/ou.ro.0000fcba

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online’s data policy on reuse of materials please consult the policies page.

oro.open.ac.uk
SUBJECT IDENTITY AND

SCHOOL KNOWLEDGE

BY

David Smetherham.

Thesis submitted in fulfilment of the requirements for the degree of M. Phil. at the Open University, 1977.

Sociology of Education, Faculty of Educational Studies.

Date of submission: 8.7.77.

Date of award: 10.5.78
This thesis examines the nature of the pedagogic subject identity from the perspective of a participating observer who eventually became an observing participant. What has been written is an 'insider' account of the secondary school teacher's subject identity yet even the act of writing this thesis resulted in the insider becoming an outsider: his knowledge was no longer appropriate to his identity.

An examination of the way in which one's social identity of research personne and subject practitioner interact as a result of the knowledge held by virtue of these socially located positions leads on to an awareness of the rhetorics of knowledge. The performances of the actor are constrained by the knowledge appropriate to this identity since the appropriateness of the one knowledge necessarily limits access to other knowledge. Furthermore, the knowledge each party holds of the other will be more or less accurate according to the processual aspects of the identity.

One consequence of this view is to challenge the view that research accounts are more credible than those of the participating actors. It may be different, and this will be so because of the different location of the salient identity. The researcher has no reason to exempt himself from the same theoretical and pragmatic perspective with which he views the approached group since other groups also theorize about the meanings for them of such strangers.
# CONTENTS

## Chapter One:

**Participant Observation:** Constructing Sociological Knowledge  1

- The Social Location of the Observing Participant  16

- The Knowledge of the Observing Participant  35

- The Perspective of the Observing Participant  64

Summary  97

## Chapter Two:

- The Subject Identities of Teachers  108

- Spatial Rhetoric And Subject Knowledge  119

- Subject Perspectives And Segmented Identity  160

Summary  206

## Chapter Three:

- And School Knowledge  229

- The Segmented Ownership of School Knowledge  237

- Changing Knowledge  271

Summary  315
Chapter Four:

Concluding Remarks ............................. 325

Bibliography: .................................. 327

Figures:

1. Research Methodology ......................... 8
2. Map of Institution ........................... 130
3. Plan of staffroom ............................. 152
4. Prestige Rankings ............................. 203
CHAPTER ONE.

PARTICIPANT OBSERVATION:

CONSTRUCTING SOCIOLOGICAL KNOWLEDGE.

The argument that is developed in the course of this chapter directs the reader's attention to those varied theoretical assumptions consequent upon, and perhaps also leading to, the choice of participant observation as a means of collecting and subsequently interpreting sociological information: assumptions that will be shown to constrain the activities of the worker in the field. As for the social psychologist, the common-sense knowledge of the sociologist includes an essential, if implicit, ideological selection of what counts as data according to the criteria of whatever paradigm, theoretical stance, or methodology, is considered to be appropriate (Gross, 1974). Occupying a position of some importance in the development of such a proposition is the notion that publicly available research reports fail to explicate, and for those following the view of Cicourel (1973) must of necessity fail to explicate, the precise nature of the interactive relationship that exists between the researcher and his data.

Certainly the relationship is a complex one in which the quality of the data will be affected by the success with which the researcher acts out the role of observing participant, that negotiated role of social actor that is accepted by such significant others as are contained within the parameters of a given social situation, and the level of meanings to which access is granted by both the observed and observing group. The data will be subject to constraints arising from the management of the emerging research persona, and therefore the consequential social action. It will involve decisions about who should be approached for certain
information, and the resolution of difficulties concerning how such contacts are to be sustained. The situational location of these research bargains may well preclude or aid the acquisition of other, different, knowledge. And what is to be made of Becker's (1973) caution that:

"... too great an emphasis on first-hand observation may cause us unintentionally to limit ourselves to those groups and sites we can easily get access to." (Op. cit. p.193).

Furthermore, it may well be contended that acceptance of any role within any given social world inevitably involves the imposition of a particular fabric of meanings with which to interpret the activity of that world. For example, the actions of teachers both in and out of their classrooms is subject to various institutional constraints — and the existence of these constraints ought to be reflected in the (say) sociologically constructed meanings attributed to the observed processes by the interested onlooker. However, the existence of such 'meanings' should not be taken as implying they are necessarily shared in an asymmetrical way by the parties to an action since each participant will possess his own, socially located, perspective within which the meanings of events are fabricated. (In a similar mode the 'public' and 'private' opinions of individuals are not necessarily coincident). Such a proposition should not be taken as suggesting that one is somehow more 'real' than the other but rather that both occur within a particular interpretative framework.

In line with such a stance the reader is warned against the expectation that this thesis seeks to provide definitive answers to these questions: the concern is more accurately
portrayed as developing an awareness that accounts of the social world, such as those provided by the observing participant, are both situationally located and socially constructed. As these accounts are based upon assumptions derived in part from the appropriate epistemic community the requirement is for the fieldworker to demonstrate the existential nature of the accomplishments (Phillipson, 1972). The present proposal is therefore one arguing that, in order for others to experientially appropriate the work of the researcher, it becomes necessary for the observing participant to provide the reader with an awareness of the essentially sensitizing nature of the operational processes being used. It is now some time since Hammond (1964) was among those drawing attention to the way in which the research process itself was a relatively unchronicled dimension in the sociological literature, yet the very ideology of the research method requires that it no longer be considered adjunctive to the substantive research findings. The chosen research methodology is rather viewed as a formative process profoundly influencing the sociological re-construction of that knowledge. Indeed, without an understanding of the interactive processes involved in pursuing the (paradigmatic) career of social actor cum researcher neither writer nor reader will be able properly to evaluate those meanings attached to that activity labelled (by the sociological community) 'participant observation'. It was an increasing consciousness of the critical importance of this relationship during the course of the writer's career as researcher that led to an intensive questioning of the particular reality that was the object of the research. The research activity transcends the realities of two social worlds: that represented by the community of
scholars of which he is a practitioner, and that represented by the social world in which he is at that moment participating. Both will interactively constitute the field of human endeavour from which the appropriate data will be extracted. An exemplar illustrating the potential of such a perspective is to be found in the 'fact' of an author's work being addressed - either implicitly or explicitly - to a particular audience has received relatively little attention from the sociological community. This is so notwithstanding the resultant problematizing of the research activity that emanates from such a fact. Thus, the translation of what is subsequently perceived to be a 'major work' may prove a profound and sociologically significant event. A relevant instance of this proposition can be discerned in the translations of those works by Schutz from Dutch into English, an activity enabling Dale (1974) to comment:

"The rapid development of interest in phenomenology amongst English speaking sociologists is itself an intriguing problem in the sociology of knowledge."

In a similar fashion, an analysis of the ways in which footnotes and bibliographies are employed as sources of legitimation within the context of a particular writer's argument, should prove instructive of the various processes by which specific books and articles come to be viewed as 'belonging' to particular sociological traditions. Young (1971) would be a comparatively recent example from within the British phenomenological tradition. Thus, whenever a review of the 'relevant' literature is undertaken (such as that carried out by the writer for the purposes of this thesis) the fact that a particular book 'means' something is a paradigmatic determination in which the meaning may be simply:
Sociological literature can therefore be shown as possessing its own social dimension and, by implication, acknowledges the particular scholarly community in which it originated and the audience to whom it is directed. Thus, even when participation is confined to reading, the reading of one book rather than another is the subject of implicit assumptions concerning what the relevant arguments and issues are perceived to be. Indeed, the reading of one book rather than another—by providing access to one particular corpus of knowledge rather than another—serves to differentially legitimate claims to 'own' that knowledge. The theoretical formulation that most nearly approximates to such a perspective is perhaps contained in Bourdieu's (1971) enlightening account of the processes of selection that operate both prior to, and concomitant with, the publication of what he terms a 'creative project'. A similar process to that which occurs in the subsequent 'public naming' of such documents. Within the immediate context the notion of publication refers to commercial publishing activities although much of the argument is equally applicable to, for example, theses presented for higher degrees. Whilst obviously requiring further refinement the proposition provides some explanation for the fact that published documents pertaining to sociological work typically present any critique of the research methodology adopted by the author only in the form of an appendage to the
1. Bennett, Neville; Brunner, Jerome; Entwhistle Noel; Marsh, Leonard; Owen, Joslyn; and Roger, Vincent. 'Formal and Informal Matters - Conversational Extracts' Times Educational Supplement 4th. June, 1976 p.18. (It may or may not be significant that much of the subsequent criticism was aimed the methodology).

'substantive findings' of the particular work in question. Bennett\textsuperscript{1} is therefore able to respond to a query concerning the lack of a more detailed methodological appendix in a recently published book\textsuperscript{2} with the justification:

"It would have made the price of the book over three pounds. At a very late stage I was asked to drop fifty pages, and frankly it was easier to drop them out of the appendix than to rewrite the book."

A similar trait is implicit in the collection of papers edited by Shipman (1976) in which he asks contributors to discuss research that had previously been carried out and reported upon.

"They were asked to include not only the research design, but the personal and professional problems that had to be overcome, the thinking that lay behind their work and the way it was finally produced for publication. They were asked to tell it as it happened, to put in the brains and heart of the research experience that had often been left out of the original book for lack of space and the conventions of reporting."


Conversely, although perhaps less frequently, one comes across books devoted to 'methodology' that contain little attempt at providing a conscious and detailed exposition of a specific substantive study. Johnson (1975) perhaps comes closest to such an account yet even so he still fails to explicate the sequential mode and effects of the interaction between his chosen methods of collecting data, the data that was actually collected, and the
interpretations that were placed upon that data. One constantly returns to the original contention regarding the unexplicated relationship between the mode of data collection and the consequent findings derived from such data, a relationship that is essentially ideological.

Of course, there may well be some difficulty in establishing the precise origins of any apparent discreteness between 'methodology' and 'substantive findings' that seemingly occurs in published documents. For example, whether or not such a distinction arises within the sociological community (which is the personal inclination of the writer) or with the commercial publisher, its existence demonstrates the ideological dimension of public sociological literature. Shipman (1976) also notes that:

"... publishers are on the lookout for the research that is going to touch some sensitive topical nerve centre, while simultaneously carrying academic weight."


(Indeed, if the emergence of definitive epistemological areas of study is accompanied by, or concomitant with, the development of a 'humour culture' as Berger (1973) suggests then, whilst at one time it may have been true that few jokes existed about sociologists, this is probably no longer the case. If 'methodology' is indeed becoming an epistemological area of study then it is perhaps significant that one increasingly comes across jokes about the research activity - see Figure One).

If one accepts the repeatedly made suggestion that the actual collection of data is a relatively low status
Figure One.

occupation within the research process (Roth, 1956; and Platt, 1976; rehearse the relevant arguments), then the warning of Sterling against holding the assumption that every testing of a hypothesis possesses an equal chance of publication has, within the context of the present proposal, a certain transpositional salience for the novitiate fieldworker. Thus, one consequence of the processes by which negative results of replicated research are unlikely to be accepted for publication in learned journals, is that some evidence is provided for the suggestion that the beginning participant observer will experience a degree of difficulty in finding out 'how to do it' (Geer, 1968). This will be so because of their limited access to appropriate and experiential documentation, a difficulty compounded by other considerations receiving more detailed treatment later in this chapter.

The cumulative effect of the foregoing is such as to reinforce Becker's (1970) demonstration of the marginality of qualitative research strategies as portrayed in the biographical histories of particular institutional personnel (namely, the Chairmen of the Section on Methodology, American Sociological Association) who are more closely identified with a quantitative style of social research. Finally, the ideological dimension of such research is also revealed in a suggestion that publicly available literature deals with a different sort of sociological reality than that carried out by research students in preparation for higher degree submissions. Such an interpretation seems to be implied in a recent report issued by the Social Science Research Council in which it was stated that topics chosen by
postgraduate students (for example, theoretical sociology, the sociology of knowledge, and political sociology) reflected their relative lack of time and money and were a relatively economical way of obtaining a Ph.D. Returning to the notion of the research activity was transcending the realities of two social worlds, that peopled by like-minded sociologists and that world inhabited by the approached group, the writer now reverts to a consideration of the particular 'reality' that was the object of the research. Since many of these issues will be articulated within the main body of the thesis the writer merely notes in passing the major changes in perspective which have accompanied the research activity. As such they stand as signposts indicating, in retrospect, the biographical route through which the writer journeyed before arriving at the standpoint represented by this thesis.

The initial application to read for a higher degree was made during the writer's probationary year as a teacher. Having recently qualified as a graduate with a Bachelor of Education degree the proposal at this stage reflected this twin interest. It was concerned to examine the nature of the degree, the extent to which holders of this degree represented a 'third-force' in teacher typologies, and the way in which different modes of achieving this status resulted in socially differentiated sorts of teacher. The main thrust of the research activity spanning some eighteen months was a theoretical analysis of the different courses offered by Colleges and Universities and actually reached the point of an outline questionnaire together with a selected sample of teachers to whom it would be sent. At this juncture two separate but emerging
events became fateful for the development of the thesis. Progressively more interest had been shown in the difficulties of the beginning teacher as such rather than investigating any differences between them: at this distance it is difficult to evaluate whether or not one's supervisors were guiding the enquiry in this direction either consciously or unconsciously (see for example their respective and then recently completed work, Hextall (1969) and Dale (1971) which obviously informed their own thinking at that time) or whether the provision of appropriate bibliographies etcetera were merely supportive. The other critical factor was that the writer moved to become Head of Social Studies at another school, a beginning teacher but not a newly beginning teacher, a teacher more closely identified with the political manoeuvrings of a rapidly expanding department.

At this stage the focus of the study had undergone a major shift in orientation and was now concerned with the division of school knowledge into subjects and the consequences of this division for the identity of the teacher. The methodology had also given way to participant observation together with a case study of the mathematics department. It was at this stage that the importance of 'secret knowledge' was realized both in terms of the research method and as part of the socially located subject identity of teachers. If the thesis had been completed then much of what now forms its core would not have been written since a combination of experiences and further reading pushed the entire investigation beyond these limits and added another eighteen months to the proposed date of submission. During this period the scope of the study widened to encompass broader issues and the writer became increasingly aware of the dual nature of the research commitment.
A questioning of the particular reality that was the object of the research along the lines that have been indicated ultimately leads to a fundamental concern regarding the essential nature of sociology itself: namely, the level of understanding that is possible in any sociological inquiry. Whether the sociologist merely 'observes' or actively 'participates' his perspective, together with the relationship between that perspective and developed (and indeed developing) theoretical categories, is an essentially isomorphic one. Moreover, the action-in-progress is always interpreted from the viewpoint of some socially located position that will be affected by whatever positions are taken by any or all of the other participants in that varied situation (Becker, 1970).

It is at precisely this point that Robinson (1974) makes a telling criticism of Smith and Geoffrey's analysis of classroom life for its lack of any real attempt to explicate the effects of their membership of whatever the epistemic community to which they belong. Robinson himself contends that the difficulty may be presented as one of circumlocation:

"Relevance to the researcher's area of concern is seen as a major guideline to the generation of categories, but what is not explicated is the basis of relevance and the process whereby this is linked to generation." (Op. cit. p.255)

Lacey (1976) would seem to be making a similar point when
he criticizes the 'illusory' nature of the 'be natural' participant observer role insofar as it fails to take sufficient account of what he calls the researcher's hidden agenda. Lacey also emphasises the nature of those constraints imposed upon the research activity by virtue of its being orientated to a particular Institute of Education, University Department, etcetera. There is an obvious parallel between such a stance and the earlier references to the orientation provided by bibliographies and footnotes in sociological writings; indeed, one argument that will subsequently receive more detailed consideration is that sociological knowledge (say) is 'sociological' precisely because it is perceived to be directed to a particular epistemic audience. The perhaps 'of course' assumption that the research act itself constitutes an important and complex variable within the parameters of a specific sociological investigation is not a 'new' idea. Cicourel (1964) developed a salient theoretical framework for the present line of argument and in the early 1950's Vidich (1955) was noting the researcher's (potentially different) exploitation of his personal background of experience as a basis of knowledge. The foregoing therefore seems to provide sufficient evidence for establishing an a priori case for the proposal that social action is based upon the common-sense realities of the actor, and thus that the interested observer will bring to the action a biographical set of meaning structures with which to orientate his interpretation of the social scene. Such a notion has an obvious affinity with the Schutzian idea that various interpretative schemes will be utilized by the onlooker in order to 'make sense' of the data. Hargreaves (1975) provides a supportive comment
from within an educational milieu when he notes that:

"Some of these interpretative schemes are shared by all the members of a culture; others may be restricted to members of subcultures or groups; others may be unique to the individual, arising through his unique biography." (Op. cit. p.20)

The significance of this for the pedagogic subject identity of the teacher is central to the assumptions of this thesis. For the present one is concerned to develop this insight in terms of participant observation as a research methodology. After the ensuing discussion of the possible stances that may be adopted in the field the reader will be forgiven for any sympathy with Chanan's call (1976) for a 'researching of the research process' in order to carry out a programme aimed at the demystification of methodology.

It will have become obvious at this point that there is a certain circularity in the argument so far developed: by stressing the interrelationship between researcher and data one is almost calling for a participant observer's account of our first participating observer. However, it is important to note that the 'infinite regression' that is involved in such a stance is not necessarily confined to participant observation: Reiser (1974) proposes a similar phenomenon regarding attitude questionnaires and Lacey's (1977) discussion of a black box model of research is most informative in this respect. Nonetheless, a critical case can be made out and this does require an answer even if this can be no more than indicative
(at this stage) of the general grounds upon which the response is made, Hindess (1973) addresses many of the difficulties created by a stance in which there is no one truth but rather a multiplicity of truths — each with its unknown, and perhaps unknowable, forms of distortion. Whilst the writer accepts the legitimacy of the need for such critiques and perhaps much of the contention that such a position will:

"... lead to a complete relativism and to a necessary agnosticism with respect to the possibility of an objective knowledge of the world." (Op. cit. p.12)

it would not be accepted that the outcome is necessarily as annihilistic as Hindess seems to imply (for example, see the response of Cicourel (1976) contained in his revised introduction to that work). Furthermore, as Lacey (1976) argues, the implicit paradox is applicable to all social research and merely becomes more or less overt in particular instances. Douglas (1973) utilized studies of suicidal phenomena to illustrate how the application of an essentially deductive theoretical perspective to the 'facts' of suicide emerged as the predominant paradigm within which explanations came to be generated.

By directing the reader's attention to an inductive examination of the processes by which meaning is imputed to social action 'explanation' is revealed as a function of the socially located perspectives of the (socially differentiated) observers. The knowledge that is so
gained is communicated by means of illustrative exposition aimed at enabling others to successfully appropriate meaningful references in terms of their own biographic experiences. This will be achieved by utilizing the notion of a 'sensitizing concept' (Blumer, 1970) to provide an orientation to the emerging data which the reader can then employ to apprehend the experiences of the writer during the course of approaching empirical instances. Obviously these formulations possess the potential to be done well, or to be done badly, but each case will be an advance in the sociological stock of knowledge: since there will always be another side to any story the researcher can only mark the boundaries as they appear from the perspective of his socially located position in the world.

The Social Location of the Observing Participant:

The raison d'être underlying the adoption of participant observation as an appropriate research methodology is that, by taking the role of the subjects being studied, the researcher is able to re-create in his own imagination and experience, the thoughts and feelings in the minds of those being studied: the observed group. What is required is therefore not merely a symbolic interpretation of the observed processes occurring within the experienced culture but also a reconstruction of those processes in which the interpretations of the subjects have first importance. (This stance links
closely with the Schutzian notion of 'second order constructs' and the problems this raises for any sociological method - various discussions of these problems are contained in Filmer, 1972). However, notwithstanding the theoretical desirability of such a posture one is nonetheless faced with the conclusions of researchers such as Shipman (1974) who have acknowledged the problems that are created by the use of participant observation as a research methodology. Thus Shipman specifically comments on his role as a participating observer whilst evaluating the Keele Integrated Studies Project:

"... one obvious conclusion from the experience gained during this investigation is... the impossibility of the outsider feeling what it was really like. Thus my interpretation of events observed differed from that of those actually engaged. One advantage of including comments from insiders is to highlight this difference which is rarely examined in the reports of observational studies."


The dilemma facing the participating observer and highlighted in the above comment seems to be that becoming a natural part of the observed group contains a potential for affective involvement whilst the rigours of the research methodology itself require what may best be described as maintaining an attitude of integrity to the stance of that scholarly community represented by his presence. Indeed, the experience of the writer leads him to doubt whether there can ever be any real community of interest
between the researcher and those being studied; in part this discreteness arises from a difference in perspective, and in part because the previously 'private' knowledge of the group is in some sense about to become 'public'. The existence of what Becker (1970) calls an irreconcilable conflict between the observed group and the researcher may thus be attributed to their respective responsibilities regarding the consequences of their social actions, and both are potentially capable of 'whistle blowing'. These issues obviously raise problems regarding the commitments of the participant observer and these are worked out in greater detail as the thesis develops. For the moment it will be sufficient to stress the nature of the writer's commitment as an observing participant with an a priori accountability to the demands and expectations of an actor participating in the everyday life-drama of his world. It is not argued that the different stances that are possible are mutually exclusive but that each pragmatic decision is a negotiated compromise between conflicting demands: each is capable of providing its own version of the reality that is perceived. The existence of this dilemma provides certain corroborative evidence for the original proposition that the interactive process is itself problematic: in this instance because the consequential sharing of the sentiments of other actors within the paradigms of that particular social world arouses the possibility, if not the likelihood, that the participant observer will himself be changed (see, for example, the references provided by Koerman, 1974; and Castenda, 1968; both of which provide exemplars of this process). Moreover,
the very dynamics of the research activity will itself serve as an agent of change in the world in which the researcher is at that moment participating (Iluekhohn, 1940). Such a process is documented, however sketchily, by the few contemporary accounts that are concerned to grapple with the full implications of such an analysis. Jenkins, for example, provides a particularly illuminating comment from his position as an "insider" on the previously mentioned Keele Integrated Studies Project. He evaluates Shipman's own description of his role thus:

"Shipman does injustice to the complexity of his relationship with the course team. He began as wallpaper . . . but soon his dormant position came under pressure from two directions. First, the methodology of participant observation became a team in-joke attracting banter ('Why is Shipman covering up his notes with his hand?'). Second, the team now saw Shipman as a person well able to work his passage. Invitations to participate rather than observe were parried in crucial areas, but accepted in others . . . In general he tried to keep his counsel in meetings, but offer support outside . . . The occasional doubt persisted ('Do you think Shipman really believes in what we're doing?').

(Shipman, 1974. p.ix-x)

The relationship between these ideas and the writer's own experiences will become explicit as the thesis develops: for the moment one or two indications of the emerging process will probably suffice as signposts to the general direction.
7. A non-teaching position aimed at supporting teachers by preparing and advising on the use of audio-visual material relating to the classroom performance.
It became apparent at a relatively early stage in the writer's career as an observing participant that the content of certain conversations with other members of staff were thought to be 'inappropriate' for my socially located position in the school. When no explanations were offered other meanings were imputed to the interaction - for example, it will be remembered that the writer was a member of a rapidly expanding department - that would potentially influence the quality, and perhaps even the quantity, of that data that would be made available. It was not long before some explanation was made necessary and that preferred was along the lines of: 'I'm writing a thesis about the extent to which teachers of different subjects are different sorts of teacher'. This was an accepted definition of the situation. However, it is interesting to note the various consequences that flowed from this decision once made.

Having made the decision to offer the above explanation the writer then determined to note carefully those identities to whom it was made. In all no more than eight people on a staff of around seventy were explicitly provided with this information yet within a matter of weeks no explanation was required since its content had apparently now become an implicit assumption underlying any interaction. The inference seems to be that this information had reached certain key staff informally responsible for feeding such items into the appropriate knowledge networks. In this process two people stand out as fulfilling a particular function in this respect: the head of the mathematics department (it will be remembered that, at this stage I was engaged in a case study of the department) and the media resources officer.
This latter, because of his socially located identity (that is, marginal to the teaching persona but often crucial to the teaching performance) was probably of considerable importance and this can be demonstrated by two particular incidents recorded in the writer's field-notes relating to that period.

Not long after the provision of the above information any notes addressed to the writer were accompanied by various humoursome remarks including a long list of fictitious and completely bogus qualifications after my name. This rapidly became the object of more general staffroom banter. In another case I was talking to a teacher when the media resources officer shouted across 'You want to watch what you say Jennifer, you'll be in his book if you're not careful!' The significance of this was the implied understanding that the person to whom that remark was addressed knew the background - as judging by the wide-scale laughter so too did a large number of the staff. Within a more general context the incident focussed attention on the existence of 'secret knowledge' and informs a subsequent discussion of this phenomenon occurring later in this thesis.

The incident also possesses a direct relevance to the subject identity of teachers that can be illustrated by a similar incident yet one in which the writer was an 'insider' participant. As a teacher responsible for a year class (as distinct from the subject based class centred on the teaching activity per se) the writer was required to write a general comment on the twice-yearly reports that were written on each pupil. These reports would then be checked by the appropriate year tutor prior to their final signing by the head or deputy head according
to the year group in question. At the vetting stage several reports were returned to the writer because of errors in the construction of sentences. The head was portrayed as 'very particular' about this because 'their degree was in English' and that had the report gone to the deputy head for signing it would have been alright 'because her degree was in mathematics'. Whether or not this attributed characteristic was correct was never discovered - the significance lies in the fact that others are prepared to inform their ways of behaving towards a person on the basis of knowledge mediated through another. This knowledge may or may not have any basis in 'fact', and the person concerned may or may not be aware that others present their personna in this way. The relevance of these points for the observing participant will not be lost on the reader and are the subject of a further discussion later in this chapter.

The second incident to which reference was made involved a mathematics teacher and its significance arises in the length of time that had elapsed between the original provision of the information and its overt acknowledgement in conversation. Towards the end of the research activity (although this was then not known to the teacher concerned) the writer was talking about the teaching of mathematics to a member of that department. (This was some eighteen months after the information had become general knowledge and which the writer had assumed was no longer an overt subject of discussion.) At the end of the conversation as I was taking my leave one of the respondents made the apparently quite arbitrary remark: 'going away to write up some more notes then?! This incident seems to provide a caution to those believing
that any 'observer effect' will disappear, or at least cease to be relevant, with the passing of time. The writer's experience thus confirmed a theoretical awareness of the methodological necessity for becoming an actor in the social world - with the concomitant requirement for participatory activities to be accompanied by observation - and thereby raised one's consciousness of the tensions inevitably involved in the acting out of the two roles in the field. The former is necessary for the purposes of infiltrating the approached group, the latter because it is a specifically sociological perspective that informs the observer's interpretation of the data. However, to categorize the action from the socially located position of either 'observed' or 'observer' is perhaps too simplistic. The writer's experience demonstrates that the observer is himself part of the observable context in which the 'observed' also 'observe' the observer: the research perspective at any one moment in time is but the negotiated outcome of previous social activities. Participant observation is therefore viewed as a dialectical activity even if only in the sense that when an individual enters the presence of others (either physically or metaphysically as when a name occurs in conversation) they will commonly seek to acquire information about the 'stranger' and/or bring into play such relevant information as is already possessed by them. This socio-biographic dimension of the research activity raises the possibility that the participant observer will be accepted because of the kind of person he is in the eyes of the approached group rather than, say, because of what the research represents thereby raising questions concerning the processes involved in the researchers coming to be defined by those he is seeking to
observe. Becker and Mack (1971) draw attention to the relative lack of sociological writing concerning the appropriateness of various techniques dealing with unobtrusive entry or accidental access to approached groups. In his own career as a professional dance musician (in which the majority of those observed are said not to have been aware of the study) this identity was itself a sufficient introduction to those marijuana users willing to discuss their experiences. Dalton (1959) similarly used his official status in the organisation that he observed as a basis for carrying out an unofficial enquiry.

An acknowledgement of the way in which the presence of an 'outsider' alters the observed social world is implicit in the recorded experiences of the writer and in Shipman's own description of role-transference during the previously utilized research programme. His initial acceptance by the team was as a sociologist who would observe: an ascribed role that was rapidly replaced by one involving a greater degree of participation. Subsequently Shipman progressed through bouts of total participation until he finally embraced 'some sort of consultant role' on the professional side, and 'one of the boys' on the personal side.

It is important to stress that these negotiated role-movements are not merely the result of sociological labelling but arise from the interaction of actors within their social world. As such they constitute important and sociologically 'disruptive' (of the action-in-progress) events insofar as the meanings imputed to that event by the actor have 'changed'. For example, Lacey (1976) has noted that, because of the greater
8. Schutz, Alfred
'Common Sense and Scientific Interpretations of Human Action.'
freedom allowed by his researcher role, members of staff often 'had a chat' and found him:

"... interested in matters not usually discussed by teachers. This interest gradually established a flow of information about things they thought would interest me. (Op. cit. p.72. My emphasis)

The proposition being made is that the very presence of the observer will cause some 'disruption' of the social world, even if only in the minimal sense akin to the way in which the skin colour of an interviewer can bias the answers of particular categories of respondents. Because the other actors in the social drama will commonly vivify the apprehended details of an individual's social biography (Goffman, 1959) the onlooker will be assigned a role in the action in progress whether such outcomes are desired or not. Moreover, there is the further implication that the participating observer will prove incapable of refraining from socially significant participatory acts. This will be not only because of the impossibility of maintaining that attitude of sociological disinterestedness whilst in the field - see Hargreaves (1968) and Shipman (1974) - but also because the matrix of attributed social meanings present within the 'reality' of that social world attributes significance to the behaviours of both passive and active social actors. Indeed Schutz6 presents the observer as one who:

"... can never enter as a consociate in an interaction pattern with one of the actors on the social scene without abandoning, at least temporarily, his scientific attitude. The participant observer or field worker..."
establishes contact with the group studied as a man among fellowmen; only his system of relevances which serves as the scheme of his selection and interpretation is determined by the scientific attitude, temporarily dropped in order to be resumed again."

The arguments being rehearsed obviously open up many general issues regarding what may be viewed as less 'involved' methods. In brief the position of the writer is that other methods are similarly, but more covertly, 'involved' and reference has previously been made to the black box model of research (Lacey, 1977) that is analogous to such a theoretical position. The stance of observing participant evolved because it affords an opportunity for reflexive sociology to generate data that is perhaps unobtainable by other means yet there is a concomitant obligation for the researcher to acknowledge the extent to which the participant participates and, where possible, record the changes and influence caused by his presence and attempt to arrive at some understanding of their consequences.

Earlier in this chapter it was argued that the observer himself is also changed as a consequence of his participation and the extent to which this occurs is often difficult to appreciate. In the case of the writer a particular incident exposed what until that point had been an only partially realized change in the nature of his commitment to the social scene. The research has already been outlined as arising from, and concomitant with, the writer's activity as a teacher yet a profound if subtle change had taken place. After having enacted a fully participant role at a particularly stormy meeting of heads of subject departments the previous evening when the
writer next entered the staffroom (the following morning) all conversation stopped. It was apparent that my participation in the events of the night before had been the source of conversation. Without any conscious thought the writer pretended to get out a notebook and note (in a stage whisper) 'enter room . . . silence' at which point general laughter broke out. Besides once again demonstrating the existence of background knowledge related to my research activity the incident also illustrated the changed nature of one's commitment: a teacher totally immersed in the life world would not have been able (I believe) to be as unconcerned as was the writer. Once this insight had been made a retrospective analysis of field notes revealed many meetings, both formal and informal, where matters of importance to the teacher persona had been discussed. Time and again, however, the notes reveal the application of sociological imagination, points to follow up that were often not those most relevant to the writer's socially located position within the school. The revelation of such a lack of commitment to the observed social world had resulted from its being a constant source of data. Speaking to one of my students on a separate matter shortly after this realization she came out quite spontaneously with the comment: "Everything's sociology to you." The thing is she was absolutely right.

The biographical experiences of the writer would therefore suggest a negative response to the question posed by Kluckhohn (1940): 'Can the researcher ever be a "complete participant"?' To this extent the statement made by Gans (1968 perhaps provides the best summary of the 'position' arrived at by the conclusion of the research period:
"Being a total participant is probably the most fruitful kind of participant-observation, for only by being completely immersed in an event as an involved person can one really confront and grasp the social and emotional incentives and pressures that act on people in groups. Total participation is psychologically very difficult for the researcher, however; it is almost impossible for him to be both a total participant and an observer of himself and other people. In most instances, however, whatever the participant-observer's formal role and degree of behavioural participation, he is emotionally first an observer and only secondarily a participant."
(Op. cit. p.303)

At this stage the reader could be forgiven for holding the assumption that the observed social world only has existence for the duration of the research activity. (The same assumption might be made about the researcher.) This is, of course, patently a nonsense yet the earlier reference to the manner in which actors give life to social and biographical histories failed to take sufficient account of the social location of the knowledge that is so generated. Such a perspective possesses some salience for the research activity and is perhaps best expounded in connection with the initial approach of the researcher when:

"... the conditions under which an initial entree is negotiated may have important consequences for how the research is socially defined by the members of the setting. These social definitions will have a bearing on the extent to which the members trust a social researcher."
(Johnson, 1975; p.50)

The general argument received an exemplary exposition in
The Field Worker in Union Research 
that study of union-management relations carried out by Gullahorn and Strauss\(^9\) in which the authors make explicit reference to union suspicion of Strauss. This occurred as a direct consequence of a particular identification attributed to an individual who merely accompanied Strauss to the first meeting. The life-world to which the researcher wishes to gain admittance is a temporal phenomenon and the example demonstrates how the differentially located biography of both approaching stranger and approached group may exert their respective influences upon the eventual perspective from which the action is viewed. Whyte's (1955) account of his attempt to strike up a female acquaintance within the constraints imposed by Cornerville's Regal Hotel provides a similar exemplar of instances where an individual's biography may lead to a meaning being attributed to a social action (on behalf of the approached group) which is other than that desired by the approaching stranger. Thus Whyte, finding no solitary female in the Hotel lounge, selects a group of two women and one man to whom to introduce himself: a choice leading to immediate rejection and hasty retreat! Whyte's surprise at such a rejection contrasts with the total lack of surprise on the part of the present writer whose own biography would lead him to suppose two women on their own would have been a more appropriate group for the particular purpose at hand. Who can say what form Whyte's research may have taken had the original approach provided entree to a desired community? The notion has some relevance for the observing participant since the process is a recurrent one that continues not only throughout the research in its consequences, but also acts continuously to define the significance of the research
10. A discussion of this difficulty is given in:
Paul, Benjamin D. (1953)
Interviewing Techniques and Field Relationships
in Kroeber, A.L. et. al.
Anthropology Today
act, and therefore the social location of the observer, in an omnipresent mode. Consequently, it is of some importance that the gaining of entrance to potential research situations, together with the concomitant negotiations, is viewed as crucial in differentially affecting the data that is ultimately collected. Notwithstanding this argument 'public' accounts possess an unfortunate tendency to begin only when the social relationships required to establish some kind of community between actor and observer have already been accomplished (Cicourel, 1964). In this respect the significance of Dalton's (1959) comment that he carried out little formal interviewing because of the 'problem' arising from the perceived need to explain what he was up to, has yet to be fully assessed.

The presence of an observer on the social scene obviously necessitates some explanation that both makes sense to the other participants and also makes sense to them. That such a process possesses its own power dimension is readily appreciated when one considers the ways in which introductions through the offices of 'higher authority' may affect the subsequent transmission of data to the observer. For example, entree into the approached community may be problematic for the fieldworker insofar as the frequent necessity for an initial endorsement by those in positions of authority will often constitute a subsequent constraint affecting the nature of acceptance by the natives. In fact the difficulty is frequently further compounded in that proposals 'making sense' to a hierarchical authority (such as those made in order to gain entree) are not necessarily those that 'make sense' to the people who will actually be observed. Both Bruyn (1966) and Geer (1964)
11. Friedman, N. (1967)
The Social Nature of Psychological Research
Basic Books.

12. Roethlisberger, F.J. and Dickson, W.J. (1939)
Management and the Worker
Harvard University Press.

Problems in Participant Observation.
American Journal of Sociology Vol. 60.

14. Whyte, W.
Interviewing in Field Research
have commented on the differential acceptance of 'cover stories' according to the level of the organisation with which they were immediately concerned. Dalton (1959) provides a delightful description of how, as a covert observer himself, he had watched management:

"... set the scene and limit the enquiry to specific areas ... the smiles and delighted manipulation of researchers by guarded personnel."
(Opera cit. p.275)

The force of the preceding arguments lead the writer to query the belief of Becker (1970) that, provided the observer keeps a 'low profile' and is not viewed as important or fateful by the approached group, actors within the social world 'will be constrained to act as they would have in his absence, by the very social constraints whose effects interest him'. However, it is not the belief itself that is necessarily being questioned but rather the impossibility, in field research situations, of the observer adhering to the requirements of the conditions that are attached to it. For example, although the complete (concealed) observer might possibly fulfil such a condition, Friedman's discussion of the ways in which change may be brought about simply by the virtue of 'being there', and the effect of this on the data that is consequently gathered, is perhaps a more accurate analysis. Roethlisberger and Dickson provide similar examples from within a research paradigm of an early questioning of the extent to which non-involvement is possible. The belief of these workers is that the mere presence of a researcher (say) serves to influence the observed group's perception of what constitutes 'appropriate' behaviour. Other early accounts raising questions regarding the potentiality of such a 'distortion' occur in the work of Schwartz and Schwartz and Whyte.
The various strands of the proposition that is now emerging have important methodological consequences regarding the analytic activities of the observing participant and many of these receive articulation in the following statement of Moerman (1974).

"It is clear that when an ethnographer asks natives questions which they would not ask each other, he is calling attention to issues which are normally inexplicit and sometimes non-existent. In so far as the significance of an action depends upon the situation in which it occurs, then, to the extent that answering an ethnographer's question is an unusual situation for natives, one cannot reason from a native's answer to his normal categories and ascriptions. But the importance of the situation, and particularly of the other persons present in it, goes beyond this to distort the data of even the most silent ethnographer. By his very presence as someone interested in culture and cultures, the social scientist establishes the primary relevance to him of ethnic (or kinship, or class, or political) categorization schemes as ways of reporting, recording and analysing human occurrences. He thus presumes that those who would talk to him pay primary attention to these categorizations even when they would not otherwise do so."

(Op. cit. p.66)

The application of a sociological perspective to the particular action-in-progress may thus be potentially disruptive of the native priorities and categorizations. Whilst such a process may be explicitly acknowledge in those instances when it is an 'alien culture' that is the subject of analysis - for example, the introduction to Castaneda (1968) describes the problem of categorising
Selected Problems of Field Work in a Planned Community.
American Sociological Review.

16. See, for example, the discussion in
Dean, John P. (1954)
Participant Observation and Interviewing
in Doby, John T. (Ed) (1954)
Introduction to Social Research
Stackpole.
a 'non-ordinary reality system' - the same phenomenon is only infrequently perceived to be problematic by the researcher working within a similar cultural milieu to his own. This is, of course, a particular difficulty with much educational research where the biographical experiences of the researcher leads to the probability that he will already have some idea of 'what it's all about'. Although insufficient attention has perhaps been paid to the caution of Merton that:

"... informants will not hesitate to make certain private views known to a disinterested outside observer - views which would not be expressed were it thought they would get back. The outsider has 'stranger' value."¹⁵. The outsider has 'stranger' value.

the researcher should beware that the knowledge of such informants are not the contrary of the bias provided by the ethnographer. Questions concerning the relative helpfulness of different informants¹⁶ illustrate the complexity of this phenomenon for the fieldworker. A complexity that will necessarily be reflected in the eventual 'knowledge about' proffered by the researcher. Knowledge is therefore not disinterested, and consequently neither is the construction of a specific corpus of that knowledge, but inextricably linked to the interests of its producers. There is no a priori reason to suppose that the previously mentioned giving and receiving of biographic knowledge by the researcher in order to establish some rapport (Blum, 1970) is not reflected in the giving and receiving of other knowledge.

A specific application of the relevance of such a notion to the methodology of participant observation is illustrated by the way in which a member of a particular social world, now incorporating the observing participant activity, can be experienced in a problematic way.
Johnson (1975) notes how:

"During my first six months I witnessed friendships and romances created and dissolved, and committees in every stage from originating idea to dissolution or atrophy. There were alliances, coalitions, and inter-office political factions . . . They were put together for the purposes at hand and dissolved when victories or defeats were consumated."

(Op. cit. p.132)

He later commented how, erroneously, he had at that time considered it possible to come to know these phenomena independently of the daily fulx. The substance of the argument being propounded is that methodological procedures are concerned not only with some more or less descriptive analysis of events-in-the-world but themselves become a constitutive property of such events. As Blum (1971) argues concerning the processes involved in the social construction of a particular corpus of knowledge:

"... at every point within the course of sociological enquiry, the sociologist has to decide on the basis of his tact and his commonsense knowledge how to settle various matters which require resolution before the enquiry can be consumated."

(Op. cit. p.129)

Because the social meanings of the situation will have changed, the perspective from which the observing participant 'makes sense of the world' will also have shifted, and this should be reflected in the eventual re-construction of knowledge that is offered to the reader. This requires a kind of reflexivity on the
part of the researcher which is very rare. However, an interesting example from within an ethnomethodological paradigm occurs in the early methodological chapters of Cicourel (1976), the content of which repays careful reading.

The Knowledge of the Observing Participant.

At this juncture in the developing thesis several important issues regarding the sociological knowledge of the observing participant have been raised. As the observer goes about his business of constructing knowledge there is a two-way flow of information: he acts not only as a receiver of that knowledge, but also as a source of knowledge around which others engage in a process of 'making sense' of that activity and of its meaning for them. It is now proposed to tease out certain of these strands of thought in rather more detail and at the same time construct a foundation for the argument to be rehearsed in succeeding chapters of this thesis.

In the course of discussing the differential credibility of informants in the field Becker (1970) advances the suggestion that:

"... an individual's statements and descriptions of events are made from a perspective which is a function of his position in the group."

(Op. cit. p.29)

Such a stance is in keeping with the general proposition being advanced and is an important contribution possessing
some salience to the present discussion. If the (sociological) informant is correctly viewed as occupying such a position within the approached group, then the sociological perspective is itself similarly exposed as a function of that same position. Whilst the notion that the observing participant views the world through a socially situated interpretative framework is hardly revolutionary it nonetheless remains true that Dalton (1959); Dean (1959); and Goffman (1959) are three of the few writers attempting any serious evaluation of its significance for the research process. One aspect of the difficulty upon which it is proposed to focus attention may be polemically stated as being one of either (for the sake of the argument) 'knowing too much' or 'not knowing enough'. (There is also some relevance in the argument for the way in which similar polarizations may constrain the relationship between the original mode of entry to the group and the subsequently negotiated social location. The relationship between this position and the consequent differential accessibility of knowledge emerges from the present discussion). In order to overcome the reader's possible objection that a researcher can never 'know too much' he is referred to Dalton's beautiful portrayal of the problematic nature of the covert observer activity in this respect:

"... in his speculative prowling he is almost certain at times to forget that non-intimates see his formal function as embracing only a limited knowledge of unofficial events. Eager to learn more, he alarms some persons, even his fringe
intimates, by accidently disclosing bits of unofficial information they think it strange that he should have. Variously committed people misinterpret his slip, magnify what he knows, and fear that he will imprudently compromise them, or - in the changing scene - use his information for personal ends. In any case they are likely to treat him as a red light end to alert others."


Such a comment provides additional illumination on the writer's earlier difficulty over the apparent discreteness between his socially located identity and the knowledge that he was seeking to acquire. One of the myriad difficulties is the impossibility of keeping accurate records of 'who said what' in one's head yet there will be occasions when a respondent assumes knowledge in order for a conversation to take place. The choice is either one of becoming a pedant by challenging each assumption as it is made, or letting the conversation continue in which case undesired inferences may be made by others about one's ability to keep quiet about what you know. It is, of course, also the case that the 'you know assumption' provides information that was not previously known and the whole chain is immediately re-established. During the writer's period of observing participation there were two particular difficulties that presented themselves in connection with 'knowing too much' one largely impinging upon the observer role and the other on the participant role.

The functional aspects of the 'you know assumption' have already been indicated but the dynamics of the process perhaps have a more significant implication somewhat akin to the phenomenon noted by Lacey. Readers will
remember his description of the way in which 'having a chat' established a flow of information concerning things others thought he would be interested in. In the writer's case, and presumably after various testing procedures had been carried out that he has been unable to identify from field notes, because it became known that I talked to many members of staff (thereby crossing certain social boundaries) information similarly flowed to the writer. This was 'especially so when some consequential event took place upon which several of those involved proffered their own interpretation of what had happened. One such respondent explicitly remarked that as I had no doubt heard another version of the event she would like to give me hers. The assumption being made by the writer is that similar thoughts probably informed a number of those teachers approaching one in this way: because it was assumed the writer 'knew too much' a 'bandwagon effect' developed in which the assumption was the source of even more information.

The state of knowing too much also impinged on the writer's participant role in a manner that may well have eventually contributed to his progressive lack of commitment to the social scene. One of the themes that will subsequently be developed in this thesis is the existence of multiple realities and secret knowledge and this interacted with the difficulty of knowing too much to produce some difficulty for the writer's participant role. In this case, and presumably once again after testing procedures had been carried out, the writer became increasingly aware of discrepancies between the public and private stances of various actors, and also between differences in the presented self in different social contexts. There were occasions when this knowledge could have been politically useful to the writer.
but who was, of course, constrained not to use this knowledge by other considerations. (Here it should be stated that similar discrepancies existed in the various performances of the writer's own participant role: the phenomenon was not an unusual occurrence). Thus, there were specific times when, as Head of a pedagogic subject department, the writer would wish to have exposed the fragility of another's position but was prevented from doing so. Moreover, because the precise boundaries of what knowledge was 'private' and what was not cannot be remembered with clarity one always proceeded with caution and thereby sometimes failed to present as strong an argument as one was capable of. Indeed, there is one case contained in the writer's field notes from towards the end of the research period where the observer personna is believed to have been deliberately manipulated in this way in order to effectively gag the participant personna on an important matter.

On the other hand, 'not knowing enough' is used to characterize a particular reservation on the part of the writer concerning the extent to which the research perspective is dependent upon - and indeed constrained by - the availability of whatever knowledge is mediated to him through the approached group. Any research will of course be constrained by the existence of an 'information threshold': the criticism being articulated at this point is directed at a failure to explicate its existence together with the way in which such boundaries affect the data (inséfaras the researcher is aware of their existence).

The notion of 'public knowledge' is utilized here in the same sense as that employed by Junker (1960) in his categorization of information data and therefore bears the connotation of knowledge as 'that which everyone knows
and can talk about'. However, this is subject to the proviso implied by the current argument which seems to suggest this may in fact be precious little. Such a view receives some recognition in Junker's own caution that:

"What may be evaluated as 'public' within a situation may also be regarded as 'confidential' or 'secret' vis-a-vis outsiders."
(Op. cit. p.34)

For the purposes of the present discussion the notion of public knowledge is employed to point a contradistinction with secret knowledge. This latter usage is appropriate when conveying a sense of exclusivity to the knowledge that is being transmitted (that is, information possessed by an in-group and perceived by that group as important to its solidarity and continued existence). Junker also draws a distinction between 'confidential' knowledge which is non-attributable, and 'private' knowledge used to denote a knowledge that is personal to the individual such as dress sense.

Whilst the difficulty of penetrating areas of secret knowledge may be partially surmounted by the researcher's acceptance of a participatory 'in-group' role (for example, the expectation would be that the adoption of such a stance would reveal norms and values that, in different circumstances, would remain hidden) this nonetheless remains a perspective with inherent limitations. Some of these limitations have been made explicit in various incidents already related to the reader. It is these biographical experiences of the writer that are the source of a certain reservation whilst at the same time accepting much of Hargreave's (1968)
contention that, by the act of participating in the informal activities of the staff he was able to gain admittance into the matrix of informal relations, cliques, private jokes and quarrels. He notes that:

"... this mutual personal adjustment of observer and subjects revealed itself not only in improved personal relationships, but also in the gossip that was related to the observer. I am convinced that many of the stories recounted to me would not have been told at all had I reminded the teacher that I was observing the school." (op. cit. p.199)

Exactly the same argument is made by Becker (1970) and the earlier incident concerning Lacey that was subsequently drawn upon for its consequences relating to the perspective of the said observer.

These exemplars are illustrative of the general manner in which the act of participation is argued to provide the basis for admittance to groups from which the casual observer is excluded. Nonetheless the arguments that have already been rehearsed cautions practitioners of the methodology against a too ready acceptance of the presented world as being precisely the same as that providing the appropriate 'ground of being' within which the everyday activities take place. 'That reality' perceived by the observing participant may be dependent upon a perspective derived from only partial admittance to the socially constructed realms of meaning available within the approached group. In the same way that the research act tends to screen out potentially ambivalent data in a merging of multiple realities so to is insufficient attention paid to the notion of 'sufficient explanation'.
17. Patrick, James (1974) 
A Glasgow Gang Observed. 
p. 14f.
"In reality' the research activity may be subject to an embryonic unfolding of the culture of the approached group - an unfolding controlled by elements beyond his normal visibility and requiring special techniques of observation and verification (Bruyn, 1966). Moreover, the observer will not know that he does not know, and this lack of knowledge may lead to erroneous interpretations of behaviour based upon contingencies of action stemming from the insider's possession of more or less secret knowledge to which the observer will not have access. A parallel phenomenon may be noted in the use and knowledge of language - particularly in respect of that language peculiar to some subcultural grouping. Patrick in his observations of a Glasgow gang makes the illuminating comment that:

"Born and bred in Glasgow, I thought myself au fait with the local dialect and after two years of part-time work with these boys I considered myself reasonably familiar with their slang."

- a notion he was subsequently to acknowledge as being 'a serious mistake'.

If one adopts the suggestion that knowledge may indeed be considered as differentially available to the various participants of any action-in-progress, then this leads to the formulation of the premise that the imputed 'meanings' of such actions are themselves a socially situated phenomenon. The subjective appropriation of such meanings takes place from within the life-world of a particular perspective. In addition, the observer's knowledge of specific social events (together with the concomitant and/or subsequent meaning attributed to that event by the social observer)
will be at least partially dependent upon a more or less consciously negotiated perception of what is considered 'adequate' for the particular purposes at hand. These 'negotiations' may be carried out internally within the approached group or they may involve negotiations with whatever significant others are seen as relevant to the case in point.

It will be remembered that one aspect of the writer's research activity was a case study of the mathematics department and that certain biographic knowledge made available by the researcher eased his entry into that life world. One of the turning points in this greater availability of mathematical knowledge (in its very broad sense) was the fact of my carrying out the research for a higher degree. It turned out that the head of that department was in the course of registering for a similar qualification and part of the examination concerned sociology in general and research methodology in particular. This community of interest resulted in a greatly increased flow of information although it was at the same time accompanied by a more detailed probing of one's cover story! (Indeed, it is suggested elsewhere in this thesis that teachers, because they have increasingly undergone some study of this subject in their training courses, will be increasingly more likely to challenge a researcher's 'front'). One cannot ignore the possibility that, in different circumstances, awareness of the above knowledge may have abruptly stopped the flow of information.

One further aspect of such a selective presentation of the social world can take the form of the researcher's confinement to areas attributed little significance by the actors involved. In this connection Johnson (1975) notes:
18. Sorokin, Pitirim (1947) 
Society, Culture and Personality, 
Harper Brothers. 
Quoted in Douglas (1973) p.236.
"... one worker, with whom I felt I shared a trusting relationship from the beginning, later revealed he had set me up during the first couple of weeks. He took me only... where nothing significant was happening."
(Op. cit. p. 94)

Hargreaves (1968) noted a similar phenomenon regarding the activities of teachers in classes he was observing yet this was fairly explicit and he 'knew' it was happening. Much of the next chapter in this thesis is concerned with the way in which the rhetorics of space can be employed to keep private performances private. It is the writer's belief that teachers are often more successful at this than the research community supposes: Dale (1972), for example, has remarked on the apparent dearth of sociologies of school staffrooms.

One consequence of the above premises is that the meanings of perceptual phenomena presented to the observer will, to some degree and of necessity, be uncertain (Douglas, 1973).

The implication here is not only that 'meaning' is an intensely problematic concept for the (sociological) observer, but that it is potentially just as problematic for the social actors inhabiting that world when they are confronted by specific situations. Thus, in the same way that the 'objective' phenomenon of sexual intercourse has been demonstrated to be the subject of differential interpretations and evaluations requiring different responses, so too does a particular classroom incident carry different meanings for observer and teacher (Lacey, 1976). Lacey, for example, describes how what he took to be a quite arbitrary punishment of an innocuous, although deviant, act on the part of a pupil was subsequently revealed as possessing a quite different meaning for the teacher. For the teacher the deviant act per se was relatively unimportant:
the dramatic persona represented by the punishment was directed towards the act as representative of a crossing of some previously constructed definitions of acceptable classroom behaviour. Similar multiple definitions of the initial interaction between class and teacher exist and Hargreaves (1975) provides three descriptive passages outlining the different ways in which a teacher can approach a new class. Of particular relevance is the way in which Hargreaves draws attention to the manner in which the apparently situated 'meaning' of the teacher behaviours can be derived from that individual's non-situated biography.

The potential danger for the researcher is to make similar assumptions based upon a sociological appropriation of Becker's (1970.B) notion of a 'hierarchy of credibility': in this case that fieldworkers in general, and sociological observing participants in particular, possess a more complete picture of what is going on that anyone else. Placed within the specific arguments of this thesis, the proposition is that the teacher's social world is one that offers multiple and possibly (although not necessarily competing) different definitions of reality to the various 'interested publics'. As such it constitutes an important core perspective of this thesis. The context within which the action occurs may well be of considerable importance when the researcher seeks to determine what meanings are attributed to that action by the other members of the social world. Contingencies of time and place, the knowledge each participant has of the other, all contribute to the actor's 'understanding' of an event which may be in competition with the interpretations placed upon that event by interested others. For example, Douglas (1971.B) reports a study of social
welfare practices in which the workers gave explicit recognition to the distinction between 'what the agency says we are doing' and 'what we are really doing'. The parallel phenomenon of a distinction between 'what researchers say a group is doing' and 'what the group itself says it is doing' has already been the subject of earlier comment.

For the present purpose it is relatively unimportant whether such a plurality of life-worlds be viewed as a particular characteristic of modern society (an argument rehearsed in Berger et al. 1973) for its present significance, both in its application to the research methodology of participant observation and for those actors fully participating in the observable social world, lies in the theoretical potentiality of another proposition: that, in the life-worlds of the individual

"Different sectors of their everyday life relate them to vastly different and often severely discrepant worlds of meaning and experience. Modern life is typically segmented to a very high degree, and it is important to understand that this segmentation (or, as we prefer to call it, pluralization) is not only manifest on the level of observable social conduct but also has important manifestations on the level of consciousness."

(Op. cit. p.63)

The pertinence of this observation for the fieldworker is to caution not only that certain cultural meanings cannot be understood without successful entrance into these private groups (Bruyn, 1966), but also that many research reports fail to explicate any awareness that
19. Vidich (1955) deals with some of the difficulties arising from exploiting one's personal background of experience as a basis of knowledge. He also suggests a native/foreign distinction in the nature of the difficulty.
such groups exist. Whether or not it is 'significant' that the majority of reports exhibiting such an awareness derive from an anthropological rather than a sociological paradigm must be the reader to judge. Although it might be argued that the implied contrast is somewhat naive its purpose is to emphasize the more intensive nature of anthropological fieldwork carried out over longer periods of time. There would seem to be an element of truth in the suggestion that the sociologist withdraws from the scene of the action in a way that the anthropologist does not; both in terms of a day to day withdrawal and in the fact his observations are often carried out over a shorter period of time.

Thus, an excellent illustration of the capacity of insiders to act as custodians of private knowledge is to be found in Malinowski's\(^{19}\) classic anthropological study of the Trobriand Islanders. Here was a quintessential description of participant observation at work and even so one may find indications that 'secret knowledge' existed: in this case concerning the death of a youth previously befriended by Malinowski. The youth's death was ostensibly caused by an accidental fall from a great height whilst climbing a coconut palm. In fact the boy had committed a public act of suicide in a traditional manner yet Malinowski acknowledges that it was not until much later that he discovered the 'real' meaning of this act.

In a similar manner, and despite similarly living in the midst of those being observed, Berreman (1962) notes that:

"It was six months after my arrival before animal sacrifices and attendant rituals were performed in my presence although they had been performed in my absence and without my knowledge throughout my residence in the village."

Nonetheless, perhaps the most astonishing confirmation of the proposition comes from Johnson (1975). In this study of Social Workers at Metro it was the case that immediately prior to Johnson's entree one of these workers had been arrested for performing his job 'in a fashion not in accordance with standard operating procedures'. Although this worker remained on the job, and even with an inside informant giving material assistance and advice concerning Johnson's research (including help regarding the timing and mode of application) the fact of the arrest only came to light at a much later date. In his own words Johnson

"... was chagrined to learn that no information about the arrest had been obtained from the inside informant."
(Op. cit. p.73)

If the above contention is based upon a correct interpretation of the research situation then it suggests not 'merely' that any consequent analysis will present a less or more severely distorted description of the action-in-progress, but that an opportunity to at least subjectively delineate the nature of such constraints will have been lost. One of the more explicit ways in which access to particular social worlds has been restricted is in the dearth of material relating to the higher echelons of the social structure of which the earlier comment by Dale (1972) is but a relatively unimportant example. Such a proposal bears an obvious affinity with Goffman's (1959) notion of an organisation's 'back regions' in which access by outsiders is made extremely difficult as a direct consequence of its members concern to prevent non-members from seeing a performance that is not addressed to them.
An illustration of the credence to be given to the potentiality of the 'secret knowledge' indicated as existent - together with the relative ease with which members of the in-group ensure that it remains so - may be derived from a brief consideration of the extent to which the sociological perspective is itself a 'back region' of the participant observer role. Of course, it may be argued that such a back region occurs at a greater distance from the action (and may therefore be the more easily hidden) but such a contention seems presumptuous and, in any case, the evidence on either side has still to be obtained.

For example, a view of the 'sociologist as spy' is suggested by Berger (1963): a view brought to life in a particular application of Goffman's description (1959) of insider possession of team secrets capable of disrupting the public performances of the approached group. Goffman refers to various roles (the informer, still, spotter, the go-between, and so on) each of which is related to the degree of conguity with the appropriate audience. He then adds:

"There is yet another peculiar fellow in the audience. He is the one who takes an unremarked, modest place in the audience and leaves the region when they do, but when he leaves to go to his employer, a competitor of the team whose performance he has witnessed, to report what he has seen. He is the professional shopper - the Gimbel's man in Macy's and the Macy's man in Gimbel's; he is the fashion spy .." (Op. cit. p.145f.)

One might also be tempted to also add 'homo sociologicus' to his description!

To the extent that one is drawn to the conclusion that the research act is to be considered as essentially
'dishonest' (Gans, 1968) there may be some truth in the attribution. Moreover, the researcher may himself unintentionally legitimate this view on those occasions when he acts to censor the knowledge that is gained by his activity and, in extreme cases, those instances when the researcher goes native. However, these problems of commitment have already been indicated to be paradigm dependent and merely constitute one of the ways in which an investigation may be coloured by the biographical experiences, attitudes, thoughts, etcetera, of both the observer and the observed. Thus the writer has been involved in conversations in which the exploitation of one's personal background of experiences as a basis for gaining 'data' was considered to be similarly 'dishonest'. Be that as it may, the suggestion is something of a digression and the reader is invited to return to the previous contention that both members and observers of the social world possess their own back regions of secret knowledge that will be of more or less salience to the particular purposes at hand. For example, Dalton (1964) notes during the course of a discussion concerning what criteria are appropriate for evaluating informants that he made mistakes and was deceived into judging some persons to be intimates.

"This is part of the price the researcher must pay in studying those who have different interests from his and who may engage in their own systematic study of him and even systematically manipulate him to aid themselves and their department."


The relevance of this remark to the personal experiences of the writer has already been indicated!
The Coming Crises of Western Sociology
Basic Books
Becker (1970) also alludes to the existence of 'professional secrets' regarding the status of insider information that is gathered but never reported in print - although it may well be circulated in private conversations and documents. In any event, there seems to be no a priori reason for supposing that the observed group are any the less competent at screening out their own private knowledge than is the interested onlooker at his. Blau (1964) provides an illuminative exemplar of this process in his description of how he arrived at the eventual realization that he had himself already been the subject of observation by those he was in the process of approaching even though Blau had not yet started observing them. Although occurring within a somewhat different context the following extract from Gouldner adds weight to such an emphasis:

"... there is not as great a difference between the sociologist and those he studies as the sociologist seems to think, even with respect to an intellectual interest in knowing social worlds. Those being studied are also avid students of human relations; they too have their social theories and conduct their investigations."
(Op. cit. p.496)

Such comments possess a certain cogency in those cases where the approached group has some expert knowledge of the research activity and Johnson (1975) provides an already utilized example drawn from the area of social work. In this case certain of the workers, those having recently completed their graduate studies, were perceived by Johnson to be giving him a particularly hard time in
Survey Data and Social Policy 
British Journal of Sociology Vol. 23. No. 1. 
p. 77-91.

22. Line, M.B. et. al. (1972) 
Experimental Information Service in the Social 
Bath University Library.
their interrogative questioning about the purposes of the research. The phenomenon is similar to that which the writer has previously suggested may increasingly be the case in investigations of teachers in school. That the intellectual perspectives of the approached group may lead to respondents questioning the appropriateness of whatever questions are being asked is also suggested by Platt. Line also comments on the phenomenon:

"One of the problems . . . of sending questionnaires to social scientists is that many of them regard themselves, rightly or wrongly, as experts in survey techniques."

This suggestion may now be placed alongside the thin but consistent line of evidence to be discerned in the sociological literature that explicitly supports the notion of a differential ability and willingness on the part of various individuals and groups to manipulate information-giving phenomena in order to produce a desired result. This will equally be the case at the level of personal encounters (Goffman, 1959) or industrial sub-cultures (Dalton, 1959) as it is in relation to suicidal actions (Douglas, 1973). In this latter case the apprehension of the individual that what he tells the psychiatrist may subsequently be used against him is replicated in that relationship between teacher and sociologist. Indeed, the same 'specialist-case' relationship may well prove a determinant of such things as lying, and the specific content of one's communications for both teacher and potential suicide (see Douglas, 1973 in this latter respect).
"Individuals being interviewed by psychiatrists know more or less what kinds of things will seem irrational, illogical, and insane, to the psychiatrists; and they know that the psychiatrist is evaluating them in the most fundamental way. Is this not exactly the kind of relationship in which the individual being interrogated will distrust the interrogator and communicate with him in a very special manner?" (Op. cit. p.260ff.)

The implications of this statement for the field research activity are immense; and this is particularly the case in the light of the previously argued contention that the knowledge of the observing participant is situationally located and constrained in the way indicated. If the writer may return to the earlier incident in which certain questions were regarded as illegitimate for the writer's socially located position, one further interpretation remains to be teased out.

It will be remembered that it was not considered 'appropriate' for a member of the social studies department to go round asking certain questions of other departments: respondents wanted to know why the information was being sought. When the forthcoming explanation was along the lines indicated, that is, that the writer was carrying out research for a higher degree, the questions were more or less legitimated. (Here one is assuming that various social tests of this explanation have been made and negotiated with various degrees of success). What is significant is that as the writer reflected on his fieldnotes there seemed to be another implicit meaning to the interaction that had gradually emerged over time. Whilst the research personna
had validated the investigative activity, the nature of the questions — and more importantly their answers — were viewed within a different context. It was the reflexive nature of the research, the reflecting to others of one's geographical experience, that provided much of the insight for this thesis and it was this participatory role that provided the context for the answers that were being given. Because the socially located position of the writer was that of a man among fellow men one's commitment to the social scene was not in doubt; one's hopes and fears, career expectations, were shared by one's colleagues to a greater or lesser degree. Concerns about financial allocations, next years timetable allocations, the emerging form of new curriculum developments in the school, all were seen as as fateful for the writer as for any other teacher in the school. Thus, when one talks to members of other departments about these matters there was a community of interest providing the context for the conversation.

Now the reader will probably object that, given the internal politicising of any organisation, is it seriously being suggested that received information concerning (say) secret knowledge about the manipulation of courses to attract a desired type of student, was really being revealed to a potential competitor? In the normal course of events the answer must be that of course it is not but the writer was an observing participant and the consequent ambivalence opened many doors that would remain closed to other disinterested observers. On the one hand the writer was 'one of us' and sharing our interests; on the other he was something of a 'stranger' that experience had shown would keep a confidence even when his own participant
interests were thereby placed in jeopardy. The suggestion being made is therefore that the knowledge acquired in acting out a fully participatory in-group role provided many of the insights around which this thesis is built. Furthermore, this knowledge (in its completeness) would probably have been relatively inaccessible to the disinterested outsider; yet even if such knowledge were obtained (for example, by reading this thesis) the context of the interaction would be sufficiently discrepant for a different description of events in the world to have emerged. The reader should appreciate that the writer is not arguing his account to be a more truthful one than that provided by other sources but that its orientation provides a different account. In other words the thesis represents a socially located analysis of events whose construction of what counts as knowledge is contingent upon many factors not necessarily replicated in other publicly available reports of the action.

The substance of the foregoing is such as to once again render the methodology of participant observation problematic. That is so on the grounds that any interpretations of social action will be dependent upon, and coincident with, the researcher's own sensitized awareness of the possible existence of 'secret knowledge' and the extent to which this is, or is not, accessible. His recognition of the restrictive nature of this 're-construction of knowledge component' of the participant activity will, to some extent, be determined by the approached groups negotiated acceptance of the researcher's presented self (Goffman, 1959). The difficulty for the researcher will be one of how to 'get at' this area of knowledge and the

observing participant will be required to maintain a consciousness of the available informant models (for example, Dalton, 1959; Goffman, 1959; Cicourel, 1964; Becker, 1970) together with an intuitive sensitivity towards the possibilities for change caused by his presence. Such indications will of course be extremely difficult to observe although an awareness of the various strategies for interaction (Goffman, 1969) should do much to sharpen the perspective.

One such example of the potential relationship between the researcher's socially located identity, his sensitivity to the existence of secret knowledge, and the reflexive nature of the researcher's other-image (together with the effect of this process on the information that is made available) is illustrated in Fletcher's (1974) record of his observations in a friendly doctor's surgery. At only his second visit to the surgery necessitating the successful negotiation of an overt display of 'receptionist power' (White, 1973) Fletcher notes the receptionist as first recognising his persona, and then saying: "You're the one that goes in with him," at which point she broke into a long smile. One can only infer the possible nature of the prior exchanges between doctor, receptionist, and any interested others, and the way in which this may have affected the outcomes of the observation.

Vulliamy (1972) similarly alludes to the force of this argument when reporting on his study of music education in a London secondary school. He was attempting to show that even in a school with a possible wide differentiation of musical tradition the emphasis will still be upon the
'high culture' in the European serious music tradition. The had of the music department is clearly portrayed by Vulliamy as rejecting the 'plink-a-plonk' approach to school music yet the researcher has to acknowledge that the effect of the teacher's awareness of his (Vulliamy's) experience as a rock drummer was unknown and that this knowledge, together with other factors, may have influenced what he was told.

A possible application of this general frame of reference to the observing participant in the field is indicated by two examples drawn from the writer's field notes. The supervisor of students on teaching practice at a school will make periodic visits for the purpose of assessing that student's performance in the classroom. Such supervisors may be subjectively aware that the prevailing staff culture of the school is in disaccord with that pedagogic paradigm of the teaching activity represented by his presence. Such an awareness on the part of this particular approaching stranger will usually be consequential upon the working of biographic and other interpretative programmes of action along lines already indicated that result in an apprehended suspicion of what may be the case. However, the actual collection of data in support of this suspicion may prove extremely difficult since 'outsidership' is a reflexive dilemma: the ascription of a particular role within the social world both delineates the contents of negotiated communications, and those actors whose presence is - or is not - considered to be necessary for the immediate encounter. It will be seen from the way in which the problem has been articulated that there is a similarity between this situation and the general stance of the writer just previously outlined.

During the course of a longer conversation recorded in the field notes the general argument is encapsulated in an 'incidental' comment made about a frequent visitor
to the school who was closely identified with the social studies department. The general gist of the comment under scrutiny was:

"He's a 'leftie' . . . I've spoken to him once or twice and can tell . . . I'm not going to speak to him again."

The visitor in question was the lecturer in charge of a group of graduate sociology students who made extended visits to the school prior to their individual periods of teaching practice. When the context of the remark is elaborated several relevancies emerge for the current discussion of methodology. The speaker was a member of the English department (the significance of this identity will be discussed in the next chapter) and although, as it turned out, the lecturer had also been asked what he was doing the same question was asked of me. This alerted the writer to the everyday process of cross-checking that goes on in verbal interactions: thus, having heard for the first time that Mary had a daughter the next time her name was mentioned one posed the question 'Oh yes . . . she's got a little girl hasn't she?' The process is one of checking information, eliciting further information, etcetera, that may then become an 'of course assumption' underlaying further conversations such as those elaborated earlier in this chapter.

It may of course be true that the observing participant will not usually be permitted access to those initial interactions where his presence is debated and thus Hargreaves can remain unaware of the negotiated processes involved in his progression from one attributed role to
another. Whilst some questions may be asked, jokes made, at this juncture there will be little for the observing participant to 'observe'. Hargreaves (1968), for example, can merely comment that because of an (imputedly) inadequate explanation of his presence to the staff by the head of the school:

"... too many fears and questions remained unexpressed and unanswered."

Possible strategies that could be employed to 'get at' this knowledge might include carefully controlling the giving out of certain information unique to the researcher and noting where this information reappears. It will be recalled this was the subject of previous comment in connection with the writer's own experience. The above incident may also suggest the occasional challenge of information contained in conversations in a way that suggests it may not be accurate. Finally, the previously cited incident was noteworthy also for the way in which one actor had placed a particular meaning upon an interaction and, on that basis, had made a decision to withdraw from any further involvement. This is an insight that might well be followed up by those intending to enter the field.

The second example, although different in substance, possesses a sufficient similarity to extend one's appreciation of the methodological problem posed by the interpolation of a social alter filter between the observer and the social world giving rise to an account of that world that has itself been negotiated.
The records of this incident originate with a meeting of the school teaching staff attended by the writer in his role of observing participant: one of the items to be discussed was the hoary question of 'Discipline in the School'. For the sociologist what counts as a 'discipline problem' is necessarily problematic not only for its potentiality in the development of a staffroom segmental subculture (Dale, 1971), but also in terms of the taken-for-granted meanings attributed to the term in the ensuing discussion. These meanings formed the unchallenged assumptions of the staff culture until a teacher identified with the sociology department raised the question of whether, possibly, particular ways of teaching within the classroom might not themselves result in differing interpretations of what actions constituted a 'discipline problem'.

(As an aside, when discussing this incident with an 'outsider' colleague - himself a sociologist - he made the remark 'typical bloody sociologist' in a joking mode. These 'self' and 'other' images of sociologists not only have relevance to the recounting of the incident but may also constrain the particular action-in-progress in specific ways. The potential unwillingness of respondents to respond may well be one indication of this).

However, returning to the staff meeting, the comment was greeted with general murmurings of dissent and what can only be described as various 'noises off' from the main body of staff. The general tenor of these noises was to make it quite clear that such sentiments were considered inappropriate within the context of that discussion. The next speaker promptly directed everyone's attention away
from the 'specious' nature of the previous speaker's statement and back toward a more 'correct' interpretation of the item founded on the practical contingencies of classroom behaviour. Nothing further was said about the problematic nature of the item under discussion and although the sociological significance of the interruption would be noted by the interested outsider it would nonetheless remain an isolated and independent event.

However, the writer, as the teacher responsible for the department to which the above teacher 'belonged', was subsequently approached by several members of staff who independently wished to know what meaning should be attached to the statement. That is, they had approached a significant other for an explanation instead of the perpetrator of the said event (this interpretation was later cross checked with that teacher who made the original statement and those approaching the writer for the information). When the request was made the writer, consciously adopting the stranger's pose of an observing participant, attempted several different albeit second order constructions of the 'truth' being embodied in the analysis. The only explanation to find universal acceptance among those making the approach was that along the lines of 'well . . . teaches sociology . . . and young'.

This incident serves to draw the reader's attention to the parallel between the phenomenon of a 'credibility of explanation' in this case and that suggested for the methodology of participant observation. Moerman (1974) questions 'When are the Lue?' and goes on to speak of
the way in which the reporting by others to him was frequently in terms of ethnic, and specifically Inu, categories. Hoerman then warns that, in analysing the underlying rules by which natives ascribe events, things, and persons to native categories, the ethnographer must beware of imposing an alien meaning structure on them. Given that the approached group will establish a flow of information about the things they think will interest the observing participant, and will keep secret other knowledge that may or may not interest the researcher; and that the observer will not be a party to those negotiations involved in arriving at these definitions; both the fieldworker and those variously concerned with the production of his reports must affirm their agnosticism.

It should be stressed in this respect that the teacher concerned in the above incident was unaware of the indicated approaches, although staff reaction to the statement may have sensitized that teacher to the existence of the attitudes that prompted them. Moreover, it was the 'outsideness' revealed by the other teachers rejection of taken-for-granted definitions of what constituted a discipline problem that made a re-construction of existing knowledge necessary. Thus one returns to the supposition that interested actors on the social scene engage upon the everyday activity of re-negotiating the meanings of events with significant others prior to the re-establishment, or not, of interactive relationships. A characteristic of such re-defining situations would seem to be that the offending role identity is rarely consulted at the time these negotiations take place.
There is some similarity with the procedures used by approached groups when interpreting the meanings for them of approaching strangers. When a stranger enters the staff world of a school there is often more or less intense speculation concerning their presence about which they may never be aware. The implication here is not that the 'stranger' represents the non-situated personna of the ordinary man in the street but is situationally located: for example, as husband, wife, friend of a member of staff, an applicant for a job, a student on teaching practice, etcetera. It is noticeable that parents per se are not typically to be found in the school staff room.

It is often on the basis of various information-gathering strategies related to the approaching stranger (yet not, at this stage, as a result of direct interactive events in which the stranger is invited to participate) that decisions about whether to approach - or not to approach - what to talk about - or what not to talk about - will be made. Often based upon minimal information an 'other-image' will be constructed from which the actions of this other may be correctly interpreted. (A theme elaborated in subsequent chapters of this thesis is that such minimal information-gathering may well be restricted to the possible pedagogic subject identity of the stranger).

The process is on-going and is existential in nature thus requiring that the observing participant is perpetually in confrontation with both its existence and its consequences for his activity. Indeed, a cautionary aside to the practitioner of participant observation connected with this construction of other images is that there is some evidence that the field worker performs particularly badly
on two counts: pedagogical research in general tends to be held in low esteem by teachers (Cane and Schroeder, 1970), and sociology in particular is seen as, at best, marginal to the real world of teaching. It is the existence of such background expectancies as these that make the perceived discrepancy between the interests of the field worker and those he seeks to study seem at times to become a gaping chasm. Thus, in a subsequent discussion of the relevance of role-specific knowledge Taylor (1973) argues that possession of the wrong kind of knowledge precludes certain people from membership of particular groups - and the groups he chooses to illustrate his point are teachers and college lecturers.

The Perspective of the Observing Participant.

Given that man the sociologist is located within the appropriated life-world then the sociological perspective must of necessity be viewed as dependent upon his socially located position. To this extent the differential 'availability' of potential perspectives will be, and will continue to be, consequent upon the substance of whatever research bargain was negotiated in order to gain admittance to that particular social world. The notion that the way in which the approached group defines the research persona will affect whether or not certain kinds of information and events will be kept hidden (the 'private' knowledge of that group) or made available to the observer (its 'public' knowledge) has previously been discussed. What is being considered at this juncture in the argument is concerned with the interaction between
the (differential) accessibility of knowledge to the observing participant, and the consequent sociological assessment that will be made of whatever knowledge is thus presented. For example, Phillips (1973) has made the suggestion that the behaviours of the approached group will be constrained by their definition of the situation in which the perceived purpose of the investigation will be evaluated within a 'correct response paradigm'.

Sociological writers have often commented on the tendency to study only those organisations agreeing to the research activity (Becker, 1970): a dilemma not wholly resolved by the increasing recognition that the collection of data is itself a social process. Although leading to a concomitant awareness that social investigations are not always rationally planned studies of problematic areas - knowledge of social welfare practices in California are as likely to derive from the existence of personal contacts able to ease entry for the observer (Johnson, 1975), as studies of Yaqui knowledge are to originate in a chance meeting with an old man at a bus stop (Castaneda, 1968) - there remains the difficulty that much sociology may be grounded within a perspective based upon a limited access to the observable life-world. The writer has already commented on Dale's (1972) note concerning the quantitative disparity between sociologies of classroom and staffroom.

Similarly, actors are not merely repositories of social meanings but are also creators of them and such a prospect raises the possibility that the various actions-in-progress contain several layers of meaning that are not, necessarily, mutually compatible and that may indeed (at least potentially)
be contradictory. There is a tendency for the research process to screen out such ambivalence - particularly insofar as this involves the translation of, socially located, personal experiences.

The initial appropriation of a particular research methodology, being a subjectively 'meaningful' mode of collecting data, therefore locates the very sociological perspective within an ideological paradigm. This process will itself partially define the way in which the researcher both observes the world and conducts his research. Earlier in the chapter the writer explained the main 'signposts' guiding the research activity and at least set out the complex nature of the problem even if no ready solution came to hand. However, because the problem is complex this in no way negates the validity of those contending that the sociological perspective is 'merely' the application of sociological concepts. Because the notion is one involving another facet of the infinite regression debate Phillips (1973) requires an answer when he calls for an explanation of how sociologists make decisions about what is or is not sociological knowledge.

Such a stance has some relevance when considering the differential availability of meanings to those social actors - among whom the writer would include the sociologist - participating within the life of the observable social world. The notion of an 'area of relevance' implied in many of the preceding arguments extends beyond the initial adoption of a particular research methodology to embrace many of the actor's 'common-sense' understandings of his world. Those conjectures made at the inception of a research programme therefore become of crucial importance in indicating what questions will be asked - for the action
of posing a question not only determines the boundaries of possible answers but, more specifically, make it impossible for certain answers to be given or other insights to be generated. Thus, whilst the progression in the present research study possesses its own internal consistency it was never suggested that the classroom activities of the teacher would be incorporated into the data. Similarly, there is no attempt to examine the implications of what is said about subject identity in a secondary school to situations where this division is not applicable. There are also many salient features of a teacher's identity that are worthy of study yet they form no part of my thesis.

In a similar manner to that in which traditional studies of suicidal phenomenon utilized statistical sources for their data (and therefore established the way in which this data would 'make sense') so too may a particular sociological interpretation of the actions in progress reflect both the observer's socially located position within the group and, importantly in the light of the present argument,

". . . the state of the observer's conceptualization of the problem at the time the item of evidence was gathered."
(Becker, 1970. Page 36)

This is obviously true of the present thesis. Likewise, Castaenda (1973) feels able to subsequently 'confess' that earlier field-notes had been based upon an (erroneous) assumption concerning the central role of psychotropic plants and explicitly states that he had previously:

". . . discarded those parts of my field notes in earlier works because they did not pertain to the use of psychotropic plants."
Particular research perspectives – and consequently their various research outcomes – may therefore be viewed as emergent and emerging social actions dependent upon a biographic interpretational paradigm of behaviour. The acceptance of such an argument offers further evidence for the prior suggestion that differential explanations of similar phenomenon are implied in the essential spirit of the sociological activity. 'Doing research' is thus an activity taking place within an ideological paradigm in which the observing participant utilizes the biographic experiences of the self both as a common-sense actor and scientific researcher (Cicourel, 1964; Robinson, 1974). In Schutzian terms, the researcher's experience of that part of the world that is within reach is appropriated as part of the actor's unique biographical situation: it is a 'transcending of the Here and Now to which it belongs'. What seems to be implied in a pragmatic sense is that:

"The actor . . . approaches the role-taking situation with a background of conventions and/or ignorance which precedes his abstractions from the immediate objects and events in his visual field."
(Cicourel, 1964. Page 213)

The argument becomes even more explicit when Lacey (1976) proposes the question of how outside is outside? He suggests that in fact:

". . . every study is constrained by the limitations of the researcher and those limitations extend to the constraints imposed by the researcher's values. These may limit his insights and curb his imagination."
(Op. cit. p.67)
25. Poole, R. (1973)
Towards a Deep Subjectivity.
Allen Lane.
Whilst the nature of some of these constraints will become explicit in the case at present before the reader one would also wish to give credence to the opposing suggestion: that the researcher's values may similarly provide opportunities for illuminative insights, the elaboration of the sociological imagination.

The essential substance of the thesis advanced in this chapter is that the methodological process is itself a problematic phenomenon. This is taken to mean an awareness that reality can be purposively confronted and acted upon and that, as a consequence, there will be a variation in the extent to which a real situation is defined as problematic, and therefore in the availability of resolutions to situations so defined. At this point the application of such a perspective has been limited to a consideration of the extent to which the observing participant if granted only limited access to the socially constructed realm of meanings available within the approached group. What is now proposed is a recognition of the interactive process as one offering a symbolic interpretation of those observed processes. The focus of such a contention will be the comment of Poole\textsuperscript{25} that:

"What is taken to be true, evidence, obvious, is a function of perspective - it depends upon the angle of vision upon the world and the quality of phenomena which have been included in that purview."

Consequently, the proposition is that interactive processes can, 'in reality', offer only their own re-constructions of that reality apprehended through the application of a particular perspective. Moreover, because the field-
worker is condensing the common-sense experiences of everyday life the selection of what appears to be the most crucial, most characteristic, activity will be governed by the observing participant's skill in identifying the perceived centrality of particular concepts in the complexity of the social world. The argument is thus that the 'outsider' understands the phenomenological constructs of that world forming the ground of the actor's being only from the conditioning and constraints imposed by the application of a sociological perspective. What is dangerous is when such perspectives derive from a sociology originating in the sociologist's own typifications. Indeed, in some degree a sociological 'misrepresentation' of the social world as argued by Laing necessarily ensues from the impossibility of the participant observer subjectively appropriating the experience of another (Silverman, 1970). Those subjective meanings attributed to social actions by those involved are interpreted qualitatively by the differential location in that social world of 'sociologist' and 'actor' (Schutz, 1964). A theoretical extension of these arguments is to be found in Phillips (1973) whilst a critique of such ideas from a different direction is provided by the Hindess monograph already cited. In essence the difficulty is succinctly summarized in the observation of Swift (1973) that:

"Sociology does not deal with a special class of data. It brings to all empirical data a special perspective. It is not so much that there is something 'out there' which is sociological as that we perceive something sociological about what is 'out there'."  
(Op. cit. p. 179f.)
In essence then sociological work may be portrayed as an activity aimed at the generation of appropriate data by the process of attributing sociological meanings to the 'out there' activity. It therefore becomes important that the questions being asked, and the language being used, reflect a shared vocabulary for interpreting the action: this is a point of some salience for a later argument and will be returned to in later chapters. For the present purposes then the particular perspective being used may be potentially differentiated not only as between (from Schutz) 'sociologist' and 'actor', but also between sociologist and those he regards as respondents, interviewees, other observers, or his research colleagues. In all these cases the critical question to be answered is posed by Cicourel (1973).

"Can we say that individual actors employ the same terms in defining social situations for themselves and others? How does the actor in everyday life assign meanings to objects and events in his environment? The point is whether the social analyst is using the terms as convenient shorthand to describe what he thinks is the actor’s perspective or whether the actor’s vocabulary includes the same terms and meanings, or their equivalents, as those of the observer."

(Op. cit. p.12)

Although Cicourel's comment was directed towards the notions of role and status in particular it is the writer's belief that the same questions may be asked of the entire sociological enterprise.

This general difficulty for the researcher is raised in an acute form by the novitiate fieldworker for the alternative to 'nothing is sociology' is the opposing 'everything is sociology' (a theme that is elaborated
later in this chapter). What constitutes a 'sociological perspective' is therefore not merely a question for some epistemological debate but one extending even to the particular selection of one mode of describing data from among the many that are available (Bruyn, 1966). For example, if the observing participant is engaged in some reflective study of a phenomenon it may be crucial his insights derive from a 'sensitizing concept' (Blumer, 1954); an 'intuitive reconnaissance' paradigm (Bruyn, 1966); or some other analytic interpretation of the data. In each case the decisive choice can be dependent upon 'the observer and his interests'. On the other hand the description of social activity offered by the observing participant may be just that: socially descriptive but in an essentially penetrating and meaningful way. The sociological community has also to grapple with the implications stemming from the fact that descriptions of data are also likely to be literary in emphasis and primarily derived from the observer's sight and hearing. Thus one becomes aware of the tension and difficulties experienced by Castaneda when attempting explanations of phenomenon directed at other senses. More typically however the sociological perspective of the observing participant is such that:

"... when he feels he has understood the experience in their (the approached groups) terms, he would look for elements in the culture of his fellow social scientists which are comparable to those he has studied in order to provide the basis for his colleagues' own understanding of the cultural data. He may do this by making special metaphors or creating analogies from his original experience in both cultures in order to create a unity of understanding between them."

(Bruyn, 1966. Page 162)
27. Horton, Robin (1971)
*African Traditional Thought and Western Science in Young (1971)* p. 208-266.
What is important in this case is that the researcher's characterisation of the social world must, at least initially, be in the terms and languages of the approached group. Without such an existential appropriation the imputed meanings of that world cannot be properly comprehended.

Thus once again the stance of the observing participant, as practitioner of a particular research methodology, is linked (necessarily) to a concomitant interpretational paradigm thereby offering an alternative construction of the meanings attached to a specific event by such other actors as are at that moment engaged in the reality of the social world.

Such a perspective leads to a translation of the argument as one suggesting that the application of a theoretical perspective to the various actions-in-progress can, by the very nature of that perspective, act as a parametric constraint upon the process of 'making sense' of the data. The action of transposing an interpretational paradigm from the observer to the observed (in those cases in which the former is unfamiliar with the thought categories of the latter) could effectively deprive the observer of an essential 'key to understanding'. Whatever the criticisms of their work both Schutz and Garfinkel at least perceive the initial task of sociology to be an examination of those categories employed by the 'ordinary man in the street'.

Horton advances a general proposition appertaining to the nature and function of theoretical thinking when he portrays explanatory theory as possessing the potential to unify an apparent diversity of presented phenomena. By linking statements identifying happenings within the
theory, with happenings within the world of everyday experience, the resulting 'reality' is suggested to be neither that of the theory nor yet a construction of the commonsense. Horton would further claim that such 'correspondence' rather imposes a phenomenological unity that is uniquely characteristic of the relation between the world of commonsense and the world of theory. In effect, theoretical entities are utilized:

"to link events in the visible, tangible world (natural effects) to their antecedents in the same world (natural causes) . . ."

and that one consequence of such a process is that:

"... once a particular theoretical idiom has been adopted, it tends to direct people's attention towards certain kinds of causal linkage and away from others."

(Op. cit. p.213)

Such an acknowledgement that methodological givens act to subjectively bias one's perspective on the observable world — that is, the process of 'making sense' is itself a function of perspective — and that the social knowledge so acquired possesses a biographical dimension, leads to a consequent recognition of research as a purposive activity. This not only in the sense in which the purposes of those being studied form part of the data but also in the sense that the researcher is also constrained to act within those purposes deemed to be 'data'. Blum (1971) supports the implication of such a proposition when he argues that the use of a particular methodological procedure analytically located the meaning of that world for the personna of actor as theorist.

29. In a footnote Douglas refers to:
   Pittenger, Robert E. et. al. (1960)
   The First Five Minutes
   Paul Martineau.
Acceptance of a social constructionist view of reality provides an additional support for the argument directed at the negotiated nature of the observing participant's perceptions of that world. In so doing one also implies a view of that reality as inherently capable of definitive change (Berger and Luckmann, 1971). The problem for the researcher is thus one of the extent to which the sociological enterprise itself acts to redefine the nature of the observed reality; the complaint of sociologists that their research is subject to 'an excisive and distorting use of its findings by pressure groups' may well be echoed in a similar relationship between the observed group and those doing the observing.

The difficulty is somewhat analogous to that encountered in the analysis of psychiatric reports relating to suicidal phenomenon reported by Douglas (1973). In this case constraints imposed by the method of recording what was observed (that is, the infrequent use of the tape-recorder and rather more frequent use of rough notes made at the time by the psychiatrist during his encounter with the client) led to a questioning of the particular reality that was in fact being observed. Douglas notes that:

"The dominant means of recording what happened is reconstruction from memory shortly after the actual encounter. The evidence that can be gained by comparing the memories of psychiatrists with recordings of what actually went on would seem to indicate that there is a good deal of difference between what they remember was said and what was recorded as having been said. The interpretation normally given to this finding is that their reconstructions have distorted or selectively presented what went on in fact,"
presumably to fit the motives, self-conceptions, etc., of the psychiatrists. It is entirely possible that this is the best explanation of such differences. On the other hand, it could also be simply that the memory is selectively retentive not of specific statements or actions but, rather, of socially and personally meaningful units and complexes." (Op. cit. p. 259. The emphasis is in italics in original).

What is apparently being suggested by Douglas is that accounts written by observers are to be viewed as condensations of what takes place rather than as simple distortions or selective presentations. The phenomenon has been demonstrated as considerably more complex when the context is that of a social interaction involving myriads of groupings exhibiting various degrees of visibility to outsiders, and indeed to certain of the insiders. In these instances each of the many qualifications that have been rehearsed in this chapter come into play in a way that individual encounters can only suggest as possibilities. The dilemma is a real one and, to the extent that the explanation is appropriate to the activities of the observing participant, it is enticing. However, it does replicate an earlier discussion and the same critique still applies: the suggestion does contain an ambiguous circularity in its argument since it remains the observer who is imputing meaning to the event. The requirement for some explanation of the processes by which 'out there' phenomena are incorporated into (an explicit) socially and personally meaningful complexes still exists.

Nonetheless, one would not wish to imply that the collection of data by the observing participant consists of little else than the random jottings of 'another' observer. The data will not be the same in its completeness as the data collected by some other because it is linked inextricably
with the process by which it 'becomes sociology'. Namely, that the study of this or that social phenomena occurs within a less or more strictly defined theoretical frame of reference (Berger, 1963). What in fact distinguishes random jottings from the field notes of an interested observer of the social scene is that these latter are different precisely because they are addressed to a different epistemic community. Their legitimation derives from a different source. Such a perspective does of course raise a very interesting question as to who is actually doing the defining and can only reinforce the earlier portrayal of the observing participant as a personna committed to two life-worlds.

The distinction can be illustrated with reference to those details provided in Johnson's (1975) biographical account of his journey in self-awareness whilst engaged in fieldwork among a group of welfare workers in California. Thus at one point in the early part of his study he reports being literally 'sick with fear': now the fact of that sickness is not - at least within the particular stance adopted by the writer - a 'sociological' event. Similar feelings are no doubt experienced by many beginning fieldworkers, and perhaps by more experienced ones as well, but this feeling is only of potential 'sociological' interest. It becomes sociological significant only when the researcher goes on to demonstrate how this feeling may have subsequently affected his approach to particular groups: did it gain entree to a previously closed 'medical' perspective on the approached group via a resident nurse? Did it open up any new insight in that it stimulated some previously latent experiences of the group? Painful questions need to be asked if the reader's knowledge of this sickness is to be warranted by the sociological
community.
The data collected by observing the social world will subsequently be utilized in a theoretical understanding of what went on and one consequence of this for the observing participant is the existence of the previously mentioned irreducible difference of interest (this is not the same as a conflict of interest) between the observer and those he studies.

"The observer deliberately cedes the social realities of the observations as not being his reality. The facts of life for the practical actors in the setting are, for the observer, exhibits for observation, recording, reflection, theoretical speculation, and so forth. The meaningful properties seen by the observer in the things observed cannot possibly be equivalent to the observed individual's experiences of them." (Johnson, 1975, page 142f.).

Whilst the implications of this contention form the substance of this chapter an educationist version of a prospectively interesting question relating to the research methodology now emerges (and one to which an answer will begin to be supplied in a subsequent chapter). On what occasions do the insiders of the social world (that is, the classroom teachers) ignore the realities examined in this thesis (the pedagogic subject as a source of a socially located identity) and on what occasions do they attend to it?
The argument as it relates to the participant observer activity is that actual experiences of everyday life are necessarily transformed by the observer into something other than they were in the apprehended realities of the approached group. The selective perception of the presented world that is argued by Douglas (1973) is therefore more than merely a biographic interpretation
of social action since it is also grounded within, for example, historic, cultural and epistemological paradigms. This argument receives further elaboration in McHugh (1970) and leads ultimately to a concurrent exposition of those processes involved in 'warranting knowledge' that is taken up later in this thesis. The potentiality for either 'distorting' or 'selectively presenting' an observed phenomenon is not necessarily confined to its more frequent manifestation in which the approached group may be presented as the plaintiffs (in an action directed against that particular presentation of data associated with a sociological paradigm). Indeed, one may also posit a converse instance of the case in point in which the researcher stands accused of 'going native' (and thereby leading to complaints from professional colleagues that the data has been distorted in this way). The position here is that somewhat akin to McHugh's thesis concerning the perceived failure of positivism during which he argues that:

". . . nothing - no object, event, or circumstance - determines its own status as truth, either to the scientist or to science . . . An event is transformed into truth only by the application of a canon of procedure, a canon that truth-makers use and analysts must formulate as providing the possibility of agreement." (Op. cit. p. 332)

A recognition that 'sociological insights' or ways of seeing the world are but one version of the social reality leads to the concomitant awareness that such realities cannot exist independently of their mode of production. It is in such a realization regarding the
inherent precariousness of socially constructed knowledge that the sociologist as fieldworker may derive support for an ecstatic transformation enabling the pragmatic resolution of the problematic nature of his activity. Such difficulties - perceived as arising from the imposition of one, socially located meaning system upon actions taking place within another - are rarely made explicit in sociological writings. Although Castaneda (1968) does exceptionally acknowledge that the meaning of an event for him is not necessarily an exact duplicate of what don Juan said himself. An illustrative episode is that in which don Juan is asked by Castaneda whether or not he (Castaneda) 'really flew': don Juan responds by suggesting that within the particular context the question was nonsensical and therefore without meaning. This tension is apparent throughout Castaneda's writings and is one receiving insufficient consideration in traditional sociologies of the school. For example, it may be that in 'making sense' of schools sociologists ask questions about (say) school knowledge that are perceived by teachers, and indeed perhaps by their pupils also, as similarly 'nonsensical'. The previously noted 'discommunity' of interest between the sociologist and certain members of the teaching profession may well derive in part from the fact that what is a core concern to the former is no more than a peripheral one for the latter. (The reverse may perhaps also be true). Thus unique questions may be posed by the observing participant and, being hitherto unthought, the teacher answers not by reference to some stock of expert knowledge but rather with the common sense, everyday understandings of the (admittedly pedagogic) man in the street. This answer
is then transposed by the observer into a qualitatively different system of meanings.

The proposition that meaning should not necessarily be considered as necessarily coincidental as between questioner and respondent (although the at-the-time presumption will be that it is sufficiently congruous for the immediate purpose at hand) establishes an understanding of 'meaning' as constituting the 'data of the observer' (Bruyn, 1966), in a way that the description 'observable data' does not. Moreover, whilst the category 'observer as researcher' seeks to ascertain the meaning of a given social world, the (in this case) theoretical perspective implied in the possessive ' of the observer' seeks to explain this meaning within a different framework. Bruyn suggests a polarity of interest in which:

"The researcher looks for the meaning of reality in the culture he studies, and is therefore concerned with discovering and verifying the existence of a certain reality through human meanings. The theorist, however, must bring these meanings together into some larger whole; in so doing, he creates a certain reality for himself." (Op. cit. p.162)

At this juncture one is moving towards an exposition suggesting an experiential awareness of the relationship between what Berger and Luckmann (1967) chose to call 'receipe knowledge' (what everybody knows) and theoretical knowledge. Taylor (1973) not only restates the argument but places it firmly within an educationist context with the succinct commentary that:

"What is often ignored is how the role related knowledge that people have about education determines the perspectives from which they identify the nature of the problems to be faced and the means by which they might be overcome." (Op. cit. p.193)
As the writer explained in the introduction to this thesis the situationally located position of the teacher personna certainly interacted with and informed the stance of the similarly located research personna. It is a central concern of the whole thesis that each participant in a social scene is engaged in participant observation in a more or less dynamic way. Each will encounter problems of entree to particular communities within the appropriate life-world and each is similarly engaged in theorizing activity concerning the meanings for them of what is happening in that world. At the moment the research perspective is paramount but only because it is of particular salience for the present purpose at hand.

It is later argued that what counts as (say) the pedagogic subject 'history' may differ from school to school in much the same way that what counts as sociological knowledge may differ from university department to university department. The present argument is important for stressing the importance of meaning boundaries in determining the specific situational meaning that individual actors must work within in order to construct that particular social world for themselves. Thus, where individual members of a culture (including the sociological observer) consider a phenomenon to be meaningful they do so only in the sense that it may be 'adequately' interpreted or explained in some way acceptable to those members. Only certain things in certain situations will be considered relevant for such an interpretation to be made. The substance of the proposition was made quite clearly by Douglas (1973) in his attempts to reformulate various theoretical
approaches to suicidal actions during the course of which he cautions that:

"... abstractions must be the result of comparisons made by sociologists of the concrete meaning of those phenomenon defined as similar by the members of the culture. It need hardly be added that the meanings being compared must be those constructed by the actors in response to their 'natural cultural habitat' rather than those constructed by actors in response to some 'unnatural' instrument with its own implicit assumptions about the structure of meanings being studied."
(Op. cit. p.189ff.)

Any 'principle of the contextual determination of meanings' is therefore equally subject in its application to both observer and observed. There is some similarity here with Becker's observation regarding outsiders also being insiders in certain circumstances, together with the reverse case of 'insiders' who might also be considered 'outsiders'. Both are suggestive that the ambiguity imputed to the situated meanings of a phenomenon arise from a broadly based social constructionist theory of meanings. The ways in which specific events are differentially related (by the social actors) to each other will determine the meanings of particular phenomenon to those individuals and that such meanings will be differentially perceived by those participating in the action. As with suicidal action, the problematic nature of sociological work is consequent upon the problem of determining meanings in which:

"... a basic reorientation of sociological work ... in the direction of intensive observation, description, and an analysis of individual cases ... seems to be necessary."
Theoretical questioning of practical assumptions concerning the nature of the participant observer activity lead in turn to an examination of the previously taken-for-granted statements that the methodology requires the researcher to view the observed culture just as the people being studied view it. The researcher is typically then asked to use the sociological imagination in order that others may appropriate the universality and relevance of the perceived 'world reality' in the approached group. One of the few contemporary accounts exhibiting some awareness that this may be a problematic statement is that by Shipman (1974) who writes:

"... the people sociologists study often have trouble recognising themselves and their activities in the sociological reports written about them. *We ought to worry about that more than we do.* We should not expect laymen to make our analyses for us. But neither should we ignore those matters laymen habitually take into account when we describe, or make assumptions about, how they carry on their activities ... . If the people studied cannot recognise themselves in those descriptions without coaching we should pay attention."


Here Shipman touches upon the salient argument that experience of the social world is differentiated according to the actor's location in that world. Whereas the interested observer existentially appropriates that world as an object of thinking the actor within it experiences this world as a field of actual and possible actions (Schutz, 1964). It is, for example, interesting that in a later paper Shipman (1976) provides an illuminative parallel drawn from within the research paradigm when discussing sociological work. He comments that:
"... once results have been published they are often used in ways that suggest that they have either been misunderstood or deliberately distorted,"
(Op. cit. p.150)

The reader will readily locate the sentiments expressed by Shipman within the context of a preceding argument: If appropriated knowledge of the social world is indeed differentiated in 'hypsographical contour lines of relevance' then, because observer and observed do not share an identical situation, not every possible aspect of this world will come within the prospect of its members. Knowledge is socially distributed and, as such, the observer's re-construction of that knowledge must therefore take account of both the subjective meaning and the subjective relevance of that knowledge. The methodological process itself has repeatedly been shown as problematic in its constraining the possibilities of action. This is not only because neither observer nor observed will share an identical social situation, but also because different outsiders will be differentially located in the social world. The general proposition is illustrated in the following extract:

"In order to make sense of an act, the observer must place it within a category which he can comprehend. He might distinguish, for instance, between an act associated with friendship and, say, an act associated with work. At the same time, however, the act will have certain meanings to the person who carries it out and to the people at whom it is directed. What the observer takes to be merely the repetition of the same physical action may imply totally different meanings to those concerned according to the way in which they define each situation. By concentrating on the behaviour itself, it is possible to miss totally its significance to the people involved and, therefore, to be unable to predict with any accuracy the way in which those at whom it is directed will react to it."
What then is the relationship between social action, the social construction of knowledge, and the subsequent sociological re-construction of that knowledge?

That pedagogic world inhabited by teachers and viewed as a social construction is not, in essence, an existential predication but is a world of realities peopled and experienced by the biographic and social histories of other actors who will have preceded the neomer in their movements about that world. It is these previous actors who have already interpreted their experience that will order the activity of confrontation and 'make sense' of the world. This is a situational explanation of why different histories, different sociologies are possible since any change in what counts as knowledge must necessarily take account of what knowledge is already located in that place. Schutz once again notes the relevance of this for the activity of the observing participant:

"The observational field of the social scientist . . . namely the social reality, has a specific meaning and relevance structure for the human beings living, acting, and thinking therein. By a series of common-sense constructs they have pre-selected and pre-interpreted this world which they experience as the reality of their daily lives. It is these thought objects of theirs which determine their behaviour by motivating it. The thought objects constructed by the social scientist, in order to grasp this social reality, have to be founded upon the thought objects constructed by the common-sense thinking of men, living their daily life within their social world. (Schutz, 1954 p.266f.)

The implication is that, in the process of creating—or rather re-creating—the common-sense meanings for
men engaged in living their life as usual, the newcomer takes existential possession of the experiences and common-sense constructs of the different actors involved in that social world. However, the newcomer's participation in the action-in-progress in the approached world is subject to those finite provinces of meaning derived from that individuals inherited stock of knowledge.

The act of 'jumping from the stalls to the stage' that is required of the observing participant also requires a re-orientation of interpretative actions for use with the new social surroundings of the socially constructed world since only members of the in-group, having a definite status in that world, and also being aware of it, can use the cultural pattern of the social world as a natural and trustworthy scheme of orientation.

Whilst that reality represented by the approached world may be apprehended and observed it is pre-defined by the typical features of that world, and consequently the typical acts of those typical actors constrained within it. It is nevertheless true that whatever the reality circumscribed within the observational field of the outsider the activity of confronting that reality is dependent upon the observer's own 'relatively natural view of the world' and it will be those meaning structures derived from such a view that will orientate the observer's interpretation of those social activities. Moreover, the research activity itself takes place within a particular normative and interpretative paradigm (Wilson, 1971) which has a strategic role in the sociological explanation. Participant observation may therefore legitimately be portrayed as a socio-entrepreneurial activity in which resulting descriptions of the action:
"... are the products of research activities conducted by members of a particular scientific community and consist of accounts of those activities that are provided and understood by competent members of that community. The conduct of research and communication of results, moreover, depend on common-sense knowledge that is taken for granted by the members of the relevant scientific community, and one's competence as a member of that community consists partially in being seen as having command of this body of presumptively shared common-sense knowledge."

(Wilson, 1971. My emphasis)

The exploitation of the observing participant's biography as an interpretative basis for the re-construction of knowledge has certain consequences when considering the precise stance of the participatory stance that has been developed elsewhere in this chapter. Vidich (1955) for example draws out certain distinctions between the meaning of events when observed in one's own society and in a foreign culture: it may be that some meanings can only be fully understood in the one case or the other. Again and again one returns to the stress upon the unique nature of the sociological perspective as derived from the observing participant's view of reality. That the interactive process is itself a constituent part of the knowledge being constructed. It therefore becomes possible, indeed predictable, that at different stages of the observation the participant will gradually be given opportunities to participate in the different social activities of the approached group: in so doing the data will necessarily 'change'. Indeed, the background to this thesis has been demonstrated to follow just such pattern of change.

However, one must beware of the implication that the sociological perspective consists of a series of unique,
isolated and subjective experiences of the observer for it can only be senseful experience when there is a sharing of features in common with other actions or experiences. 'Meaning' can therefore be attributed only to action transcending the present moment.

If these meanings are themselves a creation from experience and are capable of a separate existence we have the means of release from the existential imperative and are able to postulate the existence of knowledge as a stock of typifications capable of being transmitted in social intercourse. Knowledge may thus be a derivative of action enabling that confrontation with the social world to acquire structures of meaning from the purposes at hand. The acquisition of knowledge is therefore followed by its utilization in order to achieve ends that we have in view. These ends themselves determine which of the available typifications shall be relevant in the act of choosing. Schutz answers his own question of what constitutes my particular purpose in hand at this particular moment:

"This question leads us to the second set of experiences upon which the practicability of future actions is founded. It consists of the experiences which I, the actor, have of my biographically determined situation at the moment of any projecting. To this biographically determined situation belongs not only my position in space, time, and society but also my experience that some of the elements of the world taken for granted are imposed upon me, while others are either in my control or capable of being brought within my control, and thus principally modifiable .... At any given moment of my biographically determined situation I am merely concerned with some elements, or some aspects of the world taken for granted, that within and that outside my control. My prevailing interest . . . determines the nature of such a selection (of that which is relevant.)" (Schutz, 1962. Projects of Action).
The pedagogic subject will of course constitute just such a 'prevailing interest' and the application of the above perspective to the social actions of those participating in the realities of the staff world will itself act as an interpretative filter in observing the social processes of reality construction, and the maintenance or otherwise, of the teacher's world. Lacey (1976) portrays the participant observer as one

"... records as accurately as possible selected aspects of the everyday life of people in everyday situations."

and the selection of some elements, of some aspects, of the taken for granted world means that the world experienced by others will be unlike the world experienced by the observing participant although both share that world and for whom it provides (although dichotomously) their respective grounds of being. We have thus once again returned to the recurrent theme of this chapter: the degree of 'fit' between the social world observed by the outsider, and that experienced by those wholly participating within it. From this derives the difficulty that actors within that world:

"... often cannot recognize the acts they are supposed to have engaged in, because the sociologist has not observed those acts closely, or paid any attention to their detail when he has. The omission ... makes it impossible for us to put the real contingencies of action into our theories, to make them take account of the constraints and opportunities actually present. We may find ourselves theorizing about activities which never occur in the way we imagine."
(Shipman, 1974. Page 192)
30. Hughes, Everett C. (1947)  
Institutions, Office and the Person  
American Journal of Sociology No. 43.  
November, 1947.
Although subject to many limitations and constraints the writer believes one of the strengths of this thesis to be that it was conceived and constructed from a location within the world with which it deals. The various reflexive dilemmas of the observing participant may of course caution against making too much of this stance.

To some extent the function of perspective makes a certain discreteness inevitable for it has already been shown that knowledge is a socially distributed phenomenon. It is now proposed to elaborate another facet of this argument that the knowledge of the observing participant will not, in its completeness, be the same as the knowledge of the complete participant.

Given 'the career' of the researcher is merely one among many of the segmental ways in which he views 'social reality' the writer is required to explicate the consequences of this career in terms of the knowledge that is constructed. To the extent that the research stance appears of particular salience - because it happens to be the purpose at hand - the notion of a research career may be applied to that moving perspective in which such persons orientate themselves with reference to the social order, and of the typical sequences and concatenations of office. Thus Blau (1964) notes the collection of 'data' to be contingent upon processes of conceptual refinement, a differential perception of the 'appropriateness' of various methodological techniques at different stages of the enquiry, and that - during later phases of the observing participant activity - the best informants are no longer marginal sources of information but are now highly respected. However, the observational field of the participating
sociologist contains not only the respective careers of the observed actors living wholly within the constraints of that social world, but may also be seen to contain the developing career of the observer himself: the existing professional identity. Perhaps significantly there have been few studies of this area concerning the research process although Härnqvist (1973) probably comes nearest to the present perspective viewing the research persona as itself a problematic phenomenon. Even so, Härnqvist merely examines the typical 'career profile' of the researcher within the arena of subsequent publishing activities and as occurring within different organisational settings. Nonetheless it is contended that the professional world that the observer seeks to illuminate will be but incompletely understood (in an unnecessarily limiting way) if this phenomenon continues to remain shrouded in professional secrecy. The observing participant only possesses an identity insofar as this is

"...objectively defined as location in a certain world and ...subjectively appropriated only 'along with' that world."
(Berger and Luckmann, 1971)

The career orientation of the research identity is therefore yet another reality filter of some consequence in the observer's re-construction of the world. Although there is no immediate similarity between barbershop apprentices and fieldworkers both are engaged in a process of learning their respective ropes (Geer, 1966). The sociologist adopting the methodology of participant observation is however not merely 'interested' in the process of situational learning but is pragmatically
involved (Schatzman and Strauss, 1973). Having made an ideological decision to employ the methodology he must now learn to interact with the social data around him in order to understand the situational symbols used by the natives in constructing their various courses of action. The bewilderment of the apprentice barbers as the action takes place around them, and in which there are no prescribed sequences of study, may be mirrored in the activity of the novitiate fieldworker. Neither possesses knowledge of what is 'going on'; both are pretty much on their own; both are concerned; both are left just to go around and watch and study. Becker's (1970) note that:

"Novice sociologists frequently have great trouble doing field research because they do not recognise sociology, as they have read it, in the human activity they see all around them."
(Op. cit. p.190)

is full of import for the beginning observing participant. In her own discussion of the relationship between initial experiences in the field and the researcher's thoughts both prior to entering the field and subsequent upon the completion of that event (Geer, 1964) emphasises the sometimes fundamental changes that take place. One particular exemplar concerns those first few days in the field when the perceived appropriateness of the various strategies and concepts that had previously been proposed is now in doubt. Although such changes may radically affect the nature of the subsequent work - as indeed was the case with the writer - they seldom constitute a front region of the research performance:

"a point seldom mentioned in monographs but frequently discussed by fieldworkers among themselves."
(Op. cit. p.322)
A statement that the reader may wish to reflect upon and relate back to the earlier discussion concerning the part played by sociological literature in informing selected aspects of the research persona!

Geer continues by elaborating a process of adjustment in which various biographical knowledges may problematize the observing participant's perception of their role, changes in 'understandings' regarding the ways things work, and an expression of the initially rather narrowly defined (perhaps by both parties to the interaction) role of the researcher. She then relates these issues to her own experiences:

"Three days of fieldwork were enough to change my concept of college students dramatically. Before entering the field, I thought of them as irresponsible children. But as I ... accumulated the bits of information about them which bring people alive and make their problems real, I achieved a form of empathy with them and became their advocate. The observers who began work in the field experienced the same change, but not until they got into the field. Reading my field notes did not help."

Reference has already been made to the 'everything is sociology' - 'nothing is sociology' syndrome experienced by novitiate fieldworkers and the synthesis with the present emphasis on the changing perspective of the research persona is clearly demonstrated in Johnson's (1975) commentary regarding his early days observing the Metro social workers:

"I recorded a voluminous amount of notes during the early months, comparatively at least. I think I recorded even more of them then than later ... As I subsequently reviewed these early notes, I found them not especially valuable ones, in terms
either of description or of insight. . .

... the notes trivial, naive and often mistaken character resulted from my ignorance of the setting and its tasks, official rules, names, terminology, and the like.”


Suffice it to say that these experiences are compatible with those of the writer whose only regret is that the insight they supply was retrospective—and it may be this is necessarily so.

Theoretical consideration of method is too frequently divorced from the practical outworkings in the field, and the maintenance of a perspective outside and independent of change is a qualified must statement for the observing participant. There are few accounts where the time perspective is detailed in the treatment of data yet Douglas (1975), once again writing from within an anthropological paradigm, graphically brings together the various strands of the argument in an eclectic way. She (presumably rhetorically) asks her readers to:

"... imagine the anthropologist who, fresh home from the field, announces: 'My tribe hasn't got any religion.' There ought to be a Bateman cartoon to illustrate the dropped spectacles and raised eyebrows and the sense of horrid solecism. No one has interest in the news except to pass a harsh verdict on the man's fieldwork. Pity the poor anthropologist who expected his fieldwork to yield the usual interesting information on ritual symbolism. If he comes home without it, his monograph will lack its crowning glory. Knowing this only too well while he is in the field, he works towards a nervous collapse or an angry showdown with his hosts, whom he suspects of holding out on him. How can he be sure that his fieldwork is not at fault, or that their disinclination to reveal their religion is not due to secretiveness or
deep reserve? Will it be a matter of time? Madame Dieterlen said the Dogon only opened up after seven years of intense inquiry, that it took twenty years to get the full story. If the anthropologist is in a hurry with his career, he cannot be blamed for turning to another problem, land tenure or politics. On this he soon becomes so much an expert that he never has time again to research into primitive religion. Thus unintentionally is a professional bias established. And thus is an interesting subject rendered sterile."
(Op. cit. p.76f)

The recognition that sociology too socially constructs its data from the surrounding human activity is only infrequently acknowledged to be subject to similar constraints imposed by its interactive nature. The point is of course that, at least from the perspective of the novitiate observer, the everyday life of the approached group is not particularly dramatic (at least in 'public'). This, together with the not infrequent absence of any appropriate research strategy during those early days in the field (seemingly an experience commonly acknowledged by many categories of worker during their first days on the job that is itself worthy of further enquiry) enables many researchers to identify with the comment:

"During the early period of observation a high proportion of the incidents and interaction I observed were simply not interpretable!"
(Lacey, 1976. Page 78)

The 'changing perspective over time' (Vidich, 1955) has, as one of its sources, what Becker (1970) calls the 'observer-informant-group equation'. It will be remembered that a previous discussion concerned a change over time in the status of those giving information and this was linked to the differential accessibility of knowledge.
31. See the relevant arguments in Silverman (1970)
Becker suggests three tests that may be utilized in checking information. The first concerns the 'credibility of informants', the second involves the volunteered or directed statement, and the third the aforementioned equation. This latter requires a reflexive study of how the observer's role within the approached group might influence what he will see and hear: the very act of participating poses a unique methodological problem because the action itself becomes an important and complex variable in the interpretation of observed events. In the words of Douglas (1973):

"The statements, cries, actions, and whatever other real-world phenomena one can come up with are the data that one must use to study and analyze meanings; and in the initial stages some of these phenomena must necessarily be the experiences and observations of the sociological observers themselves."


Much of what has been stated theoretically has been, and will be, illustrated from the experience of the writer. He has, for example, previously shown how entree progressed from one approached group to another and interacted with similar changes in research interests. Some of these movements were constrained by the nature of other commitments (such as the move from one school to another) others arose from changes in the situational location of both the observer and participant identities.

Summary.

If the observer is a participating co-actor in the observable social world the question of initial entry
and subsequent progressions in ascribed roles become problematic since those meanings residing in social institutions derive in part from the specialized expectations that are attached to each social office. By the very act of participation actors in the approached world are given expectations concerning the nature of appropriate actions for both themselves and approaching others when this involves the attribution of a situationallocated meaning. There is therefore ample evidence that:

"... the type of role which is taken is affected by the research design, the framework of the culture to be studied, and the abilities of particular researchers to assume tasks which can be accepted as a natural part of the culture."
(Bruyn, 1966. Page 15)

The problem then is that the existing social stock of knowledge provides and maintains a system of confirmatory meanings on which social action is based. This being so, an initial 'problem' for the approaching stranger will be, in the terms used by Schwartz and Schwartz (1955), that of whether to adopt an 'active' or a 'passive' role. Although not theoretically descended from the foregoing Junker (1960) provides a particularly useful analysis of the possible roles that are available. Junker is conscious of the influence that the identity of the approaching stranger will have on the information to which access is provided by the approached group. Using his typology the 'coice' for the writer lay between acceptance of the complete participant identity and that of the participant as observer - at least initially. However, although in the very beginning the role was
nearer that of the complete participant in the sense that the originating spirit and provision of insights derived from the writer's socially located position as a practising teacher, the theoretical formulations and their subsequent practical activities would obviously necessitate some degree of outsideness. The notes made during these early stages reflect a situation in which the writer moves from a total participant role to that of 'participant as observer' in a quite discrete way. There are periods of participation followed by periods of observation: one of the reasons for this was perhaps the writer's emotional commitment to life in the field, he was not in danger of going native but rather a native who was in danger of going whatever the alternative is. Thus events in which the writer may have been substantially involved are merely mentioned in retrospect and the observations etcetera made from this rather more uncommitted position perhaps hours, days, or even weeks after the event providing the initial lead. The 'observer' component of one's role thus represented a more or less conscious attempt to reflect on one's experience as a participant: thus much of this early information stemmed from the day to day activities of the teacher personna which were then used to illuminate the actions of others. As such they represent a more or less conscious attempt to reflect on phenomenon presented to the writer's teacher personna.

The data was emerging ad hoc from field experiences and not from some theoretical stance (although this latter would be subsumed within the notion of 'interest' that guides day to day activity). Gradually the two activities become less separate and 'observation' begin to be made while actively 'participating'
although the research perspective remained a relatively private performance. The movement between one role and the other was quite explicit in the field notes of the time and Junker's other two modes (the observer as participant, and the complete observer) are considered and quite consciously rejected as inappropriate descriptions of the activity being engaged in at that time.

In part this seems to be implied as deriving from Junker's assertion that the observer as participant describes a situation in which the observer activities are made publicly known at the outset of the research and thereby provide access to a wide range of information. This was patently not true and the stance was therefore dismissed. This was very much an at-the-time analysis and, interestingly, looking at the events with the 'benefit' of hindsight the writer has a certain hesitation in accepting the reasoning behind the analysis. However, in retrospect, two intriguing questions emerge that were not at that time considered to be 'issues'.

The first concerns changes in the nature of the research activity which has already been acknowledged to be associated with the changing focus of the study. Now what is a prospectively interesting area is a comment that, at that time, was relegated to the status of scribbled footnotes. The reader will remember that the change in focus was from a study of the beginning teacher in relation to the degree of bachelor of education: this change was accompanied by a move from an assistant teacher status at one school to head of department at another. One's notes of the time record the odd comment that this sort of information, that is regarding qualifications, was neither readily available nor formed an appropriate
topic of conversation. Now it may be that one is dealing with a school based phenomenon: that this explanation was precisely the case. However, it is at least as likely — from one's perspective in the here and now — that the change in status was accompanied by new definitions of appropriate behaviour in which access to new knowledge was gained at the expense of a concomitant restriction on further access to old knowledge. Initial qualifications were no longer a core interest in these new social circles; they were assumed and not redemptive behaviours for heads of departments either in or out of that role.

The second feature of the aforementioned phenomenon is the role played by the appropriate sociological community. It is difficult to assess the contribution made by one's supervisors to this change in direction yet, at this stage, relevant publications (Junker, 1960; for example) are beginning to be appropriated if in rather an objectivist manner. There are no records of this but one be viewing the early part of a process by which sociological literature and the advice of one's research colleagues is starting to inform insights gained in the field and suggesting ways in which these notions may be further explored in a profitable way. Of course, the situation also contains the potential for a reversing of the argument.

Nonetheless, all in all the writer can now 'see' indications of that gradual erosion of commitment to the approached group's action in progress and a greater responsiveness to the sociological world, that has previously been discussed.

Advantages accruing to the role of complete participant derive from feeling as they feel making possible the sharing of secret information. Junker's own suggestion that total concealment of the observer-identity from the
approached group, together with role-pretence at 'being-a-colleague' would perhaps raise issues of commitment and ethics and fails to make some necessary distinctions. For example, the writer would wish to separate a participant identity that then proceeds towards a reflective examination of the social world from one where the identity is deliberately 'put on' for the purposes of the research. In the terms of Junker's argument the analysis is very much from the viewpoint of the approached group: can his description ever be that of a complete participant in the terms he uses. An 'observer-identity'; pretence at 'being-a-colleague' are not native categorizations of the action. As a living and breathing member of both an epistemological and school community the writer as 'teacher - researcher' obtained access to much knowledge that would not be made available to the uncommitted outsider. Sensitivity to the apprehended biography of at least one actor on the social scene provided an awareness of the possible motivations for social action on the part of that teacher. Similarly an awareness was established of the extent to which different publics - headteachers, others in the subject department, professional colleagues, students on teaching practice, visiting sociologists - are presented with, perhaps rather different, versions of truth. Such intensive participation and exposure to the activities of the approached group also carry the potentiality of the researcher 'going native' and may possibly create problems when the time comes to leave the field. In fact in this case the writer's 'nativity' preceded the research act although the tension between the sociological necessity and native action was nonethe-
less transcendentally present. Even so, it would be argued that the insights provided by such a perspective are of particular merit since the establishment of a social identity proceeds, or is concomitant with, the establishment of the observer identity and, in this case, exerted - at least in the initial stages - a minimal influence on the nature of the interactive process.

Disadvantages of a complete participant identity, and one to which the writer was prone, are that the advantages are achieved at the cost of a certain difficulty in the perceptions of the workings of reciprocal relationships between that part of the world forming the ground of one's being, and the larger 'reality'. Individual actors will assign meanings to the actions of others and react in terms of the interpretation suggested by those meanings (Cicourel, 1964; Schutz, 1964) and therefore the very acting out of the role of participant rather than that of observer will close avenues of information that may well have remained open to the less involved observer. Thus, whilst useful information can be gained concerning the negotiation of conflict between the legitimate interests of teachers of pedagogic subjects, it would be unreasonable for the actor as participant in the conflict to later approach a participatory co-actor in that drama with a view to collecting data! The phenomenon is perhaps more complex than this statement suggests and the writer has already referred to one instance in which such information was provided and then used to 'gag' the observing participant.

The realities of the researcher and approached group derive from different social worlds. Similarly, those times of greatest sociological interest are likely to
be those times of greatest personal involvement in the
world and a subsequent examination of 'what went on' may
well be prejudiced and different from the view of an
uncommitted observer of the scene. The experience of
the writer would further suggest this perspective is
further illuminated by the earlier comments regarding
shifts in perspective and commitment over a period that
is relevant to the research.
The problem for the participant-as-observer is that the
distinctive identity required for the execution of the
'purpose-at-hand' must involve a sufficient lack of
disagreement for each actor to proceed with his own plan
of action. The process will involve the negotiation of
a mutually satisfactory working consensus as to the
operative identity since the problem is that:

"... we do not know what to do with
respect to another person until we have
established his meaning for us and our
meaning for him."

(Tunstall. Sociological Perspectives. p.160)

However, where the adopted method is that of participant
as observer the question of entree into the community is
frequently achieved through a prior 'introduction' to
that community through official or unofficial channels
and the 'thinking as usual' activities of the approached
group will include many 'of course' assumptions relating
to the socially located identity of the stranger now
Before them. The social world of the staff is familiar
with students, teaching practice supervisors, inspectors
of one sort or another, and the prevailing definitions
of the situation easily impute assumed meanings to any
stranger. The process is a familiar one to researchers
and Hargreaves (1968) notes that within the first few
days, but also recurrently throughout his research
programme, teachers approached and questioned him in various attempts to 'place' him within the social setting.

The imputation of motive provides a coherence to the social encounters in that world and will be subject to the situational culture in which the vocabulary of the actor must be acceptable to the particular audience being addressed. Moreover, such imputation of motive will be differentially associated with certain situations and certain social positions.

Observer activities however cannot be wholly concealed, although they may be subordinated to the activity of participation, and this may result in competing definitions of the situation. In this case the question of appropriate behaviours may arise over the negotiated social identity: the actors become uncertain whether the assigned operational identity is involved. Alternative interpretations of this identity are then presented and this leads to a process of situation defining in which the circular negotiation of compromise interpretation, partial recognition of identity, is embarked upon. The province of these changes are not once and for all: Hargreaves (1968) describes his initial acceptance as a member of staff, its redifinition to that of an inspectorial role, and then another process of reinterpretation resulting in a re-defined teacher role. Each re-interpretation produces its own social action and the continuing imputation of role to another influences the content of one's own role for the duality of altercasting demands not only the image of whom we are, but also that of whom we take alter to be, governs the availability of alternative social activities.
That the activity of observation is a potentially threatening one to the approached group is shown in Fletcher's (1974) already utilised observations in a surgery. Fletcher describes how his presence:

"... may have made some patients keep this part (that is, the individual's biography) to a minimum."

and then goes on to describe differences in the interactive process between the first and second series of interviews. During the second series he notes that the doctor became increasingly anxious for him to complete the observations and Fletcher was finally forced to stop before the doctor felt it necessary to explicitly forbid him.

Apart from the limited access to certain levels of information, particularly the existing secret knowledge of the approached group, the problematic nature of the interactive process centres around which of the two presentations of the self - participant or observer - is accepted as the basis for evaluating the action in progress by the co-actors. The extent to which either role is accepted will affect the ability of the researcher to penetrate below the levels of public information: and hence which activities are imputed to be 'significant'.

The selective presentation of the self (Goffman, 1957) requires overt expressive acts designed to encourage or oblige the public acceptance of a particular social identity. The difficulty for the observing participant is that such a selective presentation will become a self-fulfilling prophecy: an image that significant others will act towards as if he were indeed that kind of person. Public acceptance may of course be accompanied by private scepticism in which others develop subtle
tactics aimed at testing the performances of this self-assigned and selectively presented image. We thus return to the problematic nature of the knowledge that is being re-constructed by the researcher acting within the very world he is observing.
CHAPTER TWO.

THE SUBJECT IDENTITY

OF TEACHERS.

Having examined ways in which the methodology of participant observation might be said to be a 'problematic' activity it was then suggested that the formulation of research strategies were interactively related to the social location of whatever knowledge was thereby constructed. Implicit in the portrayal of the research activity as possessing an ideological dimension was the suggestion that methods of studying specific phenomena are differentially 'appropriate' thus indicating the paradigmatic nature of social research. Such a stance was supported by, among others, an illustration making reference to the traditional reliance upon official statistics in the study of suicide (Douglas, 1973):

"Once the earlier sociological studies of suicide had been formulated in statistical terms and tested with the use of official statistics, it was quite the normal procedure for any new studies by sociologists to be cast in the same mould. They set a professional precedent which has been hard to break."

(Op. cit. p.166)

What is now proposed is that an application of such a perspective to the sociological literature on teachers and teaching (Westwood, 1967a; and 1967b. provides a useful summary within its own terms) shows the former dominance of role theorists to have resulted in a similarly wide-spread acceptance of that traditional
perception of the teacher as primarily a participant in a narrowly defined definition of classroom interaction. For example, the stance of Westwood would provide little light on a processual view of the teacher as a selective guardian of the various routes labelling pupil behaviours found in Cicourel and Kitsuse (1965) or Hargreaves (1968), or, indeed, the portrait of teachers that is argued in this thesis. One consequence of this approach is that the social category 'teacher' has remained relatively non-problematic, taken as given, and the research concern has been to deductively analyse rather than inductively question. Until comparatively recently much of the sociological literature traditionally centered around the various activities played out when enacting the role 'teacher', together with studies of proximal variables that were thought to be involved in satisfactorily explaining teacher-pupil interaction (for example, the study of Rosencranz and Biddle, 1964, was directed towards this very issue). Much of the early work is therefore concerned to establish whether the teacher is orientated towards some child-centered or academic client typology (Kob, 1961) with little attempt at the systematic development of any substantive theoretical framework. Later investigations of changes in the attitude and role-perceptions of students as they progress through their college courses, which may or may not then be compared with similar attributes on the part of practising teachers (Cohen, 1965; Musgrove and Taylor, 1965; Wiseman and Start, 1965; Gibson, 1972), may therefore be apprehended as the conceptual offspring of these early theorists. Similar studies were carried out proposing differences in role-perceptions as between
students and headteachers (Hoy, 1969) or the perceived marginality of particular subjects (Wilson, 1962) in particular institutions such as the humanist in a technical college with little attempt to explicate the meanings of these labels for the practitioners involved. The call by Hargreaves (1972) for more systematic research into teacher-teacher relationships remains largely unanswered notwithstanding the fact that the academic or subject department in the secondary school provides teachers with a major dimension of their socially located identity. However, there has been a relatively recent re-orientation of perspective brought about by the application of a quite different sociological tradition to studies of the teacher. This has led to the emergence of suggestive insights initially deriving from a consideration of the practitioner as a persona undergoing a process of 'professionalization'. Following on from the early questioning of whether teaching was in fact characteristically a professional task, as measured by its possession of the required number of 'essentially professional traits' (Greenwood, 1957; Etzioni, 1969), interest then extended to an examination of the notion of a 'core professional activity' which was accompanied by the notion of professional initiation processes (Merton, Reader and Kendall, 1957; Becker, Geer, Strauss and Hughes, 1961; Olesen and Whitaker, 1968) eclectically reported in this country by Taylor and Dale (1971), and career (Hughes, 1959; Hextall, 1969). The importance of these perspectives for the present thesis is their emphasis upon the teacher as a participant in a world other than that of the classroom therefore preparing the way for a fuller sociological appreciation of the teacher both as a knowledge practitioner and member of an epistemological community.
It is the theoretical development of such an understanding that forms the substance of this and subsequent chapters and, as such, may be viewed as an attempt to at least partially answer recent calls for an explanatory framework in which school knowledge is related to the subjective organisation of the teacher identity (Ealand, 1971). To this extent those insights provided by that strand of conceptual analysis categorized as the 'sociology of knowledge' will be placed alongside that of the 'sociology of professions' as being supportive of the particular Weltanschauungen and parameters within which the subject reality of the teacher is defined. On this view an image of 'Man-the-teacher' as existentially related to his social structure will thus consciously direct the reader's attention towards an exposition of the manner in which the social organisation and structuring of curriculum knowledge affect the way in which the teacher is socialised into a strong subject identity. The process has some affinity with that relationship between the observing participant and the socially constructed world of the approached group. An important corollary to this perspective will be the contention that the teacher's pedagogic subject perspective (see Mannheim, 1956; for the latter) is an important mechanism in the construction of reality. This has already been shown as of some importance in the case of the observing participant (Schutz, 1964) and will be no less consequential when teachers and their pupils go about constructing the life-world reality in specific professional situations. An examination of the institutional nature of the perspective would therefore be expected to reveal an ideationally related perspectival knowledge in specific situational structures. This would particularly be the case when utilizing the notions of career, professional communication, the perceived centres of the reality defining process, and the ideational
1. Postman, N. and Weingartner, C. (1972)  
Teaching as a Subversive Activity  
Penguin.
content of curriculum and pedagogy.

Any analysis of teachers subject identity must therefore interactively confront those attitudes originating from within both institutional and ideological paradigms. Both impose constraints upon the present, and perhaps future, social action. Dale (1972) implicitly draws attention to the apparent arbitrariness of the division of school knowledge into recognisable 'subjects', a phenomenon elaborated by Postman and Weingartner. An illuminative example was similarly provided by a conversation between the writer and a headteacher in which the latter recalled his initial thoughts when making decisions about the curriculum of a new school:

"Well, mathematics had to have five periods. And if you give mathematics five you must give english the same number. Then history and geography must have two each otherwise they complain of unfair treatment. Science is quite important so that should have four periods; Then games and p.e. need two periods (you never get anything done in one, its all change, run round the gym, then change back again). Now that gave me... twenty periods. Then there's the nonOacademic subjects: crafts, home economics, two each; religion can be done in one period because it overlap with the other subjects. I'm quite keen on languages so four periods should be allowed for that and the less bright could do social studies for two of these if they can't keep up.

One period of drama to let off steam, another of music, library work takes up another. The other three periods were used up for integrated studies.

What is being suggested is therefore a particular conceptualisation of the pedagogic subject (which may have a 'career' either independent of, or allied to, that of the teacher as a subject specialist) as an objectified
2. Gorbutt, D.
The New Sociology of Teaching
Education for Teaching.
Vol. 89. Page 8.
but nonetheless relativistic reality defining the activity of teaching and interpreted in terms of its subjectively appropriated meaning for the teacher. In essence there is little difference between the research perspective of the fieldworker and the subject perspective of the teacher (insáfar as the processual aspects are concerned) as in both cases it is the respective interest that establishes the saliánce of the particular purpose at hand. In both cases the notion of perspective implies those biographically constituted representations of particular symbols and meanings which have been institutionalmente orientated towards particular questions about the universe. Thus the various dilemmas of the observing participant in coming to know his world are expected to illuminate and inform similar dilemmas on the part of the subject practitioner as he strives to make sense of his world. Gorbutt would similarly argue that it is:

". . . through an understanding of the socially constructed nature of teacher's subject and pedagogical perspectives and their constituent categories that we can learn new insights into the determinants of teaching and learning activities in the classroom." (2).

Because it is wished to elaborate the ideological dimensions of the teacher's subject perspective it is first necessary to delineate the boundaries of the required conceptual distinction. The 'subject' identity of teachers comprises a socially organised professional activity that acts to differentiate between one segmented member of the profession and another. To this extent the more comprehensive
'teacher's perspective' requires to be separated from the more narrowly focussed 'subject perspective' more typically subsumed within it. The former will in fact contain differentially legitimated interpretational systems best styled the pedagogic orientation, and the subject orientation: the immediate concern is with the latter. A further narrowing of the concept may follow from the distinction proposed by Keddie (1971) as between the 'educationist' and 'teacher' contexts of the action. The educational practices of teachers in the classroom were noted as markedly different from their previously expressed theoretical perspective and this gave rise to Keddie's suggestion that educationist contexts became appropriate when, for example, the educational policy of a subject department derives from a conscious and selective drawing upon a corpus of educational theory and practice. (It will later be argued that departments similarly selectively draw upon a corpus of knowledge when contending what counts as their subject within that particular institutional locale).

One consequence of Keddie's distinction is that, given the situationally relevant politics of the process, the educationist context involves groupings deriving from the association of individual departments relating to some particular, unifying, policy such as 'mixed ability' teaching. On the other hand the teacher context is that in which the teacher moves for most of the time and involving some anticipatory action; for example with pupils in the classroom or the structural organisation of classroom knowledge. It thus contitutively contains at least some of the elements of the teacher's subject identity in the sense in which this latter is used in
the present argument.
In this context it must remain a matter of speculation whether or not the greater preparatory socialization into the educationist perspective experienced by teachers with university and college qualifications in which 'Education' was a main field of study may eventually result in the emergence of the educationist perspective as a phenomenologically distinct area of school knowledge. Although perhaps because of other reasons the increasing number of curriculum co-ordinators may provide the necessary institutional structures for such a development.

The emerging proposition is that it is from the socially situated location of subject participant and knowledge practitioner that the teacher constantly interprets the meaning for him of the activities of others through a taken for granted vocabulary of motive. These taken for granted vocabularies of motive derive from the appropriate knowledge community as mediated through the various social structures and processes. As each knowledge practitioner will possess his own biographical realization of these situationally constrained realities as a socially constructed nomos - which may be more or less explicitly differentiated from that of others (Boland, 1971) - and since this assumption is typically taken for granted, teachers are rarely perceived as questioning the belief that they hold an occupational ideology based on different kinds of knowledge. Even so, socialization into the 'common culture' of a subject, together with its terminology, may be problematic for some teachers and the reasons for this begin to be exposed in this thesis.

While it is true that most teachers possess a clear idea of what they think a subject is, that is what knowledge contents fill it up (Keädie, 1971), and have a rough
idea of where its boundaries are, this knowledge is acquired at a very early stage in their career and tends to be a back region of their subject performance. In this sense it is perhaps important to appreciate that school subjects are exigent to the establishment and maintenance of a normative social order: pupils who are successful are those who master subjects, and teachers have themselves been successful pupils! Keddie also provides a useful exemplar of just such a process of initiation into the terminology and culture of a subject when reporting her observation of a social science lesson. This was a 'new subject' for the pupils but whereas the 'A' stream pupils were prepared to accept the label as self-legitimating, the 'C' stream pupils apprehended the same material in terms of their experiential interpretative frame work: the meaning of the new knowledge was derived from subjects with which they were already familiar and consequently questioned what they considered to be an unjustifiable change of content. A similar phenomenon has been noted by the writer in connection with several 'new' approaches in the curriculum such as integrated studies, the Schools Council Secondary Mathematics Project, the use of thematic approaches in religious education, and so forth.

Although the problematic notion of a subject being merely what the teacher thinks it is, is elaborated later in this thesis, the relativism implicit in a notion of the individualistic construction of knowledge is constrained by its location within a social constructionist model. External definitions of what shall count originate in the supportive epistemic community as mediated through one's subject colleagues in the school, membership of a
subject association, various conferences and courses organised by those in the know, etcetera. However, notwithstanding the nature of this reservation, the writer's experience is such as to caution against placing too strong an influence on the practitioner's membership of the (dispersed) epistemic community. Any conceptual precariousness over definitions of what shall count as legitimate pedagogic knowledge are more likely to be remedied by a situationally constrained confirmation of plausibility supplied by the school rather than by a greater dependence upon external reality definers such as subject journals or the wider community of scholars. In this respect the writer disagrees with the argument advanced by Estland (1971) not in its content so much as its influence on the actions in progress. The observations and experience of the writer leads him to suppose that such definitions play much less of a part in defining knowledge than is commonly supposed and that this derives in part from the teachers selective appropriation from the various packages of knowledge that are offered. Thus the apparent lack of innovation as a result of their activities has recently led to the Schools Council investing a considerable sum of money to find out what effect that body is 'really' having. Corroboration of this line of reasoning can be found in a parallel phenomenon: the rapid substitution of school-based mores of classroom behaviours for those of college previously referred to. (In order to return to the proposition at hand suffice it to say that the perceived significance of external definitions of reality is elaborated in a subsequent chapter.)
Perhaps the most appropriate articulation of the present argument is that of Douglas (1973) regarding theconstruction of meanings in relation to suicidal phenomenon:

He writes,

"... the structure one finds in the meanings of specific suicidal phenomena is not given by the transmitted culture, though some of the specific meanings and criteria that make this possible are so given... the individuals involved construct this structure of meanings. Though the possible (or plausible) meanings of these phenomena are primarily determined by the shared cultural meanings which are culturally defined as relevant to these phenomena (including the criteria of various sorts) and by the shared context of meanings given to the individuals involved in their past interaction, the specific, actualized meanings of these phenomena will be in large measure determined by the intentional actions of the individuals involved. Moreover... the only way one can go about scientifically studying the meanings of suicidal phenomena (or any other phenomena) is by studying the specific meanings of real-world phenomena of this socially-defined type as the individuals involved construct them."


If pedagogic knowledge is to be considered as just such a specific phenomenon then, recognising the differential availability of possible meanings to be a culturally 'given', the sociological task is to delineate the various meaning boundaries that constrain the actions of the subject practitioner in constructing his social world. The remainder of this chapter is therefore concerned to explicate the various levels of significance attached by the social actor to information derived from the socially situated meanings of the real world phenomena.
2. For example:
Laurens Van der Post (1958)
The Lost World of the Kalahari
William Morrow.

Redfield, Robert (1955)
The Little Community
University of Chicago Press.
Spatial Rhetoric and Subject Knowledge.

Reference has previously been made to the paradigmatic nature of socially constructed space and of its potential influence upon the action in progress. Whilst the interdependence between physical environment and the socially shared meanings of cultural givens are a recognised phenomenon in anthropological literature, sociological consideration of the symbolic quality of social objects (Hall, 1967; Bernstein, 1967; and Sommer, 1969; perhaps providing some exceptions), if discussed at all, is typically relegated to the status of a theoretical appendage having little direct relevance to whatever substantive findings are reported by (say) the participant observer. However, the argument about to be developed is that much of the social and physical world is treated, naturally, as if it contained messages and that the boundaries formed by spatial representations - for example, the size of the room, the arrangement of the furniture - constitute physical features that are symbolic of social demarcations. As such they may have a profound affect upon the 'reality' of the interactive process for both participant and observer (White, 1973). That is, that the transcendental nature of social space will form an essential aspect of that social world being experienced by the actors living within it. Consequently, there will be a continuing dialectic between the symbolic meanings arising from the spatially constructed social world and those social encounters taking place within its bounds. The limitations thereby placed upon the nature of any interaction between the pedagogically separate activities, together with their associated groups of
Role and Status in the Office  
Architectural Association Quarterly  
October, 1969.

4. Evans, Kate (1974)  
The Head and His Territory  
New Society  24 October, 1974  
p.199-201
members, will constitute part of the meanings-context within which that encounter takes place. In the process of 'becoming' the observing participant develops an increasing consciousness of the way in which social space itself 'continually becomes' part of the presentation of the self. In the previous chapter it was noted that only certain status positions are recognised as legitimate within the staffroom. Indeed, social objects may be comprehended — perhaps can only be comprehended — as posing their own existential demands upon the social world thereby giving the quality of 'uniqueness' to each encounter. This 'rhetoric of space' (Burke, 1965) is therefore ultimately concerned with the manipulation of socially constructed space for political ends. The sociological application of this concept has received insufficient attention in published accounts of research projects (and the reader will remember the salience of a previously rehearsed argument at this point) although Duffy is an exception in his outline of the way in which the Civil Service deliberated manipulated an office environment in order to achieve a desired result. Evans successfully translates the perspective to an educationist context in her own description of the ways in which the headteacher's presentation of the self may be perceived in the chosen arrangement of furniture in their 'office'. The attributed ownership of social space is thus an important sociological perspective since the establishment of social territory carries with it the connotation that such space is 'defensible' (Newman, 1973). At an early stage in one's fieldnotes (written as a head of a subject department reflecting his experience to others) the
Attribution of rooms and areas to specific departments becomes a major perspective. Of course the traditional nature of school knowledge means that these attributions are only challenged at times of change (and again it should be borne in mind that the writer was a member of an expanding department). The issue is also one of relevance to the previously mentioned changing perspective over time (Vidich, 1955): in another instant the insight would have been lost in the complex of taken for granted assumptions. Returning to one's notes these record probes concerning which rooms are used almost solely by members of one department; which are shared by members of the same department and which by members of different departments; which activities most commonly take place in which rooms; to what extent are rooms individually recognisable as subject rooms? (All of these concerns are elaborated during the course of this thesis).

The significance of all this is that the ownership of social space, whether by an individual or by an identifiable social group - such as that constituted by the subject department - affords members of that group a certain selectivity of exposure in those behaviours actively presented to the different publics. That earlier discussion relating to the back regions of various social performances has some connection with the current argument about the existence and meaning of territorial boundaries that will not be lost on the reader. For example, what is one to make of the inference to be drawn from the work of Partridge (1968) when he notes that teachers of technical subjects - art and craft, science, etcetera - tend to remain in smaller informal groups when not actively teaching, and not to join in general staffroom activities to the same
extent as perhaps do teachers of other subject specialisms. Cannon (1964) makes a similar point concerning physical education and domestic science teachers both of whom are often geographically isolated, and also socially isolated in that they spend comparatively long periods with their pupils. The proposition is thus that the life-world of the secondary school teacher derives, at least in part, from the taken for granted assumptions underlaying whatever subject perspectives are held by that teacher. Furthermore, it is this subject identity of the teacher that provides the legitimizing authority signalling ownership of particular social territories. Teachers participating in the shared life world of an identifiable subject culture are not merely members of the same department but, since the pedagogic subject is viewed as minimally possessing an objectified - if not reified - existence, may lay claim to, and establish, 'territories' in those situations where the ownership of social space becomes possible. Those procedures involved in the designation of social spaces throughout the school are often the result of negotiated conflict and usually only become public on two occasions: the signalling of ownership of social space as in the staffroom, and the designation of teaching spaces.

The attribution of social space (in both staff and classroom) to specific subject departments, that is spaces used almost exclusively by members of staff and pupils engaged in 'doing' that particular subject, is especially interesting for its reflection of traditional assumptions about the curriculum. That the differential utilization of classroom space may reflect
different ways of organising school knowledge is not a new idea (Bernstein, 1967; Adelman and Walker, 1974). Bernstein indicates that as schools move from a mechanic to an organic mode of solidarity it may be expected that architectural features will take on a political significance. Comcomitant with an extension in the range of subjects offered in schools there will be a reduction in the symbolic significance of particular spaces and particular times as the spatial celebration of insular purity of subject categories gives way to the notion of integration. However, it may be that a schema such as that proposed by Bernstein fails to take proper account of the manner in which school knowledge comes to be 'owned' by particular pedagogic departments. For example, there is some evidence that 'new knowledge' tends merely to be incorporated within the meaning boundaries of existing knowledge (Whitty, 1975) thus leaving the rhetorical dimension of the spatial ownership essentially unresolved.

Potentially the most explicit definitions of pedagogic space occurs in the categorization of (consciously named) 'teaching spaces' as subject rooms - in which particular rooms come to be seen as 'belonging' to particular subjects. Delamont (1976) is therefore able to embark on a discussion concerning the rooms and respective messages of English and science teaching. The contribution of spatial rhetoric to the development of differential pedagogic subcultures is implied in the following statement of Turner (1971) in connection with industrial subcultures. He suggests that the sementation of these subcultures occurs precisely because:
"There are physical boundaries within which the subculture is found, and the individual only spends a certain portion of his life within these boundaries. Outside these limits, many of his behaviour patterns will be different. Moreover, since the individual and his fellow workers all cross these boundaries at about the same time... their particular portion of the subculture is suspended until they all return the following morning. Thus, the life of the subculture proceeds in a series of discrete jumps in time."

(Op. cit. p.4)

The comparative insularity of the teaching activity noted by many observers, for example Hargreaves (1968), is of course only possible because of such a designation. It is the symbolic meaning boundary that both teacher and class 'cross at about the same time' in order to carry out the pedagogic activity. Whilst the 'ownership' of such spaces tends to be a culturally 'given' there are occasions - Bernstein's expansion in the range of subjects would be one; the use of the same space by more than one teacher (particularly when they are located within different departments) would be another - when competing definitions arise.

Thus, the spatial arrangements of pedagogic objects within a room are explicitly placed in their positions precisely in order to transmit a specific message to the observer. For example, the special displays of work produced by the pupils being taught by students on teaching practice are frequently at least partially for the benefit of the visiting supervisor. Similar displays are produced by teachers for the purposes of the school open day. In this sense then a selective
presentation of the pedagogic activity becomes partially visible and begins to reveal its ideological dimension since even this minimal 'telling of what goes on' opens up the contents of that pedagogic package for inspection, and possible debate, by other subject practitioners. It was the case that the morning after the previous open day several comments were made relating to:

"I didn't know that you did that in . . we usually do that next term as part of our structured work on primitive society."

In the case of shared rooms conflict over who has how much of the available notice board potentially give way to various ploys aimed at establishing the act of trespass.

Teaching rooms are therefore an essential part of the spatial rhetoric and act upon the world in imposing their own socially situated definitions of activities that may legitimately take place within their bounds. Pupils given an instruction to go to a room other than that in which a subject is normally taught typically respond with 'but we normally have mathematics (or whatever) now'. The implication being that because a room has been altered, therefore so has the activity about to take place.

Pedagogic ownership of rooms is undoubtedly seen as important by subject practitioners. That questions concerning the use of rooms generally arouse the deepest suspicion of motive was illustrated during one conversation being observed although not participated in. When one of the participants asked another (with whom he was otherwise on apparently quite friendly terms) 'Do you do much teaching in room . . .?' the immediate response was an interrogative and defensive 'Why?'
There seems little doubt that similar suspicions are commonly shared by many practitioners yet even as an observing participant (and therefore sharing these assumptions as part of one's participant persona) the writer finds it difficult to articulate why this should be so. However, there are a number of imputed rationalizations for the pedagogic importance of claims on space, facilities, etcetera that may become more or less important according to the situational definition within which they occur. Changes in the ownership of such spaces have already been stated as occurring comparatively infrequently and would usually only become an 'issue' within the politics of the wider situational context.

The taken for granted assumption of a connection between the number of staff located within a particular subject department and the number of rooms at the disposal of that department whilst problematic, does emphasize the notion that the 'status' of a particular package of knowledge will be reflected in the number of rooms owned by that department responsible for presenting that knowledge. Nonetheless, there are a number of of complex interacting factors of which the relative numbers of full and part-time staff; the numbers of staff having loyalties to other subject departments, pastoral responsibilities, etcetera; constraints imposed by timetabling arrangements; whether or not the subject is taught to all year groups at the same time; are only a few. Discussion of the relative status of different knowledge packages per se (the discussion in Young, 1971) is illustrative) occurs elsewhere in this thesis; the present concern is rather with the attribution of
differential units of time (Bernstein, 1971) to the
different subject contents. Whilst the interconnection
between contents and units of time may be substantial
(for example, one could not envisage a secondary school
timetable allowing for one forty minute period of
mathematics each week) it is not a necessary connection.
Thus, religious education (say) may possess a marginal
status within the school yet it will nonetheless
typically have a minimal allocation of units (if only
to satisfy the law) if not a similar allocation to
that of 'related' subjects such as history (perhaps
explicitly reinforcing this status). The comments of
the headteacher were instructive in this respect.
Thus a teacher teaching units of (say) five periods
per class will be more likely to own a teaching space
than one teaching in single units who may be 'fitted
in' (in order to fill up available but unused rooms)
more easily. The beginning teacher is typically por-
trayed as the teacher whose class is to be discovered
in an outside classroom, or moving from room to room.
Where this occurs, it is perceived as reflecting the
relative (low) status of that teacher (Hargreaves, 1966).
A social studies teacher to whom this very description
applied during the research activity commented that:

"... things should be different next
year when I won't be a probationer
any more."

What is proposed is the adoption of a similar level
of analysis to the relative status of pedagogic subject
departments: that is, that changes in the ownership of
teaching spaces, viewed with the context of expanding
and contracting departments, will be both subjectively appropriated and given meaning by subject practitioners as confirming a change in the status of that school knowledge within which they are located. However, the continuous process of differentiation evidenced in the characteristic physical and social separation of the classroom occurs not only in the designation of teaching space within the school, but also in those areas set aside for staff use only. Whilst the writer's observation of competing definitions of classroom space was limited to a 'second order' reconstruction of events, observation of conflicting definitions of non-teaching spaces were not subject to such constraints. In fact, during the period of observation a radical redefining of the ownership of such a room occurred giving the writer a first hand opportunity to note the social processes involved in a more or less satisfactory (to the parties concerned) negotiation of the matter.

The first taken for granted assumption was the use of differential labelling; it will be seen from the plan of the school (Figure two) that teaching spaces were consecutively numbered, non-teaching spaces consecutively lettered, various cupboards etcetera (that outwardly possessed similar doors and so forth giving the appearance of being the entrance to 'a room' had no designation at all). Thus a series of adjacent doors running off a particular corridor and all looking much the same to the outside observer might be labelled: 'F'; '8'; then a door with no designation; '9'; '10'; '18'; '19'; 'F'; 'G'; another door with no designation; 'H'; '20'. In this instance the scenario of the particular action concerned the utilization of two adjacent rooms of
similar area; their 'special' nature being emphasized by the use of the designatory letters 'J' and 'K'. See plan.

Spatially the difference between the two rooms was striking: Room 'J' is almost starkly functional containing two desks, several chairs, and three filing cabinets (allocated to the mathematics, history, and English departments). The room was used infrequently and apart from advanced lessons for history and French groups in the sixth form its main use was by a social worker attached to the school for one day per week. The visual contrast with room 'K' could therefore hardly be greater: although containing similar accessories the main impression here is of a room that is 'lived in'. There is a small carpet, telephone, special deliveries of milk are made by an outside milkman as if to a front door; coffee and tea-making facilities are obviously available. The room is in fact used mainly for social intercourse by members of the religious education, needlecraft, and social studies departments, with little acknowledgement to the work preparation function officially imputed to be its purpose. The room is formally designated as being there solely for the use of heads of departments. The writer as observing participant taught in the classroom opposite and was therefore fairly heavily involved in the use of the room enabling him to observe in some detail the various processes at work in claiming and defending this territory which, it is suggested, may serve as a micro-study of the larger scale manoeuvrings of the main staffroom, if not of the classroom, that will be returned to later in this chapter.
KEY TO PLAN OF SCHOOL

Pottery Room
Girls' Cloakroom
Model Office
Commerce Room
Commerce Room

Needlecraft Room
Needlecraft Room

Geography Room
Geography Room

Girls' Cloakroom
Maths Lab

Fiction Library
Reference Library
Main Library
'A' level library

Stockroom
Storeroom
Media Resources
Remedial Reading room

Art Room
Art Room
Stockroom
Girls' Cloakroom
Craft Room

Year Mistresses Room
6th Form Common Room
History Room

Careers Room
Miss Davies' Group
Needlecraft Room
Needlecraft Room
Housecraft Room
Housecraft Room
Housecraft Room

Social Studies Room
Advanced Biology Lab:
Biology Lab
Preparation Room
Head of Dept. Room
Head of Dept. Room

Advanced Chemistry
Preparation Room
Physics Lab:
Year Mistresses Room
Stockroom
Lecture Room
Preparation Room
Chemistry Lab:
Housecraft Room
Housecraft Flat
Housecraft Flat
Girls' Cloakroom
Girls' Cloakroom
As far as could be ascertained the social experiences enacted in the past had resulted in the use of the room by needlecraft and religious education teachers because of the nearness of the teaching room of the appropriate heads of department. (One could of course relate such a perspective to the physical and social marginality of these subjects but this is not really the purpose at hand). It will be noted that science, although equally near to room 'J' possessed its own territory for such activities - preparation rooms marked 'I' and 'L' on the plan - and therefore had no 'need' of this space. As religious education had begun to move in the direction of social studies it was decided to split the departments and the writer then entered the social scene as the first head of social studies.

One's initial acceptance as a participant in the activities of this room may therefore be perceived as directly related to social and historical encounters that had already taken place. Towards the end of the first year of observation the then head of religious education was appointed to a post of year mistress - a transfer posing certain implications for the nature of the socially located identity - and the head of needlecraft left and an acting head of needlecraft was appointed. The writer was therefore left in undisputed 'ownership' of this space to the extent that new members of staff inferred the room was for the benefit of the social studies department. During the process of transition when the attributed ownership was changing initial 'in-jokes' about the use of the room gave way to a situation in which staff actually began to (ask permission' to use the telephone, hold tutorials' in the room, and so on!)
Returning to the main period of observation however, the reader's attention is directed to a particular facet of the ownership process: its initial use by the needlecraft department, and the consequent 'freezing out' of those whom they considered to be interlopers even those these latter possessed at least as much formal right to use that room. Although officially designated as a room for the sole use of head of departments the room was in fact used by the majority of the needlecraft department including part-time staff and other clerical help that the department has access to. The social activities of this group had therefore resulted in a physical taking over of the room aided by their own proximity and the separation of the room from other areas of the school when challenges might more easily have been made. Potential users were often inhibited from making any comments on those occasions when they did venture into this area both by the presence of an obviously cohesive group of like minded teachers and the now public nature of the task. By leaving various social objects associated with the appropriate subject - stacks of dress catalogues, boxes of materials, and so forth, it also became extremely difficult for members of other departments to take advantage of any periods when the needlecraft staff were absent from the room to mount an alternative definition of the appropriate activity.

One further consequence of this saturation use by the members of a few departments was that other, legitimate, users of the room were frozen out. Thus other occasional users of the room (and this mainly related to history and geography with which religious and social studies are perceived as socially related) tended to be dis-
couraged either by physically being crowded out as indicated above, or by the creation of what can only be described as a 'heavy atmosphere' whilst they were they. Later, the intruder would become the subject of informal remarks, jokes, and many of the mechanisms used in the social labelling of outsiders noted by Becker (1973) in his own study of a related phenomenon. One particular incident that was related to me with some relish concerned an 'acting' head of geography who had started to use the room and was consciously made to feel unwelcome (even though the informant had even less 'right' to be there themself). This link between the teacher's status and the use of the room was particularly significant since the justification reported to was the very none to which the users themselves were most vulnerable. This seems to indicate the potentiality of the discrete multiplicity of meanings upon which actors consciously and selectively draw in establishing the meaning for them of a particular encounter.

The writer's own position in this was quite difficult since he was to some extent identified with the aforementioned grouping. However, this did not stop other actors approaching one with their version of events of which I was not necessarily seen as party too. This interpretation probably arose because of the writer's own newness to the social scene and the unequivocacy of his own right to be there: the participant persona was therefore being sort as an ally by both contenders in he encounter. Fortunately the dilemma resolved itself along the lines already indicated so that a commitment to one side or the other never arose in any explicit sense.
Given the foregoing connection between the social ownership of space and the differential status of various packages of school knowledge, it is not surprising that subject areas such as art, music, science, physical education, and home economic, are perceived as especially fortunate by other practitioners in that they traditionally lay claim to the need for specialist accommodation. It is taken for granted that such packages are, in some way, 'special': an interpretation frequently reinforced by the knowledge that special funds are often available from the authority for construction of appropriate buildings, equipment, the provision of additional resources, etcetera, and of the 'necessary' constraints imposed upon the nature and type of client that these departments will service. The way in which these physical structures make outsider access difficult (and thereby aid the establishment of a pedagogic back region) is a facet of the spatial rhetoric discussed elsewhere and particular in the previous chapter as related to the activities of the observing participant. What it is desired to emphasize within the present context is a particular 'peculiarity' of the way in which physical structures are reflected (or themselves reflect) in the pedagogic structures of the socially located and biographically appropriated world in which they exist.

The maintenance of distinctive spatial and pedagogic meaning boundaries interacts with the 'special' nature of the knowledge that is involved to suggest an ideological dimension that is not immediately apparent within the apprehended context of the school. Cannon's (1964) previously noted observation that teachers of domestic
Headmasters and Schools
in Eggleston (1974)
science and physical education are often trained in specialist colleges together with other teachers of the same subject, is no less applicable to these other areas of 'special' knowledge. The notion of peculiarity arises from the fact of the spatial isolation within the school mimicking the geographical isolation of the training institution (for example, Cannon notes physical education colleges to be typically situated in large grounds away from urban centres). The point being that there is little opportunity during training for these student teachers to consider themselves as teachers in more general terms, or to discuss academic work with colleagues in different subject areas. When added to the writer's previous analysis (Smetherham, 1973) of the various restrictions placed upon the selection of 'main fields of study' for students expressing the desire to teach in secondary schools - a list in many respects similar to those at present being discussed - in which possession of a university degree would not be a typical teaching qualification, such teachers may indeed be portrayed as 'strangers'. Consideration of the part played by spatial rhetorics in the establishment of a socially located subject identity may constitute a component part of the process by which practitioners of pedagogic knowledge come to have a differentially established, ideological, dimension to that identity. Such a supposition would approximate to the ideational element in Bernbaum's statement if not in its precise articulation. He suggests, admittedly in connection with headship that:
"It is likely that in studying and teaching the subjects which represent and explore human values the arts graduates will have more opportunity to display, or even acquire, those personal qualities which are seen to be important to becoming a headmaster. Science teachers, on the other hand, might be less 'People orientated' and conceive of the job essentially in terms of their subject. Consequently, they may not display characteristics associated with leadership roles, or even personal manipulation, in relation to the school as a whole."


What is suggested - and it is as applicable to art, music, physical education, and home economics, as much as to science - is that the relative isolation of these subjects in relation to the school as a whole is one consequence of the spatial rhetoric that transcends the situated immediacy of the school.

The danger will always be that the application of a sociological perspective distorts the meaning of the phenomena for whoever is involved. This is particularly so where a multiplicity of realities exist forming a storehouse of available meanings from which the actor selectively appropriates those seeming 'to make the best sense' of the particular social drama within which he perceives himself to be participating. What is implied is that the social drama being enacted is not necessarily one that is made known in its completeness to the other participants. Thus the information that is ostensibly made known to one respondent may in fact be intended to reach the ears of a third party that, for whatever reason, it is not desired to inform directly.

Bearing such a caution in mind the writer, in the course of various conversations with heads of departments carried on throughout the research activity, encouraged strategies
that might be employed in the expansion of the listener's or respondents subject within the school. (Here is an instance in which the socially located position of the writer was used to establish a flow of information based upon the reflection of experiences reported by various staff members. This will have had some effect upon the content of what was said). In many cases the hypothetical expansion of the said subject departments was explicitly linked to ownership of teaching space and the following comments drawn from the writer's field notes are highly illustrative of the general strategy.

"The whole of the business studies course could be expanded and improved by the availability of more full time qualified teaching staff and more rooms."
(The activities of the business studies department are returned to later).

"It would be an advantage if my teaching room could be one with a television ... as the careers room is shared with the remedial reading department it is difficult to make the fullest use of the accommodation ... as everything left has to be cleared."

"... a suite of english rooms to make team teaching easier."

"The modern language department should be well equipped and allocated with at least one room with all the necessary sockets to cope with the numerous machines that have to be used at the same time."

The context of the second comment is that both of the relevant departments perceived themselves as possessing a relatively low status in the overall pedagogic framework. Generally the comment is indicative of the earlier
'case in point' constituting a practical example of the proposition then outlined.
Expansion of subject departments in specific situations is frequently carried out within the framework of some associated pedagogic innovation: in the case of the English department that of team teaching. In this particular social locale it was interesting that once the expansion had taken place, or the desirable end was achieved, the innovation to which it was harnessed is often quietly forgotten. Thus, the English department had achieved their goal of a suite of rooms but various difficulties then emerged that prevented their teaching as a team.

The comment of the modern language department is particularly interesting since, on subsequent cross checking with the media resources office, the writer was later told 'that's a laugh, they don't use the equipment they've got'. The comment is therefore an indication of the selective use of reality definers (as well as a comment on the observing participant's role in that he was told this information for some reason) that was a previous suggestion made in this chapter. The department are therefore apparently aware that the trend in modern languages is towards the use of technical equipment and that any justification of expansion obviously 'ought' to appeal to such evidence as part of a rational argument in obtaining resources. In the same way that Lacey (1976) and others were reported in the previous chapter as establishing, intentionally or unintentionally, a flow of information about things others thought would interest them, so here is another application of that insight. The same phenomenon occurs in all social worlds: arguments are proposed in those terms in which they are most likely to be acceptable - and this is not necessarily
the most important argument relating to the desired outcome as experienced in the biography of those making the proposal.

The above presentation suggests that the rhetoric of space constitutes part of those processual aspects of the appropriated world concerned with establishing the meaning for them of the holders of particular social identities. For example, the persona of the approaching stranger is commonly perceived as strongly allied to the pedagogic subject and enquiries for an unknown 'John Smith', from both pupils and staff, are frequently followed by the interrogatory question: 'What subject does he teach?' It is taken for granted that this information will enable John Smith to be accurately located within the appropriate social world. There are, of course, many assumptions underlying this apparently simple encounter: the 'fact' that John Smith is associated with a particular department 'means' that he will typically frequent particular social spaces be they designated as teaching spaces or some other interactive space. (Teaching is also 'interactive' the term is used here rather in the sense of more general social interactions). Certainly the 'fact' that John Smith teaches mathematics is typically the first information that will be sought regarding his persona; in the case of newcomers to the social scene it may well be the only fact by which they are identified.

A similar process is involved whenever requests for John Smith are made in the staff room: a telephone call for John Smith, an enquiry for his whereabouts from a stranger (perhaps a visiting adviser; a sixth former carrying a 'cover' slip) - all will be met with a
significant look at the social space usually occupied by Smith and other members of that department and the appropriate answer given. At least as significant is the fact that if Smith is not there other members of the department will be asked if they know where he is! This signalling of the ownership of social space is an important socialising influence in the initial career of a new member of staff and this is particularly the case in those instances where the department being joined has been unable to negotiate, for whatever reason, its own territory in the staffroom.

During a conversation with one teacher (who had been appointed specifically to start up a new subject within the school) it was explicitly stated, without any prompting from the writer, that one of the first things she had noticed was the existence of departmental groups in the staffroom. It had been very difficult for her to 'break in' and she had done so deliberately by sitting near to a group and gradually 'worming her way in'.

Indeed, the ownership of social space is often achieved by various implicit meanings linked to a particular subject orientation. Several ploys were adopted by the writer specifically in order to test the validity of this hypothesis - for example, by deliberately sitting in (say) a history designated space. Almost always some form of signal was passed denoting the transgression - and this signal was typically related to the ownership of school knowledge frequently taking the form of jocular remarks such as:

"You're sitting in my seat . . . on a history table."

"Been pushed off your own table then?"

and so on.
The basing of social interactions upon the pedagogic subject is not without its dysfunctional consequences for members of a particular department and one such example of its differential meaning for participants in the actions in progress was revealed during a discussion between the writer and several members of the art department – including the teacher in charge of that department. At some point in the conversation this latter excused herself on the grounds of another meeting. Immediately, another member of that department turned to the writer and volunteered the statement:

"Thank god Jane's gone, all she ever talks about is art."

and the conversation then resumed along quite different lines. Thus the subject identity constitutes a social and physical parameter potentially constraining the selection of a particular meaning structure from the apparent multiplicity of meanings available. The proposition being argued is that the, differentially significant, selectivity of exposure between subject practitioner and approaching stranger (the latter of whom has yet to be located within the pedagogic meaning systems of the staffroom world) is a process mirrored in the relationship between the different subject departments. What is being suggested is therefore a pedagogic application of Goffman's (1969) notion of spatial events each carrying their own, unique, ceremonial message. It is also implicit that the specific 'contents' of each message will be differentially significant for the different actors.
Queue Culture
*American Journal of Sociology*
*Vol. 75*. Pages 291-299
In the same way that Mann's analysis of the way in which queues formed their own culture in which objects in the queue line were assigned different meanings contingent upon the passing of time and place in the queue etcetera so with subject departments. Where people sit, who sits with them, are considered to be socially important events: events that are apprehended as reflecting the socially constructed nature of the school curriculum and therefore also reflective of any process of change occurring within that construction. The potential richness of this interactive tapestry is suggested in that account of avoidance rituals in a psychiatric hospital provided by Strauss etc. (1963).

"On Ward A the rule that patients were to remain outside the nurses station was observed. Patients would wait for an invitation or . . . stay in the doorway so that they could talk with those in the station and yet not presume upon them."

(Op, cit. p.153)

a process graphically illustrated in the film of the book 'One Flew Over the Cuckoo's Nest.

Visitors to the staffroom knowingly violating the 'ideal sphere' of influence yet engaged upon some necessary task include students bearing a message; a member of the hierarchy with some urgent request; secretarial staff on some errand. In each case they may be observed hovering near to the object of their attention whilst waiting for some gap in the conversation or other recognition of their particular purpose at hand.

Students on teaching practice waiting for the appropriate head of department, their supervisors waiting for the student, a visitor waiting . . . . . . .
It is in a similar mode that a member of one pedagogic
department approaching another on some matter or other
does so as a potential violator of meanings: the
ceremonial symbolism implicit in such an activity will
itself act to situationally constrain the meaning of
the encounter about to take place. However, the
imputation of meaning (on the part of the approached
to the actions of the approaching other) extends not
only to social activity but also to social objects.
This is clearly illustrated by an incident involving
the writer.

During the morning break the writer was in occupation
of his own territory based upon the social studies
area (see table three) and was given a cover for the
next teaching period involving an English class. It
will be seen from the diagram that English occupied
the adjacent social space. When break was over the
writer proceeded to the appropriate class and then
realized that the actual work had been left on the
table where he had been sitting in the staff room.
Upon the writer's return, the total period of absence
was no more than two minutes, the work had disappeared.
Another social studies teacher had noticed the work,
categorized as 'English rubbish' and therefore
handed back to an English teacher. This teacher had
given it to his own head of department who was by
that time in the process of looking for it! The
entire incident became possible when a teacher noticed
an object belonging to one department in an area that
it had nor 'right' to be in. Instances of this type
were an almost daily occurrence yet were conspicuously
non-existent when such items were left in the general
area - although this thesis was tested from time to
time with negative results.
During the programme of research carried out by the writer the business studies department made an attempt to change the basis of its legitimation as school knowledge, and it may prove enlightening to show how the rhetoric of space was utilized to reflect this change. Although the following description is drawn from fieldnotes made over a considerable period of time the perspective is consciously retrospective and sociological. The teacher concerned would not necessarily articulate the process of change in the same way.

The strategies that are about to be outlined insofar as they appertain to the spatial rhetoric were accompanied by a campaign to get business studies accepted as an 'academic' rather than a 'vocational' subject. This campaign was accompanied by the production of a Model III Certificate of Secondary Education Syllabus that enabled the previous contents to be removed and this subsequently formed the basis of an argument effectively used to justify an action that, in reality, had already been taken. This new syllabus placed an explicit emphasis on academically 'respectable' areas such as economic, accountancy, principles of law, etcetera, rather than shorthand and typing; and a brief flirtation with the social studies department over the content of what were now potentially overlapping syllabii. Moreover, these changes took place with the minimum consultation with colleagues outside the immediate department — a point to be developed in the next chapter.

Business studies is one of those departments having the previously mentioned 'distinctiveness' in territorial claims on classroom space. Special equipment is needed:
typewriters and desks, other office equipment that is difficult to move about, a model office, office spines for individually monitored programmes of work. Although a characteristically vocational subject - a perception that the then head of department rejected - this view was not mutually shared by all the parties involved and although the strong sixth form course was publicised in these terms pupils were subsequently cooled out if they were unable to meet its academic demands. To this extent its pedagogic position in the organisation of school knowledge is seen as unusual: a view reinforced by its modes of practice and differing examinations. (Although not wholly replacing 'traditional' school examinations those of the Royal Society of Arts and the Pitman Institute play a central role). During the period of research this position of marginality in the curriculum was under review and this was reflected in the stance adopted by its practitioners in the staffroom. Initially the teachers associated with business studies were located with art, music, etc. in the general social area. However, the appointment of a new head of department, followed shortly after that by the resignation of the only other full time member of staff, led to a change in its pedagogic and spatial location along the lines already indicated.

It has already been explained that the newly appointed head of department went quite some way in rejecting the previously held vocational image of the department and rather sought for its acceptance as a member of the academic subject community. This was accompanied by a move away from placement within the general social area and the claiming of territory broadly based within the
Personal Space  
Prentice Hall
curriculum area represented by the history-geography axis. The strategic manoeuvre of 'donating' a type-writer to the staffroom which, of course, needed to be placed on a table — and then proceeding to be seen continuously typing in that place (together with the concomitant leaving of stencils, duplicating paper, and other similar objects) served to successfully establish the ownership of that space. Items symbolically representing ownership of social spaces thus appear to be of some importance in laying claim to territory and such items may be a textbook, sets of exercise books, worksheets, registers, and so on. From time to time these objects will be pointedly retrieved and this retrieval is often accompanied by verbal statements of one sort or another underlining the act of trespass. This use of markers to reserve space in public places is a phenomenon noted by Sommer and given life in Leon Mann's account of the existence of a queue culture among a line of people waiting outside Melbourne Football Ground has already been referred to. The significance in this context is that the items left and then 'reclaimed' tend not to be personal possessions of the pedagog such as pens and cigarettes (that could be related to the personal baggage of the queuer) but were items linked to the subject taught by that teacher.

By stating the proposition in this way one is able to draw parallels with the work of Strauss (1963) arising from their work observing the negotiated order of a psychiatric hospital. Within the context of the school delineates the extent to which the spatial rhetoric of staffroom and school is representative of differential
pedagogic ideologies together with the degree to which these divisions are recognised by the various participants and the consequent affect of this on subject identity. The staffroom will now be examined as a geographical site where persons from different (segmented) professional worlds come together; each segmental echelon having received a more or less noticeably different training and holding a different hierarchical position in respect of their subject knowledge, and each playing a different part on the overall division of labour. (Goffman, 1956).

Attention has frequently been directed to the world of the staffroom as a world socially and physically estranged from the world of the pupil (Hargreaves, 1975). For the pedagogue the staffroom constitutes a similar arena to that of the formal meetings attended by business management (Dalton, 1959) to the extent that in both cases there exists:

"... a gallery of fronts where aimless, deviant, and central currents of action merge for a moment, perfunctorily for some, emotionally for others. All depart with new knowledge to pursue variously altered, but rarely the agreed, courses."

(Op. cit. p.227)

At this juncture the intention is rather to examine the interactions of the staffroom in terms of a socially organised world engaged in social encounters grounded upon those realities symbolically represented by the objectified reality of the pedagogic subject. In so doing due emphasis should be placed upon the negotiable aspect of these definitions since the pedagogic subject
is not a mutually exclusive definition of the observed social world but is one among many characteristic features serving as situational constraints upon the actions in progress. The negotiated notions of school, teacher, pupil, timetable, similarly constrain the action: the subject identity appears of particular salience because it is the particular purpose at hand. Such a proposition bears an obvious affinity to the argument of Berger and Luckmann (1967) concerning the ways in which host communities segregate foreigners and other 'guest' peoples: an insight similarly employed in the earlier discussion of the knowledge of the observing participant.

Whilst the physical location of the staffroom within an area designated as an administrative block (see Figure Three) serves to reinforce the 'culturally given' social separation of teacher and pupil it nonetheless fails to explicate the problematic nature of such a categorization. For example, it will be noted that nearby rooms are occupied by 'administrative' staff, a label used to identify the activities of such as the school nurse, secretaries, deputy headteachers, the headteacher. Other 'ancillary' staff (that is, the schoolkeeper and his staff, kitchen staff, cleaners) are thus portrayed as being physically and socially 'outside' the particular matrix of meanings comprising the teacher's life world. However, even accepting such a distinction, not all 'staff' may use the 'staff room', and not all 'staff' who use it are teachers. Thus, while it may be taken for granted that all teachers may use the room the head and two deputies do so only with a particular purpose in mind (examples of legitimate purposes in mind would include making announcements, 'seeing' teachers — although this rarely includes 'having a cup of tea' with teachers); whilst the school librarian and media resources officer may use the room school nurses and secretaries may not. And parents most certainly may not.
The nomenclature 'staff room' is therefore not 'merely' a social construction but may in fact be an intensely problematic phenomenon in the construction of situationally derived 'meanings'. This is indicated in the teacher's stock of knowledge at hand that imputes different meanings to a message given one by the head in the privacy of their study, to a similar message delivered to present in the staff room during a meeting. In the latter case the message may provide a general topic of conversation in which public and private stances are taken; in the former case teachers may feel the need to, first 'sound people out' in order to establish whether their knowledge is the same as mine. The perspective has some affinity with that examined in relation to the activities of the participant observer in the previous chapter.

However, insofar as the social organisation of the staff room is presented as possessing a certain 'significance', the differential nature and contents of the interactive encounters taking place within its (situationally defined) boundaries may be considered as imputing various meanings to the action in progress. The 'first impressions' of the approaching stranger may well be that of a collection of people more or less randomly distributed among the available seating. Such a view would quickly be replaced by a sociological awareness of the constraints being placed upon the various contingencies of action. What at first sight appeared to be a collection of individuals drinking coffee, engaging in social intercourse, marking books, now reveals a patterned interaction in which, it is suggested, the teacher's pedagogic subject exerts a considerable influence.
Such approaching strangers - who have yet to be identified within the pedagogic meaning structures of the school - are usually to be located within the general social space (the terminology being descriptive of its use by transient members of the staff world) of the staff room. The 'transient' may be a staff member whose presence is sufficiently infrequent for any territorial claim to be sustained, visitors, teachers on temporary attachment to the school, new members of staff not yet recognised as 'belonging' to a particular subject department. These are the more important because of the way in which the 'communality' of departmental social interactions extends to activities as 'making tea' and 'having lunch' that not only take place within the social and physical confines of that department's territory but are viewed as social occasions establishing their own customs and rituals. Territorial aspects of social identity are an important part of the process whereby students on teaching practice are assimilated into the staffroom culture of the school. If it is not explicitly pointed out to them that table 'x' belongs to the history department the implicit recognition of this fact is reflected time and again in the student's speedy establishment of their (pedagogic) persona as the more or less legitimate occupier of that space.

Finally, the contingent occupation of general social space by specific subject departments requires a certain clarification. Members of the relevant departments - let us say science and home economics - have been shown as extremely successful in the creation of a spatial and social back region for the performance of pedagogic
8. Tomkins, Paul (1975)
Coping With ROSLA
Hard Cheese 4 and 5
November, 1975. Pages 7-31
and other tasks: the concomitant development of meaning structures that are seen as largely independent of those held by their professional colleagues results in the 'need' for only occasional forays into the staffroom. In this respect there is some similarity between these teachers and the distinctive ideology of the computer programmers at Brian Michaels (Pettigrew, 1973). Consequently, they may be legitimately portrayed as possessing a transient identity for the purposes of the present discussion. On the other hand, the designation is also applied to those activities identified with such departments as those of art and music. In this case however, the label 'transient' originates somewhat differently. Whilst the practitioners of these subjects will generally be located in approximately the same 'spot' the space is not 'owned' in the same way as those spaces 'owned' by other departments. The supposition here is that both departments typically rely on a number of part-time specialist teaching staff and that 'the department' as such may consist of one or perhaps two full-time members. The presented image is thus one lacking a sense of permanence and it is this that it is suggested prevents the establishment of a specific social territory. It might also be observed that such a 'lack of permanence' in the departments spatially located position in the staffroom is reflected in a subjective feeling of similar impermanence within the social location of the curriculum. This interrelationship between spatial and social location is an oft-noted phenomenon of classroom observations: 'the bad ones sit at the back' syndrome (see, for example, the description of Tomkins\(^2\)). Thus, although the importance of these subjects is frequently given theoretical recognition the practitioners themselves often feel subjectively vulnerable within the context of demands for additional time made by other 'academic' departments.
Having established the notion that the spatial symbolism of the staffroom is socially constructed, it becomes necessary to explicate the manner in which these symbolic representations may be portrayed as reflecting the taken for granted assumptions concerning the socially organised forms of school knowledge. For example, examination of those spatial areas pedagogically designated according to their perceived territorial claims by particular knowledge areas reveals certain departments - for example, physical education - to be situated on the periphery of the staffroom. This is a relatively difficult position for the approaching other to gain access and, as such, may reflect a feeling of pedagogic defensiveness on the part of the practitioners concerned. This feeling of defensiveness was an almost continuous undercurrent in many of the writer's conversations with various members of that department. That there was some basis for it may be adduced from the fact that when a member of staff left that department it was suggested by the headteacher that they 'make do' with what they had. (The 'navigational' problem of the social actor arising from the pedagogic ownership of space is a constructed reality and whilst one may make too much of the (sociological) 'art of walking' the writer does sympathize with Ryave and Schenkein's emphasis upon the social implications of the constraining nature of 'natural' boundaries.) Many of the territorial groups were internally cohesive with their backs turned towards outsiders, and the amount of space physically taken up by chairs, bags, and other paraphernalia bore the meaning that anyone wishing to see another member of staff might have to stumble across several intermediary obstructions.
However, the present contention that the physical occupation of a marginal position in the staffroom by those members of a particular pedagogic department may be reflected in the same practitioner's awareness - a perception perhaps shared by members of other departments - of the marginality of their particular package of knowledge within the context of the total curriculum.

On the other hand, the relative estrangement of mathematics - situated in a quite separate area physically and socially separated from other departments - and to a lesser extent modern languages, may evolve from a quite different tradition. Here again the writer is conscious that the use of the following descriptive polemic is informed by the sociological imagination rather than descriptions provided by the approached groups. In these cases, the suggestion is that the spatial positioning may be interpreted as reflecting the (pedagogically) isolated nature of the subjects themselves. Thus the knowledge contents of mathematics is intelligible only to other established practitioners and speakers of the same tongue: whilst, at a pinch, the English teacher may take a history lesson there is a fundamental divide between the speakers of a shared native tongue and those subjects where:

"I couldn't even understand what the question was that was being asked . . never mind trying to help the kids find out what the answer was."

A comment provided by an art teacher having just 'covered' a mathematics lesson with the second year.
Territoriality of Patients in a Research Ward
Holt, Rinehart and Winston.
An intriguing comparison emerges between the revealed ideology underlying this statement and Becker's (1973) observations on the culture of dance musicians. Becker comments on the symbolism implicit in the isolation of the dance musician from the wider society - viewed as including musicians from differing traditions.

"... these patterns of isolation and self-segregation are expressed ... in participation in the social intercourse of the larger community ... its primary consequence is to intensify the musician's status as an outsider ... the musician is spatially isolated from the audience. He works on a platform, which provides a physical barrier that prevents direct interaction."

"... The process of self-segregation is evident in certain symbolic expressions, particularly in the use of an occupational slang which readily identifies the man who can use it properly as someone who is not square and as quickly reveals as an outsider the person who uses it incorrectly or not at all." (Op. cit. p.95ff. and p.100)

As a final aside it may be of some salience that science teachers, when they do appear in the staffroom, tend to sit in that part of the general area closest to the mathematics space. The perceived conceptual affinity between these two packages of knowledge is one that receives further attention during the course of this thesis.

The notion that the socially situated location of a particular pedagogic package interacts with the rhetorical dimension of spatial utility has some similarity with the observations of Esser, Chamberlain, Chapple and Kline. Their work was carried out within the context of a
residential teaching hospital in which they discovered a rigid hierarchical system of spatial ownership that resulted in three layers of dominance. Those in the upper third were free to move anywhere and claim any territory: a claim that was only infrequently challenged since they would typically only take over the territory of those in the lower third whose range of options was more restricted. Whilst not wholly paralleled the situation in the school staffroom has a certain degree of correspondence with such a process enabling the social distribution of personal space to be viewed as reflective of the generally taken for granted assumptions concerning the structure of the curriculum. Mathematics is portrayed as separate - isolated from interlopers; English has taken up a dominant position surrounded by its pedagogic satellites of history and geography; and linked to social studies giving rise to demarcation disputes that will be discussed later. Business studies is attempting a change in status by making a bid for academic recognition; areas employing relative large numbers of staff per se but nonetheless marginal in the curriculum take up defensive positions around the perimeter of the staffroom; subjects such as music take what is available. The consequences of this will be important for the instigators of particular actions and the relative success at making public and keeping secret what goes on. And into all this walks the fieldworker notebook in hand.

However, the selective exposure with other 'like-minded' subjects may have unforseen consequences since it will potentially reveal teaching materials and so forth that other departments may consider to be within their domain.
11. Stratta, L. (1972)
English and Sociology in the Secondary School
Journal of Curriculum Studies
Vol. 4, No. 2.

12. Lindley, D.
English and 'Humanities'
The Use of English Vol. 24, No. 3.
This may in turn lead to questioning of the appropriated pedagogic ownership of the various contents based on a performance that is normally kept hidden: to this extent it is reminiscent of the earlier discussion of those 'problems' seen as arising from the selective presentation of pedagogic packages at 'open days' or as a consequence of room-sharing. An example of this type of incident related to the staffroom occurred during the research activity of the writer:

The particular incident arose between the English and Social Studies departments (whose spatial proximity has already been noted and commented upon). The background to the encounter was that, from time to time, the English department had been accused of teaching 'social studies topics' (the consequences of such labelling are developed in a subsequent chapter) and in particular of taking the more 'interesting areas, and even more particularly of an inadequate and populist approach. The implication of such a criticism was not so much a presentation of social studies as a 'science of humanity' concerned to abstract personal experience out of the classroom but rather that the emphasis of English upon individual experience was so total that it failed to locate that experience within any social dimension whatsoever. As such it represented an intriguing reversal of Lindley's article in which English now becomes the mirror image of his critique of school sociology. He notes

"The implication of all creative literature is that abstractions such as 'society' ... only have reality insofar as they are alive in the limited individual, and the tendency of an integrated humanities course (particularly one that favours
The Architectural Belief System and Social Behaviour.
British Journal of Sociology.
the procedures of sociology) is towards statistical abstraction, and a spuriously objective 'science of humanity'. The family patterns of eskimos . . . the administration of Oxfam, all contribute to a picture of the world which encourages the viewer to reach quick conclusions without the struggle to evaluate himself, and therefore without having registered the qualities and values involved in the picture."

The implications of this comment for the perceptions of school knowledge will be picked up later.

To return to the polemics of the initial incident, the stress here is not upon the contents of the (differentially appropriated) pedagogic rhetorics of legitimation (which are the subject of a subsequent argument) but rather with the circumstances in which it arose. The incident occurred precisely because of the existence of that spatial dimension to the imputed meanings of social objects that has been illustrated. Teaching materials left on the shared table by a social studies table had been spotted by a teacher of english and, under the impression they were 'english materials', had appropriated them and used them in a lesson.

It would therefore seem that town planners and architects are not the only instances where the management of space has an affect on professional ideology. Indeed, the spatial dimension of social behaviour was investigated by Glaser and Strauss (1965) in their study of the ways in which physical boundaries, separation by objects, and so on, were utilized by those involved with the dying in hospital. In this case the various knowledges about the state of the patent health were held by the patient and those others involved in the unfolding drama, and that
Purity and Danger
Routledge and Kegan Paul.
behaviours were differentially 'appropriate' according to whether or not - and who - was aware that the patient was dying. Various 'awareness contexts' were suggested (open, suspicion, mutual preference, and closed) each of which is equally applicable to the perceived ownership of pedagogic knowledge by subject departments. Definitions of what subject 'are' are similarly negotiated by and between different subject departments and one may comprehend similar contexts of awareness concerning the real state of affairs (which may or may not be accurate). The rhetorics of space thus reinforce the contextual meanings of the actions in progress and the extent to which various performances are addressed to, or concealed from, others. In an interesting way Douglas has related the notion of impurity to those of social disorder and what she chooses to call 'dangerous contagion'. Since dirt is essentially disorder and relative, and school knowledge can be similarly considered as pure or impure (Bernstein, 1971) an eclectic insight is capable of being developed. And is later in this thesis. In both cases it is probably correct to note that an:

"inevitable by-product of social differentiation is social awareness, self-consciousness about the processes of communal life' (Douglas. Op. cit. p.91)

Subject Perspectives and Segmented Identities.

The argument so far presented has been concerned to establish a substantive foundation for the earlier contention that
15. Bennett, William S. and Hokenstad, Merl C. 
Full-Time People Workers and Conceptions of 
the 'Professional' 
Page 250-271
differential subject ideologies are capable of providing an authoritative source of legitimation for the symbolic ownership of socially constructed space. This was presented as constituting the pedagogic rhetoric of space. Implicit in such a proposition is the further suggestion that the establishment of spatial ownership, being consequent upon and consanguineous with pedagogic rhetoric, provides an important perspective from which the various players (make sense) impute meaning to the actions in progress. It was further demonstrated that the relative meaningfulness (for man the actor) of a particular phenomenon, being extrapolated by the actor from within the 'given' of a pedagogically orientated meaning structure (itself perceived as being less or more problematic) was consequent upon the socially located subject identity. Such a proposition is essentially a reformulation of that earlier perception of the sociological perspective of the observing participant as being a function of social position. Much of what was argued then is applicable now and the difficulties raised in relation to researcher's knowledge of the world may be equally intense for the social actor making sense of the world from his position.

Having established presumptive evidence for supposing that the socially constructed category 'school knowledge' possesses a differential significance for the meaning of the pedagogic identity we are now in a position to proceed to a more detailed consideration of this general thesis. An illustrative example was that of the science teacher for whom the subject identity was not only as constraining the 'life chances' of that individual but it was suggested such an identity made the holder less 'people orientated' as a direct consequence of its social and physical isolation. Such a reference to 'people' orientations is suggestive of the study by Bennett and Mokenstad in which the authors argue that those professions sharing knowledge with their clients will.
be 'political' in a way that the work of (say) engineers is not. It is intended to show that the segmented activities of subject teachers are also 'political'
but in another sense.
Subject practitioners have been shown to utilize differentially legitimated rhetorics of space in maintaining pedagogic back regions: a practice that is capable of interpretation as an avoidance ritual aimed at ensuring the minimum possible exposure of that performance to other (different) subject identities. Thus a course under the aegis of home economics entitled 'Child Care and the Family' may emphasize some aspects that would be viewed as problematic within the context of (say) a sociology course. On those occasions when such others do achieve access they also convey a potentially competing definition of the way in which that particular knowledge 'counts'. The previously considered differences between the English and social studies department is an illustrative case of particular significance for its differing proclamations of 'uniqueness' seen to be offered by the two departments (they stand as representative of a more or less general phenomenon). Each subject department perceives of itself as possessing a 'speciality' having a unique contribution to make to the purpose at hand that it alone is able to make. The claim to be performing a 'unique mission' is frequently accompanied by a pedagogic rhetoric selectively enlisted in support of the appropriate specialist group as being the one most suited to the task (and thereby carrying the implication that other groups should be excluded from it).
The processes by which occupational identity is both
subjectively and ideologically appropriated have been insufficiently explicated by the previously mentioned studies of changes as teachers progress through college and the first years of teaching. For example, Smetherham (1977) locates one way in which pupils may be fruitfully regarded as initiate members of the scientific knowledge community. Teachers have been successful pupils and the National Foundation for Educational Research survey into methods of helping children in their choice of subjects at secondary school was based upon the explicit assumption that the kind of choice that is made will exert a decisive influence on later educational and vocational opportunities. Certainly, subject labels:

"... form the basis of that matrix which is the timetable by which pupil's day is arranged. Most of the teachers are known to the pupils at least initially by a subject label. Thus, an important aspect of a teacher's identity within a school is the subject which he teaches. Where the school is of moderate size ... it is usually considered necessary to employ more than one teacher for each subject on the curriculum, and this leads to departmental organisation and the beginnings of a hierarchy of teachers, divided horizontally by seniority of appointment and vertically by subject department ... so that each subject becomes a means of entering and climbing through a career structure." (Warwick, Page 100).

Hargreaves (1975) thus draws attention to the disproportionate numbers of physical education teachers applying for courses of advanced study and suggests one reason for this to be the fact that they like to spend an increasing amount of time in academic departments as their physical skills wane. Edwards (1973) similarly analyses the
backgrounds of applicants for a headship in an interesting way relating their subject expertise to present persona.

Subjective aspects of identity and career draw attention to the importance of the evaluative response paradigms represented by variously important persons and groups, as well as the way in which the situation acts to affect the presentation of a particular persona (Goffman, 1969).

Such a relationship between that work-based identity and occupational title as sociallocated, ideological, meanings receives acknowledgement in Becker and Carper's (1956) study of 'Who am I' labels. The authors were concerned to explicate the names and categories made available among groups of physiology, philosophy, and mechanical engineering students, although the implications of the exercise are not unrelated to the present concern.

Occupational title was differentially appropriated by the three groups: philosophy students had little attachment to their title although they acknowledged their image as 'intellectuals'; engineers were proud of being engineers although they exhibited no perceived attachment to any particular sub-field; whereas physiology students were not only aware that they were part of a wider (medical) grouping, but were also aware of the peculiar nature of their work:

"It's up to you to interpret what happens."

(Op. cit. p.179)

Such a perspective provides the basis for a speculative and interesting comparison of the various occupational titles that are available to teachers and the consequent commitment that is felt to them. Although the designation 'primary school teacher' is probably acceptable this is
not necessarily the case with secondary school teachers where the requirement is rather to be known as a Teacher of something. Various literature distinguishing between the activity 'teaching', 'lecturing', and so forth was associated with various, different, pedagogic subjects has already been referred to in this chapter. It now becomes prospectively interesting to ask to what extent do (say) sociology teachers make similar distinctions between those among them who are 'sociologists who happen to be teaching' and the different 'teachers who teach sociology'? The notion of commitment is obviously relevant here and this may well be related to perceptions of what constitutes a proper work task, a 'central core concern'. Certainly the changing commitment of the writer as observing participant on the social scene demonstrates the potential consequences of such a perspective.

To what extent are there pedagogic equivalents of the physiologists specific task attachment (and the comments concerning our science teacher are supportive of this analysis in their case)? Is the converse of the philosophers acceptance of his task as 'intellectual', seen as deriving from uncertainty regarding his social position, the art teachers 'artiness' originating in the same source? In each case the subject for the teacher is a more or less discrete form of life,

"... a particular method for treating and reconstructing one's biography as a practically conceived corpus of knowledge."
(Blum, 1971. p.301f.)

a theoretical consciousness providing an interpretative framework for making sense of events in the world.
Thus, when Clark (1966) suggests that:

"The value systems of the faculty particularly cluster around the individual disciplines and hence at one level of analysis there are as many value systems as there are departments."


although the system he describes is that of the United States the parallel phenomenon is found also in this country (Musgrove and Taylor, 1969).

Such a suggestion establishes some grounds for inferring that situational sets of typifications may be socially acknowledged in one institutional locale whereas they are not similarly acknowledged in another. Here the earlier contention that external reality definers are not necessarily too important may be reinforced by the possible action of the head of department in the activity of shortlisting for interview. By shortlisting those candidates most likely to be sympathetic with the particular and situation ideological position of the department the head of department may establish a framework within which all over work activities are identified. What is therefore suggested is a pragmatic pedagogic appropriation of the statement by Strauss et. al. (1964):

"At each institutional locale . . . the jurisdictional areas of each specialist group have to be adjudicated and negotiated. The division of labour cannot be legislated; it must be worked out at each locale."

(Op. cit. p.5)

If this interpretation is correct then the implication is profound and will be elaborated as the thesis is developed. For example, it may be that the presented
17. Thompson, E. P. (1966)
The Making of the English Working Class
Vintage Books

Occupational Specialization As An Emergent Process.
May, 1973. Pages 255-278
image of a subject experienced at the beginning teacher's first school not only requires that he acts in a manner congruent with that image, but that that image may acquire something in the nature of a 'side-bet' (Becker, 1960). The recognition that prior actions now have consequences for other activities is implicit on those occasions of individual adjustment to social position such as outlined by Becker. Moreover, should a pattern of behaviour be altered to conform to the requirements of one social position then the actor inevitably unfit himself for other positions that he might conceivably have access to prior to that moment.

The various strands of this argument are brought together in an analogy with the way in which nineteenth century craftsmen looked to trade unions to protect the knowledge base of their skills through the apprenticeship system. The subject association is thus not a critical definer of reality but an agency that used selectively to organize the defence of particular knowledges against potential - and situationally located - intruders. An exemplar of this process is provided by Richardson (1973) in her description of the dilemma facing David Williams at Nailsea School. As teacher with responsibility for drama, but under the aegis of the English department, he had to consider whether drama should aspire to independent status. As a consequence of his decision in favour of the latter course there was a fundamental review of the place and status of drama within the school during which Williams was required to defend the intellectual status of drama within the school and justify its existence as a separate subject in the curriculum by expounding its educational objectives. This was not required whilst a subordinate of the English department.

For the subject department, as for the computer programmers and systems analysts at Brian Michaels; the focus is on how a specialist group defines its task, how it
protects its identity by the development of a system of values, and generally how it links itself with the activities of interdependent specialities. It has already been made quite explicit that one is not here discussing teachers as though they were some homogeneous whole but rather as a number of segmental cultures based on subject groupings seen as encountering specialized problems peculiar to that subject. For example, Grace\textsuperscript{18} notes that teachers of practical subjects are regarded by their colleagues, although they do not so regard themselves, as a service department to the school in general. Thus the writer observed the assumption that the home economic department would make the tea during open days; that the art department would decorate the main hall at Christmas. Indeed, it was a source of contention that these things were assumed and were not asked:

"I wouldn't have minded so much but she just took it for granted . . . didn't even ask me. I've a damn good mind not to do it next time."

Alternatively, Dale (1971) observed that items such as the mediation of school rules are significantly more likely to carried out through the offices of the subject departments in secondary schools and that that group of teachers with whom the beginning teacher comes into contact is more likely to be formed by those whose professional interests he shares. Strauss et. al. (1963) noted the same phenomenon within a hospital milieu:

"... those who belong to the same profession also may differ quite considerably in the training they have received, as well as in the theoretical (or ideological) positions
19. Fugrove, F. (1968)  
The Contribution of Sociology  
in Kerr, John, F. (1968)  
Changing The Curriculum  
University of London Press.  
Pages 96-109.
they take towards important issues. It was noticeable that considerable variability characterised who worked with whom — and how — depending upon such matters as ideological and hierarchical position."

(Op. cit. p.149ff.)

To the extent that different ideologies are represented by the different pedagogic subjects the temporal clausality of the shared meanings underlines the importance of the staff world as an arena for negotiation. There is thus a cultural expectation (Becker, 1960) that teachers of history are not expected to apply for geography posts (although, interestingly, both may do so for 'social studies' positions).

Such an analysis has some affinity with the work of Bucher and Strauss (1961) on the process of professional segmentation in organised medicine. Indeed, if the pedagogic identity is to be located within a(differential) ideological paradigm then it is proposed that practitioners of the various pedagogic subjects may usefully be viewed as representatives of a similarly segmented profession.

In this context the 'image' that subject practitioners have of themselves, together with that of the 'ideal client' to whom such practitioners see 'their' subject as directed, will be critical to an analysis of those parameters within which the practitioner initially defines the particular realities of the pedagogic life, and subsequently sustains them. Such an orientation corresponds with Musgrove's belief that:

"... subjects are communities of people, competing and collaborating with one another, defining and defending their boundaries, demanding allegiance from their members and conferring a sense of identity upon them ..."
Bucher and Strauss' initial formulation of their 'thesis of segmentation' originated in a questioning of that traditional view of the professional as being a member of a relatively homogeneous 'community of scholars' in which the initiation of recruits was a process primarily perceived as concerned with the novitiate's induction into some 'common core' identity. However, the subsequent emergence of distinctive occupational ideologies rendered such a view problematic in so far as members of a given occupation could be portrayed as possessing different perceptions of what, in fact, constituted the 'most characteristic professional act' of their lives. The sociological dilemma is that, following Bucher and Strauss' utilization of 'organised medicine' as a proto-type profession, the majority of studies relating to various processes of segmentation appertain to the (American) medical profession. Thus, the situation is analogous to the manner in which Durkheim's use of official statistics paradigmatically informed subsequent studies of suicidal phenomena. As a consequence, although (as with medicine) there is an abundance of sociological literature examining the social structure and organisation of educational institutions, there has been relatively little application of the notion to those studies best characterised as constituting 'sociologies of the school'. Dale's (1971) use of the concept in his study of beginning teachers would be one of the few exceptions.

The thesis of segmentation should not be understood as proposing that each individual 'segment' is necessarily able to be characteristically identified with a single work activity - for example the teaching of a particular pedagogic subject - from which the, divergent, core activity may evolve. Rather, the suggestion is one in which (in the event of such an identification occurring)
a concomitant tendency to develop those characteristics associated with such an identification may emerge alongside those auxiliary activities potentially introducing a further variation in the individual's commitment to the major area of work. Thus, the kind of work the professional believes he should be doing; how that work is to be organised; which tasks are perceived as having precedence; are all areas of potential (segment-based) disagreement concerning the appropriate performance of the professional task.

Whilst consideration of the extent to which the pedagogic department (being based on the, socially constructed, division of school knowledge into traditional subject areas) might be said to reflect such a (segmented) identification constitutes the substance of the present argument. It is certainly true that such departments owe their existence to the demands of consciously accepted institutional tasks. Secondary school teachers come into the system with a strong vested interest in teaching a subject based professional expertise and identify this activity with the appropriate subject departments.

The proposition about to be argued is that conflict centred upon those conceptual areas considered to be crucial to a 'sociology of professions' - namely those of 'client', 'colleague', and 'career' - will be a direct consequence of the social organisation of (secondary) school knowledge into pedagogic subjects. The pedagogic subject basis of much preparatory teacher socialization is considered to be subsumed within this argument so far as it is relevant. Thus the amalgam of a unique sense of mission and specialized occupational
identity implicit in the above will throw teachers into new relationships with their pupils and their professional colleagues, based upon subject images - that will be more or less accurate - that separate them in a segmental way from other groupings. Such a view does not exclude the possibility that the (fateful) interests of the different subject groupings may be a source of direct conflict between them. Bucher and Strauss note that problem areas in which professionals most frequently experience a conflict of interest are in gaining a proper foothold in the particular institutions, in recruitment, and in relations with the 'outside'. All of this is most relevant to the data so far produced. Moreover, the way in which these different understandings are negotiated will affect the situational nature of the client and institutional relationship, and it is here that particular definitions of pedagogic subject knowledge are at their most relative (to the particular institutional locale).

In so contending that the pedagogic subject constitutes the teacher's core professional identity the writer intends to utilize a notion arising from the previously demonstrated existence of a multiplicity of 'meanings' from which the actor appropriates particular meanings in order to make sense of the specific 'world-scene' with which he is confronted. The implication that meaning is 'relativistic' will therefore be used to substantiate the suggestion of a potential discreteness between the symbolism and reality of the professional process (Becker, 1970). Here relativistic is used to convey the sense that although the meaning of 'x' may continue to possess the same meaning for the actor it is
portrayed as having different meanings in the context of (differential) interactions with the actor's various publics. Relative is seen rather more as carrying a sense of the notion that the 'meaning x' changes according to context.

Thus a teacher may wish to introduce a particular knowledge content, 'x', for a particular reason that is not conveyed to others: in discussions with the head, other departments, he imputes 'x' the meaning 'that he believes would have the most 'meaning' for these others in terms of a particular outcome'. Relative means rather that the 'actual naming 'x' will change for all participants. Thus, a classroom incident has a particular meaning for the actor that may be re-defined in the context of further discussions with, for example, the pupil, the parent, other teachers.

As such particular imputations of meanings may be construed as an attempt either to counteract or disguise:

"... the failure of professions to monopolize their area of knowledge, the lack of homogeneity within professions, the frequent failure of clients to accept professional judgements."

(Becker, 1971. Page 103)

If more or less discrete packages of knowledge can be said to have their own pathologies, then it would be expected that some indication of their presence would be revealed on those occasions when the pedagogic message is necessarily exposed. (The term 'pathology' is used by Becker (1971) to refer to that disparity that emerges when the symbolic reality ignores or distorts large and important parts of the 'world reality'). One such, albeit infrequent, event occurs when subject departments are in overt competition for pupil-clients - and it is to the ideological dimension of this process that the writer
now directs the reader's attention. Hall's (1967) description of the acquisition and retention of clients within the medical profession illuminates the structural processes involved in the development of a segment-based client ideology. Carried on in a competitive milieu, and perceived as essential to professional success, the practitioner's problem is not simply one of how to attract patients per se but, more importantly,

"... to attract the desired type of patient, and ... discourage those who do not fit well into the pattern of his practice."
(Op. cit. p.93)

Although the unique position of the pupil client (in the sense that the pupil is under a legal constraint to attend) vis-a-vis the clients of other professionals (the quality of 'uniqueness is lessened to the extent that the client of the probation officer is under a similar duress), requires the cautious application of such a model to the teaching profession there is none-the less some affinity. The 'relevance' of the medical practitioner's dilemma within an educational milieu is best illustrated by Corwin's (1970) analysis of organisational conflict centred upon the elective course structure of the american high school. Here, a major problem was the allocation of, and competition for, students - a process in which the various manipulative mechanisms used by teachers in their seeking to control the enrollment (in their subject classes) of certain categories of student, may prove instructive. (As
Indeed would a similar comparison between the school counsellor’s influence upon students subsequent educational career, and that of the general practitioner referring cases to a specialist. See Cicourel and Kitsuse, 1971). However, returning to the operational strategies used by the teacher in attracting the desired type of student; these were highly elaborated and included such devices as the imposition of admission requirements in which the criteria for selection (and therefore also exclusion) of students incorporated in written examinations, progress made in other courses, and the results of various tests; demands for the control of assignment procedures; informal recruitment; and the 'education' of counsellors into the belief that a given type of course required a particular type of student. Corwin (1970) quotes the example, that one suspects is equally repeatable in this country, of the justification for establishing entry requirements that was provided by a language teacher:

". . . since all our professional organisations said there was a definite correlation between ability in foreign language and ability in English . . . no student would be allowed to take foreign language who has . . . less than a C grade in English."


It would be interesting to know the extent to which this represented a selective use of what the professional organisation had said in order to impose this situational entry requirement.

Many similar strategies were observed by the writer during the research period and various processes involved in the negotiation of the differential contingencies of action were noted as being directly related to the social
organisation of school knowledge. The following analysis of these processes is illustrative of the general manner in which a (segment-based) client ideology is both part of, and interacts with, the rhetorics of legitimation in establishing the ideological meanings of the pedagogic identity. The observations upon which this account is based centred around the choosing of options for the fourth and fifth year of schooling that takes place towards the middle of the pupil's third year. This is the subject of a more detailed analysis later in this thesis: here the writer merely wishes to signify the 'different' character of the school knowledge now taken as 'given'. The structural processes, in chronological order (although the process is in fact both reflexive and circular in form) involves firstly establishing the precise choices to be offered (English, mathematics and physical education were not 'choices') one from each block of options of around seven subjects; then the issuing of a booklet explaining the choices to the pupils and their parents; the preparation of interview schedules for the 'guidance' of the interviewers; and finally 'the interview' itself. The actual form of the options having been decided (the various encounters in this respect are alluded to at different points in the thesis) the next development was the issuing of the information booklet 'Your Guided Choice' to pupils and their parents. This booklet was written by the headteacher without consulting the various subject departments and therefore forms an interesting and useful perspective from which to analyse those hierarchical assumptions (at least in so far as the headteacher is concerned) underlaying the construction of 'what counts' as educational knowledge. This lack of consultation may
*Write and Wrong*  
*Times Educational Supplement*  
not (hopefully) be typical but, precisely because of its untypicality, may be useful for its illustration of at least one headteacher's 'givens' that are not usually revealed in quite such a public performance. Perhaps the first indication that the headteacher holds a differential ideology to that held by many of the subject practitioners is in the apparent emphasis placed upon the notion of 'occupational career' (together with the linking of that notion to particular subject areas). The introduction thus states:

"... certain basic subjects are necessary. Everybody needs an understanding of the use of English and it is true to say that, for most careers, some ability with figures is required."

(Op. cit. p.3)

Whilst most would probably agree upon the contemporary socio-economic requirement for at least a minimal understanding of the 'use of English' and 'ability with figures' the designation of these subjects as being compulsory proved to be problematic on several counts. For example, the need for understanding (say) the 'use of English' is not necessarily to be associated with the pedagogic mode of organisation to be found in the secondary school. The subject 'English' is not to be found in the activity of the state nursery schools and may, or may not, appear as a separate course of study within the state primary school. Even with the secondary school various 'integrated' schemes (albeit typically confined to the first three years) have made a more or less determined attempt to dispense with the subject per se. A recent report emphasizing the use of 'language across the curriculum' stresses the wider appeal. (Interestingly, in the light of previous comment, Doe reports a conference held by a north London school in which
"One group leader complained that the English department had 'jumped in' with a demand for six periods in the first year to teach basic skills."

Is this another example of selective appropriation of reality definers in order to support internal expansion plans?

The argument is that the categorization of English and mathematics as 'compulsory' may therefore be portrayed as an attempt, on the part of the headteacher, to fulfill the perceived demands of the examination system and occupational structure (the letter columns of national newspapers and specialist educational journals frequently carry items from employers in which the latter complain that school leavers are not familiar with the commercial use of English, etcetera). As such it is merely reflective of a particular, pedagogic, division of labour.

It has already been suggested that the insulation of 'different' pedagogic subjects is - in some senses - a conspiracy of silence, in which the specific contents of various subject messages will be more or less realistically comprehended by other subject practitioners. Such an understanding now forms the basis of a suggestion that what is implied by a label is not necessarily that which constitutes the particular life-world for its practitioners. For example, one pedagogue will have an idea of 'what goes on' in (say) a geography lesson. This 'idea' will be located within a biographically interpreted continuum of ideas ranging from a totally accurate picture to one that it utterly mistaken: the precise location on this continuum being dependent upon the situationally located position of the actor.
is being suggested here is the existence of a differential awareness of (say) 'what goes on in mathematics' - that will be less or more approximate to 'what really goes on in mathematics' - thus allowing the 'content' to be labelled compulsory on the basis of a legitimation (the necessary requirement of occupational careers for an 'ability with figures') that may or may not be apparent in the substantive contents of mathematics lessons. For example, the pupil, mathematics teacher, other colleagues, the headteacher, parents, will all have varying perceptions of 'what goes on' in the mathematics lesson. It is later suggested that mathematics teachers go some way, at least in respect of certain of their pupil-clients, towards rejecting a 'utility function' perspective of their subject: a process aided by the selective exposure of certain contents to certain clients. Instead, they offer a 'mathematics is fun' interpretation of the mathematics activity.

The implication that 'we all know (and agree)' that the designation of compulsory subjects may be legitimated on the grounds that such subjects form 'a basic qualification which is required for many careers and particularly for scientific careers' is, in fact, an intensely problematic phenomena. This will be especially so when taken for granted assumptions concerning 'what we all know universities; the Midland Bank, whatever, wants' are themselves shown to be inaccurate. See, for example, the initial letter of Taylor in the Times Educational Supplement dated 11. June, 1976, and the subsequent reply of Spurgin in the same journal two weeks later. The correspondence concerned qualifications for entry into the medical profession and the 'perceived' need to possess qualifications in physics,
chemistry, mathematics and biology.

However, returning to our guide, it is further suggested that the reader may find it 'useful' to utilize the four subsequent headings (a modern language other than English; a science subject; one of the 'other' academic subjects; and a creative subject) in deciding what other subjects will 'fill up' their timetables. (Physical education is completely ignored in the booklet thereby reinforcing its practitioners perceptions of the marginality of the subject). 'Fill up' demonstrates the socially constructed nature of the 'choice' since the number and length of periods allocated to different subjects will constrain the number of choices that may be made. Although it would not be relevant to the immediate purposes of this thesis it might prove instructive to compare the structure of choices with that of traditional (that is, classical) school curricula leading to the notion of an educated man.

The extent to which the almost universal compulsariness of mathematics and English is situationally supported by the apparent frequency with which such practitioners come to occupy positions of headship (Edwards, 1973) a phenomenon that may also prove worthy of explication in another context.

The suggestion that pupils consider taking up a modern language is also based upon a similar, problematic, appeal to being a university requirement together with the additional argument that:

"Languages are useful in the commercial world, and the Common Market has opened up many more opportunities."

(Op. cit. p.5)

Here there is a noteworthy shift of emphasis from the more traditional legitimations of the need to study
a modern language as part of an elitist education. After a period of relative decline modern languages have re-established itself on the basis of a re-constructed definition of 'what counts' as an appropriate language. Movements towards 'french studies' in which the language content is minimal are seen as more appropriate for:

"the lower ability pupil, they just can't cope with the language and get left behind and then they just become a nuisance."

The 'european studies' movement in general is indicative of the manner in which changes in society are subsumed within the existing pedagogic divisions of school knowledge. Indeed, the inertia of having a staff which is already differentiated in a given epistemological manner may have profound consequences for any radical attempt at the reconstruction of school knowledge. The further advice that all pupils take up a science subject is followed by the range of alternatives as to what counts as science: combined science; the family and science (both of these are Certificate of Secondary Education courses); or biology, and physics with chemistry at General Certificate of Education. This division further underlines the differential selectivity of exposure in which low status clients are granted only limited access to particular categories of knowledge. A procedure already demonstrated to be a characteristic of selection processes operating at the level of both college (Smetherham, 1973) and school. In the case of school knowledge the converse is also the case: high status pupils may not be permitted access to low status knowledge. For example,
during a conversation with a parent the writer was informed of the parent's belief that 'Maureen', an upper band pupil:

"... must concentrate on mathematics, English, etcetera ... and that social studies, whilst useful, should be dropped if her other work became too demaning."

Also during the period of observation on of the schools 'bright young things' wanted to enter the medical profession and was studying Latin in her own time. In order to 'do' the proper number of sciences she was (uniquely) told that she need not do social studies at all.

This parental perception (that the foregoing suggests is at least 'publicly' shared by the headteacher) of the school as an agent of selection in controlling the pupil's access to the various layers of the occupational structure is reflected in those pedagogic codifications of school knowledge that are made available (differentially) to the various pupil clients. Whilst detailed consideration of the 'relative' status of pedagogic knowledge is postponed to a later discussion, such an orientation does pose the problem of the extent to which such a perspective forms a component part of any 'culture of positivism' within the school. These institutional attempts to reconstruct the curriculum may be permitted only within 'low status' subjects by low status pupils within low status institutions. Thus 'integrated studies' seemingly have a greater purchase in primary schools than in secondary schools, and similarly vis a vis secondary schools and universities. Indeed, it may also be suggested that innovatory movements are to a large extent also associated with low status, that is, young teachers.
With the exception of 'set piece' battles over the allocation of rooms, staff, or money, the relative status of the different subjects is typically implicitly acknowledged rather than explicitly stated, and the guide booklets reference to 'other academic subjects' provoked an intense reaction among the staff. Annoyance at the imputed implications of the statement was reflected in the subsequent frequency of its use as a (heavily sarcastic) in-joke for some considerable period after the initial distribution of the booklet. Thus,

"Don't worry what Jean says . . . she's only one of the other academic subjects."

and so on.

Concomitant with such feelings, and deriving from the same source, was a fairly heated rejection of the way in which these particular subjects were portrayed. This is of particular interest since, although the rejection of their imputed aims was voiced (by the subject practitioners concerned) on a very personal level and obviously heartfelt, evidence supporting such statements could nonetheless be found in the various syllabi issued by departments for 'public consumption' by the hierarchy and other colleagues. The particular statement against which much of the ire was directed philosophised that:

"A good general education includes the study of subjects not directly related to jobs and occupations. Subjects such as history, geography, economic, religious education, and social studies, give you the opportunity to study people and society. Being able to understand the other person's point of view is perhaps the most valuable lesson you can learn whatever career you decide to follow."
What is being proposed is a (perspectival) perception of the action as demonstrating a consciously acknowledged discreteness between the 'private' pedagogic messages transmitted to those in the know, and the 'public' message differentially transmitted to interested others. The anger of the subject practitioner was thus one consequence of a specific and situationally defined 'meaning' of the pedagogic personna being transposed to another (inappropriate) context. The action in progress has been disrupted because a message intended to be transmitted to a particular member of the audience has misappropriated its contents: the situation is somewhat analagous to the drama critic invited behind the scenes 'to see what goes on'. Discovering perhaps that the lead actor continually arrives late on the set and thereby holding up rehearsals (an occurrence that is conspiratorially supported by the other actors for the sake of 'getting on with the action') it is this, rather than the behind the scenes story of the play that forms the substance of any subsequent article.

The relevance of this analogy to the apparently discrepant phenomenon at present under discussion is precisely that an essentially privately shared meaning of the pedagogic message has, incommodiously, become 'public'.

The aims of the various pedagogic departments as exhibited in 'public' documents addressed to private audiences will therefore be rendered more or less meaningless in other contexts. For example, the desire of one department to:

"... give the girls knowledge of life, society and environment in this country and in other countries, by a variety of methods and means. Also to compare other societies, customs, dress, way of life, etc., with our own in an attempt to improve tolerance and relationships (Geography syllabus)
will be reflected in similar statements by other departments that portray their aims as being:

"To gain a respect for a variety of peoples with different cultures and values so that they can evaluate their own and be tolerant of others and realise that all cultures, however scattered in time, have something of interest and value... to help widen their experience and develop their understanding of human relationships and problems and give practice in assessing moral values and forming judgements by studying those in a different or past society."

(History syllabus)

The social studies syllabus contained a somewhat similar passage to those of the history and geography. It has already been established that the staffroom rhetoric of space implicitly reflects pedagogic divisions of school knowledge. It is precisely history, geography, social studies, that were seen (with the addition of English) to be grouped together spatially. The sense in which these subjects are 'like-minded' is reflected in the occasional disputes over the pedagogic ownership of various contents - to the extent that teachers of English and social studies were, and are, unsure of which department own what knowledge. Similar difficulties arise over aspects of the Schools Council Geography for the Young School Leaver Project, and over the contents of the Inner London Education Authority World History Project that is marketed outside that area as social studies.

Alongside this general similarity of content - reflected in the way these subjects are often 'integrated' in various humanities courses - there is also a less or
more articulated sense that a geography teacher is not a history teacher, is not a social studies teachers. The practitioners of these subjects are therefore faced with a dilemma: on the one hand there is a more or less implicit acknowledgement of a certain connotativeness of pedagogic content - especially in the case of low status pupils; on the other hand (and particularly during strategic negotiations of rooms, resources, and clients) such practitioners will wish to present as discrete a public face as possible. Thus, the earlier proposition that the establishment of pedagogic 'back regions' allows play to continue may be portrayed as a (partial) resolution of this dilemma. The distinction between (general) aims and (specific) objectives much loved by education lecturers in teaching colleges thus possesses some relevance to the present discussion. Many practitioners acknowledge that, on one level and for certain types of client, 'we're all trying to do the same thing, aren't we?' This proposition receives further clarification in the subsequent analysis of interview briefing documents when it will be suggested that pedagogic 'content' is perceived as secondary to other items. (This may be partially explained by the taken for granted belief that pupil clients will already 'know' what makes up a subject and this does not therefore need to be explained).

The importance of segmentation (Bucher and Strauss, 1961) is that it focusses attention on the organisational aspects of subject identity: a position that is adopted on one issue underlying that identity concomitantly entails taking up corresponding positions along other dimensions of that identity. Segments, because they involve sharing socially appropriate identities manifested through circles of
20. Durkheim, Emile (1958)
Professional Ethics and Civic Morals
colleagueship, thus enable the recognition of groups of people who organise their professional identity in ways that distinguish them, to a greater or lesser extent, from other members of their profession. This may be an appropriate occasion for suggesting a particular application of Durkheim's, rather more general, use of the category 'colleague' to signify something of a merely associational nature.\(^{20}\) Whilst servicable, his utilization of the term to variously describe a sense of brotherhood, an association of co-workers, or indeed the formal membership of an occupation, implies a professional unanimity that, in the case of the pedagogic practitioner, may be misleading. The limitations of such an approach are well illustrated in Halls (1967) previously mentioned description of the phenomenon of consultation and referral in medical practice: a process in which selected colleagues were invited to participate not only in appraising a client's need but also in that planning of the service to be rendered. Placed within a pedagogic context it seems reasonable to suppose that the selection of one colleague rather than another originates in the (socially located) pedagogic subject identity. It is the 'fact' of this situational identification that exerts a constraining influence upon the practitioner's selection of pedagogic colleagues together with those attitudes and problems centred around those commonly shared concerns about the ends best served by their work. Colleagues working within the same pedagogic department may therefore be depicted as sharing not only that (differential) 'pedagogic rhetoric' of space but also sharing a similarly differential pedagogic rhetoric of legitimation. The existence of a (differential) rhetoric of client identification will shortly be established. Within the context of the developing argument, the
identification of pedagogic 'circles of colleagueship' (Bucher and Strauss, 1971) is obviously crucial to the proposition that the postulated process of segmentation is significant not only for the way in which relationships between fellow (pedagogic) professionals will be segment-directed, but also for the latent possibility that a sharing of professional identity between practitioners in neighbouring and allied areas of school knowledge may prove to have certain consequences for those attempting innovations in that knowledge. For example, it has already been demonstrated that — despite a tendency towards discreteness — certain pedagogic subject identities are capable of forming spatial and strategic 'alliances' for the purposes of a particular social drama. The use of 'alliances' distinguishes this notion from that of 'collegeship' which refers rather to one's fellow subject practitioners.

The writer has previously indicated that pedagogic competition for pupil clients may be seen as possessing an explicit ideological dimension. To the extent that this discussion is capable of categorization the most commonly acknowledged referent is probably that best described by a 'utilitarian' ideology. Corwin (1970) believes that the philosophy underlying such an approach is particularly applicable to subject areas such as those of art, money management, home economics, business education, and so forth, where the argument is that such subjects should be extended to the whole ability range thereby broadening the outlook of students. Although the research was carried out in the American high school there appears to be no reason for summarizing that a general formulation of such a thesis would be any less applicable in the
english secondary school. Indeed, the various strategies employed by the business studies department were portrayed as explicit attempts at rejecting such traditionally held assumptions. The same utilitarian ideology is also typically employed as a (pedagogic) legitimation of specific modes of social control. Thus the comment that 'art is the only thing Jane is good at' is often the basis of a request (either by the art teacher or some other) that Jane 'does art' when she should really be doing something else - say social studies. Difficulties met in the teaching of certain groups of students (see the arguments of Hargreaves, 1968; and Lacey, 1976) may be associated with a perceived dislike of teaching low status clients, and this will be shown to be expressed in ideological ways.

The expansion of particular pedagogic departments may similarly be concomitant with a 'need' to enrol the right number and type of student and here the rhetoric of client ideology interacts with that of space and pedagogy. Thus, an 'empire-building' ideology will be linked with increased client enrolment in order to ensure the expansion of existing programmes, whilst a 'shaky' department will similarly need students but purely in order to continue. An example of the latter case would be the requirement that every course enrolls a minimum number of students.

Operational illustrations of each of these ideologies were provided in the section dealing with the negotiation of options and are a more or less continuing phenomenon throughout the year.

Although Hall (1967) fails to explicate the precise mode of operation by which clients, once acquired, are to be discouraged, the pedagogic practitioner has recourse to various control mechanisms with which to either reinforce or reject the practitioner-client commitment. Usually
involving the withdrawal of a student from work with another teacher (Jane's art lesson would be an appropriate example) reinforcement mechanisms were more frequently resorted to by teachers associated with 'non-academic' areas of the school, particularly extra curricula activities such as orchestra or sports practice. (It is also possible that such requests are conversely in the nature of a compensatory ploy reflecting an earlier failure on the part of such departments to acquire these preferred high status clients). It was also the case, and it may be significant, that latent rejection of non-conforming pupil-clients was almost entirely restricted to manipulative manoeuverings between academic departments as illustrated by Corwin's (1970) example of the biology teacher who assigned abnormally large amounts of homework. This procedure was followed in order that complaining pupils would themselves request a transfer to another class. (Many of these mechanisms are embryonically present in much of what has been said). The observation by Hanley and Grunberg\(^2\) that in medicine there is not one practitioner-client relationship but rather a number of variations seems to be, at least partially, equally true of teaching.

However, before proceeding with the main argument there is one further aspect of teacher-pupil interactions that constrains the nature of the actions in progress. The foregoing theoretical formulation of the a priori grounds for believing a 'client ideology' to exist, together with the substantive discussion that follows, draws attention to the uniqueness of the teacher-client relationship. This uniqueness derives not only from the teacher's mediatory role between the world of children and that of adults (Westwood, 1967A), but also from the low status
generally assigned to child-clients, particularly when under an obligation to attend as in teacher pupil relationships (Geer, 1966). Such an analysis possesses certain implications for that process by which the particular social identities come to be seen as legitimating particular definitions of what shall count as school knowledge: for example, Leggatt (1970) questions whether the requirement of compulsory attendance may not be concomitant with a changing parental concern into a right to know and appraise what is going on in the school. In other words, have the parents also become clients?

Becker's (1953) study of the Chicago public school teacher provides an implicit recognition of such a proposition in his observation that teachers who stayed in low prestige schools were compensated by an accompanying avoidance of pressure (from middle-class parents) to teach their pupils and help them succeed. Although the events at the William Tyndale Junior School in Islington caution against the connection being a necessary one, these events themselves constitute a validation of the proposition from, as it were, the opposite end of the spectrum. Such a phenomenon would certainly support pathological descriptions of curricula innovation as being restricted to low prestige institutions, low prestige subjects, and low prestige clients. Yet to be assessed are the pedagogic implications of Fortie's (1969) suggestion that, following from the attendance of pupil-clients being both free and compulsory, teachers are effective hired employees in which 'the community' is the one big client.

Nonetheless, even though multiple clients are increasingly
a characteristic of the employment of professionals in bureaucratic organisations (Hughes, 1970), for the moment the teacher client relationship continues to be without parallel in any other profession. A discussion of the school as an example of a bureaucratic organisation in the almost classic Weberian sense if given by Bidwell. One explanation for this may be discerned in Greenwood's suggestion that the essence of the practitioner client relationship is located in the client's lack of the necessary theoretical background from which to diagnose his needs, discriminate among the range of possibilities and (subsequently) evaluate the calibre of the services provided. Should this be the case, then that pedagogic rhetoric resulting from the social organisation of school knowledge and aiding the establishment of (pedagogic) back regions may be seen as an attempt to mystify the nature of the subject identity. It is noteworthy that attempts to restrict certain categories of pupil clients are aimed at precisely that group of clients refusing, for whatever reason, to accept 'subjects' as self-legitimating labels whose 'meaning' will only subsequently be revealed (Keddie, 1971).

However, attempts to mystify the pedagogic performance (at least in so far as the client is concerned) are subject to two, socially situated, constraints. The intensive, regular, and protracted nature of the teacher-client relationship affords continual opportunity for pupil clients (for example, Leggatt observes that it only occurs in teaching that the professional's unique public service is so attenuated and public). Moreover, the stature of the teacher-practitioner is further undermined in that both pupil-clients and their parents
will have had considerable exposure to, and experience of, other practising teachers. Both parents and their children are therefore in possession of a comparative empirical base for appraising teachers that is without comparison in the practitioner client relationship of any other professional worker.

There are some grounds for supposing that the teacher's clients (because of their comparative empirical base) may direct, or attempt to direct, the worker at his task potentially resulting in practitioner client hostility. Becker (1953) shows the school teacher as seeking autonomy not only from formal authorities but also from the parents of the children they teach. The teacher practitioner is also analogous to Becker's professional dance musicians in that practitioner client hostility was, in both cases, portrayed as a characteristic of service occupations in which the client for whom the service is performed comes into direct contact with the practitioner. Therefore both practitioner and client not only possess widely differing pictures of the way in which the service should be performed but practitioners will characteristically consider the client unable to judge the proper worth of the service and resent any attempt to exercise control and indeed develop mechanisms of defence against outside interference.

The proposition that the various (pedagogic) segments will seek to identify - for themselves - a distinctive image of the client relationship is one necessarily presupposing that the pedagogic subject is first capable of providing a similarly distinctive ideological framework.

Whilst the evidence previously produced is generally supportive of the aforesaid proposition the nature of a subject's self-image becomes rather more explicit during the 'interviewing' stage when the actual guidance of third year pupils and their parents takes place. Prior to the actual interview each subject department was required to submit a brief outline of the perceived
essentials of their subject for the purposes of determining which of a pupil's chosen selections were 'appropriate' for that particular pupil to actually take up. Remembering that such documents were supposedly concerned with explaining the essence of each subject it is perhaps significant that many were concerned rather with differentiating between the 'ideal client' to whom their, different, courses were directed (that is General Certificate of Education or Certificate of Secondary Education). Thus, at least part of the revealed ideology of the subject suggests that, in situations where competition to enrol 'suitable' pupils is paramount, the actual subject perspective is of secondary importance although it remains the basis of the differentiation processes. In the case of history, for example, a brief description of the different available courses was followed by an itemised list of 'required' pupil characteristics. The ideal client to whom the pedagogic subject 'history' is directed is explicitly, in the case of the Certificate of Secondary Education Mode III course, one with a proven record of good attendance, a reliable worker, and one who will behave sensibly on 'outings'. This image changes to a demand for pupils with retentive memories and possessing a reasonable standard of literacy when it is the Mode I equivalent of the same course that is under consideration. There is an even more pronounced shift of emphasis when the course is that of the General Certificate of Education: in this case the perception of what is required changes to 'intelligence, capacity for hard work, and a good standard of literacy'.
The selection of history has no especial significance since the emphasis is rather upon its (typical) embodiment of characteristics associated with all subjects. For example, the geography distillation enables a similar pattern to be discerned. Following its detailed description of the examination paper (that is, not the examination syllabus) with the distinction that the General Certificate of Education 'needs a good memory for facts' whereas the Certificate of Secondary Education 'requires less memory of facts'. What is being suggested is that the apparent similarity in the image different 'subjects' have of their ideal client is not only connected with the previously discussed willingness of such pupils to themselves accept such labels as self-legitimating categories, but arises as a direct consequence of a particular definition and division of school knowledge. Clients with intelligence, a good memory, capacity for hard work, and a good standard of literacy are precisely those who will succeed in most (socially constructed) classrooms where the task of the teacher is perceived as one of getting across a particular body of contents, and that of the pupil to be one of reproducing the said contents of particular knowledge packages according to some objective criteria. Indeed, such an interpretation goes some way in explaining the phenomenon described by Barnes (1974) in which he views the number and type of teacher initiated questions as indicative of the teacher's covert interpretation of the nature of what they were teaching. Whilst the actual categorizations used by Barnes are a matter of analytic convenience, the whole of his first section - an analysis of language interactions in twelve lessons - repays careful study within the context of the present argument. Mathematics
lesions, for example, were observed as containing about twice as many questions as other subjects (science, history, English, and religious education) yet their orientation was perceived to be more a handing over of ready made material, either of facts or processes, than with attempts as explicating the student's own thoughts. The disproportionate number of purely factual questions was believed to originate in the nature of the particular knowledge package. That is to say the teacher:

"...was giving a very closely defined reasoning task and on the whole requiring pupils to take only one step at a time." (Op. cit. p.35)

Questions are thus along the line of

"how many of a particular item are to be found in the diagram"

or "if a whole is divided into six parts what is the name of each part" (Op. cit. p.36f)

Barnes's analysis of his latter question (a more detailed exposition is provided by Barnes as indicated) is particularly interesting in that an apparently correct answer is rejected by the teacher as 'not illustrating the point'. This selectively appropriated 'correctness' of knowledge according to the context is illustrated in another incident demonstrating the situationally specific subject identity.

A music lesson observed by the writer in which the music teacher was getting across something or other about the development of a particular tune provides the context.
The tune was along the line 'pom tiddle. ... tiddle pom', and the pupil was asked to suggest ways in which the theme might be developed. The answer suggested by the pupil, who was Hungarian, was rejected:

"... well, that's correct in a technical sense but what I'm really after is ..."

In a later conversation with that pupil the possibility emerged that the difference may have been one of a difference between Hungarian musical tradition and that best epitomized as in the western classical tradition. What constitutes a right answer may thus depend on the socially constructed contexts in which questions are put. In the same way, although the methodology of the new mathematics in the form of the Inner London Education Authority's Secondary Mathematics Individualized Learning Experiment (S.M.I.L.E.) may be very different to traditional mathematics although similar structural assumptions still exist.

The narrative checker of the pedagogic subject-object relationship that is suggested in the above illustrations is indicative of a general process of alienation resulting from the compartmentalization of reality in which knowledge becomes separated from its social context, in this case the existential experience of the pupil, and therefore derives its meaning only from the reality of the classroom encounter. Thus, on questioning a teacher of S.M.I.L.E. mathematics whether, given that the pupils derived absolute enjoyment from the activity, did they develop any 'understanding' of what it was all about. An analogy from the writer's biographical experience, having learned traditional mathematics was the type of question: 'You are in a control tower with an aircraft approaching at two thousand feet at one hundred and fifty miles distant. How soon will it land if it has a
speed of x miles an hour? Apart from participating in a learning activity and the hoped for qualification both instances seem without context and completely meaningless in terms of mathematics in the world. It was perhaps surprising that such a notion was fully accepted by the teacher for whom 'solving the problem' was the intrinsic justification for the mathematical activity.

The raison d'être of at least this particular package of knowledge contents is therefore revealed as an encapsulation of many a prior assumptions concerning the school legitimization of what shall count. The implication is that the 'rigour', the 'analytic power' so frequently mentioned by traditional epistemologists and analytic philosophers is associated with the activity of learning mathematics. It does, in fact, aid the cognitive development and trains a logical mind. The argument continues to be an attractive one within an educationist context for those subject practitioners engaged in the rhetorics of the taken for granted epistemological school map.

Thus, to the extent that these objective criteria are perceived to exist, together with the implied consensus as to what constitutes a good education, the nature of the reality encounter that is being promulgated is one that is a relatively unquestioned reality that is comprehended by the individual consciousness. Moreover, although this reality may be apprehended by the individual consciousness the activity of perception is essentially a situationally located phenomenon. The ideal client as one prepared to accept the self-legitimating nature of doing school knowledge is therefore the same client (whether the subject is science, housecraft, social studies,
or whatever) and the apparently more or less undignified scramble for the pedagogic allegiances of a finite number of pupils is demonstrated as being a considerably more complex social phenomenon than an initial analysis suggests.

It is a pedagogic given that within the secondary school subject specialists will have been specifically given a position from which they are expected to teach predefined areas of knowledge. The introduction of new knowledge contents has already been shown as constrained not only by externally imposed limitations on the social time and staff available, but also by the inertia of a staff already differentiated in a given epistemological manner. Less obviously coercive, but nonetheless equally constraining, is the biographical history of individual practitioners: they will be practitioners precisely because they were good at doing their subject at school. This success will have continued during their later education and they will have become strongly identified with their subject by the time of their first teaching post. Teacher identification with the pedagogic subject has been shown to include the categorization of pupil clients according to the latter's need and ability to do certain subjects. The immediate question is therefore one of the extent to which the foregoing spatial and pedagogic rhetorics of the school are mimicked in the practitioner client relationship.

Music was previously portrayed as something of a marginal subject in the spatial rhetoric of the staffroom being, along with subjects such as physical education (Hargreaves, 1968), frequently perceived as involving its practitioners in a considerable amount of 'out of school' activity. Additionally, it is often seen by its practitioners as
being a difficult subject to teach, and by pupils as offering something of an easy option (Vulliamy, 1972). The significance of this for the pedagogic identity is that the client ideology may be viewed as a more or less explicit attempt at anticipatory socialisation in which the subject image is specifically presented to pupils in precisely these terms. Thus, the briefing notes expect that:

"any girl who takes this course will be expected to support the extra-curricula musical activities."

Science, a subject involving a particularly esoteric language of its own is similarly a state of affairs that is explicitly referred to in these notes:

"To be successful in this examination girls must be prepared to learn accurately scientific terms."

Similar mechanisms exist to selectively cool out those inappropriate clients. Thus, again in the case of music, for the General Certificate of Education course:

"Girls must have had some previous musical background and also must have already had lessons on an instrument..."

"The course presents a far more academic and theoretical approach to music than does the C.S.E. Classical music only is studied, together with a considerable amount of theory of music."

Those wishing to study science are similarly appised of the need for the usual regular tests and questions to be done at home that will continue throughout the course.
Attention has also been directed to that rejection of business studies as a vocational subject (together with concomitant attempts to gain academic recognition) and this too is reflected in the provision of the information that:

"This subject requires the same amount of class and homework as any other subject which is taken."

The argument has gone some way towards a consideration of the socially negotiated ways in which one's subject specialism may impinge upon the conflicts and expectations of the subject practitioner in particular institutional locales. Such a tendency may certainly be implicit in Musgrove and Taylor (1969) in their examination of the extent to which practising teachers distinguish between the roles of different subject specialists and whether or not such distinctions are related to differences in status.

Teacher respondents were asked to rank ten subject areas in their perceived order of prestige and professional standing. The results, in so far as they pertain to secondary education are shown in Table Three.

Notwithstanding the high ranking of mathematics, which may be attributable to the content of the subject, to the level at which it is taught - but is probably a combination of at least these - a significant discovery is that those areas to which other teachers assign a low status are, with few exceptions, precisely those to which the intending teacher is restricted on entry to training college and having low status in the various rhetorics of the school.

Thus, there seems to exist a thin but consistent strand of research supporting the suggestion that subject identity exerts a subtle but explicit part in making the teacher of one knowledge a different sort of person to the teacher
of another.

A further example of approaches along this line is the work of Musgrove (1967) who asked teachers to indicate the relative importance they attached to different aspects of their work and the importance which they perceived that headteachers, colleagues, and pupils attached to them. In so far as individual subjects were concerned domestic science seemed to experience the greatest conflict and mathematics least. Both were over-represented in the two extremes of the scale that was used and in both greatest conflict centred principally around the evaluation of personality in teaching. A similar result had earlier been obtained by Rudd and Wiseman (1962) in which teachers of housecraft expressed low levels of satisfaction - a finding not reflected in higher than average levels of dissatisfaction. An analysis leading the authors to speculate that such teaching situations may permit fewer positive satisfactions for those teachers.

Implicit in much of the preceding work is the notion that the form, or indeed existence, of a particular segment is not a perpetually defined part of the body professional but is typically continually undergoing change. A specific subject identity may emerge, develop, modify, disappear; thereby giving rise to consequential changes to those other segmented identities that are encountered on the way. It is because of subject identity, however constituted, that the importing of new knowledge is typically incremental, based upon existing structures. Thus at a meeting of heads of department the housecraft department (a title arrived at after a great deal of thought) was referred to as:

"You know... domestic science as was."

In speaking of the changes at Countesthorpe College
### Table 3: Prestige Ranking and Primary Function of Various Subject Specialists As Seen By Other Teachers.

<table>
<thead>
<tr>
<th>Prestige Ranking</th>
<th>Mean Ranking</th>
<th>% Ranking Primary Function As Teaching</th>
<th>Lecturing</th>
<th>Total</th>
<th>Training</th>
<th>Instructing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sixth Form Mathematics</td>
<td>2.5</td>
<td>52.6</td>
<td>38.9</td>
<td>91.5</td>
<td>0.8</td>
<td>7.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Modern Languages</td>
<td>3.5</td>
<td>88.8</td>
<td>3.5</td>
<td>92.3</td>
<td>0.8</td>
<td>6.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Religious Education</td>
<td>6.3</td>
<td>51.8</td>
<td>15.4</td>
<td>67.2</td>
<td>10.4</td>
<td>22.4</td>
<td>32.8</td>
</tr>
<tr>
<td>Business Studies/Commerce</td>
<td>6.3</td>
<td>27.6</td>
<td>2.6</td>
<td>30.2</td>
<td>21.5</td>
<td>48.3</td>
<td>69.8</td>
</tr>
<tr>
<td>Woodwork/Domestic Science</td>
<td>6.4</td>
<td>9.5</td>
<td>0.0</td>
<td>9.5</td>
<td>31.9</td>
<td>58.6</td>
<td>90.5</td>
</tr>
<tr>
<td>Physical Education</td>
<td>6.5</td>
<td>6.9</td>
<td>0.8</td>
<td>7.7</td>
<td>57.8</td>
<td>34.5</td>
<td>92.3</td>
</tr>
</tbody>
</table>

T - Teaching;  L - Lecturing;  TR - Training;  I - Instructing.

**Note:** In the full table in Musgrove and Taylor (1969) University Lecturer is ranked (1), and Junior/Infant Teachers (9) and (10) respectively.
Headmasters and Schools
in Eggleston (1974)
Bernbaum reports the head as stating the whole point of innovation to be that of avoiding the traditional message. The head then goes on to describe the seven curriculum areas, four of which are unchanged from the typical division of school knowledge — mathematics, languages, science, and physical education. The three which were seen as embodying radical moves towards interdisciplinary study were described (taking examples) as follows. 'Creative and Expressive Words, Music, and Drama' was seen as enclosing:

"... that group of studies normally associated with English and literature."

'Study of the Individual and Group', a radically different label was described as having replaced:

"... the conventional history, geography, and social studies."

The King is dead — god save the king.

At any one time, the approached world will be socially analogous to the activity of the observing participant: changes will occur in both because of movement in the conceptual framework, changes in the situationally imposed conditions of work, and in continually changing relationships to other segments and occupational identities. In seeking to control the conditions of work in terms of their own definitions those teachers identified with the different pedagogic subjects therefore develop special interests, compete for limited resources, and cope with unique problems. Thus, during a meeting of heads of department concerned with the financial allocations for the following year the head of mathematics explicitly commented that each subject had its own vested interest and asked whether the head could not
deal with any special cases that arose. (See also the earlier comment of Doe concerning the allocation of units of time to the English department). The various strategies that have been outlined so far bring to life the following description of Bucher and Strauss and provide a theoretical proposition for portraying the pedagogic subject as a segmented identity.

"The problem for a new specialism are particularly those associated with status and power. New specialist groups are likely to be seeking social accreditation. Deprived as they often are of the full measure of their expected status and function, new groups may take on expansionist policies. Since the expansion of one jurisdiction often means the diminution of another, this method of increasing status produces conflict. As a defensive reaction, the more established group may accuse the expansionist one of incompetence and encroachment. The older group may also attempt to invoke a set of fictions about itself to protect the core of its expertise. These fictions or myths, supported by intra-group solidarity, can provide the established group with a comforting self-image to help meet and adapt to pressures from the outside. . .

The process of the conflict between the rival groups may take the form of a set of boundary testing activities. As one group seeks power and the other survival, each will develop a set of stereotypes and misconceptions about the other. A group dealing in this way and declining in status and power may seek to emphasize that part of the core of its expertise which still remains and which may not be covered by the activities of the expanding group. This may be interpreted as a threat by the newer group, who are likely to be
Reflections on My Critics
in Lakatos, I. and Musgrave, A. (Eds)
Criticism and the Growth of Knowledge
Cambridge University Press.
defensive about their own history of expertise in this area. They in turn may retaliate by emphasizing their particular strength. In this way are group's defensive behaviours seen as another group's threat and the cycle of conflict continues.

Over time the development of this conflict may lead to further changes in occupational identities, values and allocation of activities between the specialist groups. Systems of career progression may be altered: since individual careers are likely to be tied up with the fate of specialities, no career opportunities that were possible for one generation may not recur for subsequent generations."

(Bucher and Strauss, 1961).

Thus, at the moment of looking each segment is likely to be in a different phase of development and engaging in tactics appropriate to their particular position. This has been the import underlying much of this section and will form the interpretative framework for much of the next chapter.

Summary.

If one is indeed able to posit school knowledge as comprising a series of 'disciplinary matrices' in the sense used by Kuhn and including symbolic generalizations, shared commitments to certain beliefs, shared values, and examplars, an immediate difficulty is presented within the context of Bernstein's (1971) notion of a curriculum message. In seeking to make a conceptual
distinction between a collection type of educational knowledge code (characterised by closed subject boundaries and in which the different contents are well insulated) and the converse case of an integrated knowledge code (this being characterised by the open relationship of its contents) Bernstein appears to allow some ambiguity of the notion of what constitutes a given subject 'content'. For example, one might wish to ascertain whether contents are to be understood as a more or less objectified knowledge 'x', or whether it is rather to be seen as a way of looking at the world? The recognition that knowledge is socially constructed requires a similar acknowledgement that knowledge has an objectified existence only in so far as that knowledge is accredited by members of a particular community. In this case the pedagogic subject. The difficulty is somewhat analogous to that experienced by the observing participant when the actor's knowledge of the apprehended social world - relating to a particular event - may possess differentially appropriate meanings not only according to the socially located position of the observers but also according to the subsequent interpretational paradigm of the community to whom that event is relayed by these same observers. In the former case knowledge is differentially available, in the latter the available knowledge is differentially interpreted. The previous discussion concerning the relationships between the subject identities of teachers and notions of social space, training, etcetera, has been somewhat fragmentary and now needs to be placed within some overall framework. Such a theoretical perspective is provided by Bernstein's (1971) theory of a realization of formal educational knowledge through three distinctive message systems previously referred to is probably the
most convenient starting point. In brief Bernstein proposes three, interlinked, message systems: 'curriculum' — defining what may count as valid knowledge; 'pedagogy' — defining what may count as the valid transmission of knowledge; and 'evaluation' — defining what may count as the valid realization of this knowledge on the part of the taught.

Consideration of the teacher's subject perspective can therefore be viewed as entailing particular appropriations of the various message systems together with a study of the particular audiences to whom such messages are addressed. In this connection Bernstein's initial definition of the socially constructed category 'curriculum' in terms of the principle by which units of time and their contents are brought into a special relationship with each other may provide a focus for the ensuing discussion.

One is immediately aware of certain constraints and assumptions underlaying the notion of 'curriculum'; it is, for example, a notion associated with that of 'school' and any reference to the curriculum of the university would provide an indication of the speaker's 'strangeness'. What counts as valid knowledge is therefore indicated as being (differentially) dependent upon institutional imperatives and suggests a very specific application of Taylor's (1973) discussion drawn from a somewhat different context concerning the consequences of the extent to which knowledge is increasingly 'role specific'. Taylor argues that such a phenomenon:

"... has a profound effect on the way in which knowledge about education originates, is disseminated and put to use. As part of the process by which identity is exerted, each of the educational professions and
sub-professions tends to develop its own language and style of expression, to legitimate certain sources of knowledge and to devalue others. It is not ignorance that precludes certain people from the membership of particular groups, it is the possession of the wrong kind of knowledge. The serving teacher who is widely read in the psychology and sociolology of education, and who substitutes judgements from these speakers and spheres for the traditional recipe knowledge of the staffroom, may find himself regarded as an outsider, already half-way to becoming a college of education lecturer . . ." (Op. cit. p.195)

It is therefore interesting to note the extent to which secondary schools feel constrained by the perceived demands of universities, together with the suggestion, in the case of social studies, that changes in the school resulted from an influx of university graduates in that subject.

For example, Whitty (1973) advances the notion of a sort of 'cognitive imperialism' based upon the assumption that the pupils own perceptions of the everyday world will be enhanced by initiating them into the interpretations of that world promulgated by the particular interest group of which that teacher is a member. In the case in point, the community of sociologists. Mary responds to the question 'What made you want to teach social studies?' with the answer:

"... mainly because I'd got a degree in it and I thought I'd better carry it further . . ." (Op. cit. p.74)

To the extent that present pedagogic knowledge is an objectified or vivified reality - if only because it is a social inheritance - then the school curriculum
is capable of being viewed as a less or more pragmatic construction of the powerful interested audiences. The inferences here would be that, for example, pupils are less powerful in this respect that the headteacher, subject teachers, etcetera. The question of who legitimates the curriculum gives rise to the subsidiary consideration of points of possible intervention accessible to manipulation by those involved: a theme elaborated in the next chapter. Even within the institutional arena it has been noted that:

"The professional paradigms, rituals of cognitive avoidance, loyalty structures, and the legitimations of competing alliances, all have a bearing on the ways in which knowledge is organised and transmitted."

(Beland, 1971 Page 79).

Since the pedagogic subject constitutes a major component of the teaching persona the perceived task of the teacher lays not in teaching knowledge per se but in teaching this or that particular knowledge. However, the ways in which teachers and pupils make sense of a specific corpus of knowledge has previously been demonstrated to be a function of perspective or orientation in the world. Discreteness between knowledge 'x' and a particular perspective on knowledge 'x' therefore allows of pedagogic debates as to whether this or that is taught under the subject label of (say) english, social studies, or mathematics. The point is nicely made by Phillips (1971) in discussing Köhler's well known 'Is it a goblet?' 'Is it a face?' 'Is it a candlestick?' drawing. Phillips proposes the notion that the question of what it 'really' is, is essentially a 'no-sense' question since:
"In order to see this or that (patterns, regularities, whatever) we must already have different types of knowledge. Unless one is familiar with faces or goblets, he will see neither."

This incremental aspect of school knowledge is important as the argument is that knowledge only becomes 'sociology' history, or whatever, when it is subsumed within the interpretational paradigm of particular epistemic communities. Whitty (1973) provides an almost cruel exemplar of this process when reporting a student teachers rejection of his tutor's notion of the way in which school social studies should be defined.

"... he has one idea of what social studies is and sees everything in the light of it. Most of us aren't saying things in seminars any more; often it's not worth even coming."
(Op. cit. p. 91)

When Bernstein (1971) speaks of the relative openness (or insulation) of subject boundaries is one to infer the notion of a particular pedagogic package of knowledge - for example, 'Elizabethan England' - as constituting the subject 'history', or is it rather a question of perspective? The position of the writer here has parallels with the work of Strauss (1964) on the differing perceptions about the nature of mental illness held by the adherents of three, competing schools of therapy: psychoanalysis, somatophagy, and milieuthere.

"The form which was dominant in an institution tended to be related to certain structural factors: for example, the perspectives of the senior and administrative staff, the
Ethnocentrism of Disciplines and the Fish-scale
Model of Omniscience.
Interdisciplinary Relations in the Social
Sciences.
Aldine.
number and status of the patients, and the ecology of the hospital. The spatial separation of wards and ward shape signified particular conceptions of patients which acted as a powerful structural reality in the definitions of health."

(Op. cit. p.106)

There is an obvious affinity between this description of the way in which the rhetorics of knowledge are reflected, or reinforced, in the spatial rhetorics of the socio-physical world, and the writer's previous analysis of the school. However, there is a certain potential discreteness over the nature of the particular epistemic community to whom these performances are addressed: in the case of school knowledge there seems to be an a priori case for suggesting a consideration of the pupil as an initiate member of such a community in a way that, for example, the 'client' of the lawyer, or the patient of the doctor, cannot be portrayed. Esland (1971) shows the potentiality of this perspective in suggesting that it is both teacher and pupil:

"... who, through their joint action, form epistemic communities more or less supporting the cognitive structures which make up the educational culture. In other words, the changing forms and content of knowledge will have social-structural correlates."

(Op. cit. p.78)

The importance of the institutionally based epistemic community is reinforced by a (financial) budgetary separation thereby creating competing interest groups based upon a pedagogic division of labour can be extended to a consideration of the manner in which
staff, timetable units, the number of pupil clients and their relative status, teaching rooms, etcetera, are all similarly budgeted. Bernstein likewise notes the causes and effects of the subject-orientated allegiances and work relationships of junior staff working within the collection type of educational knowledge code:

"First, staff have been socialized into strong subject loyalty and through this into specific identities. These specific identities are continuously strengthened through social interactions within the department and through the insulation between departments. Second, the departments are often in a competitive relationship for strategic teaching resources. Third, preferment within the subject hierarchy often rests with its expansion."


Whilst this may have consequences for those seeking radical educational reform (in that it may be perceived as strengthening the schools culture of positivism) such an argument is not germane to the present discussion of the the relationships between what contents count in the perceived ownership of school knowledge and that owner's socially located identity. What is relevant however, is a questioning of the acceptability of an epistemology based upon the, external, legitimating power of organised epistemic communities.

In the case of school knowledge it may be that situationally defined epistemologies related to different institutional life worlds are as an important source of legitimation as are those external epistemic communities to which they
are more or less related. Ealand (1971) indicates as much when commenting:

"Teachers are becoming committed to integrated studies sometimes without knowing why and with little idea of the problems of management and institutionalization of this knowledge. Quite obviously, integrated projects can be initiated for a variety of pragmatic and philosophical reasons; but the simple fact of their objective reality is sufficient to transform the initial intentionality and to create entirely new subject and pedagogical ideologies." (Op. cit. p. 73f.)

If particular forms of knowledge are contingent upon the history of particular educational institutions as mediated through the interpretations of those individuals now inhabiting that world, then are given subject contents any more than pedagogic rhetoric? Something of this is implied by Bernstein (1971) when he suggests that the collection code, because of its strong classification,

"... does in principle permit staff to hold (within limits) a range of ideologies, because conflicts can be contained within its various insulated hierarchies... the strong frames of reference between educational knowledge and non-educationally relevant knowledge in principle may facilitate diversity in ideology held by staff because it cannot be explicitly offered... At the same time, strong framing makes such intrusion highly visible." (Op. cit. p. 63f.)

One seems to be moving towards a relevatistic perception of pedagogic knowledge in which a socially constructed subject perspective is all embracing, a meaning structure
through which the individual interprets his world. At this juncture Esland's (1971) distinction between the subjective nomos and that, socially constructed, objective nomos reality of the pedagogic subject becomes important.

"... the teacher of English or chemistry has his own realization of these realities as a socially constructed nomos which will be different in many respects from that of anyone else. Thus, his classification of knowledge will recognize its own boundaries."
(Op. cit. p.74)

Not only is the inference that such realizations may also distinguish one teacher of English from another but also that school knowledge possesses a relativistic dimension. It is here that the relationship between school knowledge and subject identity is perhaps at its most explicit when elaborated in terms of the individual's biographical stock of knowledge (Schutz, 1967). Being a social production this knowledge is:

"... held in conjunction with other individuals, who, at varying degrees of distance, occupy his world."

These individuals comprise consociates, contemporaries, predecessors, successors, and so forth in which:

"... the greatest confirmation of his 'frame of reference' is likely to come from his consociates who inhabit his spatio-temporal world, and with whom he is jointly engaged in reality construction."
(Esland, 1971. Page 80)

The difficulty implicit in Bernstein's (1971) own
discussion of the differences between varieties of collection and integrated knowledge codes in which he uses the concept of integration to refer minimally to:

"... the subordination of previously insulated subjects or courses to relational ideas, which blurs the boundaries between subjects."
(Op. cit. p.53)

Such a definition is open to the argument that this is in fact precisely how one might describe the notion of a 'subject': that is, the subordination of more or less previously insulated knowledge to some relational idea which blurs the boundaries between them.

However, the writer's quarrel is only with the second order nature of the conceptual constructions used by Bernstein that has no consequential affect on the present argument since it is the increasing differentiation of educational identity experienced by those for whom it is a life-world that is the focus of this thesis.

The pedagogic subject identity is:

"... a membership category established early in an educational career, in terms of an early choice between the pure and the applied, between the sciences and the arts, between having and not having a specific educational identity ... One nearly always knows the social significance of where one is and in particular, who one is with each advance in the educational career .... Subject loyalty is then systematically developed in pupils and finally students with each increase in the educational life and then transmitted by them as teachers and lecturers. The system is self-perpetuating through this form of socialization."
(Op. cit. p.55)
School based frames of knowledge not only differentiate between the experiential, community-based, non-school knowledge of the pupil and the pedagogical paradigms of the institution, but also between the subject based epistemic communities. The pupil does indeed soon learn (and what the teacher already knows) what of the outside may be brought into the particular pedagogic frame. The teacher of sociology soon makes it explicit that an 'English' type of essay, or an 'history' answer, is not what is required in sociology essay. In this sense, and in addition to the various examples related in this chapter, the whole process is analogous to the way in which the observing participant was said to have to 'learn the ropes' (Geer, 1968) in the first chapter. This is where Bernstein's work (1971) on boundary maintenance is so important for stratification occurs on both levels: not only between school knowledge and community knowledge, but also between the different pedagogic areas. There exists in both:

"... a clear distinction between what is taken to count as knowledge, and what is not, on the basis of which processes of selection and exclusion for curricula will take place ... this type of curricula organisation presupposes and serves to legitimate a rigid hierarchy between teachers and taught, for if not, some access to control by pupils would be implied, and thus the processes of selection and exclusion would become open for modification and change ... access to control by pupils or students implies that alternative definitions of knowledge are available to them."

(Young, 1971. Page 36)

In the course of his own argument Bernstein (1971)
also raises the nature of the relationship between units of time and their contents and the relative status of a given pedagogic content may possess some significance for a given educational career. Indeed, there is a dual significance in the case of the teacher as he is both a subject practitioner now and yet his present educational career is largely dependent on his previous career as a pupil.

It is, of course, difficult to assess the relationship between whether a subject is compulsory or optional (the continuum of time) and its relative status (the continuum of content). Some of these difficulties have already been elaborated at various points in this chapter. Further, how optional is optional? Are we to consider the status of a subject in the eyes of the pupil? And so on. Implicit in the questions is the notion that high status contents will be compulsory yet the option system has also been demonstrated to be capable of use in such a way that it becomes a manipulative mechanism to attract high status clients for high status subjects. At the same time it rejects low status or non-conforming clients (Hall, 1948; Corwin, 1970). It is here that the argument of Young (1971) becomes crucial for he recognises:

"... that it is not only people but knowledge in the educational institution that is 'processed', and that unless what is 'knowledge' is taken to be given, it is the interrelation of the two processes of organisation that must from the beginning of such studies."

(Young, Op. cit. p.25)

This thesis can be interpreted as one attempt to explicate the possible nature of the links between the organisation
of particularly school knowledge, both at the level of social structure and of social processes, and the pedagogic practitioner for whom it is a life-world. What is argued is that such knowledge is contingent and that institutional factors have important consequences for the particular form of knowledge displayed in a given school. An important corollary would be that that which is taken to be pedagogic subject knowledge is but a differentially appropriate selection made from among the many available sets of meanings constructed by the, in this case school teacher, to give meaning to their world.

Young (1971) provides a suitable exemplar in his use of the 'sociology of education' as illustrative of the processes by which 'new' specialists may proceed in legitimating and justifying a field of expertise in which others have already defined their area of competence. He speculates that, not surprisingly,

"... sociology mapped out new unexplored areas ... Through an arbitrary division of labour which had no theoretical basis, this allowed the expansion of sociology of education with the minimum of 'boundary disputes'..."


In this case the rhetorics of legitimation once again allow the possibility that the nature and validity of particular knowledge contents may be contingent upon 'what already exists'. Whilst the detailed implications of this statement are left for elaboration in the next chapter it may prove useful at this stage to outline the grounds for proceeding.

The fact that secondary school knowledge is often divided
up according to a division of labour more or less explicitly based upon the 'subject disciplines' thus acknowledges the perceived superiority of this way of doing things. Such perceptions of pedagogic knowledge are prevalent within the secondary school and have certain consequences for the way in which 'new knowledge' may be introduced. Mention has already been made of the way in which 'sociology of education' became recognised as 'disciplined knowledge' in institutions of higher education. Whitty (1973) makes a similar analysis in the case of the school knowledge 'social studies'. He notes:

"... those problems which advocates of the subject faced may, to a considerable extent, be related to the sort of suspicion accorded to any newcomer rather than to the particular nature of the subject."

(Op. cit. p.44)

Whitty also speaks of the vocabulary of motive assigned to the new social studies implying that this meaning was situationally located to that process and that subsequent motives may be qualitatively different. This would be in accord with the various arguments presented concerning the selective and situationally informed nature of multiple meanings.

An analysis of those rhetorics of legitimation employed by the proponents of school social studies are thus to be associated with a concerted effort aimed at claiming a place for the discipline within the secondary school curriculum. In his argument Whitty does, however, sidestep two important and perhaps interrelated issues. One might, for example, argue the case that in one sense 'social studies' was already 'there', and hat the new social studies movement followed on from a period during which teaching of the subject rapidly expanded in higher education. This point has previously been
rehearsed but a further illustrative question suggesting the gist of this suggestion might be the examination of the consequences of sociology emerging only as a second main field of study in colleges of education (Smetherham, 1973). Thus there may conceivably have existed a situation where this acquired something in the nature of a side-bet so that, in schools, teachers were already sympathetic to this identity - and would fit in with the opportunist nature of the subjects expansion.

If one accepts that incipient social studies knowledge was already 'there' in the school curriculum but forming part of (say) the teaching of English, modern studies, etcetera, the introduction of social science as a separate disciplined knowledge can immediately be apprehended as a rhetorical process aimed, at least partially, at the provision of a more acceptable (both to its adherents and the practitioners of other subject knowledge) world image. It is here that various agencies of legitimation (Institutes of Education, Schools Council, Association of Teachers of Social Science, authors such as Cannon (1964) ) would assume their significance as referents. Such a proposition is of course subject to Whitty's (1973) own proviso that:

"Although none of these comments indicate the extent to which such an 'official definition' corresponds with practice in schools, the definition in question is of considerable significance in that it would be difficult for anyone attempting to redefine the nature of the task, teaching social studies, to avoid a confrontation with this line of argument."

(Op. cit. p.33)
Whilst the ownership of subject knowledge receives a more detailed treatment in the next chapter what is important at this juncture is the perception of school sociology as positivistic. And positivistic because the rhetoric of acceptance occurred within a school culture based upon the subject disciplines being established ways of knowing. Earlier reference to the pedagogic ownership of knowledge, with the concomitant inference that such knowledge may be differentially accessible to different groups, not only emphasized the notion of secret knowledge that teachers protect as somehow 'theirs', but also points to a claim for such ownership on the basis of being 'knowledge-in-use'. Young (1971) seeks to distinguish between the property and prestige components of knowledge and argues that both play a part in the stratification of that knowledge. For example, in the latter case different social evaluations are placed on different knowledge areas having some affinity with Bernstein's (1971) emphasis on the relative 'purity' of educational knowledge codes.

Such purity is, to some extent, associated with certain socially constructed categories of thought (for example, its 'academic' or 'theoretical' content) and Young (1971) refers to Bourdieu's (1971) work on the social origins of thought categories in small scale societies. Such a process possesses some similarity with the development of thought categories in the transmission of school culture in that:

"Implicit in this process of transmission are criteria of what is typical, and the legitimacy of a hierarchy of 'study objects' becomes built into categories of thought themselves."

(Op. cit. p.31)
   Patterns of National Culture
   in Cockburn, A. and Anderson, P. (Eds)
   Student Power
   Penguin.

27. Williams, R. (1961)
   The Long Revolution
   Chatto and Windus

   In Search of the Educational Principle
   New Left Review.
The connection between school curricula and the relative legitimacy of different 'ways of seeing' may be related to the idea of the 'educated man' held by the dominant group in society. Weber, for example, perceived 'bookishness' to be a characteristic of the Chinese literati, and Young (1971) refers to Anderson's attempt to relate the content of humanities to the historical class struggle. William's linking of educational policies with the ideology and social position of different powerful groups, and Gramsci's interest in the notion of 'intellectual knowledge'. In the case of the pedagogic subject the notion of disciplined knowledge may likewise be represented as an institutional imperative, a specific cognitive commitment, a conspiracy in which:

"The conspirators are those who construct a social situation in which the particular world view is taken for granted. The individual who defines himself in this situation becomes more prone every day to share its basic assumptions."

(Bøger, 1963. Page 78)

Within these parameters one is able to advance the proposition that, for teachers of pedagogic subjects as well as for sociologists of education, the division of school knowledge exists precisely because others have negotiated a particular set of practices (embracing the subject perspective) for creating and acting upon external worlds (Blum, 1971).

Whether or not the pedagogic subject is best viewed as a 'social system' sustained by communication networks there is certainly evidence of a subject 'language' (Barnes, et. al. 1969; Keddie, 1971) and certainly
the teacher's subject perspective is the base from which he enters into social relationships and acquires the cognitive and social style appropriate to the particular educational identity: in the words of Bernstein (1971),

"It is the subject which becomes the lynchpin of the identity."
(Op. cit. p. 56)

However, whilst it is doubtless correct that one function of strong boundary maintenance is the creation of control from within through the formation of specific identities this remains, necessarily within the present context, a particularly sociological interpretation of subject identity. (Alternative approaches to the phenomenon may be found, for example, in the work of Hirst (1969) who, as a liberal philosopher offers a specifically epistemological version of forms of knowledge. Although he is careful to distinguish these analytically from subjects for all practical purposes this is what they are. An opposing view may be found in Jencks (1977) who rehearses the relevant arguments). Thus, whilst Hirst (1969) recognises the legitimacy of a social constructionist view of pedagogic knowledge he is nevertheless perceived as starting from the problematic a priori assumption about forms of knowledge in so far as his argument:

"... appears to be based on an absolutist conception of a set of distinct forms of knowledge which correspond closely to the traditional areas of the academic curriculum and thus justify, rather than examine, what are no more than the socio-historical constructs of a particular time."
(Young, 1971. Page 23)
However, it is no part of the writer’s brief to examine questions concerning the nature of knowledge from this perspective although the present thesis has necessarily taken for granted certain paradigmatic assumptions that would be questioned in philosophical enquiry. The focus of the study is rather that of examining the types of problematic encounter from which the various categories of school knowledge emerge together with an analysis of selected aspects of subject identity in the sense that this latter is a label used to define an area of knowledge that is conceived of as corresponding to a set of objective facts. For example, the activities of establishing 'networks' and doing sums are both subsumed within the subject label 'mathematics'. Whether or not they are different types of knowledge is not the present issue.

The general stance is similar to an exercise in which one of the writer’s advanced level sociology students approached Worsley’s 'Modern Society' by positing a contrast between what may be called the 'substantive' and 'perspective' chapters. (The latter typically were on the family, education, work, community; the latter covered organisation, stratification, social order). She suggested that any one of the substantive chapters can be 'looked at' from the viewpoint of any one of the three perspectives. It would be difficult to explain why this is so although it possibly is related to certain historical conventions in the teaching of school sociology. Different periods and different schools of thought in the development of sociology are characterised by their emphasis on a particular perspective. At the same time a few empirical clusters of substantive problem areas have continued to provide throughout this
development and across several perspectives, a fairly consistent focus of interest. Perhaps soon the whole of sociology will dissolve into nothing but sociological perspectives although the opposite trend seems equally feasible. The perennial substance of 'social problems' closely connected with pragmatic administrative contexts may well assert itself over and above the confusion of fluctuating schools, models, and orientations. In the meantime the present situation offers a further opportunity for analytical flexibility. By projecting alternative perspectives into one and the same problem area, deeper elements of social processes become visible which are otherwise inaccessible.

The pedagogic application of this student's analysis will be obvious.

Returning to Bernstein's (1971) thesis, he then outlines what is a central concern in this thesis: that of identity. The power component of classification. Classification is the term used to refer to the relationship between contents and to the nature of this differentiation, that is, the degree of boundary maintenance between contents. Bernstein comments that:

"... strong classification also creates a strong sense of membership in a particular class and so a specific identity."
(Op. cit. p.51)

The English type of collection code as specialised, although impure, is viewed as involving an exceptionally strong classification. It is this fact of specialisation that determines what contents (subjects) may be grouped together. Thus one studies 'pure' or 'applied' knowledge, and in which certain classes will be denied or allowed only restricted access to particular areas of knowledge and ability.
29. Department of Education and Science (1968)
Statistics of Education 551
Survey of the Curriculum and Deployment of Teachers, Secondary School.
H.M.S.O.
It is, for example, interesting that a survey of the school curriculum and the deployment of teachers sponsored by the Department of Education and Science\(^2\) ascertained that of six thousand graduates holding two subject degrees, just eleven possessed a 'hybrid science-arts' subject qualification. Evidence presented earlier in this chapter does suggest that teachers studying in colleges of education are more likely to cross subject boundaries in this way, but even here there is a tendency for them to remain confined within broad classifications.

When Bernstein (1971) asks: 'What are the different socialising experiences realised through variations in the strength of classifications and frames?' he raises a question crucial to this thesis. Within such a context the nature of the response has been established as involving the following areas of concern for which evidence has been provided at various points in this chapter.

A characteristic of the specialised English type of collection code is the establishment of a membership category early in an educational career. That the particular status in any given collection code will be made explicit by various institutional devices whose significance is that one always knows the social significance of where one is, and particularly who one is. Subject loyalty is then systematically developed with each increase in educational life and then transmitted by them as teachers: the system is therefore, to an extent, self-perpetuating. That, as a consequence of specialisation in educational careers one becomes increasingly different from others and that therefore specialisation reveals differences from rather than communality with in the educational identity.
A further characteristic of any collection code is the involvement of an hierarchical organisation of knowledge in which the ultimate mystery of the subject is revealed late in educational life. Even then it is revealed only to a select few who have shown signs of successful socialisation:

"For the many, socialisation into knowledge is socialisation into order, the existing order, into the experience that the world's educational knowledge is impermeable."
(Op. cit. p.57)

The insulation of different pedagogic subjects is aided by the fact that staff have been socialised into strong subject loyalties and therefore specific subject identities. Moreover, these specific identities will be continuously strengthened through social interaction within the department and because of the insulation between departments. The differentiation between departments is further reinforced because they will often be in competitive relationships for various strategic teaching resources.

In conclusion, it will have become apparent from this argument that subject identity is essentially a social, and socially constructed, phenomenon in which the division of school knowledge acquires something of a nomos building instrumentality (Berger and Kellner, 1971). Subject identity is thus a socially negotiated arrangement that creates for the individual the sort of order in which the activity of teaching 'makes sense'.

The following chapter begins to examine this characteristic in relation to the introduction of new knowledge within particular subject departments.
A tacit inference of the previous chapter was the notion that teachers come to 'understand' their subject specialisms in ideological ways. Moreover, because of the previously elaborated processes of consensual validation (Hargreaves, 1975) operating on the forms of school knowledge, the school 'subject' has the appearance of taken-for-granted and objective character only because the members of that particular life-world have agreed to define school knowledge in that way. However, these agreed definitions will not be entirely identical between the different subject practitioners — nor even (necessarily) between those practitioners identifying with each other — thus raising the essentially problematic nature of such understandings. The theoretical basis for such an argument derives from Blumer's (1966) suggestion (based upon the work of Mead) that:

"... the nature of an object is constituted by the meaning it has for the person or persons for whom it is an object ... this meaning is not intrinsic to the object but arises from how the person is initially prepared to act towards it."

Such a perspective has some affinity with the present consideration of how the (pedagogic) knowledge that one teacher has of another (and, indeed, 'what counts' as valid subject knowledge) is utilized in the everyday life of the teacher (Robinson, 1974). The present proposition is based upon a reformulation of the earlier
Conceptions of Interaction and Forms of Sociological Explanation.
American Sociological Review. Vol. 35. Pages 697-710

Television and the Political Image
Rethuen.
suggestion that the sociological perspective of the observing participant, as for any fieldwork of a qualitative nature, may be perceived as a function of the actor's socially located position. That, in the case of the pedagogic subject, it is not so much a case of 'things are not what they seem' as one of 'seeming different things to different people' (Phillips, 1973). In the same manner that the imputed meanings of the actions in progress originate from within the interpretative paradigm of the actor, so too will the ideology of a pedagogic subject 'mean different things to different people'.

The argument is somewhat analogous to the way in which voters have been demonstrated to hold differential images of the various political parties according to their own, socially located, political position. Thus an identification of the labour party as being 'for the working class' is shared by sixty-eight per cent of labour party supporters yet only thirty-two per cent of conservative party supporters. In the same way an image of the conservative party as being 'for the rich' was shared by only eight per cent of this party's supporters yet was an image shared by eighty-five per cent of labour party supporters. It is therefore of particular interest that this analysis is followed by the author's suggestion that party images - whether or not they are 'true' - are extremely resistant to change. They are, moreover, partially responsible for the apparent stability in voting behaviour.

The transfer of such a perspective to the subject identifications of teachers derives from a somewhat similar study carried out by Hills and Shallis (1975).
concerning the various perceptions of scientists held by different social groupings. Not surprisingly differences emerged as between the image that scientists had of themselves and that image attributed to them by other, non-scientists. For example, the supposed 'objectivity' of scientists was an image favoured by 'outsiders' but rejected by the scientists themselves! The accuracy of such images may not be unrelated to the degree of knowledge held by each group about the other: a process that becomes extremely difficult in the world of the teacher given the various rhetorics that have previously been described. In this context it does not matter whether the image is, or is not, inaccurate since the resulting social actions are based upon the image of the other rather than upon any 'reality'. It is because the pedagogic social world is a subjective, existential, production that it is both sustained and changed by the human activity taking place within it. 'Meaning' is thus a reciprocal typification of that world in which the pedagogic subject identity is an organised realm of meanings focussed upon a particular phenomena: for its practitioners it takes the form of a first-order social construction, for other situationally located identities it remains a construction of the second order. This is way there are so many parallels between the observing participant and the pedagogic world.

"These typifications take the form of commonsense interpretations of its operations that constitute a form of knowledge at hand, which, together with the personal experiences of the actor, constitute a taken-for-granted means of orientation towards this world. The process by which the social world is constructed, then, may be described
as a process of first-order construction in terms of such social meanings." (Walsh, 1972. Page 17)

In the same way that the sociological constructions of the observing participant are second order constructions, so too are those of the other subject practitioner—observers of other (pedagogic) social worlds. The problems and dilemmas of the one will be reflected in the other.

What is of more interest is therefore the problem raised by Bernstein (1971) of how forms of experience, identity and relationship are evoked, maintained and changed by the formal transmission of educational knowledge and sensitivities. How members accomplish social interactions is crucial both to the observing participant and teachers, and in the latter case one of the proposed characteristics of the pedagogic subject universes of meaning are that their boundaries are objectively inexplicable since the reasons for any particular way of defining the subject, looking at the world, will be embodied in the social history of the institutional locale. Whitty (1974) provides a link between this perspective and that of the observing participant activity when he suggests that the biographical histories of the approaching strangers will be important. Much of the subject orientated action will take place in situations where information is more or less consciously pushed out of the sight of others. The division of school knowledge in terms of given subject contents is therefore an axiomatic truth to its practitioners, and it can only be upon such, socially located, 'self-evident' truths that subjects base their coherence. As Douglas (1975) has pointed
in connection with the anthropological approach to the cultures of the approached groups:

"Its stability is an illusion, for a large part of the discourse is dedicated to creating, revising and obliquely confirming this implicit background, without ever directing explicit attention upon it. When the background of assumptions upholds what is verbally explicit, meanings come across loud and clear. Through these implicit channels of meaning, human society itself is achieved, clarity and speed of clue-reading ensured. In the above exchange between explicit and implicit meanings a perceived-to-be-regular universe establishes itself precariously, shifts, topples and sets itself up again."

(Op. cit. p.4)

What better illustration could be provided of the processes described and elaborated in this thesis? The division of subject knowledge exists as a community of shared assumptions. Moreover, whether these assumptions are actually shared they are interpretative procedures through which the world has meaning for the subject identity of teachers. This is achieved by what Cicoirel (1973) describes as the 'et cetera assumption' approach to living in the world. This assumption:

"... serves the important function of allowing things to pass despite their ambiguity or vagueness ... neither the reciprocity of perspectives nor the et cetera assumption imply that consensus exists or is necessary; rather, they indicate that a presumed 'agreement' to begin, sustain, and terminate interaction will occur despite the lack of conventional notions about the existence of substantive consensus to explain concerted action."

(Op. cit. p.53)
This is obviously closely linked to the notion of private and public knowledge related to the pedagogic subject performance and the consequent existence of 'back regions' in the playing out of this knowledge that was elaborated in the previous chapters. It is on those occasions when, for whatever reason, 'things are not allowed to pass' that these assumptions became intensely problematic for both the observing participant and the subject practitioner. The subject identity may therefore be legitimately portrayed as a proclamation of one's identity as member of some common group, some shared interest in the world. Those previously explicated behaviours, patterns of eating together, departmental parties, commensality; all indicate the social distancing that occurs between the different subject groups. Selected aspects of the social structure are thereby transmitted through the various message systems forming part of the social identity network. In Schutzian terms there is a duality in appresentational references in which the realities of departmental colleagues are apprehended as individuals, and other subject practitioners as social collectivities that possess their reality in another, different, subuniverse of knowledge.

'Interest' therefore possesses a selective function in that it becomes a principle around which the life-world of the pedagogic subject is organised and which stratifies the realities of the teacher. Autobiographical and socially located experiences of the actor thus result in the phenomenon of 'habitual possession' (Schutz, 1970) of pedagogic knowledge by differentiated subject departments. By habitual possession Shutz means:

"... a potential set of typical expectations to be actualized under typical circumstances leading to typical reactions."

(Op. cit. p.54)
Knowledge 'x' is history because that is the sort of thing we do in history at this school, etcetera. And this assumption is not confined to the pedagogue. Blum (1971) criticises a great deal of what goes on in sociology for its separation of social objects from the world from which they derive their meanings and of which it is a part. Thus both the individual subject practitioner and the sociologist (and what is the sociological identity if not that of a subject practitioner?) speak from within the assimilated culture of their respective worlds. And this is a necessary condition for others to make an adequate response to their conversations. (The implications of 'speaking the language' have been elaborated at various points in this thesis and are returned to subsequently in this chapter).

Douglas (1973) places the argument being developed in a theoretical framework when he raises a similar question in analysing the social meanings of suicidal phenomena. He asks,

"How is one to know that these individuals or the people categorizing their deaths mean the same thing by the term 'death' that the theorists do? Shneidman and Farberow have argued, to the contrary, that many individuals who commit suicide do so in large numbers and in large part because they do not mean the same thing by 'death' that the theorists assume most of us do.

... When some ronin of Japan ... perform actions which lead to what American or European doctors classify as death, we must recognise that this is a classification by Western doctors, not by the actors involved. Their 'linguistic' expressions for such actions may be totally different from the ones Western observers use and certainly might mean totally different things to the actors and the significant observers of these actions within their own culture. ...

... And, though the differences in meaning
might not be as great within one general cultural tradition, still, does it not seem plausible to expect that there are some systematic differences of meaning involved in the uses of the term 'death' between one nation and another or between one subculture and another?


The possibility therefore emerges that, whatever the situationally specific contents of the label, the practitioner of a particular pedagogic subject possesses a different 'understanding' of the meanings of that label than those 'understandings' (of the same pedagogic label) held by one's colleagues. That these relatively unquestioned taken-for-granted understandings are only infrequently revealed as, 'in fact', problematic is a function not only of the previously demonstrated rhetorics of space and pedagogy but also of a minimal co-operation in the planning of school courses. Such planning is typically confined to the practitioner's own subject area: for example, Taylor (1970) concluded that teachers show,

"... a relative lack of concern with the relation between their subject and other subjects, and to the curriculum as a whole."

Berger and Luckmann (1967), from another perspective, propose that cognitive sub-universes such as those represented by the pedagogic subject are symbolic universes each possessing its own more or less discrepant meaning system, theoretical explanation (Blum, 1971), and tests of reality. In each of these areas one's professional colleagues in that particular institutional locale are significantly important in maintaining their
reality system as the legitimate one in the face of other, potentially or actually competing, systems. These systems will be tolerated to various degrees in accordance with the general propositions that have been placed before the reader.

The Segmented Ownership of School Knowledge.

The pedagogic subjects therefore constitute more or less discrete ways of seeing the world in which process the subject identity generates particular kinds of social experience. (Esland, 1971, for example, proposes that subjects are but approved methodologies for resolving questions about the universe). What this subject knowledge actually is is the subject of negotiation and will vary from institutional locale to institutional locale, and the number of possible classifications is potentially infinite. However, such infinite possibilities are constrained by, in effect, the particular socio-historical constructions of that society and institution, a culture of positivism linked to the antecedents of that knowledge in that school. What counts as history knowledge in one locale will not count in another, in a third it may become geography knowledge, in a fourth social studies knowledge, and so on. In each case it will become the socially constructed basis of a situationally specific subject identity. However, the notion that some general principle of classification is not necessarily congruent with a specific local taxonomy of knowledge is not a new
insight for the anthropologist. Mary Douglas (1975) for example, has noted similar discrepancies concerning the nature of Karam and Thai classificatory schemes relating to animals.

"Creatures the emerge as anomalous on one could be perfectly acceptable on another. For example, Thai villages count domestic land animals as distinct from birds. And as if they had no niche for domestic birds, ducks and chickens are counted as land animals, their birdlike features notwithstanding. Land animals with wings suggest an anomaly to us, but they do not perceive it. On the other hand, the otter, like voles and seals, has no connotation of monstrosity for us: for the Thai it is a revolting hybrid, a fish as it were with the head of a dog, a wild beast which invades their domestic fields in flood time. There are obviously as many kinds of anomaly as there are criteria for classifying. For the purpose in hand, it is enough to speak of creatures which in their morphoology show criteria of more than one major class, or not enough criteria to enable them to be assigned to any one class, and of creatures which in themselves belong clearly enough to a recognised class but which have neither the habits or which stray into the habitat of another class. An example of the first will be the pangolin or scaly ant-eater, honoured by the Lele as a tree-dwelling mammal with scales like a fish; of the second, the cassowary which Karam reckon has neither the feathers nor the brains of a bird; of the third, nocturnal antelopes distinguished by the Lele on account of this habit from other antelopes; of the fourth, the Thai view of the otter and the Nile monitor and other invasive creatures which stray out of the habitat to which they could be assigned on other criteria."


It should thus not come as a suprise that 'what counts'
as appropriate subject knowledge in one context is rendered inappropriate knowledge for that subject in another. That the English teacher was unable to distinguish between 'English' worksheets and those 'belonging' to the social studies department is similarly unsurprising. Indeed, it would be an interesting exercise to expose the knowledge contents of a particular school with the purpose of establishing the number of instances where knowledge 'overlaps' between departments and what different classification schemes are resorted to in the various explanations for this phenomenon. Similarly, to take one pedagogic subject in a number of schools and establish just how many variants there are of what is ostensibly one knowledge.

For the most part one suspects these discrepancies to exist because of the social and conceptual segregation of the competing definitions of the pedagogic reality. In this case, certain definitions of realities would be seen as appropriate only to strangers of some kind and therefore apparently irrelevant to oneself and one's own group (Berger and Luckmann, 1967). The converse would be equally true.

The activities of the French department are seen as having little relevance to the teachers of physical education, geography is a 'pedagogic stranger' to the art department. To this extent one is concerned to explicate the social processes at work in constraining these definitions in this way and Berger and Luckmann interestingly contrast such segregation with a process of nihilation in which conceptual machinery is used to liquidate (conceptually) everything outside of the given subuniverse. By the denying the reality of whatever phenomena do not fit into that subuniverse the activity is rendered non-problematic. This may be done by the process of assigning people who possess such conceptions
to an inferior status where they will not need to be taken into account, or, alternatively, by accounting for all of the deviant definitions of reality in terms of concepts derived from the original subuniverse: 'from heresiology to apologetics'. Both of these processes have been shown as existing in the realities of different subject departments at different stages in their careers in the institutional locale.

Some knowledge is not considered to be appropriate to the school. It would, for example, be interesting to apply the above concepts to the pedagogic conspiracy by which different subject options 'go together' and thereby exclude the approaching persona from access to other, perhaps competing, knowledge. The withdrawal of certain groups of pupils from physical education, music, religious education, in order that they may have additional time to do (say) sociology could certainly be viewed in this light.

For the most part the subject identity exists as a segregated subuniverse of meanings in which each identity retains its own ways of doing things, its own procedures, its own traditions, in a federated or pluralistic mode. To this extent it represents a form of pedagogic pluralism that is analogous to that found in industrial subcultures (Turner, 1971). Industrial mergers were portrayed as having consequences for the previous divisions of the world.

"... because of what are seen as inadequacies, one of the organisations may virtually disappear as a coherent entity. Its employees are dismissed, or dispersed within the other organisation; the procedures, the social definitions,
the norms and job-roles all disappear because they are defined as inappropriate or inferior in some way, and the subuniverse of meaning which was peculiar to that organisation disappears, leaving only that of the dominant organisation." (Op. cit. p.115)

Here, in microcosm, is the growth of one pedagogic subject department and the decline of another that has been similarly 'taken over' in some change in the definition of school knowledge. At any one moment in time the industrial merger is thus, potentially, paralleled in the actions taking place in the pedagogic negotiating arena of the school. A process that involved many of the mechanisms elaborated in the previous chapter.

However, there will be occasions when two worlds collide, two sets of legitimating mechanisms that simultaneously focus upon similar knowledge. For the most part private performances carried out in back regions of the subject identity will enable those subjects having this mutual interest to ignore the pedagogic presence of the other. Then some crises may occur when one subject department publicly deals, perhaps the publicity is unintentional - leaving certain materials on a staffroom table, perhaps some overt display at open day, with individual knowledge that raises the consciousness of another group. It may be that one group will the attempt to use some form of legitimating apparatus to bring the events within that group's existing conceptual framework. For example, for this group, this process ensures that actual or potential deviant knowledge cases can stay within their institutionalised definitions of
reality. Thus, it would be interesting to compare the respective careers of different school subjects from a similar perspective to that employed in the study of the 'Hack-coated worker'. What are the various forces that change the nature of a subject, give rise to the emergence of new subjects - such as school sociology, or send others into decline such as school classics. It is perhaps here that power orientated critiques of school knowledge would make a relevant contribution.

Turner (1971) elaborates the processes involved in those reflexive dilemma's in connection with the relationship that exists between shared cultural knowledge that is possessed by (say) in this case the observing participant, and the analytical apparatus that it is his responsibility to utilize in the production of the relevant knowledge. Blum (1971) approaches the question of the competing social definitions of particular knowledge from the viewpoint of the sociological activity. He suggests that:

"The sociologist inevitably trades on his member's knowledge in recognizing the activities that participants to interaction are engaged in; for example, it is by virtue of my status as a competent member that I can recurrently locate in my transcripts instances of 'the same' activity. This is not to claim that members are infallible or that there is perfect agreement in recognizing any and every instances; it is only to claim that no resolution of problematic cases can be effected by resorting to procedures that are supposedly uncontaminated by member's knowledge.

(Arbitrary resolutions, made for the sake of easing the problems of 'coding', are of course no resolution at all for the present enterprise.)
...The sociologist, having made his first-level decision on the basis of members' knowledge, must then pose as problematic how utterances come off as recognizable unit activities. This requires the sociologist to explicate the resources he shares with the participants in making sense of utterances in a stretch of talk. At every step of the way, inevitably, the sociologist will continue to make explicit what these resources are and how he employs them. I see no alternative to these procedures, except to pay no explicit attention to one's socialized knowledge while continuing to use it as an indispensable aid. In short, sociological discoveries are ineluctably discoveries from within society."
(Boy-Tuner, 1974. Page 177)

Within the context of the school one of the reasons for this procedure is the rhetorical way that the pedagogic subject similarly constitutes a form of life for its practitioners. To the extent that different subject practitioners theorise about their worlds (Blum, 1971) it is also inevitable that:

"At certain points different proponents of different versions of theorising find it impossible to talk together because they differentially decide where to stop doubting."
(Op. cit. p.301)

Perhaps the most appropriate theoretical articulation of the problem for our present purposes is provided by a particular application of Becker's (1970) distinction between what he called an experiential and an experimental
4. Lewis, Oscar (1951)  
Tepoztlan Revisited  
University of Illinois.

5. Redfield, Robert (1930)  
Tepoztlan  
University of Chicago Press.

6. Merton, Robert K.; Reader, George; and Kendall, Patricia L. (Eds) (1957)  
The Student-Physician.  
Harvard University Press.

Boys in White  
University of Chicago Press.
paradigm of knowledge construction. Becker was engaged in explicating the processes by which apparently similar studies of the same phenomena reveal disparate conclusions: the argument was illustrated by the diverse studies of Tzepistlan carried out by Lewis and Redfield; and those of the medical school by Merton, Reader and Kendall, and Becker, Geer, Hughes and Strauss. In essence, Becker's resolution of the dilemma was found in the differential emphasis of the fieldworker who, by asking different questions of data, emerges with different answers. 'A problem' can therefore only be said to exist from the perspective of an experimental paradigm of knowledge construction. Thus, although:

"... the two fieldworkers in question set out to study the same thing, answer the same questions. People often study the same and similar organisations using field methods but have different theories and different questions in mind. When they ask different questions they get different answers ... the differences ... show only that the observer is observing something different." (Op. cit. p.40f.)

Such a conceptual distinction enables the writer to posit the notion that the same phenomena - the instance in point being the ideology of a pedagogic subject - will be disparately perceived according to the perspective of the observer, the pedagogic subject practitioner. The practitioner for whom that phenomena constitutes an experimental paradigm will be faced with the 'problem' of conflicting knowledge, the practitioner for whom the pedagogic life-world is an experiential existence will come to have a different view of that reality than will another, differently located, actor. Moreover,
8. Levi-Strauss, Claude (1963) 
Structural Anthropology 
Basic Books.
the fact that a given phenomenon — pedagogic content 'x' — may be recognised as 'history', 'social studies', 'mathematics', or whatever, is not necessarily perceived as problematic by the actors who will 'have different theories and different questions' in mind. Whereas the salience of this latter point for potential reconstructors of school knowledge will be the subject of further discussion elsewhere in this thesis it simultaneously draws attention to one aspect of the school's 'culture of positivism' that receives insufficient attention in sociologies of the school.

Whilst the writer has severe reservations concerning much of Whitty's (1973) thesis in this respect he is nonetheless one of the few writers commenting upon the processes by which a prevailing culture of positivism within the school may interact with, and redefine, a particular perception of subject knowledge. However, what is being contended here is rather an 'educationist' appropriation of a previously noted sociological phenomenon. It will be remembered that the social researcher — as a cultural insider — was, by implication, portrayed as continuously in danger of taking his own cultural (that is, common sense) knowledge as a non-problematic 'given' in the study of a particular phenomenon thereby enabling its integration within a positivistic mode of sociological analysis. Levi-Strauss provides an apt analogy when he states, within the context of an assessment of the relative advantages of anthropology and sociology, that an advantage of the latter arises from its 'overview' that:

". . . extends beyond the purview of the observer, but it is always from the observer's point of view that the sociologist tries to broaden it. In his attempt to interpret and assign meanings, he is always first of all concerned with explaining
his own society; what he applies to
the generality are his own logical
classifications, his own background
perspectives."

Therefore the argument is that the introduction of
'new' knowledge within the school (or indeed, re-
constructions of existing knowledge) will be subject
to a similar mode of interpretation - that it will
be interpreted from within the interpretative paradigm
of the (differential) pedagogic subjects. As a con-
sequence 'meanings' will be assigned to social phenomena
only in so far as they are perceived to possess some
'significance' for the teacher's own pedagogic society.
Thus suggestions for introducing swahili into the school
may, or may not, be viewed as possessing any particular
significance for, say, teachers of social studies. At
least, unless the teaching of swahili intruded upon
some aspect of resources (whether of rooms, staffing,
timetable allocations, the allocation of pupil clients, etcetera) previously the domain of the social studies
department. The group perspectives of different, and
segmented, pedagogic societies are therefore portrayed
as originating from within the paradigmatic biographical
activities involved in doing the particular knowledge.
There is some similarity here with the way in which the
meaning bearing activity resulting from the construction
of this knowledge, rather than some other alternative
knowledge, has served to conscientize the writer to
those processual aspects of knowledge construction.
Such an awareness would include the biographical
application of 'perspective' to the phenomenon being
observed, and the consequent consideration of the
interactive relationship between what has been written (that is, the content) and the activity of writing it. The suggestion has parallels with Cicourel's (1976) description of the social organisation of juvenile justice: answers to the question 'What happened?' were variously constructed by the interested parties.

"The police, like all members of a society, operate with background expectancies and norms or a 'sense of social structure' that enables them to transform an environment of objects into recognizable and intelligent displays making up everyday social organisation. The general rules and policies governing day-to-day bureaucratic and administrative activities become intelligent and recognizable features amenable to implementation because of the application of the background expectancies. Therefore, general policies and rules are implemented within a context of unfolding contingencies attached to actual social scenes. When the police discover or are called to the scene of a supposed violation of the legal order, their sense of social structure and memory of past events in the neighbourhood provide initial interpretations as to what happened. The general policies or rules, derived from police department directives and standing orders, are connected to legal statutes and practices by the background expectancies and remembered experiences about the neighbourhood, its residents, and the information given to the officers by the station or upon encountering the scene on their own. The contingencies of the unfolding scene provide the officers with the raw material for generating practical solutions."

(Op. cit. p.328)

In the same way the general social setting of the teacher's subject identity has been portrayed against their 'sense of the social structure'. When 'violations' of the
existing divisions of school knowledge take place what they remember of their own school days, their 'images' (more or less accurate) of what the different subjects 'stand for' will similarly provide initial interpretations of what has happened. This background expectancy and remembered experiences about the pedagogic neighbourhood will usually be based upon publicly available knowledge about that subject with more or less correspondence to the present 'realities'. Within the context of the school an analogous proposition would be that observations of phenomenon occurring within the pedagogic social world are perceived by the various actors from within the interpretational paradigm of the pedagogic subject - it is a citizens police force staffed by the inhabitants of that pedagogic locale. Indeed, the relationship between pedagogic subject contents and the, segmental, activities of the activities of the subject identity will therefore be perceived as intensely problematic, at least to the outsider.

In the same way that man the sociologist was previously shown as being himself a participating member of the human situation and therefore,

"... involved in an attempt... to arrive at a perspective which names those objects and processes among which he lives."
(Sharrock, 1974. Page 18. Dy emphasis)

so to is man the school-teacher engaged in a process of 'naming' school knowledge from within the perspective afforded by his particular (pedagogic) life world. The quintessence of both approaches is to be discerned in the interactive relationship between man the social actor, and the means by which the lived reality of the social world is apprehended. Between the knowledge
that is constantly undergoing construction, and the lived reality of the socio-cultural matrix within which the meaning of that knowledge is comprehended by the actor. The analogy is with Becker's (1968) description of the academic department at the University of Kansas as being: a dense network of social relationships, institutional demands and constraints, and temporally connected contingencies. In applying the concept of perspective to the collective actions of a relatively homogeneous grouping such as the pedagogic subject department one is referring to:

"... a coordinated set of ideas and actions a person uses in dealing with some problematic situation... a person's ordinary way of thinking and feeling about and acting in such a situation. These thoughts and actions are coordinated in the sense that the actions flow reasonably, from the actor's perspective, from the ideas contained in the perspective. Similarly, the ideas can be seen by an observer to be one of the possible sets of ideas which might form the underlying rationale for the person's actions and are seen by the actor as providing a justification for acting as he does."
(Becker, 1961. Page 34)

Becker also proposes an analytic division of 'perspective' that is most helpful to the present discussion suggesting the notion to contain several components including an implicit criteria of judgement, a paradigmatic awareness (that is more or less realistic) of what constitutes a 'proper activity' for the group to engage in, and a socially constructed definition of the situation that includes sets of shared understandings that may be more or less accurate, more or less important,

"... of what their world is like, what it allows them to do, what it insists they do, and an understanding as well of why
they are in that situation and what they can reasonably expect to get out of it."
(Becker, 1968 p.29)

Indeed, there is a very real sense in which those processes by which pedagogic practitioners of pedagogic packages of school knowledge have tended to 'objectify' the various categories - and have consequently come to hold differential subject ideologies based upon the practitioner's various contingencies of experience - may be said to mimic those of the sociologist. Biographical commitment on the part of the actor to those various contingencies of experience is as applicable to the sociological activity as to the pedagogic practitioner for both are engaged in fitting their experiences together in some way that 'makes sense' and provides an ideational framework establishing a sense of what properly goes with what. Such a sense of the appropriate serves to differentiate the participating observer from those who participate: in the writer's case the 'fact' of one's research interest means that it becomes impossible ever to fully take the role of the other even though such a role was a socially located contingency of experience. The actor reflecting upon the constructed reality of the life-world, although remaining 'in' the world, is no longer 'of' the world: the commitment to experience rather than existence means that the actor's perception of the world - whether as actor, poet, artist, or even observing participant - is no longer the perspective of those committed to existence in the world. A similar stance may be appropriated on behalf of the teacher-practitioner
in that existence requires a commitment to one's subject identity, immediately one begins to reflect on the meaning of the experience one is to that degree no longer of that world but another.
The notion of a segmental subculture, together with an examination of those typical processes through which identities evolves, involves an explanation not only of that interactive relationship between the construction of knowledge and the constructor, but also the interactive posturings of significant others. Such a deifferential availability of orientational meanings may, together with the existence of differential languages for interpreting those meanings, lead to imputations of 'irrationality' by one party on another (Ichheiser, 1970). Certainly this 'meaning component' contributes to a sense of mystique both in the case of the sociologist and that of the subject practitioner.
The implications of this proposal for the developing nature of school knowledge is that practitioners of pedagogic (and other) knowledge may be usefully perceived as participating in an emerging, or emergent, social movement. Indeed, insights provided by the processual similarity between emerging social movements formed a useful framework for the subsequent exposition of the rise of a particular way of doing mathematics.
The proposition that any given knowledge contents may, potentially, be subsumed within the pedagogic activity of a particular subject department suggests an extension of the prospectively interesting posed by Sharrock (1974). Namely, what are the processes by which one comes to conceive of a particular corpus of knowledge as 'belonging' to a specific (pedagogic subject) collectivity? Indeed,
a principal interest of this thesis lays in establishing a connection between what a teacher 'knows' and how he 'acts' and the pedagogic subject perspective has accordingly been utilized not only:

"... to convey the idea that members' activities are to be construed by reference to some corpus of knowledge but also that the corpus of knowledge itself must be viewed as being in some way associated with the collectivity in which the actors have membership."
(Op. cit. p.45)

Whilst attention has so far been directed to the socio-rhetorical basis of the interactive, and socially negotiated, relationship between subject departments the point has now been reached at which the existence of differentiated substantive pedagogic contents is itself revealed as problematic. Thus, although it was previously stated that a teacher of history is not a teacher of geography is not a teacher of social studies, there is no especial reason for proposing a necessary connection between the pedagogic activities of a particular subject department, and the specific body of knowledge 'typically' associated with those activities. A portrayal of school physics as a corpus of knowledge 'relevant' to the doings of physics's teachers has obvious affinity with the earlier notion of 'meaning' as deriving from within the interpretative paradigm of different pedagogic subjects. However, the problematic nature of the implied relationship between collectivity and corpus becomes explicit following a synthesis of the previous arguments: that social phenomenon may be differentially 'understood' (and therefore mean' different things) as a consequence
of the actor's pedagogically located position; that 'new' knowledge will be interpreted and assigned that 'meaning' from within the interpretational paradigm, 'logical classifications', and background perspectives of the pedagogic subject; and that these classifications and perspectives form part of a pedagogically differentiated 'culture of positivism'. Thus, although a teacher of history is not a teacher of physics is not a teacher of mathematics, the teacher of mathematics may teach a 'history of mathematics'. Indeed, this latter now constitutes part of the examinable syllabus of the Inner London Education Authority mathematics project 'Secondary Mathematics Individualized Learning Experiment' (S.M.I.L.E.). The physics teacher may similarly teach the 'social context of scientific discoveries', provided that in both cases these knowledge contents are not seen as 'relevant' to the activities of other departments - say, history and social studies. The knowledge different actors possess about the contents of specific school subjects derives from their situationally located perspective from which they view the pedagogic life-world. Here the notion that 'corresponding marks' contribute to this situation is discussed by Lawrence (1971) and becomes relevant because of the distinction he makes between those features that can be observed to be invariably associated with the correct use of a 'name' (a denotative symbol), and other features that the actor requires to be told (a connotative symbol). One of the consequences of such an understanding is that referents of subject labels become associated with the language used by particular epistemic communities and some of the implications of this have already been discussed. Wieder argues that:
Object features consist only in the features that members talk about (verbally attribute, note, point out, and argue about) as features that give evidence that the name of the object has been correctly applied. These same features also exhaustively define the actor's interest in the object, inasmuch as they constitute the object for the actor. They define the objects of his affect and action and they define the uses the object can be put to in whatsoever way the actor might use them to accomplish whatsoever project he might entertain.

When the name is used the referent is the set of rules for its correct application and nothing more. There is no reference to a visually perceived object. Within this theory the object consists in the rules. Thereby, the name and its referent stand in exact and exhaustive equivalence, just as one side of an equation stands to the other. Hence, the theory is called a theory of corresponding marks.

Socialization in such a world would consist in learning the names of objects and their corresponding features by being taught those names and those features. These same features would be available to the members' memory if they were asked to characterize the object. There would be no ostensive defining available to these members.

Correct usage would be defined by the theorist, on behalf of the members, by consistency and consistency alone. Once a name (thereby object) was introduced, everything that was said about it would have to be compatible with the criteria or features of that name. But no lies in the sense of false naming would be possible since, with no perceptual world as the reference for his naming, whatever the member says is 'just so'. The member could say, 'I said it, therefore it is'.

(Welder, 1971. Page 123)

The parallels between this and the relationship between situationally specific variants of school knowledge and
socialization into the emergent subject identity related to that knowledge will be apparent. The useful of such a perspective is limited to its concern only with teacher's 'talk' since the pedagogic society has been demonstrated to consist of more than merely the talking that goes on. However, the notion of the pedagogic subject as constituting some sort of mnemonic device in which shared experiences enable the extraction of features relevant to the naming process (although the meanings given to these features will not necessarily be similarly shared) continues to be an attractive one. Competing definitions become possible because the limited number of 'names' that are available constrain the number of alternatives among which the actor can delve in selecting his particular description of the knowledge. Because the actual process of selection is often not visible to other practitioners it cannot be directly observed by them (in this the rhetorics of space and knowledge will play a more or less important part) and he can therefore only assume the rules have been correctly applied. In the same way that the writer, as observing participant, could only ask questions appropriate to the knowledge and social location of his persona, so too does the subject practitioner invalidate any queries about the nature of his subject from other knowledge areas.

"If, from the members point of view, the domain of discourse has no precise boundaries, objects defined within the domain of discourse do not have fixed sets of attributes in the sense used by structural semantics. This is so because the criterial features or significata described within structural semantics are intended as those features that are actually used to describe one object from another. Yet if members confront
Idiom Formation 
in Halle, E. et. al. (Eds) 
For Jacobson 
Mouton.
situations whose contents cannot be enumerated in advance, then just how one object contrasts with another is something that is, for members, to be discovered over the course of some particular situation. What members might mean when they apply a name would then have a definite sense for a particular temporally located situation but would have no necessary stable connection to other situations in which the name was used. For every new object added to the set of possible objects there is potentially a new attribute needed to differentiate it from other members of the set. For every object that has been in the set, but is there no longer, there is a potential loss of an attribute. For a member who could not specify the boundaries of a domain, no limited set of object features would be possible. The 'best' the member could do would be to use whatsoever features of objects that seemed to differentiate members of the domain as seen and imagined from his present perspective, while 'holding in reserve' usable features that might become necessary should the apparent boundaries of that domain be altered as he views it from more perspectives. For the name user, no particular set of criteria that would apply in all cases could be stated."


Those procedures involved in such naming of knowledge indicate one consequence of a subject perspective to be that it potentially enables practitioners to focus upon one order of meanings whilst attributing contingency to other meanings. The differential, yet overlapping, ownership of pedagogic subject knowledge thus possesses some similarity with Hockett's notion of idiom formation. The idiomatic utterance, as a 'grammatical
form' the meaning of which is not able to be deduced from its structure can be demonstrated as possessing a considerable affinity with the way in which 'new' school knowledge can be assimilated within existing institutional structures. In both cases there is sufficient congruity with the particular purposes at hand for there to be sufficient reason for a claiming to know. Cicourel's (1973) discussion of a 'nonce-form' is a particularly apt theoretical formulation for outlining the processes that might be involved. He notes that:

"It is a remarkable fact that a speaker may say something that he has never before said or heard, to hearers to whom the utterance is equally novel, and yet be completely understood without anyone being aware of the novelty. Indeed, this is a daily occurrence. The way in which it comes about is basically simple: the new utterance is a nonce-form, built from familiar material by familiar patterns . . ."

The implications of this for the observing participant activity have already been made explicit at various points in this thesis. The relevance of the argument for the interpretative paradigms afforded by the pedagogic subject departments appropriation of any new school knowledge that may be presented is that it provides the interrelationship between knowledge and the rhetorical activity of that knowledges practitioners. Here, Cicourel continues his argument in a most relevant direction when he says:

"However, the mere occurrence of a nonce-form for the first time does not itself constitute the creation of a new idiom. An additional ingrediant is required:
something more or less unusual either about the structure of the newly-produced nonce-form, or about the attendant circumstances, or both, which renders the form memorable. As we go about the business of living, we constantly meet circumstances that are not exactly like anything in our previous experience. When we react via speech to such partially new circumstances, we may produce a phrase or utterance which is understandable only because those who hear it are also confronted by the new circumstances. Alternatively, an individual may react to conventional circumstances with a bit of speech which is somewhat unconventional—again being understood because of context. Given any such novelty, either of expression or of circumstances or of both, the event installs special meaning into the linguistic form which is used, and the latter becomes idiomatic... The total context, linguistic and non-linguistic, in which the nonce-form takes on the action and status of an idiom is thus the defining context for the idiom."

(The cited p.223)

The differential availability of 'meanings' potentially imputed to specific constructions of school knowledge is therefore proposed as being contingent upon the situationally defined activities of existing subject departments. Nonetheless,

"... the very fact that a corpus of knowledge has a name does not... tell us anything about the relation of corpus and collectivity until we begin to examine the kinds of names that were used."

(Sharrock, 1974. Page 47)

Such a proposal carries the connotation that, for the teacher of geography— as for the Ine— the question
'Why is geography?' extrapolates a particular and situationally negotiated social identification making for an appropriate reporting of behaviour (Moerman, 1974). Indeed,

"... once an identification label is assigned it can be used for labelling the behaviour, possessions, ideas, etcetera which are appropriately associated with the labelled category."


In the same way that Moerman believes the category 'Iue' to involve a complicity between native and ethnographer, being a product of the anthropologists essential naivete rather than an ingenious analysis of a native cognitive system, so too is the pedagogic subject department a social production. The subject identification of the teacher has a high priority, at least within the secondary school, for talking about social behaviours that might, in another context, be properly associated with other identifications. Accordingly, and in the same sense that the Iue are considered to be a tribe 'because they successfully present themselves as one' - and thereby distinguish the Iue from the non-Iue & the pedagogic subject department 'is' for exactly the same reasons. It has already been suggested that, in assigning (say) the label 'music teacher', one also imputes a specific set of social identities with which that other can appropriately and similarly be labelled: a history teacher is not a geography teacher, etcetera. What has occurred is that a particular corpus of knowledge (say, mathematics) has become identified
as a high priority, situationally defined, label legitimating the activities of a particular collectivity - the pedagogic subject department. Although there may be no necessary connection between the corpus of knowledge and the activities of that collectivity named with a sameness of name.

It is this discreteness in the social process of 'naming after' that enables Moerman to speak of 'the cultural traits of the Lue' although similar practices may be observed elsewhere, for example, in their non-Lue neighbours. These latter being dismissed by the Lue as merely being 'copiers'. The situation is thus analogous with the previously noted phenomenon by which pedagogic departments were in dispute over the 'ownership' of some item of knowledge whilst simultaneously recognizing that specific knowledge contents may be the object of apparently interchangeable subject labels. This is a similar process to that described by Douglas (1975) in which the same animal would be capable of being differently classified by Thai and Karam taxonomies. Sharrock (1974) utilizes various accounts of witchcraft among the Azande peoples in which a particular corpus of knowledge relating to medical practices was noted as occurring among both the Azande and Baka. Here, the same knowledge is assigned a different social identification and Sharrock questions how this 'inconsistent' use of names can provide a coherent and intelligible account of social events. He suggests that the 'naming' of knowledge subsequently becomes a device for describing by which he means:

"... the name is not to be revised in the light of events but is, rather, to be invoked in the description of
whatever events occur. Thus, though the use of names such as 'Zande medicine' and 'Baka medicine' might initially appear as specifying the constituency amongst which a knowledge of those medicines might be found, it does not mean that those names have to be retracted if it is found that knowledge of Baka medicines can be found amongst other persons than members of the Baka; rather, that which those persons know has now to be described by reference to the fact that some elements of knowledge have already been named as 'Baka medicines'. Thus, after they have learned from Bogwözu, the Zande may now be described as 'having a knowledge of Baka medicines.'

(Op. cit. p.49)

Within the context of this thesis an application of the notion would be that culturally given 'names' will be invoked by pedagogic subject practitioners in the description and categorization of knowledge. Such epistemological naming provides presumptive evidence for suggesting that, whatever the origins of the 'sameness of names', the connection between pedagogic corpus and collectivity need be no more than coincidental. In a similar mode to that by which 'knowledge' of Baka medicine is not limited to those for whom the social identification has a high priority, so (say) mathematical knowledge is not perceived as necessarily linked to the (school) community of teacher mathematicians. Of course, such an assumption may receive a different percpetual acknowledgement by various groups of staff and pupils. Keddie (1971) describes how different classes reacted to a film entitled 'The First Fifteen Minutes of Life' shown during a social studies lesson and perceived by the teacher as being appropriate to
the, in this case sociological, context of a teaching unit on the theme of 'socialization'. Keddie notes that:

"Mary defined the film as 'biology' and said 'We've done it before'".
(Op. cit. p.143)

In ascribing a specific corpus of knowledge to a particular pedagogic community Mary was essentially sharing in the previously noted dismissal (by the Lue) of non-Lue but shared practices as 'copying' although these were shared practices in common. One is not here referring to shared practitioner knowledge as such but to the utilization of that knowledge in order to 'expose' less or more assymetrical relationships between, different, pedagogic subject departments. For example, employing a further illustration drawn from a social studies lesson, a class examining demographic statistics will acknowledge that, at least in a minimal sense, they are engaging in the pedagogic activity of 'doing mathematics'. Moreover, this recognition has certain consequences for those interpreting the 'meaning' of that lesson. Pupils may comment 'We don't do percentages that way' (by implication 'that way' being the 'wrong way') in our mathematics lesson.' Similarly, the teacher, finally despairing of ever 'getting percentages across' may seek out the mathematics teacher to request that the pupil's shortcoming in this respect be remedied. In both these cases it is the school category 'mathematics' that is seen as legitimating that activity occurring within a 'social studies' lesson: in some
way the corpus of mathematical knowledge is owned by an identifiable (pedagogic) collectivity. As Sharrock (1974) has noted the notion of knowledge being 'owned' is extremely suggestive of further conceptual corollaries such as 'rights', 'obligations', 'possession', 'borrowing', 'theft', etcetera and several of these dimensions have been elaborated in the course of this thesis. It will be remembered that Lue practices, although shared-in-common with non-Lue, were perceived by the Lue as knowledge that was 'owned' — the non-Lue practice was merely seen as 'copied'. Of particular interest for the present purposes is that such a notion acknowledges a certain discreteness between the perceived status of knowledge and the various descriptive categories of social action of which it is a part. You may borrow or steal my car but that does not alter my ownership of that object. Sharrock's example is of course an analogy and obviously does not raise the question of the extent to which ownership may be legitimated. The action of ascribing ownership of a named corpus of knowledge to particular (and segmented) pedagogic collectivity immediately renders as problematic:

"... how persons come to describe the world in ways that they do as a result of the fact that the name of a corpus of knowledge may routinely be seen by members as indicating ownership of the corpus by a particular collectivity."
(Op. cit. p.50)

What the question draws attention to is that 'social interest' component of (ideological) various divisions of school knowledge.

"The treatment of corpus names as recognizing a relationship of ownership between collectivity and corpus provides ..."
... a method of interpreting the activities of persons in the society, both those who are collectively members and those who are not. It provides us with a method of assessing the bona fides of actions and thus of managing the distinction between appearances realities that is fundamental both to the conduct of everyday life and the accomplishment of sociological work. The examination of activities to see if they are perceived and premised as a corpus of knowledge owned by a collectivity in which the actor does not have membership equips us to find that his activities are imitations, impersonations, representations and the like, that he is not acting on his own behalf but trying to appear like others or to express their ideas and interests. ...

The treatment of corpus names as expressing an ownership relation also enables us to find in the activities of members ... ways to make the relationship of one collectivity to another observable. Thus, the identification of the knowledge of the witchdoctor Bögwözu as 'Baka medicine' provides us with a particular way to see his activities: they do not represent an innovation within Azande society but, instead, represent the occurrence of cultural contact and of cultural borrowing by the Azande from another society." (Sharrock, 1974 p.52)

Thus, the difficulty of knowing what particular pedagogic subject activity may 'legitimately' be included within the category 'school mathematics' is therefore concomitant with that process by which 'knowledge' potentially becomes alienated from the act of knowing. By implication, such an analysis would result in the proposition that the already weak classification between pedagogic contents
will become increasingly problematic as various subject practitioners lay claim to knowledge contents in which the claim is legitimated by an appeal to the 'reality' of the meaning-bearing activity.

Such a contention may become clearer within the context of the following brief illustration of the way in which the differential ownership of particular 'pedagogic facts emphasizes the problematic nature of both contents and their classification. (It is anticipated that the resultant problematizing of the codified structure would lead to an awareness of that situation's potentiality as a basis for a later 'conscientization' of school knowledge). Allan Rogerson, a research director of the School Mathematics Project, for example, explicitly writes within the context of:

"... an increasing concern ... at the lack of basis mathematical skills in school-leavers ... and the following articles consider and discuss how mathematical concepts and their practical application may best be presented to children."

(Op. cit. p. 60 My emphasis)

Rogerson introduces his article with the statement that treating children as individuals 'does not mean giving them what they want so much as giving them what they need' - a need that is later defined by the author as related to the type of work they will do and the kind of mathematics most relevant. The assumption is that modern technological society needs trained personnel in mathematics and that, furthermore, some knowledge of mathematics is necessary in order to merely 'survive' as a citizen in such an environment.

That mathematics is 'necessary' is taken for granted
thus reflecting a naturalistic view of consciousness in reinforcing the importance of children being taught what is good for them, and what is good for them is the continuation of the present social system 'about which we are all agreed'. This loosely defined consensus leads in turn to a central value system in which the social system exists over and above the individual participants.

However, even such an objectivist view of mathematical knowledge cannot be totally detached from the human subjectivity within which it is transformed and this is a difficulty well comprehended by its school practitioners (named with a sameness of names) who approach and state the 'problem' of knowledge possessing a social dimension in these terms:

"How does an awareness of this social context relate to teaching mathematics to the individual pupil? The attitude taken in many mathematics books towards hire purchase, where it is unfavourably compared to bank loans, is a typical example of lack of social awareness. The comparison with bank loans is socially irrelevant, since many of the people who use hire purchase do not have bank accounts and in many cases would be unable to obtain loans because they have neither security nor any inclination to save.

Hire purchase is widespread because it fits into a philosophy of the short term; you can walk into a shop and walk out with what you want. It also satisfies many people's desires to possess goods which only richer people can afford to buy outright. Millions of people use HP for these obvious advantages - which makes the finger-wagging that goes on in mathematics texts look unreal. The implication of this example . . . is that much more thought and open-mindedness must precede any attempt to find out the relevant social context for the children we teach."
This, in turn, raises a much larger question of what we want education to be for individual children. Do we want it to train them, prepare them for society, reflect home life, or provide more attractive alternatives? All these things are genuinely motivating to different children.

Perhaps the most important way in which we can improve mathematics for individual children is the style, format and form of materials we use in teaching."

(Op. cit. p.69)

(The emphasis of the last sentence will be noted as particularly relevant to the developing argument concerning the relationships between corpus and collectivity).

The connotations of such a passage not only underlines the way in which mathematics may be perceived as representative of the banking concept of education but also as representative of the proposition at present under examination. The initial framing of the rhetorical question that is being asked; followed by a conceptual analysis of the notion 'social context' - particularly for its revealed potential to comprehend the relationship between school knowledge and community knowledge; and finally the way in which the perceived attribution of named pedagogic subject knowledge to various subject departments; all serve to explicate the nature of the subject practitioner's real consciousness of the world.

The pedagogic rhetoric 'How does an awareness of social context relate to teaching mathematics?' is of particular interest for its notion of 'relevance' together with the previously mentioned tendency for participants in cultural action to derive their model of manhood from the prescriptive consciousness of what is. Whatever the contradictions made explicit by a reading of the surface structure they remain unresolved because of a lack of understanding concerning the underlying deep
structure. It is this failure to comprehend the dialectic between the categories of codification in the surface structure that allows the conclusion: 'perhaps the most important way in which we can improve mathematics for individual children is the style, format and form of materials we use in teaching.' Although this thesis is only marginally concerned to make a sociological analysis of the term 'relevance' when applied to various packages of school knowledge there is no doubt but that the notion possesses attraction for subject practitioners. Nonetheless, the term has some similarity with the previously discussed perspective of the observing participant and therefore necessitating the further question 'relevant to what?' The answer 'relevant to the way one experiences the world' says nothing and yet says all for there is no difference and yet all the difference between the questions 'How does an awareness of social context relate to teaching mathematics?' And the question 'How does teaching mathematics relate to the social context?'

The proposition that school knowledge may be understood as socially organised into more or less discrete packages of various knowledge contents is only infrequently perceived as problematic by the pedagogic subject practitioner, for whom such contents constitute their life world. It is from within the interpretative paradigm of this social world - aided by the spatial and pedagogic rhetorics outlined in this thesis - that the thinking-as-usual activity of the pedagogue renders the issue non-problematic. The question is typically re-constructed to have the 'meaning of' justify the teaching of this or that pedagogic subject in which both the meaning and the answer will depend upon who is asking the question.
To this extent the social category school knowledge implies a finite corpus of 'appropriate' knowledge and therefore acts as a coercive agent in the exercise of constraint upon everyday teacher, and pupil, behaviours. In this sense at least school knowledge may be said to have an 'out there' existence. However, an alternative exposition of the nature of school knowledge is in danger of failing to consider the social context of such ideology in suggesting a view of the curriculum as being merely one particular (parametric) representation of the various possible outcomes resulting from the everyday activity of teaching. Man the actor is thus portrayed as consciously participating in the transcendant action of purposeful confrontation with the particular reality represented by the category 'school knowledge'. Although the consequential, and differential, availability of the various contingencies of action does indeed derive from action the phenomenon itself is problematic. It must be remembered that man the actor also speaks from within an (ideological) interpretational paradigm. The sociological endeavour to explicate the nature of particular categories of the various knowledge contents therefore faces an immediate difficulty arising from the essential ambiguity (for example) of the activity 'doing mathematics'. Whilst the notion of 'doing mathematics' may be descriptive of a particular activity (that will be more or less recognizable by mathematicians and onlookers as being, in fact, mathematics) it may refer, additionally, in an ideological way to one's participation - in some way or another - in the activity of that epistemec community. In the latter case other members of the community, and indeed interested outsiders, will view the activity through the interpretational
culture within which they exist, live, and have their being.
Whereas one should be fully cognisant of a certain discreteness between those curriculum categories employed in the social construction of school knowledge, and various attempts to relate, for example, typologies of knowledge to those practical activities that may emerge from it, this very discreteness does provide a particular insight. One of the propositions being argued is that knowledge may only be existentially appropriated - and thus have 'meaning' for the individual - within a social context. Such a proposal reflects a similar stance to that adopted by Freire (1972) in noting that:

"To deny the importance of subjectivity in the process of transforming the world and history is naive and simplistic. It is to admit the impossible: a world without men. This objectivist view is as ingenious as that of subjectivism which postulates men without a world. World and men do not exist apart from each other." (Op. cit. p.27)

By implication the social category 'school curriculum' may therefore be apprehended as having existence only as a representation of the various outcomes resulting from the everyday activity of teaching. As has already been proposed, meanings for the individual actor will themselves derive from the particular realities of the pedagogic life world existentially appropriated from those various packages of defined and named knowledge contents. (The precise 'name' is therefore unimportant since the concern is rather with an analysis of the process). To this extent the social category 'teacher' is to be understood as only capable of being fully comprehended within the totality of 'out there' knowledge.
What is sought on the part of the reader is a consciousness that the process by which knowledge as knowledge comes to be 'out there' is a process independent of the contents or forms of that knowledge. Again, it is the fact of this discreteness that enables the writer to contend that legitimate sociological work addressing the question of 'what shall count' as school knowledge may be perceived as occupying a position of marginality in the present argument. That is, there is no necessity of connection between the two. For the present purposes it will be of no consequence whatever alternative organisation of knowledge is being proposed since whatever counts will possess the potentiality of becoming merely another package of contents and therefore subject to the same positivistic processes.

Changing Knowledge.

In questioning the problematic nature of what shall count as valid school knowledge it has become apparent that the particular perspectives involved in the notion of pedagogic subjects have originated in a negotiated set of shared meanings that have themselves given rise to taken for granted assumptions concerning those subjects. Whilst such shared meanings may (although this is a perspective with limitations) be a result of those negotiated processes of classroom interaction between teacher and pupil the immediate concern is to examine the manner in which socially constructed pedagogic categories form an interpretational paradigm able to sustain particular definitions of reality together with the related question of the extent to which categories
are able to impose these definitions upon others having an interest within the context of that particular negotiating arena.

The theoretical formulation that most nearly approximates to this perspective is that provided by Berger and Kellner (1971) concerning marriage as being a nomos-building, instrumental, activity. Both for the marriage partner and the pedagogic practitioner the social ordering of the universe provides an appropriate interpretative framework through which the world is experienced as 'making sense' of the activities in which they are respectively engaged; the only world of which its inhabitants can conceive.

"The socially constructed world must be continually mediated to and actualized by the individual, so that it can become and remain indeed his world as well. The individual is given by his society certain decisive cornerstones for his everyday experience and conduct. Most importantly, the individual is supplied with specific sets of typifications and criteria of relevance, predefined for him by the society and made available to him for the ordering of his everyday life. This ordering or . . . nomic apparatus is biographically cumulative. It begins to be formed in the individual from the earliest stages of socialization on, then keeps on being enlarged and modified by himself throughout his biography."

(Op. cit. p. 23)

What Berger and Kellner are here drawing attention to is the importance of a process of validation that requires an on-going interaction with others, co-inhabitants, in the world. Indeed, for the pedagogue, the subject department provides an identity reinforced by significant
others perhaps as equal in its significance as one's marriage partner. If it is correct that the plausibility and stability of the pedagogic subject world is dependent upon the strength and continuity of significant relationships then what has been proposed regarding the rhetorics of school knowledge bears an obvious relevance to the reinforcement of such perceptions.

When a subject department is engaged in the process of introducing 'new' knowledge, the interpretational paradigm afforded by that subject imputes meaning for others in which the various pedagogic subjects bring into play the entire, situationally located, experiences previously elaborated. It may be that some temporal, spatial or epistemetic contiguity is present that will prevent these other departments from 'knowing' about the new knowledge until some social incident makes public what was previously the private knowledge of that group. This discovery of unfamiliar knowledge within an otherwise typically familiar and anticipated context can occur because sets of expectations held by the subject departments are typically confined to the activities of one's own subject persona. As a mathematics teacher one may talk to other mathematics teachers about other subject departments but will not, in the same degree, talk to other teachers about the mathematics department: nor indeed with other teachers about that teachers department without some threatened crises of identity.

As with the observing participant activity there will be other knowledge that the actor does not know he does not know - and is therefore incapable of evaluating. Therefore the notion of 'familiarity' is particularly salient within the context of the social posturing adopted with reference to the appearance of new knowledge. This knowledge:
"... has its subjective meaning - which refers on the one hand to the habits of the subject in recognising, identifying, and choosing actual experiences under the types at hand in his actual stock of knowledge. These habits in turn are not only the outcome of the object's personal history, the sedimentation of which they are, but also a function of his actual circumstances, the situational setting within which these habits have been formed ... On the other hand, the subjective meaning of familiarity refers to, so to speak, the demarcation line which the subject draws attention to between that segment of the world which needs and that which does not need further investigation."

(Schutz, 1970. Page 27)

It has been suggested that discrepant definitions of reality are 'kept going' through the notion of a symbolic universe in which the pedagogic divisions of knowledge form specific structures plausible only in particular social circumstances. Social change will involve changing these plausibility structures and the question becomes one of what processes are intrinsic to particular pedagogic productions? Berger (1973) makes a useful distinction between the 'what' (the social organisation of knowledge) and the 'how' (the cognitive style of knowledge practitioners) that allows one to differentiate between the various bodies of knowledge and the 'habits' of thinking that pertain to them. For the pedagogue as for the technocrat the everyday knowledge of the worker has a social location in which:

"... the worker's specific knowledge derives its location and significance from this larger body of knowledge, although the latter is not available to the worker in his immediate situation."

(Op. cit. p.30)
Berger also makes the point that the worker believes such knowledge to be potentially available thus enabling the proposal that such beliefs may be more or less discrepant with the 'reality'. In the case of the technological worker the work of the individual is related to the work of many others regardless of whether these others are physically present in the work situation or not. Both participation and production can therefore take place in a segmental mode along the lines that have previously been suggested. It is this distancing between the socially located specific knowledge of the worker and some larger body of knowledge that, in the case of teaching, enables more or less discrepant forms of that knowledge to become established in particular institutional locales. The meaning of a pedagogic identity as being (say) a teacher of geography in this particular school is therefore to be distinguished from a more general appeal to one's membership of an appropriate epistemie community. The ideology of the subject thus contains a subjective component in which meanings for the individual arise from the manner in which that individual defines himself as a consequence of the actual experiences of the self in particular social locations. Berger indeed suggests that, as a consequence of biography's being:

"... apprehended both as a migration through different social worlds and as the successive realization of a number of possible ideologies... the structures of each particular world are experienced as relatively unstable and unreliable... the modern industrial society's experience of a plurality of social worlds relativizes every one of them. Consequently the institutional order undergoes a certain loss of reality. The 'ascent of reality' consequently shifts from the objective order of institutions to the realm of subjectivity."

(Op. cit. p.74)
In their research into how traditional culture can affect the thinking of those persons being taught mathematical concepts for which there are no exact antecedents in that culture, Gay and Cole (1967) found that the Kpelle of Liberia were taught things for which there was no reference of meaning within their culture. Thus, they were unable to perform successfully (in comparison with American nationals) in sorting out coloured triangles although they did demonstrate a considerable expertise in estimating how many cups of rice were contained from some larger measure. The discreteness arose because the Kpelle possessed no framework for comprehending the relevance of one to the other, and a similar discreteness exists with school pupils in relation to school knowledge. They may thoroughly enjoy doing a new mathematics project such as S.M.I.L.E. (the Inner London Education Authority project Secondary Mathematics Individualised Learning Experiment) but do not always 'realise' that the activity was 'mathematics' and cannot relate what they learn in S.M.I.L.E. to mathematical problems.

In the case of a pedagogic subject department new, innovative, knowledge potentially constitutes a 'nomic rupture' (Berger and Kellner, 1971) in which, what is not apprehended is precisely:

"... the subjective side of these difficulties namely, the transformation of nomos and identity that has occurred and that continues to go on, so that all problems and relationships are experienced in a quite new way, that is, experienced within a new and ever-changing reality."

(Op. cit. p.20)

In order to bring out some of the processes involved in a pragmatic way it is intended to show what negotiated processes were involved in the introduction of 'new' definitions of subjects already well established in the
curriculum of a particular school. In this the perspective of a school mathematics department as filtered through the view of an observing participant will provide the main emphasis. Having regard to the previously established view of the pedagogic subject as a form of life (Phillips, 1973) one might legitimately question what social negotiations are involved: the business studies department has already provided one focus in this respect and it is now proposed to examine the introduction of S.M.I.L.E. within a more explicit framework. What is suggested is that the subject 'mathematics' provides the contextual clue from which the meaning of particular phenomena are derived: it is a symbolic form of life through which knowledge is given existence and which will be considered as less or more negotiable. The co-existence of different, and often discrepant, social worlds based upon existing institutional divisions of school knowledge not only underpins the 'life-plan' (Berger et. al. 1973) of the individual as a primary source of the pedagogic subject identity but may also comprise a side bet (Becker, 1967) initiating that individual into previously unknown orders of meaning. In the view of Berger the experience of a plurality of social worlds precedes the ideological frameworks serving to legitimate them. The writer now proposes a specific and pedagogic application of the 'fantastic consequences' of these specific, on-the-job, actions that Berger relates to the actor's technological work knowledge that he:

"...carries over to other sectors of the individual's life. Various hobbies, particularly those of the do-it-yourself variety, express the same features of cognitive style in the private life of the individual, but a problem-solving and deeply technological attitude may also carry over into the manner in which
the individual looks at politics, the education of his children or the management of whatever psychological difficulties he may be afflicted with. .. what is carried over .. is not a specific item of knowledge but rather the general cognitive style that pertains to this type of knowledge."
(Op. cit. p.35)

However, Berger does fail to explicate the direction of this 'carry over'. For example, why does he suggest it is from work and not (say) to work? It may well be that there is some third or other connection between the two events. This line of argument does not negate the proposition that the pedagogic practitioner approaches whatever knowledge is available in the school in a like manner. His subject identity will be the base from which other actions flow. The degree of segmentation will now be more, now be less, according to the biography of the individuals and the various constraints imposed by the parameters of that particular life world. The interpretational paradigm potentially afforded by the pedagogic subject arises from a set of shared meanings themselves related to particular, and socially constructed, categories of school knowledge. It is in this context that the 'thinking as usual' activities of the subject practitioner may perceived not only (to recapitulate) as forming a perspective in the sense this term is employed by Becker (1961), that is,

"... to refer to a co-ordinated set of ideas and actions a person uses in dealing with some problematic situation, to refer to a person's ordinary way of feeling about and acting in such a situation. These thoughts and actions are co-ordinated in the sense that the actions flow reasonably,
from the actor's point of view, from the ideas contained in the perspective." (Op. cit. p. 34f.)

But also that; continuing the argument, the knowledge upon which this perspective is based will be socially derived and inevitably located in the persona of the particular subject identity. As Schutz (1970) noted in a somewhat similar context:

"... only a very small part of my stock of knowledge at hand originates in my own personal experience of things. By far the greater part is socially derived, originating in the experiences of others, communicated to me by others, or handed down to me ... All of this knowledge derived from others, believed by me in various degrees of plausibility, becomes my own habitual possession of things known." (Op. cit. p.84).

How to act in given situations is therefore an interpretative (and interpreted within the interpretational paradigm afforded by the subject identity) decision in which those groups of teachers involved in the teaching of particular school subjects, and portrayed as encountering specific sets of situational problems peculiar to that subject, may similarly come to hold modes of thought and action that are the natural and legitimate ones to use in such situations. The 'naming' of particular packages of knowledge as constituting 'mathematical' or whatever facts, being drawn from an infinite universe is no more and no less than a consequence of the selective interpretation from within an individual's subjectively appropriated epistemic paradigm which is left as also part of a wider reality.
This subjective component of the 'what counts' reality extends to areas such as mathematics that are often thought to be highly objective as Bruyn (1966) comments within the context of scientific knowledge.

"Man is always in a special symbolic relationship to the world he studies. This special symbolism of science in general represents only a partial perspective of the total world symbolically understood by man. But, then, each scientist has his own niche in that scientific world, his own professional life-worlds in which a special slice of that total world is cut out. The physicist may see all things as atomic, the biologist may see all living things as molecular or cellular, depending upon his speciality, the social scientist may see all human relationships as social in nature. The poet or the theologian, on the other hand, may see the whole world primarily in personal terms, that is, terms which have some deep feeling associated with them. If we search for that which is universal to man, we cannot say that the special symbols of the atomic scientist are more universal than the personalness that pervades the symbols of the poet or the theologian. In fact, all men see major portions of their world (if not all of their world) in personal terms."

Berger and Kellner (1971) focus on the dialectical relationship in which the actor, in collusion with his co-partners in the (pedagogic) world, continuously redefines the meaning of the new reality for him thereby strengthening new definitions of themselves and the world, and avoiding those interactions that weaken this definition. All that has been made explicit in this thesis points up the pedagogic subject department as a critical definer of, the essentially precarious, reality in these respects. The suggestion that the pedagogic subject department may provide a basis for the development of a segmental
12. Cleverdon, C.W. (Undated)
The effect of variations in relevance assessments in five experimental tests of index languages.
Cranfield Library Report No. 3.
Cranfield Institute of Technology.
subculture, if not that of a segmented profession, has been discussed elsewhere in this thesis. The present concern is rather with the manner in which this social grouping provides a perspective, the reality, within which all new experiences are interpreted. Young (1971) has already been utilized as suggesting some differential acceptance of the meaning 'for them' of subject labels associated with the different interpretational paradigms of (in this case science teachers vis-a-vis those in the humanities) and Cleverdon supports this view with his observation based on indexing language that scientists, as a group, accept taxonomies and typologies of the subject matter they study in a way that, for example, sociologists do not.

Thus, although each individual has their own biographic experiences the pedagogic subject department has been argued to be a core identification, a social activity through which the meanings of events are interpreted and filtered. The beginning teacher may accept the situational definitions of a subject for reasons of expediency yet this process potentially becomes something of a side-bet (Becker, 1960) since it is this same identity that identifies those proper activities that its holders might appropriately be engaged in. At the same time it sensitizes various perceptions of the variously cued meanings attached to events by those sharing the typicality of his experiences. Such perceptions:

"... structure the newcomer's recognition of his new situation, they will also be reflected in the way that he subsequently talks and acts in his new surroundings. Thus, when an individual learns to search
among the jumble of impressions which he receives from a crowded factory for the cues which indicate the location of his section . . . this modification of perception will affect his subsequent behaviour. He will feel 'at home' on this territory and will wander more freely within it than he will outside it. In a similar way, the individual will learn to name and recognise the tools and raw materials of his particular task. . . And, as the learning process continues, he will simultaneously start to acquire a set of attitudes towards the objects named."

(Turner, 1971. Page 36)

The relevance of this comment concerning the emergence of industrial sub-cultures to the processes involved in the emergence of pedagogic subject perspectives will be apparent.

Whilst there is sufficient similarity in the interpretational paradigm held by practitioners of particular categories of school knowledge, members of that specific pedagogic community jointly hold, for example, a number of perspectives that tend towards discreteness. It is this that gives their world its precarious nature even whilst massively objectified. The cognitive, social and physical world of that particular subject perspective enables a sufficient sense of the 'obvious' to enable these amalgams of perspectives to achieve a certain coherence and consistency: yet this will only be true to the extent that the thinking as usual activities of that group are able to integrate 'new knowledge' within the established interpretational paradigm of the approached group.

Such knowledge arises not only from the realities of everyday life but also from one's membership of particular epistemic communities and Phillips (1973) makes a useful distinction between the commonsense knowledge
of the former case and 'conventional wisdom'. This notion is employed to refer to meanings that are 'part of the taken for granted sources and contents' of whatever knowledge fills up that particular community of scholars. The very real difficulty concerns the extent to which this 'new knowledge' is interpreted only within the prevailing institutional and pedagogical culture of positivism for where there is no prevailing tendency to speculate about the grounds of knowledge, all knowledge tends to be comprehended in terms of the taken for granted epistemology of the natural attitude. Whilst one can perhaps make too much of this influence there is a need for Becker's (1968) recognition that the action takes place:

". . . under conditions set by the physical world and by the network of other forms of collective action in which it is embedded. Whatever the participants in the action may want to do, they are constrained to choose among those alternatives that the situation allows them." (Op. cit. p.5)

For example, Howson (1974) points out that mathematics has not always been an accepted, taken for granted, part of the pedagogic world.

"At the beginning of the nineteenth century the public and grammar schools - with the exception of a few schools such as the Mathematical School of Christ's Hospital and Sir Joseph Williamson's Mathematical School at Rochester - did not teach mathematics. Those who wished to learn the subject either attended one of the private schools which offered a modern curriculum of mathematics, navigation, surveying, book-keeping, geography, astronomy, etc., or they engaged a private tutor. Indeed, those old-established
grammar schools which wished to widen their curriculum were often not able to do so. Thus, for example, an attempt by the Governors (sic) of Leeds Grammar School to introduce mathematics and modern languages into the curriculum led to the case being taken in 1795 to the Court of Chancery.
(Op. cit. p.7)

At this time, then, mathematics was the new knowledge and was engaged in much the same activity as those similar departments whose activities have been elaborated during the course of this thesis. Howson goes on to ask:

"Why . . . should boys be expected to take mathematics and its teachers seriously when their schools and Headmasters clearly did not? The subject did not rank with the classics in that it was either optional or, if compulsory, was not considered when promotions were made. Its practitioners were left in no doubt but that they were very inferior beings."
(Op. cit. p.6)

In almost two hundred years only the names have changed! One further aspect of new knowledge is raised in the case of social studies by Whitty (1973). He propounds what he believes to be a characterization of an "official definition" of school sociology constructed so as to permit the teaching of only one sociological perspective. Although he acknowledges that no one approach has become institutionalised to the exclusion of all others he does suggest the probability that:

". . . there is a greater uniformity of provision in areas where . . . there is a Certificate of Secondary Education panel for Social Studies — and in areas like London and the south-east where
The Structure of Scientific Revolutions
University of Chicago Press.

(See also the subsequent revision of his thesis in Lakatos previously cited)
a considerable proportion of teachers in schools and colleges have connections with particular training institutions." (Op. cit. appears in a footnote to page 136)

It is the writer's contention that such a statement is specious and cannot be substantiated by any survey of school practice known to the writer. For example, the survey by Davies (1973) showed, by the detailed collection of data, that the many variants of the subject were far more closely related to the way in which the subject emerged in particular school structures. Within the context of this thesis it is 'interesting' to note that Whitty (1973) utilizes the views of teachers of English to support his argument!

It may be argued that, if members of a particular pedagogic community are to be sharing their views within the context of a more or less commonly held system of beliefs and attitudes with which they confront the activity of teaching, then the innovatory tendency of some group members claiming to possess a distinctive form of knowledge may not be wholly accepted by other pedagogues. The activities of the former are therefore typically confined to attempts to reconstruct the interpretative paradigm of particular subject groups.

The extent to which paradigms may exert some deterministic influence on what shall count as a fact, or what shall count as a mathematical activity, obviously involves many of the issues (for example, the attribution of pedagogic subject ownership of particular school knowledge) previously discussed. The particular relevance of Kuhn's13 notion of paradigmatic shifts is that the notions of segmentation, social movement, and biographic
experience do much to inform sociological explanations of paradigm shifts. This is particularly so in the light of the recognition that the concept in fact possesses two dimensions.

"On the one hand, it stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community. On the other, it denotes one sort of element in that constellation, the concrete puzzle-solutions which, employed as models or examples, can replace explicit rules as a basis for the solution of the remaining puzzles of normal science."
(Lakatos, page 73)

Whilst what constitutes a 'good' reason for choosing one paradigm rather than another may be a 'puzzle' - since both 'explanation' and 'fact' are paradigm-dependent - it does involve the notion of accreditation by members of the appropriate epistemic community. Moreover, particular paradigms are not necessarily mutually exclusive ways of seeing the world and providing the emergence of new knowledge is eventually adequately supported, scientific knowledge may potentially undergo a process of segmentation allowing a new naming of knowledge to take place. Examples here would be bio-science; astro-science, etcetera. The thrust of such an argument is that existing and new constructions of knowledge are predominantly incremental rather than annihiliistic in character. Young (1971) demonstrates the point admirably when arguing the conceptual utility of the problematic question 'what fills a subject up?' Using science as his exemplar he notes:

"The characteristic of all teaching of sciences at any level is that however strong subject loyalties and identification may be (and this is likely to be closely
associated with the level of teaching), those teaching do tend to share implicitly or explicitly norms and values which define what science is about, and thus chemistry, physics and biology are at one level 'integrated'. It is not surprising, therefore, that in an area of the curriculum not striking for its innovations, the sixth form, both biological and physical sciences are increasingly taught as fully-integrated courses.

An indication of the significance of the stratification dimension of knowledge is that the core base of the former is biochemistry and of the latter is mathematics; both high status knowledge fields among scientists. Evidence of the different situation that arises when attempts to integrate appear to reduce the status of knowledge is the failure of the general science movement after world war two. Whereas the physicist and biologist share a fairly explicit set of values through being scientists, it is doubtful if being in the 'humanities' has any common meaning for historians, geographers and those in English and foreign languages. In this case, any movement to 'integration' involves the construction of new values to replace subject identities."

(Op. cit. p.31ff.)

In postulating the existence of minority groups within a pedagogically pluralist society there is some affinity with similar insights deriving from various sociologies of deviance in which the new knowledge may be regarded as 'deviant' by the wider epistemic community. The practitioners of school knowledge per se may also consider certain knowledge in the same light, as indeed may the particular subject department. This view represents a perspective on deviance that focusses upon the differentiation of knowledge component in which meanings that are avail-
able, and upon which the subject practitioner may selectively draw, will be of some consequence for the 'naming' of this new knowledge. In the same way that the observing participant has meaning only insofar as his activities are seen as relevant to those of the approached group, so,

"Not only is it interpretatively relevant that part of our stock of knowledge at hand has 'something to do' with the thematic object now given to our interpretation; but, uno acto, certain particular moments of the object perceived obtain the character of major or minor interpretative schemes of relevance for the task of recognising and interpreting the actually experienced segment of the world." (Schutz, 1970. Page 37).

Since the social world is shared with a multiplicity of other subject identities all living and acting within it, the negotiating arena is full of different actors doing different knowledges — although these are constrained within the wider interpretative paradigm of the pedagogic subject.

As Erikson (1966) has noted within the context of a study of 'wayward puritans' social identity is inevitably linked with an awareness of the more or less clearly defined boundaries within which it is an appropriate identification. (The writer has already explicated some of the processes involved in transmitting these messages to the variously involved actors in the world). Erikson brings many of these emerging strands of thought together when he outlines:
The Social Reality of Religion  
Faber.
"... the networks of interaction which link these members together in regular social relations. And the interactions which do the most effective job of locating and publicising the group’s outer edges would seem to be those which take place between deviant persons on the one side and official agents of the community on the other. The deviant is a person whose activities have moved outside the margins of the group, and when the community calls him to account for that vagrancy it is making a statement about the nature and placement of its boundaries. It is declaring how much variability and diversity can be tolerated within the group before it begins to lose its distinctive shape, its unique identity... on the whole, members of a community inform one another about the placement of their boundaries by participating in the confrontations which occur when persons who venture out to the edges of the group are met by policing agents whose special business it is to guard the cultural integrity of the community."
(Op. cit. p.10ff)

The introduction of SMILE into the mathematics curriculum elaborates the potential richness of such an approach to the divisions of school knowledge. Berger has suggested that a key characteristic of all pluralistic situations,

"... is that the religious ex-monopolies can no longer take for granted the allegiance of their client populations."
(Op. cit. p.137)

One may transpose the notion of audience for that of client and result in an interesting proposition. Whilst other departments may be prepared to accept certain
definitions of what a particular subject 'is' (or at least to abide by previously negotiated sets of compromises in this connection) they may feel able to mount a challenge when subject departments attempt innovation even though this is, in one sense, 'none of their business'. Therefore when the new mathematics is introduced into a mathematics department it may have to take account of alternative explanations of the knowledge offered by pupils, parents, other members of staff, etcetera. Indeed, these interested others may well include other mathematics teachers.

The potential parameters of the debate are considerable for there is no logical bridge between phenomena and their theoretical principles or ways of seeing the world. For the mathematician as well as the scientist there is no agreed, mutually exclusive, procedure and:

"... intuition and idiosyncrasies play an important part in the work of the scientist as they do in the work of the artist."

The statement is quoted by Dalton (1959) in support of his own arguments in support of his position as a marginal researcher vis-à-vis scientific method.

The subject department is not an homogenous whole and while mathematics may be the 'core activity' moments of transition are likely to stressful in terms of subject identity in which an individual may appeal to other groupings external to the school in order to bring stability to this now precarious world. The suggestion that practitioners of particular pedagogic subjects may now be appropriately viewed as members of their relevant epistemic community can be linked with the earlier recognition that knowledge,
being socially constructed, possesses an objective existence only insofar, and in the sense of, its accreditation by members of a particular epistemic community. Berger (1973) provides a further link between notions of deviancy related to the sociology of knowledge when he examines the ways in which the old integrative symbols of a group gradually cease to function. His explanation of this phenomenon is that:

"Different sectors of social life now come to be governed by widely discrepant meanings and meaning systems . . . . increasingly, as pluralization develops, the individual is forced to take cognizance of others who do not believe what he believes and whose life is dominated by different, sometimes contradictory, meanings, values and beliefs."
(Op. cit. p.129)

Awareness that the socially constructed pedagogic subject culture is 'constructed' gives significance to the various modes by which these meanings are transmitted: it is precisely because the pedagogic subject department forms an epistemic and spatial boundary maintaining community that its inhabitants may share the experience of being a common kind of teacher. These members will therefore typically tend to confine themselves to a particular core of activities and to regard any conduct which drifts away from that, situationally defined, core as more or less appropriate to the purposes at hand. Boundaries of whatever kind are thus symbolic sets of parentheses limiting the activities appropriately taking place within the bounds of that department's knowledge. However,
"Boundaries are never a fixed property of any community. They are always shifting as the people of the group find new ways to define the outer limits of their universe, new ways to position themselves on the larger cultural map. Sometimes changes occur within the structure of the group which require its members to make a new survey of their territory—a change of leadership, a shift of modd. Sometimes changes occur in the surrounding environment, altering the background against which the people of the group have measured their own uniqueness. And always, new generations are moving in to take their turn guarding old institutions and need to be informed about the contours of the world they are inheriting. . . . boundaries remain a meaningful point of reference only so long as they are repeatedly tested by persons on the fringes of the group and repeatedly defended by persons chosen to represent the group's inner morality."

(Erikson, 1966. Page 12ff.)

An essential part of the 'understandings' available to adherents of SMILE mathematics is its 'rightness' in a mixed ability teaching situation thereby implying that previous mathematics teaching has been more or less successful in this respect. However, the extent to which SMILE classes are, in effect, mixed mixed ability must be open to question. During the writer's period of observation he discovered that classes were still 'banded' into two overlapping divisions in which the upper division were taught 'three SMILE lessons and two traditional mathematics lessons' whereas the lower band were taught all SMILE. The implication thus seems to be that the political context of the innovation is important and that, in this case, relevant criteria were selectively appropriated in order gain access to the financial support and greater kudos (among the hierarchy) that teaching SMILE mathematics brought. Even during
the initial introduction of the scheme in London schools this link was made explicit. It 'happened' because:

"... several heads of department had been anxious to run mixed ability schemes in their own schools."

This belief occurs at various points in the message system and remarks about constructing a SMILE dictionary are prefaced by the remark that:

"Being new to SMILE I couldn't believe that it would solve all my mixed-ability problems."

(Although the implication behind this teachers remark was clearly that it would solve a great many of them). The emergence of this new knowledge is therefore clearly and consciously linked to a 'shared problem' facing mathematics teachers.

It was not long before this epistemio differentiation was to be accompanied by an ideological differentiation and within a few weeks the writer, as observing participant, became aware of an emerging 'humour culture' in which jocular remarks were incorporated into the interpretational system of the department.

One such joke that was initially much appreciated by teachers of SMILE and that soon gained currency in the staffroom encounters concerned the teaching of 'networks'. This is a theme in which various diagrams offer a number of alternative ways of getting from one point ('a') to another ('b'): the art lay in discovering the number of paths. During lesson time a mathematics teacher sees a pupil crawling across the playground on all fours, hands and knees are dirty. When asked what he is doing
the pupil responds by showing a workcard asking how many ways he can get from one corner of the playground to the other and the pupil simultaneously states:

"So far I've walked across, hopped across, hand-standed across, and now I'm crawling across..."

In this case the medium is truly the message in which the body of shared mathematical beliefs and understandings were reinforced and mediated to other practitioners. What is on the surface a funny joke underlined the philosophy of SMILE and was variously explicitly linked to a mathematics is fun (Holt, 1965) ideology that had its origins in the principle that 'discovering things' is the essence of the new mathematics. Mathematics is an activity in which the mathematics teacher enquires what the pupil is doing and this could be contrasted with the activities of traditional teachers:

"If so and so had come across him he'd have gone straight in with all guns firing ... without waiting to find out what the explanation was."

The incident also illustrates the ways in which a complex division of school knowledge is negotiated between the various members in order that people may know, typically, what to expect from the various performances. In this case the message was in part that mathematics was spreading out of the classroom and that pupils might legitimately be found scattered around the school. Erikson (1966) provides an imaginative insight in this respect when he notes that, within socially constructed 'objective' realities, there exists:
"... a certain degree of diversity so that people can be deployed across a range of group space to survey its potential, measure its capacity, and, in the case of those we call deviants, patrol its boundaries." (Op. cit. p.19)

The procedures have much in common with those activities just described and those various ways in which clients were withdrawn from classes in order to 'do' another subject that was elaborated in the previous chapter. In fact an incident concerning this latter ploy reveals one further aspect of mathematics, the nomos builder. As part of the social studies course fifth year pupils were involved in a 'work experience' course requiring their absence from school for two complete weeks at two points in their fifth year. Although mathematics had agreed, probably reluctantly, this was not a popular withdrawal:

"It's not just that the pupils are out . . . we can't get on with any new work because if they miss the explanation they won't be able to make any progress."

The internal structure of mathematical knowledge is given an almost reified existence that is reflected in the teaching activity. The 'structure' of mathematics was a continuously transmitted message in which it was taken for granted that people accept:

"You can't just copy up the work like you can in most of the other subjects."

Remembering that the introduction of SMILE mathematics was originally conceived, or at least presented, in terms of its appropriateness for mixed ability teaching the
teacher's comment that follows is particularly interesting. He was describing the activities of a typical SMILE lesson and, in so doing, provided a useful account of the mechanisms used to provide a differential access to 'structured' learning situations:

"As the scheme is completely individualized, a child might be working, for example, at a level far ahead of his mathematical age on geometry but at a remedial level on computation. The cards are arbitrarily numbered so that a high numbered card could be for a remedial task. The children seem happy enough with this tailor made matrix."

Differentiation in similar modes has been noted by Keddie (1971) in connection with social studies lessons. Another teacher provided the following response in answer to a similar question about what happened in SMILE classrooms:

"At the beginning of each lesson they come in, pick up their folders, get their equipment, and just carry on where they left off the previous lesson. All I have to do is to sign off work they've completed otherwise I suggest things, question a few of them to make sure they understand. . . I'm more a sort of advisor rather than a teacher."

It is not long before pupils are initiated into the mystique of this way of doing mathematics one of whom commented that:

"Sometimes we get a task and it's really hard and you're stuck with it for hours. . . and you put your hand up for the teacher to help. When they come they give you bits of clues and things, they don't really tell you."
Indeed, 'not really telling you' was seen by teachers as an essential part of the learning activity. In describing what, for them, constituted the 'core professional activity' all mathematics teachers mentioned quite separately this 'not telling' dimension.

"I saw . . my main task in a SMILE lesson, perhaps session is a better word - lesson doesn't seem right somehow, as sorting out the really sticky mathematical problems."

". . . discussing their work and their results of the matrix tests, resolving misunderstandings, etcetera. . . You don't tell them what to do."

Once this ideological framework had been established, and approximately two years into the project, a change of tenor was noted in which greater emphasis was placed on 'missionising' activity. Written descriptions now included passages such as:

"Using textbooks and booklets will help but much more importantly the children need to be engaged in a whole range of activities throughout the year, even through the week . . .

. . . the sooner it is generally accepted that mathematics is a practical subject the better. We need to aim . . . for the sort of set-up offered to the average science department. The facilities we require for mathematics may be less sophisticated than some of those for science but they need to be available. Mathematics must be taught in a mathematics room designed and equipped to do just that.

(My emphasis)"
thematics department were interested in claiming this space as an additional mathematics room. The reason that was given was that:

"You can't carry SMILÉ cabinets around with you."

Again a socially constructed categorization becomes a legitimising agency in the competition for finite resources that includes the designation of teaching spaces as outlined in the proceeding chapter. The designation of such social and teaching space may well be seen as an essential part of the process of fostering and maintaining allegiance to the appropriate knowledge community insofar as spatially secluded groups possess a considerable advantage in maintaining and reinforcing a distinctive and tightly knit epistemic community. Moreover, the fact that mathematics had been 'awarded' the room bore certain messages both for members of that department and those who were unsuccessful in their bid that was not lost on the different practitioners.

The relativistic nature of the new mathematics in which the pupil is rarely in a position to be 'wrong' can lead to problematic encounters. Interestingly, during one discussion with the writer about how they marked such work one of the teacher's commented:

"There's a parallel here with English creative work... a mark given to a piece of such work is difficult to justify in any objective terms."

The remark is almost incredible within the context of a mathematics department and it would prove instructive to follow the project through to the stage when teachers
start negotiating for the acceptance of course work in external examinations. (The remark is also revealing of the way in which mathematics teachers perceive the activities of other pedagogic subjects).

Sharp and Green (1975) also describe the problems met by one headmaster concerning the new mathematics in his school. In this case the ambivalence between school and home resulted in many parents providing their children with 'sums' at home in a more or less explicit attempt to provide a compensatory (home) education to remedy the school environment.

If one might return to the subject of humour this can also be employed as an offensive weapon by other departments in establishing some sort of counter culture to that mediated by the offending subject area; the place of such humour in the general staffroom culture and the observing participant activity has already been discussed. It is significant, for example, that the following joke originated outside the mathematics department and is purported to be based on a true incident.

During the invigilation of an external mathematics examination one of the questions on the paper asked candidates 'to use Pythagoras' theorem to . . . (find out something or other). One of the candidates is then supposed to have said:

"I don't seem to have a Pythagorus' theorem . . . have you got one that I could borrow?"

Again this was a source of a great deal of amusement in the staffroom but the underlying criticism is that the candidate did not know what Pythagorus theorem was and that she 'ought' to have known.

The particular incident is reflected in fairly common accusations, particularly from non-mathematics teachers,
that pupils do not know what is meant by a percentage, etcetera, and 'ought' to stop wasting their time making shapes with cotton in their mathematics lessons and get on with 'proper' mathematics. (By 'proper' mathematics the reader is to understand the traditional mathematics that these teachers did when they were at school).

The use of the joking mode is discussed at some length in both Emmet (1966) and Turner (1971) and the latter is particularly illustrative of the ways in which the rather ambiguous meanings of joking relationships may represent wider social representations. Emmet's (1966) discussion of 'joking partners' derives from an anthropological paradigm and provides further insight into the 'meanings' of the previously related incident. He notes that joking partners:

"... are found to be people who are neither members of an immediate 'in-group' nor of quite separate groups. They occupy border-line positions such as the maternal uncle in a patrilineal family, and certain clans which pair with others as joking partners. The suggested explanation is that people in such borderline relations can indulge in joking behaviour without damage to authority within the group; and, as coming from persons not directly concerned in the problems of the group, the joking behaviour provides means of expressing playful aggression, and also, like satire, sometimes includes pointed moral rebukes among the banter."

(Op. cit. p.132)

Joking is thus portrayed as particularly prevalent among marginal social positions and is therefore reflective of precisely the reported phenomenon.

The writer's observations also lead him to suppose that, in the same way that the observing participant
15. The relevant pages in Douglas being 90-114
may only ask questions that are considered 'appropriate' to that knowledge held about him by the approached group, so too may subject-orientated 'jokes' only be made within the context of previously explicated social relationships. Douglas (1975) elaborates many of these issues in her own exposition of the social dimensions of joking that repays careful study by the reader interested in a more detailed study of the phenomenon that is required by the present argument. For example, she outlines the social dimensions of joking paying particular attention to the differences between insults and jokes, and the symbolic nature of such experiences.

The biographic experiences of teachers are of course an important element in the prevailing definitions of reality not only for what 'fills up' their own subjects but also those of other pedagogic practitioners. However, one of the consequences of this is that, because of increasing specialization, a particular school subject will be differentiately perceived by those for whom it is a life-world and those for whom it is not. The perceptions of the latter will be based on the contents they themselves were taught (usually a minimum of six years ago and frequently a considerably longer period) whereas the former have been more recently processed within a content 'they were taught to teach' paradigm of colleges and departments of education.

It then becomes interesting to ask what happens in (say) the case of sociology where the contents have not usually been 'taught' as a school subject to those now emerging as teachers of this subject? Whitty (1975), for example, whilst acknowledging that it is a peculiarity of social studies that:
"... the students who opt for it include many who have had no experience of the subject from a 'consumer' point of view during their own time as school pupils."

(Op. cit. p. 72)

nonetheless makes little attempt to assess the implications of this for his analysis. It may be, for example, precisely because their actual school experiences of the subject were necessarily limited (if they existed at all) that the activity of teaching social studies was seen as more or less problematic as their course evolved. Uncertainty as to what constituted acceptable classroom behaviours abounded as various students attempted to 'make sense' of the activity of teaching social studies which were viewed as qualitatively different from that of other subjects.

"... the problems around which discussion centred in social studies methods seminars were at variance with those members of other methods groups with whom social studies students came into contact during education seminars."

(Op. cit. p. 69)

Whitty also quotes the views of a chief examiner in sociology who commented that the content of the subject as taught in schools could be attributed to its institutional context. In particular it was specifically related to its emergence as legitimate school knowledge (here compare Bruyn's (1966) analysis of the sociological rhetoric with Phillip's (1973) on the relevance and warranting of knowledge).

Returning to the introduction of SMILE it was not long before the 'do-it-yourself' mode of teacher co-operation gave way to professional leadership supplied by the
local authority advisory staff and a mathematics inspector given special responsibility for the development of SMILE. At this stage it was possible to attend lectures on, for example, 'The Philosophy of SMILE' and other indications that the early spontaneity was beginning to give way to publicised meetings whose purpose was 'yet to be announced'.

The association of SMILE with a mixed ability teaching situation began to be re-interpreted in terms of the 'possibility' of Mode Three examinations: a possibility that was viewed with concern by some teachers and may provide the beginnings of some ideological divisions among the appropriate teachers.

The rapid growth in membership also brought the danger that 'deviant' sub-groups might spring up in schools and 'Splash' (the magazine specifically directed towards SMILE teachers) warned of the urgent need:

"... for communication ... between all the schools and teachers involved with SMILE. The success of the system depends on the enthusiastic participation of us as teachers, and so there is a need for an instrument by which we can all feel actively involved in the direction in which SMILE is moving."

(Splash Number 0001. Page 2)

If one may digress for a moment, the process of fostering and maintaining allegiance to some central body of belief is aided by the speaking of a different language to other social groupings and some of the implications of this for the pedagogic subject knowledge division has already been discussed. This would seem to be true of mathematics generally, and SMILE in particular. Thus, a common sentiment expressed by teachers when asked to 'cover' a mathematics lesson was:

"If a girl asks for help I can't even understand what the question is asking let alone trying to find out what the answer is."
There is here a pragmatic example of an argument endemic to this thesis: that is, the very real way that different subject departments have constructed for themselves life-worlds that are not only alien but frequently totally incomprehensible to the outsider (Berger, 1963). The mystique of mathematics is an essential part of the mathematical identity and is recognised as such by its practitioners. It was a cause of great hilarity to mathematics teachers when they were asked by a 'non-specialist' about an examination question in which the candidates were invited to write a story about rabbits **in mathematical language**. It is in a similar way that teachers of SMILE are also conscious of using a different language from that used by other teachers and pupils:

"A major obstacle in mathematics, particularly in our so-called modern maths, is the terminology."

and the speaker subsequently went on to describe how he had constructed a dictionary of mathematical words

"... that don't always have the same meaning as they do in common usage."

An idea that was enthusiastically taken up by many of his colleagues.

The incident is generally analogous to Pettigrew's computer programmers who were themselves aware of possessing a distinctive occupational identity that was sustained, in their case, by controlling the appropriate technology.

"Designing and programming a computer system was a mathematical problem which, of course, could only be handled by trained mathematicians."

(Op. cit. p.266)
Computer analysts, on the other hand, were perceived as constituting a different occupational identity and were (illegitimately) encroaching upon the programmer's knowledge. Such encroachments were rejected by the programmers since, although:

"Some individuals weren't too bad, the trouble was they knew nothing about computers."

The use of language to engender a feeling of 'separateness' extended to the numbering of the magazine 'Splash' when the casual reader would soon become aware of something strange. Whereas the 'normal' reader might expect consecutive issues to be numbered in sequence (by which the writer means, for example, 4 would be followed by 5, 5 by 6, and so on) this is not the case with Splash. Here, consecutive issues of the magazine were numbered 0100; 0101; 0110; and 0111. Not being aware that the issues were in fact consecutive, yet at the same time realising the numbering was odd, my request for the apparently missing copies was again taken as evidence of my inability 'to speak the language' like a native. My request to be inducted into the mysteries of the system went something like this:

Self: Well, how are they numbered then?
Other: Binary
Self: (Not knowing the significance of this incantation) What's binary?
Other: To base two.
Self: What's base two?

After which the writer became involved in a detailed technical explanation that even now he is not sure that he understands.
The incident provides a very simple example of the way in which the technical language of a subject can be used to differentiate those who share its knowledge from those who do not. Becker (1973) noted a similar phenomenon when jazz musicians 'placed' various approaching strangers along a continuum relating to the extent to which these latter both knew and could accurately appropriate, this language. (The same observations were made in connection with the socially located position of the observing participant in the first chapter). Each of these cases illustrates the need for, and use of, language as an appropriate referent for establishing new knowledge within the typifications of the approached groups relatively natural view of the world (Schutz, 1967).

Aspects of experience that are socially recognized as a form of classification through which events in the world may be endowed with meaning can thus be made available. Language within the task orientated, pedagogic structures, thus serves the dual purpose of allowing rapid communication about technical matters (but only to those who are also 'in the know') and also exerting some degree of control over that task. The more highly developed, and thereby potentially differentiated from that of other groups, the language of a group the less likely it is that other subject groupings will be able to communicate with them. Physics and mathematics may be similar, mathematics and English are not: the reader has already been advised of the socially located rhetorics that reinforce such alliances and separations.

The relevance of this perspective to the subject identity of the teacher is that the boundary of the subject provides the terrain within which other social relationships are established. Mathematics, or any other subject,
is therefore not only more or less isolated from the activities of other subject departments within that particular institutional locale, but is also relatively isolated from the activities of the more or less powerful external definers of realities represented by 'school mathematics'. Thus, although Cicourel (1973) is speaking of status relationship in a specific context what he says is directly relevant to the role related knowledge of the subject practitioner. Cicourel suggests that:

"... the more spontaneous or intimate the relationship, and hence the interaction, the less 'institutionalized' the behaviour of each. Thus strangers will respond to more impersonal or 'safe' definitions of the situation in interacting with one another. Close friends would be more likely to innovate before each other during social interaction, or they would be less constrained by 'third parties'. In order for individual actors to innovate as 'loners', they would presumably reject the social network of 'third parties' or the community. (Op. cit. p.13)

Mathematics is a relatively insulated subject with strong spatial and epistemic boundaries that both protects innovation within its domain and clearly marks any transgression, in either direction. This insularity is perceived by its practitioners: a mathematics lesson

"... isn't a discussion lesson where all you need is your brains ... like social studies and english."

Mathematical knowledge is proprietorial knowledge and provided its boundaries are respected the curricula presence of pedagogic others will be 'tolerated'. Many
of the above points are analogous to Berreman's previously cited work regarding tightly closed and highly stratified societies: both being characteristics of the pedagogic subject department in the secondary school. Berreman observed that, in such societies:

"... the difficulty of impression management is compounded. In a closed society the outsider may be prevented from viewing the activities of its members almost completely. The front region is small and admittance to any aspect of the performance is extremely difficult to obtain. Pronounced stratification makes for many teams, many performances, many back regions (one for each performance group as well as for each audience), and considerable anxiety lest one group be indiscreet in revealing the 'secrets' its members know of other groups."

(Op. cit. p.12)

One of the few areas in which mathematical activity comes in overt conflict with other departments is that of withdrawing pupils from normal lessons for remedial reading. However, mathematics is 'sacred' knowledge in this respect because of its previously mentioned structure in which pupil absence must be avoided. In this connection the observations of a SMILE teacher are pertinent. He is talking about an 'experiment in which certain pupils were withdrawn from the mathematics lesson because this was the only time when the remedial reading teacher was available. He is talking about this:

"Initially some pupils were withdrawn for special reading, but they complained about missing so much SMILE... (It must be the way we teach them!) ... Later on the reading teachers had to come into the lessons to help those with reading difficulties but relating the reading to the mathematics work cards..."
One must now raise the question of how these teachers present SMILE to significant others: what image do they see as important in transmitting the message? Interestingly, the problem of how to present SMILE to parents (a special open evening was held to explain the project, but only after it had been going for a year) and other interested parties was only then beginning to come to the fore as a consideration. At that stage there were no explanatory articles available for use as some sort of interpretational filter. In this respect the writer was particularly fortunate in being granted access to information that as, then, still at the preparatory stage of writing: the significance of this was the outline of 'what is considered to be important' about SMILE vis-à-vis other, non-mathematical, groups.

The initial introduction explicitly uses the term 'SMILE' to describe the project and it is only afterwards that the definition of what this stands for is provided. The centrality of this mnemonic symbolism is an important constituent of SMILE culture and serves to identify social, physical and mathematical properties in a very immediate way. The SMILE symbol - a circle enclosing other curves making up a mouth, eyes, and nose - is to be found on the cover of Splash magazine and other literature; enables identification; other teachers are known as 'fellow smilers'; and the writer is convinced that it will only be a matter of time before SMILE badges and 'T-shirts' will become available. The introduction then ends with the information that the project is now 'working in over sixty schools'. The selective appeal to other schools, rather than to an argument justifying the project in mathematical terms, is similar to other processes that were elaborated in the section dealing with the rhetorics of school knowledge.

Indeed, the similarity between this rhetoric, the Kpelle
(Gay and Cole, 1967) and innovation in school mathematics is apparent in that among the Kpelle a person won an argument by the similar ploy of showing the support of Kpelle tradition for the actions which everyone knows are his. The action itself was 'given': the actor was concerned merely to justify the action in the light of tradition, and in the same way SMILE, and much other pedagogic subject knowledge, is justified only after the event and then usually by recourse to its being a working project.

The stress on 'look at how many other schools are doing it' may well be an important aspect of curriculum development that could well be looked at in a more critical light than is possible in this context. The reasons for the innovation will not always be made available to other interested, potentially hostile, observers and this reference to other schools both extends the scope of the argument, removes it from the immediate context, and makes it extremely unlikely that other departments will be able to mount any offensive should they so desire. This selective presentation from among the multiplicity of meanings that are potentially available has been commented on before and merely here represents a social application of an individual phenomenon noted in the writing of Schutz (1970). That is, that in any particular life-world within which the actor lives, he lives:

"... simultaneously in various processes of reality or meaning... we put into play various levels of our personality - and this indicates a hidden reference to the schizophrenic ego hypothesis." (Op. cit. p.11)

Innovations such as 'Muffled Science' where participation
can be seen in some wider context are thus more likely to be acceptable to whoever makes the curriculum decisions in a school whether or not the actual form in practice has any likeness to the practice found in this wider context. The subjective biographical and institutional reasons for the innovation may only be revealed to 'strangers' at a later stage (if at all) and it is significant that secrecy is a basic ingredient of Kpelle society. In this connection an attempt to introduce new knowledge into the curriculum was met by the question:

"When you say this is a new course, do you mean like Nuffield science?"

Returning to the proposed explanation of SMILE, the main substance of the explanation centred around the fact that:

"A SMILE classroom is informal with the child having the responsibility for finding his or her own workcard and materials for the task."

SMILE classrooms are to be distinguished from other classrooms and since socially constructed space provides both its own spatial symbolism and the context within which the presence of other social objects are to be understood it is pertinent to describe a typical SMILE classroom.

A favourite spatial object, replacing the textbook of the staff-room as a territorial indicative, is a surround of paper plates with various coloured cottons threaded through holes to form different patterns. The designs are similar to Escher drawings and the emphasis is upon the activity, the practical nature of the new mathematics and SMILE classrooms should, above all, 'be
designed and equipped to do just that. Although one would not wish to make too much of the point it is interesting that the consistent use of the term child occurs throughout the draft. There are a number of alternative models that are available to teachers in describing those sitting before him: 'pupil', 'student', 'child', 'learner', 'scholar', would all be similarly appropriate. The particular usage of child may be significant in that, in using particular labels, teachers are making differential statements regarding their perceptions of particular definitions of the world. (It also has implications that the person so designated is seen within a framework wider than that provided by the school: for example, compare with pupil, learner, student, all of which address only 'partial' elements of the persona). In this instance the use of 'child' is especially suggestive in the light of the previous suggestion that the maintenance of a distinctive epistemic community will be aided by a high degree of control over at least the early part of the socialization process of the child. (See, for example Wilson, Patterns of Sectarianism, p.12ff.).

Platt (1969) relates such a perspective to the previously utilized notions of deviancy when he proposes an imagery of schooling in which the pupil is an aspirant label conferred upon actors in particular social situations where the concept of that persona is of something less than a complete human being. Platt goes on to illustrate the; applying his perspective to the school, 'child saving' aspects of the school curriculum in which one may portray the 'disinterested' teachers as an identity for whom school knowledge functions along the lines of a rescue service for those less fortunately placed in the social order. In this sense the pedagogic
subject takes on something in the nature of a 'moral crusade' by forming an interpretation paradigm within which deviant behaviour can be recognised and 'named'. The notion of childhood is, of course, replete with implications of some other requiring to be initiated or inducted into a specific, ideological, way of behaving.

Continuing with the introduction to SMILE the next point to be emphasized was that:

"... the teacher's role is that of tutor. The teacher is relieved of the general routine classroom organisation and is able to give much more time to the individual children's needs."

Structure has already been shown as an important mathematical concept and this was connected with the teacher's role not only in the sense of the subject's own self-validating procedures but also in the part played by mathematics in developing a logical mind. (Bloor (1973) points out that mathematics and logic are seen as being a body of truths which exist in their own right independently of whether anyone knows about them or believes in them). Structure also plays an important part in maintaining the boundaries of mathematics the pedagogic subject and such a situation is analogous to Gay and Cole's (1967) study of the Kpelle tribe in Liberia. For the Kpelle knowledge was the ability to demonstrate one's mastery of the way of life, and truth was the conformity of one's actions to such knowledge. Both notions were contextual and relativistic to the Kpelle and the
consequences of such an understanding was that:

"The absence of ultimate standards . . . is evident in Kpelle man's willingness to recognize another man's way of life in his own land. The Chinese can grow up to ten times as much rice as the Kpelle under comparable conditions — but the Chinese way is not the Kpelle way. The Vai do not eat monkeys and Kpelle do. Americans boil their water and the Kpelle do not. The Kpelle man seems unconcerned about the contradiction because to him there seems to be no contradiction. Each tribe has its own ways, and the fact they differ is not at all surprising. This compleatant tolerance might be one of the principal reasons why the Kpelle do not feel challenged to accept the proposals for change made by outsiders. These children who go to school and acquire a new set of values and ideas are simply regarded as tribal emigrants. They have joined a new tribe by their own choice. What they do now and think is, therefore, quite naturally different from what their parents do and think. They are no longer Kpelle, and they certainly have nothing to tell their parents."

(Op. cit. p.89)

If one substitutes mathematics the pedagogic subject for the Kpelle then the subject's structure, the development of a logical mind, are part of the mathematical way of life; the existence of different, perhaps competing, definitions of the mathematical activity is truly an irrelevance for they represent a new way of life, a different tribe. It is therefore particularly interesting that Bloor (1973) goes on to develop this suggestion by proposing that:

"To think of mathematical knowledge as having an independent existence is to think of them as structured and bounded
territory, with an inside and an outside. This suggests that knowledge consists in gaining access or entry to this realm, of crossing a boundary from the outside to the inside."
(Op. cit. p.177)

and the pistemic, spatial and pedagogic rhetorics outlined in this thesis merely reinforce such a view of the world.

Summary.

In terms of the various typologies of knowledge, such as that suggested by Gurvitch (1971), the rationale behind the activity of 'doing mathematics' is therefore firmly based upon an appeal to be categorized as scientific knowledge. As such the appeal is to a disinterestedness truth: two times two is four wherever you go. The assertive assumptions underlying this statement fail to consider the socially constructed nature of mathematical knowledge:

"... if it had been a thing contrary to any man's right of dominion ... that the three angles of a triangle should be equal to the two angles of a square; that doctrine should not have been, if not disputed ... suppressed."
(O'Neill. Sociology as a skin trade)

The potentially politicising nature of the mathematical activity receives relatively little recognition and, in this respect, mathematics stands as representative of the banking concept of education. Mathematical knowledge, existing outside of man's consciousness, is deposited within until its reproduction is required
in further exercises purporting to test the understanding. The particular knowledge contents have 'structure' only in that the mathematical activity provides the base for further mathematical activities: the realization of the potentiality of the contents may be obliquely comprehended by the practitioner but it will only rarely be acknowledged. Nonetheless, a re-construction of the mathematical activity - even as mathematical activity - does offer a potentiality to become. Consideration of knowledge as a process of inquiry leads to an appraisal of school knowledge from a problem-posing perspective. A view that is capable of being sustained within a paradigmatic educational project and that would be accepted by its pedagogic practitioners (Freire, 1972). For example, mathematical knowledge is portrayed in this light by its practitioners when the activity of problem-posing is considered not merely as 'fun' but also the means through which reality may be purposively confronted. It is one means through which the approached group may develop the power to perceive critically the way they exist in the world with which and in which they find themselves. Given that the meaning of an action derives its perceived significance from the social context within which it occurs, then an understanding of the relationship between the organization and transmission of school knowledge now becomes a central issue. It is precisely to this question that Bernstein (1971) directed attention with his thesis that particular codifications of school knowledge result from the differential interaction of his three message systems that have been previously elaborated. Although the paradigmatic nature of systematic education may, perhaps, only be changed by the exercise of political power an analysis of the processual aspects of the interaction may provide a theoretical basis for the
subsumptive conscientization of both school knowledge as a socially constructed category, and pedagogic subject practitioners. Bernstein suggested that the relationship between particular packages of knowledge, the curriculum contents, may be usefully comprehended in terms of the principle by which the boundaries are maintained (or not, as the case may be). Classification, the nature of content differentiation, focuses upon boundary strength as the critical distinguishing feature of the pedagogic division of labour of school knowledge. Thus, for Bernstein, the crucial question being addressed is the extent to which the various contents are well insulated from each other. This thesis should go some way to elaborating the various processes that may be involved. If the contents are well insulated from each other then one may say that the contents stand in a closed relationship; if the converse is the case then the contents stand in an open relationship. Although Bernstein explains that the notion of classification, that is 'content differentiation', is a necessary conceptual distinction serving to differentiate the how from the what there is nonetheless room for considerable ambiguity in this usage. The implication seems to be that, for example, mathematics as mathematics may stand in a totally insulated relationship from (say) social studies as social studies. The boundary between the two is clearly defined and well maintained: the contents therefore stand in a closed relationship. However, one must question the validity of such a restricted view in which self-legitimating labels are used to categorize contents – themselves having a reified existence per se that, in 'reality', may prove untenable. In other words, there is a sense
in which mathematics 'becomes' mathematics precisely because it is taught by recognised practitioners of that particular pedagogic subject, and takes place in particular and socially designated spaces, and at designated times.

A teacher carries his subject identity around with him; a teacher of history entering a room with a cover for a geography lesson may be greeted with the question: 'Have we got history now then?' Even members of a 'team' teaching together may still be asked what (say) the geographical dimension of a particular theme might be. 'Frame' - referring to the degree of control exercised over the selection, organisation, and pacing of school knowledge - is similarly more complex than the theoretical formulation of Bernstein might suggest. The degree of content insularity is therefore never total, is always precarious, and this awareness may lead to a realization of the situation having some inherent potential as a framework for the process of conscientization: particularly in its more negotiable aspects where pedagogic subject practitioners are already partially aware of the inadequacy of labelling packages of knowledge according to some criteria relating to their supposed contents.

For example, many activities will be included within the pedagogic category 'mathematics' (the measurement of spatial objects, adding, subtracting, percentages, noting the time taken to get to school, crawling across the playground on one's hands and knees) yet a purely nutritionist view of knowledge will not necessarily be able to 'make sense' of all these activities. Moreover, if knowledge indeed derives its meaning from the social world within which it is apprehended by the individual actor then the existence of highly differentiated contents can serve only to further alienate knowledge from the
Forum. No. 16
act of knowing: this would lead to the increasing recognition of the fact of 'overlapping contents'. There is some similarity between the growing recognition of a given dimension of that reality lived by the individual actor, and the process of codification posited by writers such as Freire (1972). The existence of differentiated packages of knowledge forms a significant aspect of the lived reality of the approached group. Such a reality will be made up of those nuclei of principal and secondary contradictions within which the inhabitants of that life-world live, breath, and have their being. To this extent the propositions advanced in this thesis would be the necessary first stage of de-codification involving a descriptive and interpretative analysis of the relationships between the pedagogic subject categories. Attempts at the humanization of school knowledge would need to take into account the individualistic perspective of the pedagogic subject in which the re-construction of knowledge is subject to those limitations engendered by an adherence to the old pedagogic structures and loyalties. Man's thought can be expected to be conditioned by the concrete, existential situation within which pedagogic identity is shaped. Because of the various rhetorics of knowledge existing innovation, potential reconstructions of school knowledge, even the most radical of ideas, all possess this potentiality to become just another rhetorical (ideological) framework for action.

David Hawkins poses the problem in a succinct passage stating:

"It is not only the procedures of teaching which needs attention, but the very nature of teachers' own involvement with subject matter . . . .

A teacher must learn to resonate with the naive perceptions and thought processes of those he teaches, to map into his own domain
of subject-matter comprehension. To do this he must have a wide, fluent and reflective grasp of that very subject matter. Nonetheless . . . as many kinds of subject are now organised it is not obviously nor easily possible to transform the teaching of them to a more self directed and informal style of work in schools."

Such a statement carries implications that lead directly to a consideration of the relationship between socially constructed categories of school knowledge, and that knowledge available within the wider community. Whilst the possible resolution of such a contradiction may, at least on a theoretical level, centre on the strength or weakness of the classification between the two, a reading of the underlaying deep structure leads to a questioning of the assumption discussed by Young (1973):

". . . of any superiority of educational or 'academic' knowledge over the everyday commonsense knowledge available to people as being in the world. There is no doubt that teachers' practices . . . are predicated on just the assumption of the superiority of academic knowledge that is being called into question."

In this context it is interesting that Vulliamy (1973) although calling for the re-construction of school knowledge continues to speak of 'doing sociology' together.

The narrative character of much mathematical knowledge separated from the existential experience of the learner, may nevertheless be perceived as 'useful' not only by those most closely involved in the pedagogic transaction but by other important legitimizing agencies acting to constrain definitions of particular pedagogic realities. Attempts by such agencies to prescribe what shall count as valid knowledge may contribute to the culture of
positivism found in schools and within which reconstructions of knowledge must be negotiated. In a similar manner external prescriptions relating to the pedagogic encounter act to constrain the open human possibility of change in that their legitimation reflects the 'double-indemnity' of the justifications previously elaborated in educational philosophies of education, subject associations, officially sponsored projects, training institutions, etcetera. Nonetheless, such agencies do exhibit a certain degree of discreteness in their definitions of what constitutes mathematics: they are themselves actively and pragmatically involved in their own changing, and segmented, ideologies, and themselves possess differential perspectives on the meanings of the professional and pedagogic encounters. Perhaps the most useful potential for school based attempts to reconstruct knowledge could result from the potential inherent in conflicts between different subject departments over the ownership of pedagogic knowledge, and their resolution within the context of any decodification. This occurs not only in the conflicts between English and social studies departments but also between the apparently ideologically separated areas of mathematics and physics. A recent report on the relationship between mathematics and physics enables a reviewer to state:

"Mathematics teachers have taken to extremes the idea that their subject is an intellectual pursuit in its own right." (17).

This report itself recommends that mathematicians should use examples drawn from school science, geography, economics, wherever possible and notes that the movement, in the past, from mathematics as a service subject to mathematics as a subject in its own right produced a change of emphasis.
The revealed inadequacies of labelling packages of knowledge resulted from a growing awareness that particular contents may occur within several, apparently different, packages and this realization has, at least in part, been responsible for movements towards various forms of 'integrated studies'.

Berstein (1971) described this movement in terms of the difference between 'collection' and 'integrated' types of educational knowledge code and this has already been discussed. The collection type of curricula knowledge is distinguished by strong classification between the pedagogic subjects in which the contents stand in a closed relationship although it is unclear whether the availability of differential subject ideologies into which teachers are socialized is to be considered a concomitant of this process or a cause. An educational knowledge code of this type also contains a hierarchical control of staff within subjects (on the other hand, an integrated code is seen as involving weak classification between subjects, a mixing of the categories of knowledge, and an emphasis on self-regulatory instruction). Such an analysis is only satisfactory to the extent that doing that knowledge is considered a 'worthwhile activity' and the debate is at its sharpest at precisely this point.

Since it may also prove the meeting ground between pedagogic practitioners and those belonging to the possibilitarian and analytic traditions of the new sociology it is to be deprecated that such theoretical analyses are, with few exceptions, separated from those of classroom practitioners. What is needed is more emphasis on teacher-researcher accounts in which the precise nature and implications of 'doing knowledge' are explicated and which may serve to inform the debate which is at present very sterile. Indeed, if it is
'the way of seeing knowledge' that is at issue the contents of this thesis would seem to indicate that much of the debate is misdirected, and that the actual pedagogic subject contents of the curriculum are, in a very specific sense, marginal. The rhetorical dimension of that knowledge seems to be considerably more consequence.

Whilst any particular package of knowledge contents may, given certain conditions, be possible within an integrated educational knowledge code, the ideological basis of contemporary attempts at the reconstruction of school knowledge would argue against the existence of an agreed body of knowledge. (The current debate about a 'common core' curriculum is interesting for the growing realization that subject labels are relatively meaningless).

The constitution of any reconstructed package of knowledge, or rather way of looking at the world, must thus look not to principles of epistemology but what might rather be termed the principle of existential experience. In this sense the categorization of mathematical activity originates not in the self-legitimating label attributed to 'doing mathematics' (that is, an exercise in the transmission of a reified body of knowledge divorced from reality) but as a necessary part of the particular activities of confronting particular realities.

The substitution of new ways of approaching knowledge will not be achieved without difficulty since the individuality of members of staff used to teaching within the safe boundaries of their own subject will be radically changed. Greater visibility and co-operation is required between teachers. The negotiated structure of a new curriculum would require to overcome old loyalties and there is some ground for at least accompanying such change with the coining of new titles that are not readily interpreted in terms of previous subjects. This will not be achieved overnight although existing subjects
may be used as part of some unifying theme. The notion of mathematics may thus be extended to include its social history, importance in exploration, papering the house, interpreting the environment, practical exercises more obviously related to the lived world, and consideration of the sort of jobs that need mathematicians. Monday morning at ten o'clock would thus not become synonymous with specific subject identities, activities in room five.
The socially located identity of the pedagogue and the observing participant have sufficient congruity in their respective purposes at hand to enable this thesis to be written. However, although both identities possess a shared commitment to the observable life-world of the staffroom yet, because of the differentiated social location of the knowledge associated with their respective identities, each gains different knowledge about the workings of their world. Although knowledge about this world is shared, the sharing occurs in an assymetrical manner as each 'makes sense' of the approached world according to his previous biographic experiences which then become the pre-eminent referent for constructing the particular of the world they now comprehend.

Their, differentiated, world building activities thus create meanings centred around their respective identities of observing participant and subject practitioner. The social structuring of the different world realities occurs because that knowledge is inextricably linked to the interests of those who produce it. That is, knowledge is linked to one's social identity and therefore the image that one has of the world (and also the image that that world has of the identity). This thesis has been concerned to explicite the essentially rhetorical and precarious nature of these world building activities. The required on-going validation is achieved by a continuing process of consensual validation with others of like mind: and to the extent that the subjectively appropriated nomos is unable to find like minds there will be an identity crises for the social actor. The
world of the observing participant has meaning because of his membership of a particular epistemic community with whom he may converse: the world of the pedagogic subject practitioner similarly interacts with other like minded fellows as together they engage in a pragmatic theorizing about their worlds. These conversations take place with those with whom one most feels at home:

"If one conceeds these points, one can now state a general sociological proposition: the plausibility and stability of the world, as socially defined, is dependent upon the strength and continuity of significant relationships in which conversations about this world can be continually carried on. Or, to put it a little differently: the reality of the world is sustained through conversations with significant others. This reality, of course, includes not only the imagery by which fellowmen are viewed, but also includes the way in which one views oneself. The reality-bestowing force of social relationships depends on the degree of their nearness, that is, on the degree to which social relationships occur in face to face situations and to which they are credited with primary significance by the individual. In any empirical situation, there now emerge obvious sociological questions out of these considerations, namely questions about the patterns of the world-building relationships, the social forms taken by the conversations with significant others. Sociologically one must ask how these relationships are objectively structured and distributed, and one will also want to know how they are subjectively perceived and experienced."


The writer believes this thesis to be the beginnings of an attempt to answer these questions.
BIBLIOGRAPHY.

Adelman, Clem; and Walker, Rob (1974)
Open Space, Open Classroom.
in Harris, Lawm and Prescott (Eds)
Pages 162-169

Armistead, Nigel (1974)
Reconstructing Social Psychology
Penguin

Barnes, Douglas; Britton, James;
and Rosen, Harold. (1969)
Penguin.

Becker, Howard, S. (1951)
The Professional Dance Musician
American Journal of Sociology
September, 1951. Pages 136-144.

Becker, Howard S. (1960)
Notes on the Concept of Commitment
American Journal of Sociology

Becker, Howard S. (1961)
Whose Side Are We On?
Reprinted in Filstead (1970)

Becker, Howard S. (1970)
Sociological Work
Aldine.

Becker, Howard S. (1973)
Outsiders
Free Press.
(Revised Edition)

Becker, Howard S. and Carper, James (1956)
The Development of Identification With An Occupation
American Journal of Sociology
Becker, Howard S.; Geer, Blanche; Hughes, Everett C. and Straus, Anselm L. (1961) 
Boys in White 
University of Chicago Press.

Becker, Howard S.; Geer, Blanche, and Hughes, Everett (1968) 
Making the Grade 
John Wiley and Sons.

Becker, Howard S.; Geer, Blanche; Riesman, David and Weiss, Robert S. (1968) 
Institutions and The Person 
Aldine.

Berger, Peter L. (1963) 
Invitation to Sociology 
Penguin.

Berger, Peter L., and Luckmann, Thomas, (1967) 
The Social Construction of Reality 
Penguin.

Marriage and the Construction of Reality in: Dale et. al. (Eds) 
Pages 23-31.

Berger, Peter L.; Berger, Brigette; and Kellner, Hansfried. (1973) 
The Homeless Mind 
Pelican.

Bernstein, Basil (1967) 
Open Schools, Open Society. 
New Society. 

Bernstein, Basil (1971) 
On The Classification and Framing of Educational Knowledge. 
in: Young (1971) 
Pages 47-69
Berreman, Gerald. (1962)
_Behind Many Masks_
Monograph Number 4
Cornell University, Society for Applied Anthropology.

Blau, Peter M. (1964)
The Research Process in The Study of the
Dynamics of Bureaucracy.
in: Hammond (1964)
Pages 16-49.

Bloor, David. (1973)
Wittgenstein and Mannheim On The Sociology
of Mathematics.
Studies In History and Philosophy of Science.

Blum, Alan P. (1971)
Theorizing.
in: Douglas (1971)
Pages 301-319.

Blum, Alan P. (1971)
The Corpus of Knowledge As A Normative Order
in: Young (1971)
Pages 117-132.

Blum, F.H. (1970)
Getting Individuals To Give Information To
The Outsider.
Reprinted in Filestand (1970)
Pages 83-90.

Blumer, Herbert (1954)
What Is Wrong With Social Theory.
American Journal of Sociology
Vol.19. February 1954

Blumer, Herbert (1969)
Symbolic Interactionism
Prentice Hall.

Bordieu, Pierre (1971)
Intellectual Field And Creative Project.
in: Young (1971)
Pages 161-168.
Bruyn, Severn T. (1966)
The Human Perspective In Sociology
Prentice-Hall.

Professions In Process
American Journal of Sociology
Vol.66. No.4. Pages 325-334.

Cane, Brian, and Schroeder, Colin (1970)
The Teacher and Research
National Foundation for Educational Research.

Cannon, C. (1964)
Social Studies In Secondary School.
Educational Review.

Castaneda, Carlos (1968)
The Teachings of Don Juan
Penguin.

Castaneda, Carlos (1971)
A Separate Reality
Penguin.

Castaneda, Carlos (1973)
Journey To Ixtlan,
Penguin.

Chanan, Gabriel (1976)
Science or Ideology
Times Educational Supplement,
5 March 1976.

Cicourel, Aaron V. (1964)
Method and Measurement In Sociology
Collier MacMillan.

Cicourel, Aaron V. (1973)
Cognitive Sociology
Penguin.
Gieser, Aaron V. (1976)  
The Social Organisation Of Juvenile Justice  
Heinemann.  

Clark, Burton R. (1966)  
Organizational Adaptation To Professionals  
in: Volmer and Mills (1966)  
Pages 282-291.

Cohen, Louis (1965)  
An Exploratory Study Of The Teacher's Role  
As Perceived By Headteachers, Tutors, And  
Students In A Training College.  
M.Ed. Thesis.  
University of Liverpool.

Corwin, Ronald G. (1970)  
Militant Professionalism  
Appleton, Century, Crofts.

Cosin, B.R.; Dale, I.R.; Ealand, G.M.; and  
Swift, D.F. (1971)  
School and Society  
Routledge and Kegan Paul.

Dale, Roger (1972)  
The Culture of the School  
Open University Press.

Dale, Roger (1974)  
Phenomenological Perspectives And The  
Sociology Of The School.  
in: Flude and Ahier (1974)  
Pages 53-69.

A Survey Of Teachers In Their First Year  
Of Service.  
University of Bristol.
Dalton, Melville (1959)
Men Who Manage
John Wiley.

Dalton, Melville (1964)
Preconceptions And Methods In Men Who Manage
in: Hammond (1964)
Pages 50-95

Dean, John P. (1954)
Participant Observation And Interviewing
in: Doby (1954)
Pages 233ff.

Delamont, Sara (1976)
Interaction In The Classroom
Methuen.

Deutscher, I. and Thompson, E.J. (Eds) (1966)
Among The People
Basic Books.

Doby, John T. (1954)
Introduction To Social Research.
Harrisberg.

Douglas, Jack D. (1971)
Understanding Everyday Life
Routledge and Kegan Paul.

Douglas, Jack D. (1973)
The Social Meanings of Suicide
Princeton University Press.

Douglas, Jack D. (Ed) (1971)
Understanding Everyday Life
in: Douglas (1971)
Pages 3-44.
Douglas, Mary (1975)
Implicit Meanings
Routledge and Kegan Paul.

Edwards, Russell (1973)
Tomorrow’s Heads
New Society.
1 November 1973

Emmet, D. (1966)
Rules, Roles, and Relations
MacMillan.

Eggleston, John (Ed) (1974)
Contemporary Research In The Sociology
Of Education.
Methuen.

Erikson, Kai T. (1966)
Wayward Puritans
John Wiley.

Esland, Geoffrey M. (1971)
Teaching And Learning As The Organisation
Of Knowledge.
in: Young (1971)
Pages 70-115.

Etzioni, Amitai (ed) (1969)
The Semi Professions
New York.

Filmer, Paul; Phillipson, Michael; Silverman, David;
and Walsh, David. (1972)
New Direction In Sociological Theory.
Collier-Macmillan.

Filte stead, William J. (Ed) (1970)
Qualitative Methodology
Rand McNally.
Fletcher, Colin (1974) 
Beneath The Surface 
Routledge and Kegan Paul.

Flude, Michael, and Ahier, John (1974) 
Educability, Schools and Ideology 
Hesthead.

Freire, Paulo (1972) 
Pedagogy Of The Oppressed 
Penguin.

Friedson, E. (1963) 
The Hospital In Modern Society 
MacMillan.

Gans, Herbert J. (1968) 
The Participant Observer As A Human Being 
in: Becker et. al. (1968) 
Pages 300-317.

Gay, John and Cole, Michael (1967) 
The New Mathematics And An Old Culture 
Holt, Rinehart and Winston.

Geer, Blanche (1968) 
Occupational Commitment And The Teaching Profession. 
in: Becker et. al. (1968) 
Pages 221-234

Geer, Blanche (1964) 
First Days In The Field 
in: Hammond (1964) 
Pages 322-344

Geer, Blanche; Haas, Jack; Vona, Charles Vi; Miller, Stephen J.; roadway, Clyde; Becker, Howard S. (1968) 
Learning The Ropes 
in: Deutscher and Thompson (1968)
Gibson, D.R. (1972)
Professional Socialization
Educational Research
Pages 213-219.

Awareness of Dying
Aldine.

Goffman, Erving (1959)
The Presentation of Self In Everyday Life
Doubleday.

Goffman, Erving. (1969)
Strategic Interactions.
Doubleday.

Greenwood, Ernest (1957)
Attributes of A Profession
Social Work.
Pages 44-55.

Gross, George (1974)
Unnatural Selection
in: Armistead (1974)
Pages 42-52.

Gurvitch, G. (1971)
Social Frameworks of Knowledge
Blackwell.

Hall, E.T. (1967)
The Hidden Dimension
Doubleday.

Hammond, Phillip E. (Ed) (1964)
Sociologists At Work
Basic Books.
Hargreaves, David (1968)
Social Relations In A Secondary School
Routledge and Kegan Paul.

Hargreaves, David (1972)
Staffroom Relationships
New Society
2 March 1972
Pages 434-437.

Hargreaves, David H. (1975)
Interpersonal Relation And Education
Routledge and Kegan Paul.
(Revised Edition)

Harnqvist, Kjell (1973)
The Training And Career Structures of
Educational Researchers
in: Taylor (1973)
Pages 45-89.

Harris, Alan; Lawn, Martin; and Prescott, William
(1975)
Curriculum Innovation
Croon-Helm.

Hills, Philip; and Shellie, Michael (1975)
Images Of Science
New Society
28 August 1975
Pages 477-478.

Hindess, Barry (1973)
The Use Of Official Statistics in Sociology
MacMillan.

Hirst, P.H. (1969)
The Logic Of The Curriculum
Journal of Curriculum Studies
Holt, John (1965)
How Children Fail
Penguin.

Howson, Geoffrey (1974)
Mathematics - The Fight For Recognition
Mathematics In Schools
Pages 7-9.

Hughes, Everett G. (1960)
The Professions In Society
Pages 54-61.

Ichheiser, Gustav (1970)
Appearances And Realities

Jackson, Philip (1968)
Life In Classrooms
Wiley.

Jenks, G. (Ed) (1977)
Rationality, Education And The Social
Organisation Of Knowledge
Routledge and Kegan Paul.

Johnson, John E. (1975)
Doing Field Research
Free Press.

Junker, Buford H. (1960)
Field Work
University of Chicago Press.

Keddie, Nell (1971)
Classroom Knowledge
in: Young (1971)
Pages 133-160.
Kluckhorn, A. (1940)
The Participant Observer Technique In Small Communities.
American Journal of Sociology Vol. 46, November, 1940.

Lacey, C. (1976)
Problems Of Sociological Fieldwork
in: Shipman (1976)
Pages 63-68.

Lortie, Dan C. (1969)
The Balance Of Control and Autonomy In Elementary School Teaching.
in: Etzioni (1969)
Pages 1-53

Malinowski, Bronislaw (1926)
Crime And Custom In Savage Society
Humanities Press.

McCall, George J. and Simmons J.I. (1966)
Identities And Interactions
Collier-MacMillan

McHugh, P. (1970)
On The Failure of Positivism
in: Douglas (1970)

Moeerman, Michael (1974)
Accomplishing Ethnicity
in: Turner (1974)
Pages 54-68.

Musgrove, Frank and Taylor, Phillip H. (1965)
Society And The Teacher's Role
Routledge and Kegan Paul.

Musgrove, P. (1967)
The Contribution of Sociology.
in: Kerr (ed)
Changing The Curriculum.
University of London Press.
Partridge, John (1968)
Life in A Secondary Modern School.
Felican.

Phillips, Derek E. (1973)
Abandoning Method
Jossey-Bass

Phillipson, M. (1972)
Theory, Methodology and Conceptualization
in: Filmer et. al. (1972)
Pages 77-116

The Child Savers
University of Chicago Press.

Platt, Jennifer (1976)
Realities Of Social Research
Sussex University Press.

Richardson, Elizabeth (1973)
The Teacher, The School And The Task of Management.
Heineman.

An Ethnography of Classrooms
in: Eggleston (1974)
Pages 251-266.

Roiser, Martin (1974)
Asking Silly Questions
in: Armistead (1974)
Pages 101-114.

Rosencrenz and Bidèle, Bruce J. (1964)
in: Biidle, Bruce J. and Ellena, William J. (Eds)
Contemporary Research On Teacher Effectiveness
Holt, Rinehart and Winston
Roth, Julius A. (1956)
The Status Of Interviewing
Midwest Sociologist
Vol. 19, December 1956
Pages 8-11

Sources Of Dissatisfaction Among Teachers
British Journal of Educational Psychology
Pages 275-291

Schatzman, L. and Strauss A.L. (1973)
Field Research
Prentice Hall.

Schutz, A. (1967)
Collected Papers: Volume One
Nijhoff.

Schutz, A. (1971)
The Stranger
in: Dale et. al. (1971)
Page 32ff.

Schutz, A. (1970)
Reflections On The Problem of Relevance
Yale University Press.

Schwartz, Morris S. and Schwartz Charlotte (1955)
Problems In Participant Observation
American Journal Of Sociology

Sharp, Rachel, and Green, Anthony (1975)
Education And Social Control.
Routledge and Kegan Paul.

On Owning Knowledge
in: Turner (1974)
Pages 45-53.
Shipman, Marten (1974)
Inside A Curriculum Project
Methuen.

Shipman, Marten (1976)
The Organisation And Impact Of Social Research
Routledge And Kegan Paul.

Silverman, David (1970)
The Theory Of Organisations
Heinemann.

Smetherham, David (1973)
Bachelor Of Education.
Unpublished Seminal Paper.

Smetherham, David (1977)
Curriculum Innovation: Another View
Forthcoming.

Euchter, R.; and Sabshin, M. (1963)
The Hospital And Its Negotiated Order.
in: Friedson (1963)
Pages 147-169

Strauss, A. (1964)
Psychiatric Institutions And Ideologies.
Free Press.

Swift, D.F. (1973)
Sociology And Educational Research
in: Taylor (1973)

Swift, D.F.; Winn, V.A.; Wilson, D.A. (1972)
Methodological Issues And Information Research
Unpublished Seminal Paper.

Taylor, Philip H. (1970)
How Teachers Plan Their Courses
National Foundation For Educational Research.
Taylor, William (Ed) (1973)
Research Perspectives In Education
Routledge And Kegan Paul

---

Taylor, William (1973)
Knowledge And Research
in: Taylor (1973)
Pages 191-210

---

Turner, Barry A. (1971)
Exploring The Industrial Subculture
MacMillan.

---

Turner, Roy (1971)
Words, Utterance And Activities
in: Douglas (1971)
Pages 169-167

---

Turner, Roy (1974)
Ethnomethodology
Penguin.

---

Vidich, Arthur J. (1955)
Participant Observation And The Collection
And Interpretation Of Data
American Journal of Sociology

---

Vollmer, Howard L. and Hills, Donald L. (Eds) (1966)
Professionalization
Prentice Hall

---

Vulliamy, Graham (1972)
Music Education In Secondary Schools
University of London, Institute of Education.

---

Warwick, Dennis (1974)
Ideologies, Integration And Conflicts of Meaning
in: Flude and Ahier (1974)
Pages 86-116.
Westwood, L.J. (1967A)
The Role Of The Teacher

Westwood, L.J. (1967B)
The Role Of The Teacher - Part Two
Educational Research

White, David (1973)
Receptionist Power
New Society
22 November 1973
Pages 453-454

Whitty, Geoffrey J. (1973)
Competing Definitions Of Social Studies
M.A. Thesis.
University of London, Institute Of Education.

Whitty, Geoffrey J. (1974)
Sociology And The Problem Of Radical Educational Change.
in: Flude and Ahier (1974)
Pages 112-137.

Whyte, William (1955)
Street Corner Society
University of Chicago Press.

Wieder, D. Lawrence (1971)
On Meaning By Rule
in: Douglas (1971)
Pages 107-135.

Wilson, Bryan (1962)
The Teacher's Role
British Journal Of Sociology
Pages 13.32
Wilson, Thomas P. (1971)
Normative And Interpretative Paradigms In Sociology
in: Douglas (1971)
Pages 57-79

Wise, S. and Star, K.B. (1965)
A Follow-Up Of Teachers Five Years After Completing Their Training.
British Journal of Educational Psychology.
Pages 342-361.

Young, Michael P.D. (ed) (1971)
Knowledge And Control
Collier-MacMillan.

Young, Michael P.D. (1971)
An Approach To The Study Of Curricula As Socially Organised Knowledge.
in: Young (1971)
Pages 19-46.