READING SCHOOL: TEACHING AND THE EDUCATIONAL

ENVIRONMENT FROM A SEMIOTIC PERSPECTIVE

BY

ELEANOR THOMSON
B.A. (Hons.), Dip. Ed.

Thesis submitted for the Degree of M.Litt.
The University of Glasgow

DEPARTMENT OF EDUCATION
UNIVERSITY OF GLASGOW

March, 1990

ProQuest Number: 11003351

ProQuest 11003351

CONTENTS

LIST OF ILLUSTRATIONS

ACKNOWLEDGEMENTS

DECLARATION

Much of the argument contained in Chapter Two, Section Five,
Communication, Semiotics and Pedagogy, herein, was previously
developed by the author for an article entitled 'RedeSIGNing the
Curriculum' published in *The Association of Media Education
Journal* No.6, 1987.   A report for the Scottish Education
Department entitled *A Semiotic Analysis of School Meaning: a
Pilot Study*, Department of Education, Glasgow University, and
cited herein, was jointly written by H.M. Paterson and the author
using the concepts developed by the author from the semiotic
perspective which informs this present work.

READING SCHOOL: TEACHING AND THE EDUCATIONAL

ENVIRONMENT FROM A SEMIOTIC PERSPECTIVE

Summary

School, teaching, and the educational environment (including
the physical surroundings and use of space in classrooms), are
viewed in this thesis as a complex and dynamic milieu which is
capable of generating meaning to children.   Implicit in this
notion of a complex milieu is the assumption that learned social
and cultural knowledge play a major part in the generation of
meaning in school, serving to both explain and reinforce school
meaning.   The theoretical basis for this perspective is
semiotics, the study of signs and sign systems.

The thesis is divided into four main parts which deal,
respectively, with semiotics and communication (the subject
matter of Chapters One and Two), and teaching and teacher
training (the subject matter of Chapter Three.)   It is
suggested that the video which accompanies this thesis, *What do
YOU Mean?*, produced for the Scottish Education Department and
intended for in-service teacher training, should be referred to
when reading

this section of the thesis.   The fourth part concerns the

educational environment (the subject-matter of Chapter Four).

     The thesis is exploratory in nature and the hope is

expressed that it will encourage further exploration.

INTRODUCTION

"READING" MEANING

If it seems perverse to begin my thesis by pointing out that "Reading School" is an ambiguous title, then I make no apologies for having done so; the perversity is not without reason. Ambiguity is common in language, "meaning" being rooted not so much in words but in the social and contextual value allocated to them by author and reader. Author and reader each have a role in the chain of written communication which conventionally involves the author in "creating", the reader in "understanding", and both, ultimately, in the *production of meaning*. Meaning does not reside, complete, in the written word. It must be created by a process of interaction between "communicator" and "receiver".

Brief deliberation, therefore, about the title of this thesis and whether or not "Reading Schools" means: *"schools for reading"* or *"the act of reading schools"* serves to emphasise the interaction between the reader and the possible meanings which might be contained in the item about to be read – this text. Interaction of a similar nature must take place whether the "text" in question is written, viewed or listened to. "Communicators" in general, *i.e.* everyone who attempts to communicate with others – from the person holding a conversation

with a friend in the street – to authors, film and television directors, politicians – and teachers – create meaning by selecting words, images, information. These, in turn, are interpreted or "made sense of" by their respective audiences. Each "reader" brings to the "text" his own ideas and experiences thereby rendering it "potentially unique"[1].

It can be argued that we are all active meaning-makers. The action of making meaning is, however, not always apparent to us – this "piecing together" of our physiological and psychological responses to the world usually goes on at some unnoticed level in our own consciousness so that meaning is merely "there" but the perceptual and cognitive processes which generated the meaning, bringing understanding – or lack of it – are difficult to grasp.

Rauch and Carr (1927) have said of this:

"...when we have a percept...what we perceive (if we avoid avoidable sources of error) is an event occupying part of the region which, for physics, is occupied by the brain. In fact, perception gives us the most concrete knowledge we possess as to the stuff of the physical world......"[2]

Each of us, therefore, understands the world by "filtering" through our senses the information received from the world surrounding us. The process does not end there because information gained in this way, having reached the stage where we are attempting to understand what it is that our eyes have seen, our bodies have brushed against, or which aroma our noses have detected, is processed and changed to include what we already

know of the world. We are not merely "receivers and storers" of information, we do something to that information. We process the information by bringing to bear our prior knowledge of the world, our emotional reactions to what we have seen, and so on. Our view of the world, therefore, can never be unmediated because our own senses act as the "media" through which we come to an understanding; a mix of what we perceive through the body's sensory mechanisms and the stuff of our minds: a physiological and psychological process.

Thus we can have an essential core of agreed evidence in a court of law with widely differing individual interpretations of inessential details surrounding that core: whereas one eye witness might describe the "portly robber with black bushy eyebrows" as a "Denis Healey look-alike", another might say that the robber was the "image of his next door neighbour" depending on the individual's own experience. These individuals have selected information about the person they saw at the robbery and chosen to interpret it in a particular way, concomitant with their own understanding.

Broadly the same processes of interpretation can be applied to the title of this thesis. Any reader who is already familiar with semiotics or a subject such as media studies which employs the language and theories of semiology would have seen little or no ambiguity in the title. "Reading school" would merely have been understood as the accepted use of a familiar expression in

semiotic theory and it would have been immediately perceived by such a reader that school, in this thesis, is being treated as a "text" and something to be "read" accordingly.

With these observations one can see that a process of selection by the author and reader is already at work;   the author makes initial choices and the readers of this text who are in possession of a certain kind of experience (i.e. of semiotics), or not, make further choices, but the interaction does not end there.   Because I am unsure about the experience of every reader who might approach this text with the notion that it should communicate something to them, a further choice was made by me which resulted in the method of approach you have just experienced by reading this far.

If I had simply assumed that everyone who reads this thesis after I have written it would be familiar with the terminology and concepts of semiotics then there would have been no necessity to mention the ambiguity in the title.   I could have allowed the title to represent a complete concept − a unit of meaning which required little or no explanation because it would have been assumed that the reader would be sharing certain conventions with me, the author.   Whether or not your ultimate choice as the reader was to make the word "reading" a noun or an adjective, however, matters little − the intended point of this exercise is to emphasise the fact that you, as reader, and myself, as author, were still *actively engaged in a process of making meaning.*

This process of "creating and using messages" is a tenet inherent within semiotic theory and one which motivates this thesis.

During the course of my writing, I will adopt a variety of approaches, informed by semiotic theory and communication studies, which can be related to the processes of *meaning making*.

Semiotic theory - the study of signs and sign systems or an examination of the process of "creating and using messages" - *ideally* provides one method by which we can attempt to examine the apparent fluidity and "wholeness" of "reality" which we make for ourselves by demonstrating that the apparently smooth flow of meaning which is the metaphorical "music of our being" can be transformed into *signs* and *codes*, captured, and interpreted much like the notes on an orchestral score!   Inherent in this ideal, however, are flaws which stem from what David Sless (1986) has called the *"nature of understanding"*[3]:

> "Understanding is achieved when, for a moment there are no
> more questions to ask.   Understanding is the dead spot in
> our struggle for meaning: it is the momentary pause, the
> stillness before incomprehension continues;   it is the
> brief relief from the doubt that is the norm.   Thus
> understanding is a temporary state of closure.   When we
> understand something we are effectively saying there is no
> more to ask, no more to question, all is revealed.   But of
> course "all" is never revealed and the sensation of
> certainty always passes."[4]

During the course of my own attempts to understand how meaning is generated in school and then to articulate that understanding for this thesis, I became increasingly aware of the

- 5 -

barricades which exist between our own consciousness and any true account of "reality".

An article I read in *The Guardian* in 1982, by Paul Davies, Professor of Theoretical Physics, now seems relevant, in parallel, to this problem. The article gave a short account of quantum mechanics or "the fuzzy atom theory", referring to the uncertainties which are inherent in attempting to measure the micro-world of the atom:

> "According to Bohr, the fuzzy and nebulous world of the atom only sharpens into concrete reality when an observation is made. In the absence of an observation, the atom is a ghost. It only materialises when you look for it. And *you* can decide what to look for. Look for its location and you get an atom-at-a-place. Look for its motion and you get an atom-with-a-speed. But you can't have both. The reality that the observation sharpens into focus cannot be separated from the observer and his choice of measurement strategy." [5]

According to Davies' interpretation of Bohr's observations, our quest for structure, wholeness, "reality" is a search for the mind's mirage: an illusion projected by the collective energy of brain cell and neuron. *We*, as observers, impose structure. *We* create our own reality. Bohr's scientific observations on the behaviour of atoms seems to provide evidence of the subjectivity of mind - a theme which Davies takes up in his book *Other Worlds*:

"Clearly the world that a person actually experiences
cannot be totally objective, because we experience the
world by interacting with it.   The act of experience
requires two components: the observer and the observed.
It is the mutual interaction between them that supplies our
sensations of surrounding "reality".   It is equally
obvious that our version of this "reality" will be coloured
by our model of the world as constructed by previous
experience, emotional disposition, expectation and so on.
Clearly, then, in daily life we do not experience an
objective reality at all but a sort of cocktail of internal
and external perspectives." [6]

Davies' article on Bohr's findings and the extract from his

book have, respectively, helped, first of all, to provide a key

to the awkward question which I have raised about subjectivity,

and secondly, reinforced the notion that the basic tenet of

semiotics - *meaning-making* - or as Sless has called it, *the*

stand-for relationship[7], is sound: true objectivity would be

difficult to achieve under any circumstances, and even the most

objective kinds of research are subject to similar limitations.

Professor Davies' account is interesting in another respect

and that is its similarity to the structuralist[8] point of view.

The study of signs has been linked, in certain cases, to

structuralist principles and from the structuralist viewpoint

every individual creates something of what he sees, hears or

"understands".   Accordingly, "reality" *per se* is *adjusted*

through the individual differences of the observer.   Two

familiar names in the educational world from this century, Piaget

and Bernstein, are amongst those whose structuralist ideas have

helped shape educational thought and practice.   Although the

concept of structure might enter into the arguments in this

thesis by virtue of the fact that structuralist thought could be considered to be a characteristically twentieth century way of perceiving the world, and has informed the writing of some of the authors who appear in this work, it is principally motivated by the idea of the *sign*, and not structuralism.

The use of semiotic theory is an attempt to "atomise" meaning - to break up the "flow" of "reality" - to unpick the stitches which hold meaning together in order that we can better understand what we have chosen to examine but semiotics must take its place amongst other theories as being a mere perspective of "reality" and admit to inherent flaws which arise from the very nature of thought. Making meaning and understanding are, of themselves, flawed concepts. "All", as Sless claims, is never revealed and understanding must remain forever linked - however tenuously - to a perspective of the world from where we - as collective individuals - are standing at any given time. Only by achieving an agreement about this perspective can we produce some kind of understanding. Like the previously mentioned eye-witnesses giving evidence in court, perhaps we can achieve a core of understanding in this way.

Semiotics is concerned with identifying *signs* and *sign systems* but there is little merit to be gained from merely identifying and listing the existence of signs without interpreting their meaning. In Heraklion Museum, Crete, there are many examples of Minoan writing which has been called

- 8 -

"Linear A".   These examples of some of the earliest known writing in the world have not yet been deciphered and, as such, have little value in meaning-sharing between two civilisations. We can "make meaning" from these signs from our own cultural perspective by giving them a collective value as "early examples of Greek writing".   We can examine the shapes of the writing and conclude that they are signs which were of iconic as well as symbolic value but, apart from this, the writing conveys little about the Minoans except that they had invented a form of written communication, a distictively human trait in which we share. The signs invented by the Minoans, therefore, - even though they are a tantalising reminder of our shared humanity - remain, frustratingly, undeciphered and essentially devoid of any of their original meaning.

In the theory of Jakob von Uexküll, one of the founders of behavioural physiology, known as Ethology, the study of the behavioural characteristics of species (e.g. study of the distinctive song-patterns of birds or of the foraging behaviour of animals, etc.), the fundamental nature of all species - from the cell to the manifestation of living creatures in nature - can be understood in terms of sign processes.   Thure von Uexküll offers the following interpretation:

> "....A sign is never found alone, but always as part of a circular process in which a receptor receives stimuli, codes them as signs, and responds to them as such."[3]

By this definition, we create meaning as *sign*:

> "The most elementary sign process, the "semiotic atom",
> [explained as something which is indivisible] so to speak,
> is therefore that code which governs the life of the cell.
> The cell furnishes every influence it responds to with a
> specific meaning, or translates it into its own specific
> code and then reacts with a specific response."[10]

Everything from distinctive bird-song to the living cell act as
communicators, ready to create meaning through the receptors of
the other living creatures which surround them.   The sign,
therefore, should never be conceived of as something which is
isolated *except in our attempts to break down the world into
meaningful "pieces"* – a fusion between meaning and non-meaning;
language-sharing man's attempt to explain.....

The possibility of identifying forms of communication and
isolating what we understand as the various signs which exist
within the bounds of these systems is only made possible by
recognising that signs are an integral part of a dynamic process
of meaning making.   It is possible to forget this, making the
isolation of the sign an end product, an entity which, somehow,
seems to stand alone.   Birdwhistell[11] (1971) isolated facial
expressions and body movements and devised codes to describe
these.   This was achieved through close examination of many
hours of filmed behaviour.

Facial and body movements undoubtedly carry meaning and
Birdwhistell's codes are useful in identifying these at a gross
level but the codes, themselves, are inadequate to describe the

huge variety of social meanings which can be attached to the same gesture. The identification of the signs which combine to create the flow of communication between people is likely, by using this approach, to be achieved only in the crudest way. By isolating individual movements (and, therefore, "signs") which have been taken from a complex variety of communicational acts, it almost seems that some kind of entity is being created, an entity which stands alone as being meaningful and which ignores the flow of other significant meaning which surrounds it. Any attempt to "pin down" nuances of meaning in this way can, unless contextualised, result in stultification of the whole process of making meaning.

Birdwhistell was not unaware of these problems and recognised the need for context:

> "....gestures are forms which are incapable of standing alone....gestures require infixual, suffixual, prefixual, or transfixual behaviour to achieve identity."[12]

Whilst teaching short courses on communications and media studies to my pupils, the validity of this argument was forcefully brought home. I used examples of stick-figure diagrams, which were used in an experiment by Sarbin and Hardyck (1953)[13], as part of a lesson intended to demonstrate how body movement communicates. (See Fig.1). The subjects of Sarbin and
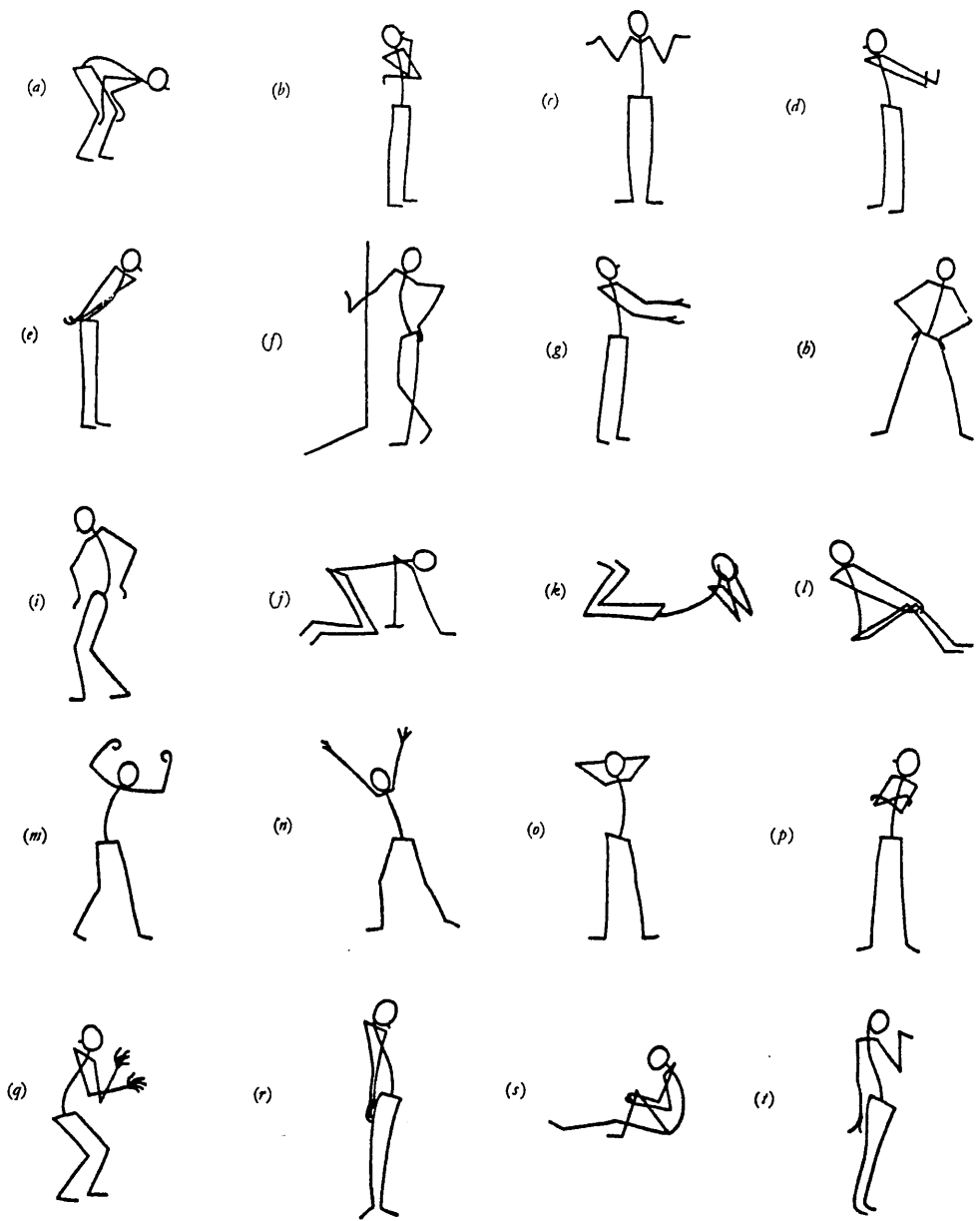
Fig. 1

Stick figures interpreted: *a* curious, *b* puzzled, *c* indifferent, *d* rejecting, *e* watching, *f* self-satisfied, *g* welcoming, *h* determined, *i* stealthy, *j* searching, *k* watching, *l* attentive, *m* violent anger, *n* excited, *o* stretching, *p* surprised, dominating, suspicious, *q* sneaking *r* shy, *s* thinking, *t* affected. (*from* Sarbin and Hardyk, 1953 *in* Argyle (1975))

Hardyck's experiments had interpreted the stick-figures, and provided various verbal "labels" for each of the figures shown. My pupils were shown the diagrams and the words. Their task was to match the words to the diagrams.

In general, the pupils were able to match many of the figures and words but difficulties were invariably experienced with (b) which they "read" as either "puzzled" (the given interpretation) or "thinking". This, accompanied by various "misinterpretations" of the other figures demonstrates the need for gestures to be viewed in context as part of the communication process which is a composite of many different *verbal and non-verbal signs*. To view them divorced from the value to be found in the surrounding flow of meaning invites us to view them as abstracts and thus, encourages misunderstandings. They do not, *in themselves*, have a complete language currency but, rather like words making up sentences, are of value only when taken in relation to the total act of human communication.

In this thesis, I have attempted to describe what is immediately discernible as meaningful within the flow of events and the context in which they are based. I have, in short, appealed throughout to what I believe to be the conventions of meaning shared between myself and the reader. For, in order that meaning may result from any form of signal, there must be a shared understanding of what "means" and what does not. In

order that I might communicate with the reader, I must assume that there is a certain, basic pool of shared understanding; that we share the same language, similar experiences as human beings, and the ability to rationalize.

We each follow certain conventions when trying to communicate or understand. Fiske (1982) has called these conventions "the social dimension of signs"[14] and maintains that convention is the "agreement amongst the users about the appropriate uses of and responses to a sign." Thus, if a child were to raise its hand in a bus in the hope of attracting the conductor's attention, it is likely that little notice would be taken of this gesture (even although it might be recognised by those present as belonging to school) since the recipient of the sign - the teacher - is absent and the location of the sign is invalid. School, therefore, generates its own unique forms of communication which are imbedded implicitly within its own "social dimensions".

In writing this thesis, I am also assuming that the reader has an understanding, either direct or indirect, of what school is; a "mental template" from which the reader is able to draw conclusions about the percepts which are emanated on these pages through the written word. I will describe the "sign systems" of school, therefore, by appealing to what I assume is understood and accepted as meaningful by all who have had direct or indirect experience of school.

It is, however, through this very process - of learned meaning - that these experiences remain unquestioned as part of the 'natural' fabric of everyday interaction in school. They constitute a way of carrying meanings which are learned and used from generation to generation. Such sign systems, or "templates for understanding", are perpetuated as a commonsense and workable way of doing things but they also reflect school priorities and expectations: producing messages which, through analysis, can be "read" at an **explicit level of understanding and not simply acted upon at an implicit** level of understanding.

For example, Douglas Barnes (1984) made a study of communication in school. He observes that:

> "A school in its very nature is a place where communication goes on: that is what it is for."[15]

Barnes, however, concentrates on teacher and pupil talk, examining in detail transcripts of examples of such talk and observing the effects of group participation in talk. School, however, communicates in many other ways which are not connected with the formal exchange of knowledge. It appears to me that communication in school must also be seen to be attributed to the *implicit* influences which are present in the school environment and which are not so readily observed. I will look, therefore, beyond the explicit purposes of school to those *implicit* influences which generate meaning within school. I will "read school" as a text. From this perspective, school as a "place

where communication goes on" is concerned less with the **kinds** of communication which exist in school and more with *how school communicates.*

Part of the value of "reading school" in this way, lies in encouraging a fresh perspective. By examining the communicative behaviour of teachers and pupils, by interpreting communicative values within the teaching environment (which for the purposes of this thesis includes the physical environment of school) we can begin to question some of the things which are often unquestioningly accepted in schools and this, I believe, to be a worthwhile venture in itself.

The decision to use semiotics in this way has not been without its theoretical and methodological problems, some of which are present in the fact that, as far as I am aware, no published work of an explicitly semiotic nature has been attempted in the area of school meaning, although certain areas of research (such as ethological approaches or studies of non verbal communication, as seen in the work of, for example, Neill (1983; 1984; 1986)), could be construed, in its broadest sense, as research of a semiotic nature.

Furthermore, semiotics is a rapidly burgeoning subject and, as such, has attracted the polemics of those who are intent on mapping its area of growth, thereby constantly changing its defined areas. One small insistent voice has, however,

remained clear amid the clamour of many throughout the writing of
this thesis and that belongs to the *sign* – forever evident at the
very heart of all polemics and one whose wisdom I have tried hard
to recount as faithfully as possible.

NOTES

1. O'Sullivan, Tim; Hartley, John; Saunders, Danny; Fiske, John, *Key Concepts in Communication*, London and New York, Methuen, 1983, p.153.

2. Rauch, Irmengard; Carr, Gerald F. (Eds.), *The Signifying Animal*, Bloomington, Indiana University Press, 1980, p.265.

3. Sless, David, *In Search of Semiotics*, London and Sydney, Croom Helm, 1986, Preface.

4. *ibid.*

5. Davies, Paul, 'Quantum quandary', *The Guardian*, March 18, 1982, p.21.

6. Davies, Paul, *Other Worlds*, London, J.M. Dent & Sons, 1980, p.108

7. "The heart of semiosis is the *stand-for* relation....There are two readily obvious ingredients to the *stand-for* relation: an object, and whatever the object *stands for*. This is sometimes referred to in the semiotic literature as the *sign/referent* relation; the *sign stands for* something, and what is *stands for* is called its *referent*." Sless, *op. cit.*, p.5.

8. This concept is linked to structural linguistics which have developed from Saussure's linguistic theory. The concept of structuralism is also linked to French writers who became influential in the 1960s such as Roland Barthes and Claude Lévi-Strauss, and others, who used concepts and terminology from Saussurian linguistics to explain the rules which govern various social and cultural phenomena. Terence Hawkes (1978) defines the concept of structuralism as:

    > "....fundamentally a way of thinking about the world which is predominantly concerned with the perception and description of structure....the true nature of things may be said to lie not in the things themselves but in the relationships which we construct, and then perceive, *between them.*" (p.17)

    Structure, then, like the sign, is not a *thing* but an abstract concept, a tool which can be used to assist us in analysing how we make order from our world. Semiotic analysis, by its very nature, imposes its own structure; the formulation of meaning from signs and their relationships.

9. Uexküll, Thure von, 'The Sign Theory of Jakob von Uexküll' *in* Krampen, Martin; Oehler, Klaus; Posner, Roland; Sebeok,

Thomas; Uexküll, Thure von, (Eds.), *Classics of Semiotics*, New York and London, Plenum Press, 1981, p.152.

10. *ibid.*, p.153.

11. Birdwhistell, Ray L. *Kinesics and Context*, The Allen Lane Penguin Press, 1971, p.257.

12. *ibid.*, p.119.

13. Sarbin, T.R. and Hardyck, C.D., 'Contributions to role-taking theory: role perception and the basis of postural cues' *in* Argyle, Michael, *Bodily Communication*, London, Methuen, 1975, pp.273/275.

14. Fiske, John, *Introduction to Communication Studies*, London, Methuen, 1982, p. 60.

15. Barnes, Douglas, *From Communication to Curriculum*, Penguin, 1984, p.14.

CHAPTER ONE

A SEMIOTIC PERSPECTIVE

> *"The sign is always simpler than the phenomenon it represents"* [1]

> *"The sign is simpler than the reality because that is its function, to reduce reality to manageable proportions. Structure is not in the thing but in the mind...We have the inborn capacity to organise and categorise events so that we can understand them."* [2]

The theoretical basis of this thesis is that of semiotics, the study of signs and sign systems.   This section is intended to throw some light on the various theoretical approaches which, herein, constitute a "semiotic perspective".   This has created the need to explore areas of research which are apparently unconnected, such as verbal and non-verbal communication and architecture.   The connection is more apparent, however, if we accept the potential of the sign as an abstract entity which can explain much about the human ability to construct meaning.

A teacher's tone of voice and body movement have the potential to influence meaning just as surely as the use of space and the shape and layout of a room are an integral - and telling - part of the school environment: all are capable of being viewed from a semiotic perspective.   Tone of voice and body movement   are   categorised   in   Sebeok's   (1986)   *Encyclopedic Dictionary of Semiotics* as, respectively: paralanguage[3] and

kinesics.[4]   The "use of space and the shape and layout of a room" is not so conveniently categorised but could be seen to relate, respectively, to proxemics[5] and the semiotics of architecture[6].   Eco (1976) argues that:

> "A phenomenological consideration of our relationship with architectural objects tells us that we commonly do experience architecture as communication, even while recognising its functionality."[7]

Thus, briefly, school architecture can be seen to be significant in that it is capable of meaning.   A more detailed discussion of this point can be found in Chapter Four: The Educational Environment.

Proxemics is categorised in Sebeok's *Encyclopedia* as "the way interpersonal spacing is organized in interaction."[8] Interpersonal spacing suggests the space which exists between and around individuals.   It is commonly known, for example, that individuals in Western society have a need for greater "body space" - that invisible "halo" of space which surrounds individuals when they are talking to each other - than do individuals from Eastern countries.

Proxemics as espoused by the American anthropologist Edward T. Hall (1959; 1966) is, however, given a wider definition by Keir Elam (1980):

"This science [proxemics] is founded on the well-tested hypothesis that man's use of space in his architectural, domestic, urban, workplace and aesthetic activities is neither casual nor merely functional but represents a semiotically loaded choice subject to powerful rules which generate a range of (connotative) cultural units."[3]

It could be argued, therefore, that the use of space in the classroom is worthy of study from a semiotic point of view and that the placing of desks and other furniture can be seen as significant within the overall pattern of communication which exists within schools.

The purpose of "reducing" the complicated processes of meaning-making contained in verbal, non-verbal and spatial patterns into *sign* and *code* is to attempt to clarify these processes; to structure them, even although it is understood that *sign* and *code*, as abstracts, can never fully describe the experience which is school. This section, therefore, has been organised into several sub-sections which offer explanations of the various concepts which inform this thesis and which belong to the "semiotic perspective" adopted, herein.

1.1 Saussure's Semiology and Peirce's Semiotics

Semiotics in its contemporary form is a relatively new discipline dating from early this century but it is firmly rooted in a long history reaching to the very foundations of Western

culture.   Its origins can be traced to the "pre-Socratic
clinical tradition"[10] of which semeiology - or the study of
symptoms in illness - is the contemporary descendant.   The
various works of Augustine (c.397-426), Poinsot (1632) and Locke
(1690) are amongst those which form the "historical layers of
semiological analysis"[11] which preceded the seminal writings of
Saussure and Peirce whose works have shaped modern day
perspectives in semiotics.

By a strange coincidence which is not unique in the course
of human history, this closely related "science of signs" was
independently conceived by Ferdinand de Saussure, a Swiss
linguist (1857-1913) and the American philosopher, C.S. Peirce
(1839-1914).   Even although there are similarities between
Saussure's idealistic vision of a "science which studies the
life of signs within society..."[12] and Peirce's "signs used by a
'scientific' intelligence, that is to say, an intelligence
capable of learning by experience"[13] these similarities must
remain firmly rooted in their temporal historic places.   The
subsequent development of separate intellectual followings born
of the separate disciplines of Saussure, as linguist, and
Peirce, as philosopher, has resulted in   differences in the
application and interpretation of their separate works.

This dichotomy is apparent, first of all, in a nominal non-
conformity between the two: "semiology" tending to be used
by Europeans in deference to Saussure and "semiotics" by English

speakers[14].   These differences are by no means a rigid semantic

rule but their existence is symptomatic of the complications

which can be detected in a still developing body of work which,

in spite of these things, is widely accepted and perceived as

belonging in general to the same discipline: the study of signs.

For example, Pierre Guiraud's (1975) work *Semiology*, first

published by the Universities of France as *La Sémiologie* is

recommended by Innes (1986), Editor of *Semiotics: An

Introductory reader* as offering "clear models of *semiotic*

procedures and categories"[15]. (my emphasis)

The main differences in the separate works of Saussure and

Peirce would appear to have arisen from their separate academic

viewpoints.   As a linguist, it is not surprising that

Saussure's first interests lay in language:

> "Language is a system of signs that express ideas, and is
> therefore comparable to a system of writing, the alphabet
> of deaf-mutes, symbolic rites, polite formulas, military
> signals, etc.   But it is the most important of all these
> systems."[16]

Signs, according to Saussure, exist as an integral part of

society.   His vision of a "science of signs", however, he saw as

the domain of the social scientists, the linguist's task being

that of finding out "...what makes language a special system

within the mass of semiological data."[17]

Saussure, therefore, having conceived the idea of "a science of signs" which he called *semiology* defined the *sign* in purely linguistic terms. His attention was focused on the sign, itself, and less with any consideration of how it relates to the external world. The sign, instead, is studied in opposition to other signs. For example, the two signs, *pupil* and *teacher* signify by saying what they are not: *pupil* is only that by virtue of the fact that it is not *teacher*. Saussure was not overly concerned with the act of "signification"; that is, linking the reality of experience with the *sign* but, rather, with the mechanisms of language.

Peirce, on the other hand, rooted his theories in the philosophical pursuit of knowledge or, as Fiske (1982) puts it, Peirce was concerned with "man's understanding of his experience and of the world around him".[18]

The evidence for this can be found in Peirce's definition of *sign*:

"A sign is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign."[19]

It is immediately apparent that Peirce is concerned with what the sign represents *to the user*, whereas Saussure's concern was with the relationship of language with signs or, more simply, language in relation to society.

A further difference which relates to the application of Saussure's theory is defined by Eco (1976), one of the most important contemporary intellects contributing to the development of semiotics today. Eco recognises the importance of Saussure's work as having promoted "all correlational definitions of sign-function"[20] which, of course, relates to the binary nature of Saussure's sign as discussed earlier. (p.24 above: **pupil** is not **teacher**). He continues, however, by observing that Saussure's definition of *sign* presupposes that the sign is intentionally produced and, therefore, artificial in nature:

> "Thus the sign is implicitly regarded as a communicative device taking place between two human beings intentionally aiming to communicate or to express something.[21]

Saussure's examples of *signs* bear out Eco's observations: "a system of writing, the alphabet of deaf-mutes, symbolic rites, polite formulas, military signals, etc."[22] These examples are *devised* forms of communication which implicitly demand that there should be a "sender" and "receiver". To insist that there should be "sender" and "receiver" is to omit those natural forms of communication such as the emission of smoke, implying fire, or other natural and non-intentional signs from which man has demonstrated an ability to make meaning. (See Chapter Two: Communication and Semiotics for a more detailed account of this fundamental difference).

Those scholars, therefore, who have favoured Saussure's definition have tended to come from the fields of language and literature, viewing the sign as an integral part of language and other constructed communication systems. The following extracts may help to demonstrate my point:

"What semiotics has discovered...is that the **law** governing or, if one prefers, the **major constraints** affecting any social practice lies in the fact that it signifies; i.e. that it is <u>articulated like a language.</u>"[23] (*Julia Kristeva*) (my emphasis)

<u>Every message</u> is made of signs..... [24] (*Roman Jakobson*) (my emphasis)

..*t*he use of a raincoat is to give protection from the rain, but this use cannot be dissociated from the very signs of an atmospheric situation. Since our society produces only standardized, normalized objects, these objects are unavoidably realizations of a model, <u>the speech of a language..</u>"[25] (*Roland Barthes*) (my emphasis)

Innes (1986) sums this up by saying:

"Ferdinand de Saussure's (1857-1913) *Course in General Linguistics.*....projects a "semiology" (a term now largely restricted to French language discussions) as a science which "studies the life of signs within society". Presenting language as the analytical paradigm for all other sign-systems, these texts [Saussure's] have supplied a categorical apparatus and methodological framework, quite different from the Peircean, which a major tradition has applied to a vast realm of materials ranging from photography and fashion to archaic kinship systems."[26]

Without denying the value of the Saussurian position, Eco (1976), who aims to "explore the theoretical possiblility and the social function of a unified approach to every phenomenon of

signification and/or communication"[27], favours the "comprehensive and semiotically more fruitful definition"[28] of the sign offered in Peirce's work.

Peirce's *sign* consists of "three subjects", the "sign", the "interpretant" and the "object" (See Fig.2) The interpretant is not, as one might suppose, the user of the sign but the concept produced by the sign. Peirce is concerned with what the sign *represents to the user* and includes the user in his definition: "A sign is something which **stands to somebody** for something.....*It addresses somebody....*"
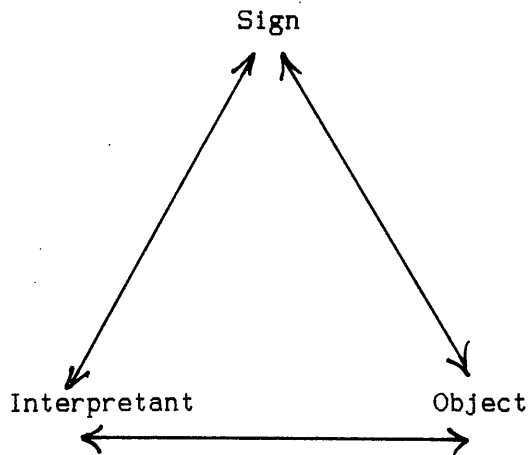
Fig.2 A model of Peirce's terms[29]

In contrast to Peirce's definition of the sign is Saussure's "binary opposition" which produces a sign from the "signifier" and the "signified", i.e. the signifier is the thing being

perceived and the signified is the idea or accompanying concept which the word represents. (See Fig.3). The opposition of signified and signifier produces meaning but that meaning is firmly rooted in language as, included in Saussure's definition, is the idea of comparing two sound-images i.e. two words. Saussure's concept of the linguistic sign was of a "two-sided psychological entity"[30]: a binary model created to support his thesis that language is more than a "naming-process"[31]. The "psychological entity", which is the sign, relates more to the description of language and much less to the users of language[32]. Eco explains that it is possible, therefore, to interpret Peirce's *sign* as an enabling device for exploring a wider field of semiotic phenomena than that offered by Saussure's definition which is rooted in linguistics.

Sign

Signifier + Signified = Signification

(External reality or meaning)
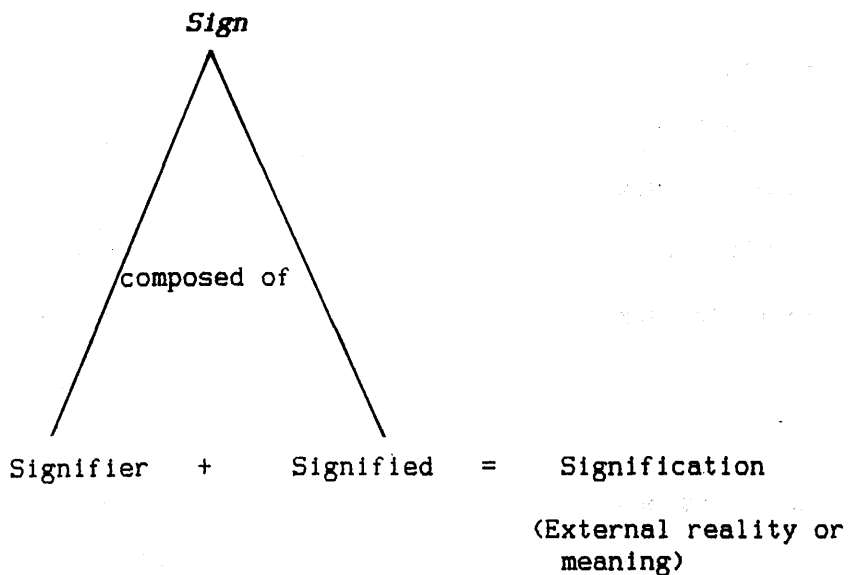
Fig.3 A model of Saussure's sign[33]

Many of the difficulties experienced in defining the sign spring from the need to acknowledge the two definitions of Saussure and Peirce. Taken on the simplest of terms, however, *a sign refers to something other than itself*, that is, we have an ability to produce meaning from our perceptions of the world and imbue these perceptions with representative value. Everything is capable of producing meaning for us. Inherent in this view of "making meaning" is the idea of the object or thing which produces a precept or idea in the user and thus creates a sign. Eco offers his own definition of a sign, based on his observations of Peirce's and Morris's[34] work:

"... *everything* that, on the grounds of a previously established social convention, can be taken as *something standing for something else.*"[35]

Inherent in this definition are the three ingredients needed to create meaning - 1."object or thing" which produces 2. a "precept or idea" 3. in the "user": "everything that" (all things which can be made meaning from) "on the grounds of a previously established social convention" (previous agreement between people that something means something else) "can be taken as something standing for something else." (the act of making meaning from things).

It is this definition of *sign* that I have found most useful and not the methodologically and definitively more language-orientated version of the sign offered by the Saussurian

position, which, as already discussed, Eco has interpreted as being rooted in the presupposition that signs are intentionally made. Eco's definition of *sign* is free from any such presupposition and can, therefore, include "natural" phenomena — that is — no one need intentionally have emitted the sign, it need only be conventionally recognised as having meaning. But, having stated this preference, I reserve the right to include *relevant concepts* which have been developed from Saussure's semiology in recent years, especially since language in all its forms and its accompanying theoretical principles cannot be ignored within the context of this thesis.

1.2 Paradigm and Syntagm

The concepts of *paradigm* and *syntagm*, for example, are rooted in Saussurian linguistics, a *paradigm* in language being the choice of unit (e.g. letters from the alphabet as units) and the *syntagm* being the combination of these units (e.g. letters from the alphabet being the units which form a word). O'Sullivan et al (1983) use the following example to illustrate the two concepts: "A man's wardobe holds a number of paradigms..— one each for shirts, ties, socks — which are combined into a syntagm (his dress for the day)"[36]. The teacher's repertoire of methods for teaching can also be considered to be a *paradigm;* *the syntagm* being the combination of these methods into a lesson. For example, the teacher may decide to begin the lesson with

teacher-explication to the whole class and carry the lesson through into group work, finally ending with whole class participation and questions and answers from pupils. The teacher makes a choice to structure lessons in a particular way. The *paradigm* is the individual items in his or her own "repertoire". Like a pianist, s/he will have a selection of "pieces" to "play" to a variety of "audiences" (age and ability ranges of pupils). The *syntagm* is the "whole" lesson produced from these choices.

It is important, here, to grasp the semiological meaning of "paradigm". The meaning of paradigm which is common in everyday language is: "an example serving as a pattern" i.e. someone can be a "paradigm of virtue". As applied in semiotics, however, "a paradigm is a <u>set from which a choice is made</u>"[37]. (My emphasis). Thus, we can have a choice made by the teacher from the learned approaches to instruction which s/he has access to and which have been agreed, through use, in educational circles as methods of instruction. It is recognised, for example, that group instruction "means" – among other things – that children are encouraged to talk during the lesson. Whole class instruction, however, demands silence from the class in order to listen to the teacher and, therefore, "means" something totally different.

Each method, therefore, can be seen as a *sign* and Eco's definition can be applied to group work thus:

Definition of Group work: group work stands for pupil-talk, is
suitable for particular lessons, and this is generally agreed and
understood by teachers.

Definition of Sign: ....*everything* that, on the grounds of
previously established social convention, can be taken as
something standing for something else. (See p.29, above.)

The above definitions can be equated as follows:

   1.   Group work = pupil-talk

      ∴ Group work = *something standing for something else*

   2.   Group work is generally understood, by teachers, as
         a method which involves pupils in talking during the
         lesson

      ∴ This is a *previously established social convention*

The variety of teaching approaches which can be used in the
classroom are significant to the teaching profession.   Lesson
planning and seating arrangements will most likely - but not
conclusively - reflect the *syntagm* which emerges most often from
the choice the teacher makes.   For example, if the teacher
favours group work above whole class instruction, then this could

be indicated by desks and seats arranged in groups.   Another professional would immediately recognise this seating arrangement as being a statement about the teacher's methodology.   The reason why such arrangement of furniture cannot conclusively show methodologies is due to the fact that a teacher might only *think* that they are catering for group work when, in fact, they are still working with the whole class.   A full discussion of these aspects can be found below in Chapter Four: The Educational Environment.

1.3 Semiotics Today

So far, I have talked about Saussure, Peirce and Eco.   In doing so, I am conscious of the fact that this has created an over-simplified view of semiotic theory when, in fact, the field of semiotics is strewn with ideas, arguments and counter-arguments about the basic nature of the discipline and there are many more names which could be added to those, above.   Indeed, Thomas Sebeok, a leader in the field, who has drawn many ideas together from Anglo-Saxon and European work on semiotics prefers to view the field of semiotics not as a discipline but as a *doctrine.*   In this way the essence of all semiotic study - the abstract notion of meaning contained in the relationship of signs - which lies at the core of all semiotic or semiological enquiries (from the semeiology of early Greece, which studies symptoms of illness, to the most recent manifestation of

semiology in Media Studies, which examines the cultural and technical codes of the media), can be perceived as sharing a common core of meaning. By adhering to the notion of a "doctrine of signs", many apparently disparate ideas can be brought together. (See Chapter One, Section Five, The Field of Research, below).

Semiotics, therefore, is an area of rapid growth and any attempt to map the areas of interest would involve the cartographer in producing a treatise of some magnitude, which would be widely eclectic in nature and which would demand the intellectual skills of more than one person. My intention, therefore, is not to make a comprehensive study of the theories and ideas of which semiotic equiry consists, but to deliniate as clearly as I can the ideas taken from semiotics which I have used to create the underlying rationale for this thesis. To do any more than this would take many years of further work of a nature which would lead me firmly away from the area which I have chosen to analyse: school.

David Sless has said, "Semiotics is far too important an enterprise to be left to semioticians."[38]. The inherent value of semiotics can be found in the simple idea that *in the percept of sign* is a key to the process of understanding. This idea lies at the very heart of the arguments of the semioticians and whilst the polemics of the experts are continuing, perhaps it is necessary to apply this basic principle boldly. Perhaps it

will only be possible to see the limitations of the theory when it is applied in areas where it has never previously been applied.

Sless, describing the act of conceptualisation which the author of research must practise prior to, and during, writing about the research, uses the metaphor of "a landscape":

> "... within which are located both the researcher and the object of study. How the landscape appears to the researcher depends very much on the position from which he views it; as the position he occupies changes so does the scene, and as certain views become visible, others disappear."[39]

In constructing this thesis, I am standing on a landscape which stretches out on all sides and is inhabited by different perceptions, in chronological order, linked to my personal experiences of school: in the distance, as a child at school; closer at hand, the vicarious experiences of others gleaned from my reading of educational textbooks; fairly recent personal experience at university and teacher training college; very recent experience of classroom interaction gained through personal involvement with my own teaching and by watching others at work in their classrooms. From the perspectives offered from this landscape I have constructed a view of school. I cannot claim that the view of school which I shall reveal *is your* "school" (i.e. your idea of school); the version of school which is discussed in this thesis is a generalisation - a *projection*[40]

which you will recognise because it is not without truth - like
the "core of evidence" mentioned above in my Introduction.

This "core of evidence" arises from my personal experiences
in the classroom, since I have been able to observe at first hand
how schools operate.   Secondly, data from 277 first year pupils
at a secondary school in Central Scotland, relating to the school
environment, was gathered.   A pilot study in the same secondary
school along with three primary schools in Central Scotland,
produced   a   total   of   approximately   21   hours   of   classroom
interaction recorded on .video and transcribed by myself and
another   viewer.   First   hand   experience,   observation   and
discussion have, therefore, been instrumental in the structuring
of the version of school which this thesis contains.

Geographically, the   study   is   narrow,   however,   since
circumstances have dictated that this version of school is seen
from a distinctly Scottish perspective.   The teachers and pupils
were predominantly Scottish;   the school buildings which form the
basis of the argument about architecture and environment were
Scottish;   the researcher is Scottish.   Teaching in institutions
is, however, universal and it is through this universality that
I would hope to communicate some of my ideas.   The theoretical
standpoint remains unchanged whether it is applied to schools in
Mauchlin,   Scotland;   Manchester,   England   or   Massachusettes,
U.S.A.   The hypothesis is that "school *means*" and that by
adopting a semiotic perspective, the nature of what it means can

be explored.   Statistically-based "certainties" do not feature

in this thesis.   Instead, there are uncertainties brought about

by the act of questioning meaning and which, as Sless has said

come, "...from semiotics itself."[41]

1.4 Feasibility of a "semiotics of school"

As I have already pointed out, Sebeok prefers to create

coherence from ideas which would otherwise seem disparate by

referring to a doctrine of signs.   Eco (1976)   sees a similar

problem – how do we draw together apparently unrelated strands of

enquiry? – when he asks whether or not the study of semiotics

should be viewed as field or discipline.   He proposes that:

"Any study of the limits and laws of semiotics must begin
by determining whether (a) one means by the term
"semiotics" a *specific discipline* with its own method and a
precise object;   or whether (b) semiotics is a *field of
studies* and thus a repertoire of interests that is not as
yet completely unified."[42]

This idea is of importance when placing this thesis within

a theoretical context – *can* a "semiotics of school" be properly

conceived of as taking its place within the parameters of

semiotic theories?   Although Eco does not conclusively answer

the question he raised, Deely (1976) whilst reviewing Eco's

(1976) *A Theory of Semiotics*,   further clarifies the concept of

"field" and "discipline" in the following way:

"Semiotics *as a discipline*....refers primarily to the development of what Peirce and Locke called the "doctrine" or theory of what a sign is, and what are the conditions for anything to be a sign.....*As a field*, on the other hand, semiotics consists in the development of attempts to isolate and pursue the implications of specifically signifying aspects and elements of phenomena that are studied in their own right by the range of traditional specialized pursuits (music, architecture, ethology, etc.)[43]

This is a helpful clarification of the distinction between what could properly be called semiotic theory and those wider ranging pursuits which involve studying sign systems within particular contexts. This, then, enables me to take a theoretical position alongside those works which study "how signs are produced and function in diverse contexts and areas"[44], school being perceived, for this purpose, as one of the "diverse contexts and areas" in question.

Indeed, Gibson (1984) identifies schools as "a potentially rich field for semiological study", elaborating as follows:

"....schools....abound in signs: conventions which convey meaning. School uniform, a pupil raising his hand, rewards and punishments are obvious examples; the timetable, the grouping of pupils, the subjects of the curriculum, the written information provided to parents, parents' evenings....indeed any school activity can be seen as a sign system and so available to semiological analysis."[45]

By observing that school is "available to *semiological* analysis" (my emphasis), Gibson indicates the semantic differentiation - or the "nominal non-conformity" - discussed earlier in this thesis (Chapter One, Section One,

Saussure's Semiology and Peirce's Semiotics, p.22)   which
frequently points to the fact that the user of the word
"semiology" is using the particular theories which have arisen
from Saussurian "semiology" rather than the broader based ideas
which have come from those who have pursued Peirce's "semiotics".

Since Gibson is discussing *structuralism* and not semiotics –
and   Saussure belongs alongside those other theorists of this
century who have contributed to structuralist thought[46] – it is
hardly surprising that he has preferred not to refer further to
semiotic theories, restricting his frame of reference to
Saussure, alone, and "semiology".

As Deely (1976) so succinctly puts it:

> "Historically, and by accidents of national intellectual
> traditions, followers of Ferdinand de Saussure....in
> particular and scholars with backgrounds in the language
> sciences generally early constituted a kind of sociological
> majority within semiotics."[47]

This majority no longer exists and, as I have demonstrated, there
has been a proliferation of writing from a whole realm of
scholars from a variety of backgrounds which could be classified
under the heading of semiotics.

1.5 The Field of Research

Eco (1976) delineates "the field" of research which could be considered to belong to semiotics as follows: *Zoosemiotics; Olfactory signs; Tactile communication; Codes of taste; Paralinguistics; Medical Semiotics; Kinesics and proxemics; Musical codes; Formalized languages; Written languages, unknown alphabets, secret codes; Natural languages; Visual communication; Systems of objects; Plot structure; Text theory; Cultural codes; Aesthetic texts; Mass communication; Rhetoric.*[48] This list has been added to in a most substantial way by the publication of the three volume 350,000 word semiotic reference work, ***Encyclopedic Dictionary of Semiotics***[49] which serves as the most comprehensive guide for the study of semiotics to date, giving information on the field of semiotics and related disciplines, including an extensive bibliography.

For the purposes of this thesis, I have found it necessary to explore several different areas of research. Some of these may not appear to belong to semiotics and are classified under, for example, psychology or communication. This eclecticism is symptomatic of the nature of semiotics, a fact which can be either criticised or revered. Sless (1986) comments as follows:

"There are serious and intractable problems associated with defining the boundaries of semiotics. Even the most

conservatively drawn map of the area would include every aspect of our culture concerned with communication - all the arts, science and philosophy, indeed all forms of understanding. Such a claim could be regarded as symptomatic of a kind of intellectual imperialism or megalomania; less harshly, perhaps, it might be viewed as an attempt to create order and provide coherence in an area of confusion where differences in tradition and subject matter make cross comparisons difficult."[50]

Sless acknowledges the eclecticism from which semiotics suffers but he uses this to illustrate the basic point that only through exploring our world for "unifying principles" can we find the limits to our knowledge.

If the "macrocosm" of cultural investigation is concerned with all the arts, science and philosophy, then the "microcosm" of school, as part of culture, requires an equally wide-ranging approach. It would, however, be a cumbersome and possibly infinite end product which would result from a semiotic exploration of every cultural influence on school. This is not what I am attempting to do. The frame of reference for this thesis is drawn from aspects of communication studies, including ideas drawn from non-verbal communication, kinesics and proxemics; structuralism; the semiotics of architecture; all of which have been placed within an educational context and employed to create a unique perspective of school and teaching.

There is a basic premise which informs this work and that is that school *means*. This is a deceptively simple premise which involves persuading readers to accept the validity of examining

areas which may only previously have seemed to be incidental to educational purposes such as the shape and appearance of school buildings or the way a teacher uses space in the classroom. In this thesis, I will attempt to explore these and other aspects of school, using semiotics as a tool for investigation.

1.6 Semiotic Methods and Methods of Research

Semiotic Methods

The word *semiotics*, as we are reminded in the **Encyclopedic Dictionary of Semiotics**, is polysemic.[51] We need concern ourselves with only two of the five notions of semiotics which have been identified, i.e. the fourth and fifth. The subject matter of the fourth notion is "semiotic methods" or:

> "...the treatment of various objects, events, or phenomena
> as signs; for example they [the semioticians using this
> method] would attribute sign functions not only to
> linguistic texts, something entailed by their very nature,
> but also to edifices, costumes, rituals..[etc.]"[52]

and the fifth, "applied semiotics" which is related to the above definition:

> "..may be understood to mean applied semiotics. When we
> use semiotic methods....to analyze some fragment of
> reality, for example, plastic arts, architecture, film,
> animal behavior, fashion folk customs, etc., the results of

our investigations form such fields of knowledge as
semiotics of art, architecture, film, fashion, folk
customs, as zoosemiotics or biosemiotics.[53]

"Semiotic method" has been further sub-divided into three
categories, the method of formalization, the method of language
analysis and the method of interpretation "consisting in that
something that is not a sign by nature is treated as if it were
one."[54]   It is to this third category that the methodology
employed in this thesis is most similar in nature:

> "The third semiotic method consists in interpreting as
> signs those things, events, or phenomena which are not
> signs by nature, for example buildings, costumes, human and
> animal behavior, meals, rituals, customs, manmade
> landscapes, natural phenomena such as solar eclipses,
> earthquakes, typhoones,(sic) the reddening or paling of
> someone's face, etc."[55]

This category takes into account that interpretation of these
things is: "instrumental in the process of communication".[56]
This idea is discussed in greater depth in Chapter Two:
Communication and Semiotics.

Methods of Research

As previously mentioned in Chapter One, Section Three,
research relating to school meaning was conducted using a variety
of methods: observation; video recordings and questionnaires
were used. Some of the information extracted from the videos -
these being the result of partial funding by the Scottish
Education Department - has been made into case-studies for the

purposes of this thesis and a report on the pilot study has been

jointly written by another researcher and myself for the Scottish

Education Department.   Information from the video recordings of

classroom interaction has been used in support of theoretical

perspectives such as architecture and environment.

In further support of the argument relating to architecture

and environment, questionnaires were issued at the beginning of

the 1986/87 school year to 277 first year pupils in the secondary

school which was the subject of the pilot project discussed

above.   These questionnaires were analysed and the results can

be found below in Chapter Four, Section Two, Pupils' Responses to

Surroundings.

Sebeok (1986) has classified one of the methods of research

used under the "structural" approach to "nonverbal communication"

as follows:

> "In the *structural* approach the aim is to give an account of
> the normative patterning of action that participants in
> interaction employ.   It is assumed that the behavior [sic]
> of participants in interaction functions communicatively to
> the extent that it is organized as a shared communicative
> code.......The method of investigation followed by exponents
> of the structural approach is primarily observational, and
> the importance of observing behavior in naturally occurring
> social encounters is stressed.   Considerable use is made of
> film and video tape records of interactions, these are
> treated as specimens which may then be analyzed........"[57]

The video recordings obtained during the pilot study enabled

a record to be kept of classroom interaction.   These records,

however, were not solely used for the purpose of examining non-verbal communication. They were also useful for examining verbal behaviour, architectural features and how space was used in the classroom. The video recordings were made by the researcher and, therefore, first-hand observation and some discussion (depending on time available) with the teachers was possible. This discussion and observation augments what would, otherwise, have been a rather narrow perspective of classroom interaction gained by merely playing back the video recordings and viewing them through the restrictive rectangle of a television screen.

These records of classroom interaction must, however, be seen to have been altered in some way by the presence of a camera and an observer and this possibility has been taken into account when viewing the recordings. One interesting example of this was found after an initial recording session in one of the Primary Schools. The teacher appeared to me to be curiously static. She remained roughly on the same spot throughout the duration of the recording whilst she gave her lesson, consisting of a "questions and answers" exchange about life in the 1950's which was part of a class project, the pupils having obtained their information from older members of their families. On making enquiries, afterwards, about her method of delivery, she expressed the belief that, because a camera was being used, she couldn't "move around very much". Her ignorance of the fact that video cameras are able to "pan" and "tilt" on a tripod and

- 45 -

are not fixed rigidly like "still" cameras led her to believe that she must change her usual method of teaching to suit the occasion. On a further visit, just how much she had changed her methods became obvious when a recording was made of an enthusiastic, boisterous and extremely active class, and their teacher, all completely involved in their work! This was a lesson which caused me to emphasise, thereafter, to each teacher who agreed to be recorded on video, that they were at liberty to do exactly as they wished with their lesson and that there was no need to feel that what they did in front of the camera should be, in any way, dictated by its presence.

This, coupled with the emphasis on a "non-judgemental approach" i.e. that I was not observing in order to "criticise", was, I feel, instrumental in achieving as near "normal" records of classroom interaction as possible.

Financial restrictions limited the number of researchers, the duration of the research, the sample of schools, and the quality of equipment. These are discussed in more detail in Chapter Three: Teaching as Semiosis.

Methods of research, therefore, are equated with semiotic methods and, together, provide a perspective of school informed by semiotics.

N O T E S

1. Voigt, Vilmos, 'Classification of Signs in Social Semiotics', Vanderbilt University: paper presented during the Second International Summer Institute for Semiotic and Structural Studies, Vanderbilt University, Nashville, T.N. June, 1981, p.1

2. Von Raffler Engel, Walburga, 'The Ontogeny of Communication', Nashville, T.N.: paper presented at the annual meeting of the International Summer Institute for Semiotic and Structrual Studies, Vanderbilt University, Nashville, T.M., June, 1981.

3. Sebeok, Thomas, *Encyclopedic Dictionary of Semiotics*, Berlin, Walter de Gruyer & Co, 1986, p.610 and pp.625/7.

4. *ibid.*, p.612.

5. *ibid.*

6. Eco, Umberto, 'Function and Sign: Semiotics of Architecture' *in* Bryan, James and Sauer, Rolf (Eds), *Structures Implicit and Explicit*, University of Pennsylvania, Publication of the Graduate School of Fine Arts, 1973.

7. *ibid.*, p.131.

8. Sebeok, *op. cit.*, p.612.

9. Elam, Keir, *The Semiotics of Theatre and Drama*, London, Methuen & Co., 1980, p.62.

10. Sebeok, Thomas A., 'Final Report' to the National Endowment for the Humanities on the Pilot Program in Semiotics in the Humanities at Indiana University, Bloomington, Indiana, August 1, 1975 - July 31, 1976. June 1, 1976: Research Centre for Language and Semiotic Studies, Indiana University, Bloomington, Indiana.

11. Deely, John N., *Introducing Semiotic: its history and doctrine*, USA, Association of American University Presses, 1982, pp.7/8.

12. Saussure, Ferdinand de, *Course in General Linguistics*, Fontana/Collins, 1974, p.16.

13. Peirce, Charles S., 'Logic as Semiotic: The Theory of Signs' *in* Innes, Robert E. (Ed.), *Semiotics: An Introductory Anthology*, London, Hutchinson, 1986, p.4.

14. Eco discusses the distinctions between "semiology" and "semiotics", in Eco, Umberto, *A Theory of Semiotics*, Bloomington, London, Indiana University Press, 1976, p.30.

15. Innes, *op cit.*, p.xiii.

16. Saussure, *op. cit.*, p.16.

17. *ibid.*, p.169.

18. Fiske, *op. cit.*, p.47.

19. *ibid.*, p.45.

20. Eco, *A Theory of Semiotics*, *op. cit.*, p.14.

21. *ibid.*, p. 15.

22. Saussure, *op. cit.*, p. 16.

23. Hawkes, Terence, *Structuralism and Semiotics*, London, Methuen & Co., 1977, p. 125.

24. *ibid.*, p.125.

25. Barthes, Roland, *Elements of Semiology*, New York, Hill and Wang, 1983, p.41.

26. Innis, *op. cit.*, p.viii. For discussions of the semiology of photography and kinship systems, see Barthes (1984) and Lévi-Strauss, (1972), respectively.

27. Eco, *A Theory of Semiotics*, *op. cit.*, p.3.

28. *ibid.*, p.15.

29. Fiske, *op. cit.*, p.45.

30. Saussure, *op. cit.*, p.66.

31. *ibid.*, p.65.

32. Fiske, *op. cit.*, p.47: "Peirce's concern as a philosopher was with man's understanding of his experience and of the world around him. It was only gradually that he came to realize the importance of *semiotics*, the act of signifying, in this. His interest was in meaning, which he found in the structural relationship of signs, people and objects.....Saussure, as a linguist, was primarily interest in language."

33. *ibid.*, adapted from model on p.47

34. "something is a sign only because it is interpreted as a sign of something by some interpreter....Semiotics, then, is not concerned with the study of a particular kind of objects, but with ordinary objects insofar (and only insofar) as they participate in semiosis", Eco (1976), *op. cit.*, p.16.

35. *ibid.*, p.16.

36. O'Sullivan, *op cit.*, p.166.

37. Fiske, *op cit.*, p.61.

38. Sless, *op cit.*, Preface.

39. *ibid.*, p.30.

40. *ibid.*,p.35: Sless reminds us that: *"...the author always creates an image of a reader; similarly the reader creates an image of an author."* He borrows the notion of *projection* from Gombrich to describe this process.

41. *ibid.*, Preface.

42. Eco, *A Theory of Semiotics*, *op. cit.*, p.7.

43. Deely, John, 'The Doctrine of Signs: Taking form at last' *in Semiotica*, 18:2, 1976, p. 172.

44. *ibid.*, p.172.

45. Gibson, Rex, *Structuralism and Education*, London, Hodder and Stoughton, 1984, p.19.

46. Innes, *op. cit.*, p.viii: "Ferdinand de Saussure's *Course in General Linguistics*, the source of "structuralist linguistics" and effector of a theoretical revolution in linguistics....."

47. Deely, *Introducing Semiotic: its history and doctrine*, *op. cit.*, p.7.

48. Eco, *A Theory of Semiotics*, *op. cit.*, pp 9-13.

49. Sebeok, *Encyclopedic Dictionary of Semiotics*, *op. cit.*

50. Sless, *op. cit.*, p.4.

51. Sebeok, *Encyclopedic Dictionary of Semiotics*, *op cit.*, p.901.

52. *ibid.*, p.902.

53. *ibid.*

54. *ibid.*, p.907.

55. *ibid.*, p.909.

56. *ibid.*

57. *ibid.*, p.611.

CHAPTER TWO

COMMUNICATION AND SEMIOTICS

2.1 Communication from a semiotic perspective

There is an important distinction to be made between
"communication" viewed as "the clear sending and receiving of
messages" and "communication perceived as semiosis"[1], an idea
which informs this thesis. This distinction requires some
explanation but, in short, it is necessary to understand the
contrasting but complementary views of communication which inform
this work. I have not confined myself to a study of what could
be called the "overt channels" of communication in school,
although these are acknowledged, but, by applying a theoretical
approach informed by semiotics, I have hypothesised about how the
individual and collective effects of the institution we call
"school" might be construed as generating not only explicit, but
implicit, meanings. There is no, one all-encompassing,
definition of communication and I do not intend to investigate,
here, the many different theories of communication which are
offered in the extensive literature on the subject as this would
be time-consuming and counter-productive to the main purpose of
this section which is to clarify as far as possible the
underlying ideas which have informed my writing.

"Communication" is a word which is used in everyday language to convey the idea of the exchange of information between people such as letters, phone calls, etc. and the dictionary provides the following definition:

> "a sending, giving or exchanging (of information, ideas, etc.)‖ a method of such exchange, *radio communication*‖....." (Longman English Dictionary, Second Edition, 1976)

This definition gives an adequate account of how the word is commonly used, pronounced and spelt but, for the purposes of this thesis, information of this kind is of minimal value since it relates to a narrow definition of communication and gives no hint of the diversity of meaning to be found in wider applications of the word.

In physiology, for example, one could hypothesise about the communicative function of synapse within the central nervous system; in sociology, one could study communication between groups of people as opposed to individuals, and in anthropology, the communicative function of tribal custom and other behaviours. Communication is by no means confined to the human species and the word can be applied to bird song, bees swarming, the chemical signals of ants, and, stretching the idea to its limits, the effects of the earth's magnetic field on the orientation of pigeons. It is possible, therefore, to include many complex ideas when applying the word "communication" generically. This broadens the scope of the word so that it is apparent that the

dictionary definition, although perhaps more precise in nature,
appears somewhat limited.

The observable difference between the precision of the
dictionary definition and the more imaginative examples given
above is heightened when the implicit meaning contained in the
dictionary definition is examined: the idea of *intention*. The
"sending", "giving", and "exchange" of information infers that
these are explicit and intentional acts. The second, and more
general, application of the word does not imply that there should
be an intentional act of communication but, in fact, relates to a
variety of viewpoints relating to what I will call "the
generation of meaning"[2], which will be discussed below, rather
than to explicit and purposeful acts of communication. At the
heart of this idea is our ability to interact cognitively with
our world and store in our memories past individual and social
experience which we bring into play when interpreting meaning.
Because we can accept that the ritualistic behaviour of primitive
tribes "means", or that group dynamics "means", or that bird song
contains meaning, we can accept these ideas about communication
as part of the symbolic, or abstract process of meaning-making,
which brings us closer to the notion of "communication" which
informs this thesis: the *generation of meaning* between
individuals, social groups, and, more specifically, by the
institution we call "school".

This definition does not require that there should be a conscious or intentional exchange of meaning but it is accepted in the simplest terms that it is possible for individuals to "make meaning" from the world. It is assumed that making meaning from stimulus involves a perceptual process and that certain stimuli, when received, are altered in the mind of the individual receiving the stimuli and made to *stand for*[3] something meaningful for that individual, i.e. something activates mental processes to produce meaning. I am *not* saying, however, that when a stimulus is received there will immediately be a *measurable* response from which it could be inferred that a stimulus has been received; I am not referring to the stimulus/response theory of behavioural psychology, but I am emphasising the notion that meaning is partly created from *perceived* phenomena i.e. that the individual responds psychologically and physiologically to stimuli such as heat or cold or more complex processes of learned stimuli such as the written or spoken word, the items of clothing worn by other individuals, the surroundings in which the individual finds himself and the multitude of other stimuli which can be perceived and understood as meaningful.

It is assumed, therefore, that the act of making meaning need not lead immediately to measurable responses by the individual concerned. Thus, it is possible for a child to learn that the shape A is a letter in the alphabet which stands for a particular sound and helps to create words in written language,

without there being any outward sign that the child has had this idea. We can induce a measurable response by asking for an oral or written example of what the child has learned, but there need not be a spontaneous, measurable response as a result of the child's meaning-making experience.

Donald Thomas (1982) points out, however, that "we do not communicate merely by assigning ideas to objects, for to communicate is quite literally 'to make common.'"[4] The above child could, quite randomly, decide that the shape A looks like a space rocket but this would be a totally arbitrary meaning which is likely to remain of significance only to that child. As Thomas maintains, therefore, "Meaning, for the purposes of communication, *must be able to be shared.*"[5] (My emphasis) This same premise must also stand in relation to the concept of communication presented in this thesis. Communication, as I have already stated, is perceived herein as "the generation of meaning between individuals, social groups, and the institution which we call 'school'" (p.52, above) and in support of this concept I have stated thus far that:

i) This encapsulates a wider concept of communication, "the generation of meaning", as well as the more commonly used and understood ideas of communication, e.g. "the clear sending and receiving of messages."

ii)   There need not be intentional acts in order for meaning to be generated.   It is assumed that it is possible for individuals to make meaning from observable phenomena.

iii)   There need not be an immediately measurable response from the activity of making meaning on the part of the individuals involved.

iv)   The meaning must, ultimately, be able to be shared.

Within this final premise is the concept of **convention.**   In order that I may share meaning with the reader, I must rely on the conventions of language, making a whole range of assumptions in the process.   I must assume that the reader will   recognise individual letters on the page and understand the complexities of syntax and lexical choice;   it is assumed that the reader will share certain cultural and social knowledge and that meaning, in this way, will be generated between author and reader.

The following discussion expands upon the above points:

i) Communication as the generation of meaning

Colin Cherry (1966) has said of communication, "There is no communication without a system of signs..."[6].   Man's highly developed ability to endow the tangible, intangible and the

abstract with symbolic value is both acknowledged and extended in this idea. Cherry's observation intrinsically acknowledges the informing principle of semiotics; the study of shared signs and sign systems, and **communication, therefore, is seen to encapsulate the idea of a system of signs; the subject-matter of semiotics.** Sebeok (1985) defines semiotics in the following way:

> "Semiotics is concerned, successively, with the generation and encoding of messages, their propagation in any sensorially appropriate form of physical energy, their decoding and interpretation." [7]

The above definitions firmly associate semiotics with what could be called the "code model" of communication. This model hypothesises that, in order for meaning to be shared, there must be a system of signs or codes. Although communication studies and semiotics are based on this hypothesis, it is my opinion that certain "ways of seeing", or received ideas, seem to have arisen in connection with communication which are not necessarily the case in semiotics. The following explanation is offered to illustrate my point.

One of the earliest communication models is that of Shannon and Weaver, shown below, Fig.4, which can be applied "to any situation of information transfer, whether by men, machines or other systems"[8].

```
Information  >  Trans-   > signal >              received  >  Receiver >  Destination

Source         mitter                           signal


                              Noise Source
```
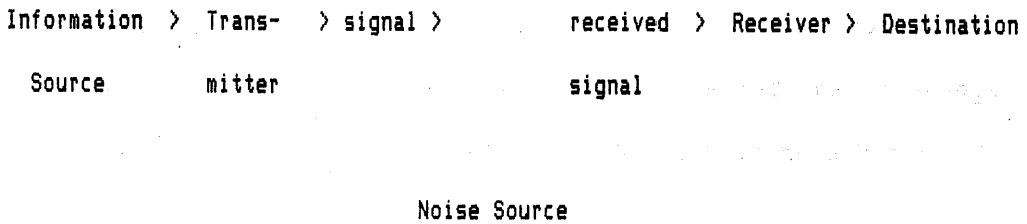
Fig.4

        Although this elementary linear model of communication

encompasses certain concepts which appear similar in nature to

Sebeok's description of semiotics, above (p.56),   such   as

"message", "encoder" (or sender/transmitter), "decoder" (or

receiver), there are differences.   Shannon and Weaver's model is

linear and infers that there is an intention to communicate

which   encourages   a   particularly   mechanistic   view   of

communication.   Nevertheless this model has been modified many

times by communication theorists and the hypothetical "way of

seeing" which it presents has become so prevalent in discussions

about   communication   that   it   has   become   the   conventionally

accepted way of thinking about how communication works (see

Chapter Two, Section Five,   Communication and Pedagogy), i.e. as

linear and intentional, emphasising channels of communication.

This encourages a rigid way of perceiving communication and often

carries connotations of passivity on the part of the receiver.

        From the semiotic perspective   there is understood to be

equal   activity   from   those   participating   in   the   act   of

communication. The "generation" and "encoding" (Sebeok, p.56, above) of "messages" does not necessarily infer a linear system, nor the **intention** to communicate. It is assumed that "messages" are composed of signs which belong to an underlying structure - a code (or sign system). Thus personal, social and cultural knowledge can be construed as carrying meaning as sign systems, whether of the nature of utterances (e.g. language, writing, reading, paralinguistics), behaviour (e.g. gesture, dress, posture, facial expression), or buildings, space, colours, cultural objects, media artifacts, footprints in the snow....etc.

In order to perceive teaching and the school environment from a semiotic perspective, it is necessary to adopt a particular "way of seeing" on the part of the reader/observer/researcher. Teaching can be associated with linear models of communication like the Shannon and Weaver example but one must also be concerned with how meaning is generated: choices are made, decisions are taken, signs are interpreted by pupils and teachers which may or may not evoke responses from either; gestures, tone of voice, clothing, eye-contact and many, many other phenomena which are not always consciously emitted play a part in the generation of meaning. This process is continuous and does not begin and end inside school classrooms. Eco (1976) maintains that:

"Those who reduce semiotics to a theory of communicational

acts cannot consider symptoms as signs, nor can they accept
as signs any other human behavioral feature from which a
receiver infers something about the situation of the sender
even though this sender is unaware of sending something to
somebody..." [3]

In other words, Eco is pointing out that communication from
a semiotic perspective should be understood as being more complex
in nature than the "clear sending and receiving of messages".
The "sending of messages" is an explicit form of communication
where there is an assumed intention to inform. The "generation
of meaning" does not exclude this idea of communication but also
includes the idea of the more implicit forms of communication
which come about when a "receiver infers something about the
situation of the sender even though this sender is unaware of
sending something to somebody..."

ii) Communication need not be intentional

In communication studies, there is often an underlying
assumption that communication takes place through intentional
acts which, as Eco points out, above, is restricting.   For
example, if an English teacher instructs her class to "Take out
your literature jotters...", this is a deliberate act of
communication; the teacher has given an explicit verbal
instruction which the pupils will respond to in an overt way by
finding this particular jotter and putting it on their desks.
Within this deliberate act of communication on the part of the
teacher, however, there are implicit meanings which pupils will

infer from the teacher's demeanour, tone of voice and other signs. If she issues this instruction in a relaxed way, with a smile, it might be assumed that the teacher is looking forward to something pleasurable. If, however, she issues the instruction with a sigh and a frown, the opposite idea could be read from these circumstances. These "non verbal" signs could, of course, have been used deliberately by the teacher for her own reasons but, if they were not, then meaning has been generated without deliberate intention on her part.

Furthermore, because the jotters are signs with a connotative value , they *stand for* "lessons on literature" and "written notes"; the utterance of the simple instruction to take them out carries with it certain implicit meanings, e.g. that the the teacher intends to include in the lesson some aspect of literature and that she intends that writing will take place. Meaning has, therefore, been conveyed to the pupils through the sharing of certain social and school-based sign systems, or codes of which the teacher may or may not be aware of manipulating. The hypothesis that there are certain shared rules, or codes, which operate at social and cultural levels and which help to generate meaning is discussed below (Subsection *iv - Meaning must ultimately be able to be shared*).

Sebeok (1985)[10] acknowledges the fact that people are not always aware of sending messages and uses the classic example of eye-pupil dilation to illustrate this point. It has long been

acknowledged that women displaying enlarged pupils are attractive to men because large pupils imply, amongst other things, a strong sexual interest on the part of the woman. This happens at an unarticulated, instinctive, level, the reaction to meaning generated by physiological changes: "While it is evident that men are attracted to women with large pupils their responses are generally at a nonverbal level."[11] Women, too, are generally unaware of this phenomena and, to all intents and purposes, cannot control pupil dilation. Their "signalling system" is, therefore, unwitting. This, of course, can be altered, as Sebeok points out, by the application of a pharmaceutical preparation derived from the plant belladona, thus rendering the hitherto unwitting eye-pupil-communication a purposeful act intended to communicate interest on the part of the woman.

This is an interesting example in that it not only shows that communication is not always intentional but demonstrates the implicit nature of some forms of communication i.e. meaning in the first case is being shared, but on an unarticulated level and, in the second place, once articulated, creates an overt form of communication. Both of the examples can be viewed as the generation of meaning because, ultimately, the implicit and explicit meanings have been shared.

iii) There need not be an immediately measurable response from
the activity of meaning making

The implicit meanings contained in the teacher's request for
literature jotters, discussed above, are powerful.   For
example, if the teacher asked the class to write the answers to
an interpretation paper in their literature jotters, there would
be extreme puzzlement amongst the pupils. If there was an active
display of puzzlement with accompanying facial expressions and
exclamations, then this could be construed as evidence of the
pupils' act of semiosis or interpretation of meaning.   If,
however, the pupils displayed no outward signs of puzzlement or
confusion, preferring to hide their reactions for some reason,
then this does not mean to say that they have not understood and,
therefore, are not puzzled.

I am arguing, therefore, that it is possible to "make
meaning" without any immediately obvious results;   that some
change has taken place within the mind of the individual can, for
however long it may take the individual to reveal that change,
remain indescernible to others.   This idea is incompatible with
certain communication models which demand feedback from the
"receiver".

iv) Meaning must ultimately be able to be shared

An individual's decision not to react to, or share with others, his act of meaning making, does not preclude the fact that meaning should, ultimately, be able to be shared.   The contradiction which appears to exist in this statement derives from the fusing together of two concepts i) the private nature of making meaning and ii) the public nature of generating meaning.   Donald Thomas (1982) reminds us that John Locke, the philosopher, conceived of *semeiotica*, or the "doctrine of signs", as being the "third great division of science."   *Physica* or "the nature of things as they are in themselves" formed the first division.   *Practica*, or "that which man ought to do, as a rational and voluntary agent, for attainment of an end", formed the second. The third, *semeiotica*, was perceived as "the ways and means whereby the knowledge of both the one and the other of these are attained and communicated."   The means by which Locke assigns power to the third division is through signs. Semeiotica considers "the nature of signs the mind makes use of for the understanding of things or **conveying its knowledge to others."** (My emphasis).   Signs, in order to communicate, therefore, according to Thomas, must "operate in a context shared by others, a context of which the signs themselves are an integral part."[12]

Eco (1976) endorses this by emphasising that, in order for signification to take place, there must be a code in existence

i.e. a system of signs ("every act of communication to or between human beings...presupposes a signification system")[13].   The concept of codes forms an important part of the hypothesis that meaning can be generated between individuals and society.   This idea is discussed by Fiske (1982) in order to illustrate hypotheses relating to communication, as follows:

> "When I communicate with you, you understand, more or less accurately, what my message means.   This message stimulates you to create a meaning for yourself that relates in some way to the meaning that I generated in my message in the first place.   The more we share the same codes, the more we use the same sign systems, the closer our two 'meanings' of the message will approximate."[14]

This simple explanation reinforces the point made earlier in this section (p.55) about convention.   In order for meaning to be generated, there must be a shared understanding between those communicating.

The following extract from an article by Charles O. Frake (1962) helps to illustrate this idea further:

> "A relatively simple task commonly performed by ethnographers is that of getting names for things.   The ethnographer typically performs his task by pointing to or holding up the apparent constituent objects of an event he is describing, eliciting the native name with the investigator's own word for the object.   The logic of the operation is: if the informant calls object X a *mbubu* and I call object X a *rock*, then *mbubu* means *rock*."[15]

Ethnographers must, of course, take their findings a little further than merely naming objects.   They must find out the contextual value of the word before its full meaning can be

gained.   There is a tongue-in-cheek account about a similar

attempt to find out the name for the Australian lovebird or grass

parakeet, "budgerigar", which warns of the inherent dangers of

merely naming things out of context.   The story is that when the

first settlers landed in Australia and asked the Aborigines, by

pointing at the birds, what they were called, the reply was

"budgerigar" which, so the story goes, when translated means

"good to eat".   This, of course, is only a joke and the true

meaning of the word is "good cockatoo".   Social and cultural

context, therefore, are important factors in the generation of

meaning.

2.2 Semiosis

Semiosis can be viewed as the activity of producing meaning:

the action of the sign[16].   For Pierce, it was equated with the

triadic nature of the sign as he defined it;   for Morris it was

"the process in which something functions as a sign"[17];   for Eco

it is "..the process by which empirical subjects communicate,

communication processes being made possible by the organization

of   signification   systems."[18].   Schools   abound   with

signification systems and, as Gibson (1984) has said:

            "....indeed any school activity can be seen as a sign
            system and so available to semiological analysis."[19]

        By now it should be apparent that two communication

paradigms have emerged.   One, related to what I have called the

"the clear sending and receiving of messages", a purposive act,

and another, much wider in scope,   which relates to the

generation of meaning and the activity of making meaning as a

semiotic function; "semiosis".   The former is an extremely

structured - mechanistic - view of communication, governed by

"messages", "senders" and "receivers"; the latter is much more

wide-ranging in nature since it relates to the idea of *active*

meaning-making, rather than ideas of passive "reception".

Watzlawick, et al (1968) make an interesting point in this

direction which also has a bearing on the previously discussed

idea of generation of meaning through intentional and

unintentional acts (Subsection *ii) Communication need not be

intentional*, p.59, above).   These authors maintain that *one

cannot* not communicate:

> "First of all, there is a property of behaviour that could
> hardly be more basic and is, therefore, often overlooked:
> behaviour has no opposite.   In other words, there is no
> such thing as non-behaviour or, to put it even more simply;
> one cannot *not* behave.   Now, if it is accepted that all
> behaviour in an interactional situation has message value,
> i.e. is communication, it follows that no matter how one
> may try, one cannot *not* communicate.   Activity or
> inactivity, words or silence all have message value...."[20]

If one accepts Watzlawick et al's dictum and combines it

with the basic premise that school and, more so, the classroom is

interaction-specific, then it follows that all behaviour is

significant in school; all behaviour *means* within the school and classroom.

When teacher and pupils enter a classroom, this in itself is active semiosis. The very action of entering a classroom *means*; conventionally, it is understood that classrooms are for learning, for doing "lessons" in. When pupils and teacher enter the teaching area - whether it be open plan or traditional-it is with an implicit understanding that certain codes of communication will operate. For this reason, all behaviour becomes "magnified" and has a greater significance within the classroom environment. A fidgety child who cannot sit still in his seat, for example, faces the possibility of punishment or reprimand because his actions generate the meaning - "lack of concentration" to the teacher - or, in deference to transmission theories, and what I have called "the clear sending and receiving of messages", the child might be perceived of as interfering with the "channels" of communication by creating "noise" by irritating or distracting behaviour.

How this distinction is made will depend on variables dictated by "context" (see Introduction: "Reading" Meaning, p.11) e.g. is the child perceived by the teacher as being deliberately distracting? We can bring the following into play when making such a decision; "mood" e.g. the dominant mood and behaviour of the class and the amount of patience which a teacher can summon depending on such things as time of day, personality

and personal factors; "circumstance", e.g. where is this behaviour taking place? For example, teachers in primary school classrooms may not be as concerned with "fidgeting" as teachers in secondary school classrooms. Is the child prone to such behaviour, perhaps revealing an underlying medical problem? But, for semiotic purposes, what is *not said* here is just as important as what *is* said. What is not said is that pupils, in general, are expected to enter the classroom in order that the agreed agenda, learning, can be covered, and that they should not, therefore, indulge in distracting behaviour. The punishments often meted out as a routine matter to pupils who fall into the category of "distracting" speak to the existence of such implicit codes. Indeed, such codes are so implicit that they are no longer consciously taken cognizance of by teachers - they become, with experience, almost reflexive - but they have an important part to play in the generation of meaning in school. Implicit codes relating to punishment, by their very nature, might escape the attention of the probationary teacher, for example (see Chapter Three, Section Three, The Maintenance of Meaning in the Classroom).

The perspective adopted, therefore, is that meaning is generated through socially and culturally motivated sign systems which involves individuals in **active meaning making**, a concept which is in direct opposition to the transmission theory of being "communicated *to*".

2.3 The Meaning of School as *Sign*

Peirce's definition of a sign as "something which stands to somebody for something in some respect or capacity" and which "creates in the mind of that person an equivalent sign, or perhaps a more developed sign" poses an intriguing question about meaning. In view of the fact that Peirce's definition appears to embrace idiosyncratic interpretations of language, would it be possible to demonstrate not only that there are conventional – or agreed aspects – of the meaning contained in the word-sign "school", but that there are also unconventional – or idiosyncratic – meanings? The question of whether or not "school" would evoke a common verbal response from several people was tested by making a small scale survey. Simple questionnaires, which simply asked that the subject should write down as many words as they could think of in connection with the word "school", were issued to approximately thirty people – adults and children.

The results showed a number of common semantic responses. The words "teacher", "blackboard", "jotters/books" were amongst the most common responses but there were other more idiosyncratic responses which might have been connected with previous experience and personal concepts of school. In one list, the word "brown" was included which was possibly connected with the colours of a school uniform. Whatever the reason, the colour seems, now, to *stand for* "school" for the person concerned.

"School", therefore, is not an "empty" word; it is a sign which "creates in the mind" equivalent signs. Klaus Oehler (1987) reminds us that:

> "For Peirce, there are no meaningless objects. All our objects are the objects of signification, and there is no such thing as a meaningless sign..."[21]

2.4 Nonverbal aspects of meaning

In this section, I am going to concentrate on less commonly understood aspects of meaning. The title given to this sub-section should be understood, therefore, to include not only the commonly received ideas of what constitutes "nonverbal" i.e. gestures, facial expression, posture, etc. but should also be understood to include less commonly understood examples such as the buildings and space which we inhabit, and other objects, and the organisation of the classroom. (A discussion informed by this perspective can be found in Chapter Four: The Educational Environment).

Nonverbal aspects of meaning in the first sense given above (gesture, facial expression, posture, etc.), is a form of communication which is widely documented but which has been largely neglected in studies of British classrooms, verbal communication tending to take precedence, instead. Barnes (1976), for example, chose to concentrate on verbal aspects of

communication in the classroom because he felt motivated to reveal what he perceived to be inherent faults in teacher perceptions of classroom interaction; his main thesis was "that the learner should take more part in the formulation of knowledge."[22] which refutes the transmission view of communication criticised above (Chapter Two, Section One, Communication from a Semiotic Perspective, p.57), a view which encourages ideas of passivity on the part of the receiver. Whilst Barnes has contributed a valuable perspective on teaching practices by demonstrating that verbal teaching methodologies are often so rigid and formalized that they inhibit natural learning abilities in children, he has also followed a pattern which is prevalent in texts relating to teaching by creating a view of school which is predominantly language-orientated.

Perhaps one of the reasons for the apparent lack of interest in nonverbal aspects of teacher-communication lies in the fact that our interpretation of nonverbal behaviour is generally understood to be largely intuitive in nature and, therefore, would seem to be dominated by a subjectivity which would apparently make teaching nonverbal interpretation skills difficult. In this connection McQuail (1984) states that:

"Non-verbal communication has a range determined more by culture than society, and it may often be very localised. It involves skills which must be unevenly distributed, but

the lines of division may coincide more with personality than with social structural factors. These skills are not generally open to formal teaching or diffusion and are largely intuitive."[23]

Whilst it would be difficult to argue with McQuail's point, given that it is a general overview about nonverbal communication, recent studies by Neill (1983; 1984; 1986) and the much more tentative evidence in this thesis, suggest that teachers use characteristic nonverbal signals and it would seem likely that a knowledge of these would prove invaluable to student and probationary teachers. Although nonverbal behaviour is linked to personality, as McQuail claims, the findings of Neill and this author suggest that the "social structural factors" which McQuail dismisses in his generalised overview take an active part in shaping teachers' nonverbal behaviour in the classroom i.e. the social structure of the classroom, and the task of controlling large numbers of children, is conducive to certain ways of behaving. Furthermore, although nonverbal communication as a shared general phenomenon is subject to idiosyncracies of a cultural and personal nature, and, therefore, would be difficult to teach in the sense that we might teach a "language", the "closed" nature of the teaching environment would suggest that the opposite would be the case. It is my opinion that it would be possible to make nonverbal communication, in this sense, something which would be open to the specific formal teaching of student and probationary teachers. These points will be discussed at greater length in

Chapter Three, Section Six, Teacher Training from a Semiotic Perspective).

Some of the general perceptual difficulties relating to the concept of nonverbal communication might partly be rooted in the semantic confusion which can arise from the use of the word "verbal". Sebeok (1986), for example, observes that:

> ".... the concept of nonverbal communication is one of the most ill-defined in all of semiotics.......Countless monographs, special journal issues, and brief articles insist on viewing nonverbal communication as "communication minus language".[24]

Lyons (1977) makes a similar point by maintaining that the nomenclature employed to distinguish different kinds of communication is misleading in that the word "verbal" is connotative of "language" and, thus, gives the impression that "verbal communication" consists only of words when, in fact, there is a "non-verbal component in spoken language", e.g. distinguishing features of voice tone.[25] Lyons maintains, therefore, that "non-verbal" is an inexact term, a viewpoint which I share.

He continues, however, by pointing out that vocal and verbal are often seen as synonymous when, in fact, vocal emissions need not always amount to communication e.g. sneezing, coughing, snoring which are physiologically determined and which he classifies as "signalling behaviour in man and animals of a

kind which, though it may be informative, is not necessarily communicative"[26].   This view is, of course, valid in relation to the first communication paradigm discussed above - the "clear sending and receiving of messages" - which assumes that in order for communication to take place, there should be intention to communicate.   A sneeze cannot be included within this communication paradigm because it is a reflex and, therefore, unintentional.   It can, however, be included within the second paradigm, the "generation of meaning" because it can be understood as a *sign*, generating meaning through social and cultural knowledge.   A sneeze can communicate in the sense that it generates meaning in certain contexts; a mother might worry about her child's health on the assumption that a sneeze might be symptomatic of illness or a doctor may decide that it is a symptom of an allergy and not of a simple cold, for example.

These complexities are, in themselves, symptomatic of the attempts of many disciplines to segment the phenomena from which we make meaning - communications which are often essentially simultaneous, or "multi-channel", in nature e.g. vocal, verbal, spatial - in order to examine them.   In short, there is no sharp dichotomy between verbal and non-verbal phenomena and the isolation of certain aspects of communication can be misleading as pointed out earlier in this thesis. (Introduction, "Reading" Meaning, p.11).   Whilst appreciating this fact, it has still been necessary to create a similar division between the "verbal" and "nonverbal" in this work for reasons of ease of discussion.

Finally, having acknowledged the fact that problems exist in finding satisfactory categorisations of "verbal" and "non verbal" and, in an attempt to go some way towards avoiding a repetition of these problems, I will continue by delineating as precisely as possible the various concepts of "non verbal communication" which have been adopted in this work.

In Chapter One, Section Five, The Field of Research, above, I listed the areas of research which Eco (1976) considered to belong to semiotics and, amongst these, were: *Zoosemiotics; Olfactory signs; Tactile communication; Paralinguistics; Kinesics and proxemics; Systems of objects.* Each of these categories, for the purposes of this thesis, can be understood as being concerned wholly, or partly, with "nonverbal aspects of meaning" and I would like to discuss each of these in turn as theories which contribute to this concept, adopted in this work. Some may not strike the reader as being immediately relevant to teaching and the educational environment but I find these full explanations which follow necessary for that very reason: that they may, indeed, be unfamiliar to the reader and, therefore, require full and adequate explanation.

Sebeok coined the word *zoosemeotics* in 1963[27] as the name for "the discipline, within which the science of signs intersects with ethology, devoted to the scientific study of signalling behaviour in and across animal species."[28] The term has been adopted since then by many disciplines and, as Sebeok observes[29],

the uses to which it has been put often deviate from the original

intentions of the author.   Used at its most restricting, the

word is seen as synonymous with the study of animal

communication in contrast with human communication.   Sebeok's

intention, however, was to make a distinction between

anthroposemiotic and *zoosemiotic* systems of communication,

extrapolating that man has species-specific systems of

communication as well as sharing certain sub-systems of

communication with other members of the animal kingdom.   Sebeok's

zoosemiotics takes its place within the conceptual framework

which he created, encapsulating one of the broadest possible

understandings of semiotics:

> "Messages may be emitted and/or received either by inorganic
> objects, such as machine, or by organic substances, for
> instance,. animals, including man, or by some of their
> component parts (e.g., ribonucleic acid, mRNA, that serves as
> an information-bearing tape "read" by particles, called
> ribosomes, that travel along it, carrying amino acid sequence
> information ....;   one may also speak of information, for
> instance, in cardiovascular functioning, where messages are
> conveyed from peripheral vessels to the brain, relayed thence
> to the heart and back to the brain......   The interaction of
> organic beings with inorganic things (such as communication
> between a man and a computer) can also be treated as a
> semiotic problem."[30]

Sebeok's concept of *zoosemiotics*, inextricably coupled with

the concept of *anthroposemiotics*, provides a theoretical framework

rich in possibilities within which the many and varied forms of

human communication can comfortably reside.   It is possible to

place within this framework all systems which are capable of

producing messages.   Sebeok considers that the study of

"communication" and "signification" are complementary, "each implying the other".[31]   *Zoosemiotics* and *anthroposemiotics*, therefore, allow for the widest possible definition of human communication, capable of encompassing all of the following categories identified by Eco.

Proxemics and kinesics: In Eco *proxemics* and *kinesics* are listed together as "gesturing", which fails to take into account the full meanings of these words.   *Proxemics* is concerned with man's perception of space which includes such concepts as "individual distance" (i.e. the amount of invisible personal space which an individual tries to maintain and will defend if this space is perceived to have been invaded, during social interaction) and "territoriality", which is the name given to the anthropological study of man's propensity to lay personal "claim" to space.   (See Hall, 1959; 1966).   Sebeok places *proxemics* firmly within the framework of anthroposemiotics:

> "Evidence bearing on the structuring of space and time on animals, or having to do with territoriality, overcrowding, and other sorts of distance regulation, were later extrapolated to man's perception of space and cultural modifications of this basic biological structuration.   The branch of anthroposemiotics that studies such behaviour is sometimes called *proxemics*.[32]

Kinesics (Birdwhistell, 1970), as discussed in a previous section[33], is concerned with communication which occurs through body movement and is closest to Eco's definition of "gesturing".

Olfactory signs are listed in Eco (1976) as scents which either contain "connotative values" or as "odors [sic] with precise referential values" which, he maintains, "can be studied as indices...or as proxemic indicators...."[34]. Children seem to be more conscious of odours than adults. Their physiological senses are usually sharper than those of adults (whose sensitivities to odours tend to diminish with age) and are, perhaps, closer to the "instinctive" in that children have not yet been exposed to the learned responses brought about through cultural conditioning whilst reaching maturity. In the survey of pupil preferences for classrooms in one secondary school, discussed in Chapter Four of this thesis[35], odours were mentioned frequently by pupils as a reason why they did not like one particular building.

Tactile communication is listed in Eco (1976) as, amongst other things, "clearly codified social behaviour such as the kiss, the embrace, the smack, the slap on the shoulder, etc., and *proxemic* behaviour."[36] Studies of this form of communication are also known as "haptics" and concerns the study of physical contact between people. This is a sensitive subject for the purposes of school as the meaning engendered by touch is wide, ranging from the loving embrace to the slap administered in temper. Neither of these two extremes would, of course, be recommended in school although studies reveal that "tactile contact may be necessary for the elementary teacher to convey love and affection to students." and that, "when a teacher

witholds touch, a child may feel isolated and rejected."[37]   On

the other hand, as one might expect, "intimate, loving touches

are not expected or condoned by the school or community at the

junior high school or high school level, since they are often

equated with sexual behaviours."   In many practical learning

situations, touch is necessary and the primary school teachers

who participated in research for this thesis were often seen to

touch pupils:

> "The amount of physical contact observed by us in primary
> classrooms was high.   Also, its quality could best be
> described as friendly - in other words the type of physical
> contact usually involved touching with the hand and only
> occasionally touching with the whole arm or with other parts
> of the body."[38]

Secondary school teachers, however, in line with the findings

above, were much less likely to touch pupils although the

friendly teacher is quite likely to touch lightly on the hand,

the shoulder or the arm to reinforce a point or to end a verbal

exchange.

Systems of Objects: Objects "as communicative devices",

according to Eco (1976), include "architecture" and "objects in

general"[39].   The role which architecture has to play in

generating meaning within the school environment is discussed in

Section Four: The Educational Environment.   Briefly, however,

buildings are an extension of the institution and the institution

communicates via many "channels" *e.g.* the repair of buildings,

and care of the physical environment in general.   During my

teacher training at an inner city school with a falling school role and a generally seedy air about it, an empty Coke container lay abandoned in a corner of the back stairs which were used regularly by pupils and staff for the duration of my stay at that school: eight weeks. Neither janitorial staff, teachers, nor management, seemed concerned about this phenomenon. It did, however, convey the implicit message of neglect and one might extrapolate from this that neglect of premises just might creep into general neglect of the people who shared this environment.

Paralinguistics is listed in Eco (1976) as "the so-called suprasegmental features and the free variants which corroborate linguistic communication..."[40] He quotes Trager[41] who "subdivides all the sounds without linguistic structure into (a) 'voice sets', connected with sex, age, state of health, etc; control (glottish control articulatory control, etc.); (ii) 'vocalizations', in turn divided into (ii.1) 'vocal characterizers' (laughing, crying, whimpering, sobbing, whining, whispering, yawning, belching, etc.) (ii.2) 'vocal qualifiers' (intensity, pitch height, extent), (ii.3) 'vocal segregates' (noises of the tongue and lips which accompany interjections, nasalizations, breathing, interlocutory grunts, etc.). Another object of paralinguistics is the study of the language of drums and whistles."[42]

Sebeok criticises the concept of "para*language*" (my emphasis), and maintains that a more apt title should be

"paraphonation", as, otherwise, "the innocent inquirer may reasonably assume [that 'paralanguage' will] bear some relation to language."[43]

Sebeok's anthroposemiotic framework identifies the human production of signs in relation to different communicative techniques as shown below:

        Silent

SIGNS   Artifactual

    Sounded   Voiceless

            Somatic   *Verbal

                        Vocal   Speech-
linked

                                Nonverbal

                                        Speech-
disjoined
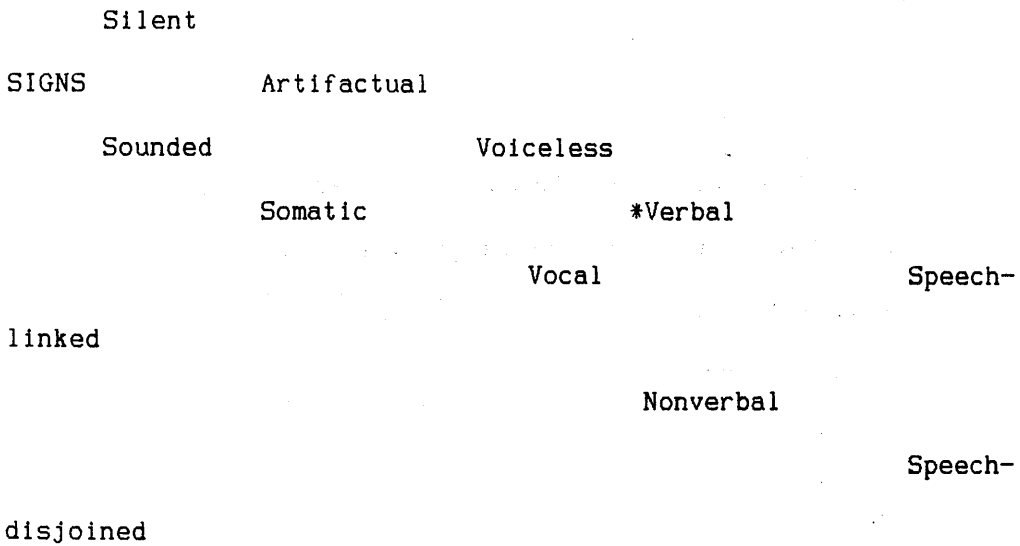
*The category assumed to be purely anthroposemiotic[44]

Sebeok criticises the loose use of the word *language* as in *Silent Language*,[45] a title which has been used by two different authors for their books[46] and demonstrates in the above tabular representation the variety of communications which man is capable

of, illustrating the huge variation to be found within the idea of "language".

He remarks that:

"Humans communicate via many channels, only one of which is acoustic. Acoustic communication in man may be somatic (e.g., humming) or artifactual (e.g. drumming: Sebeok and Umiker-Sebeok 1976). Acoustic somatic communication may be vocal (e.g., shouting for a waiter) or nonvocal (snapping one's fingers to summon him). Finally, acoustic somatic vocal communication may be verbal (speech) or nonverbal (...with the latter being either linked to or independent of speech)[47]

We can recognise within these examples a few of the channels of communication used by teachers and pupils in a classroom: pupils often snap their fingers at a teacher whilst their hand is raised in order to attract the teachers' attention quickly; drumming on desks with the palm of their hands after entering a classroom is a common practice amongst lower ability boys in the Secondary School investigated.

The concept of "nonverbal aspects of meaning" which I have adopted is, therefore, complex in nature, encompassing a wide ranging set of phenomena. Included amongst these are phenomena which are understood to belong to what is commonly known as nonverbal communication; the distinctive variations in human gesture, facial expression, posture, etc. · Less readily recognised phenomena include buildings and the objects which we come across in everyday interaction in society.

2.5 Communication, Semiotics and Pedagogy

As indicated above, it is possible to view communication
from the perspective of two opposing but interrelated paradigms.
For the purposes of the following discussion, they are perceived
as totally separate models in order to demonstrate how I
understand each to have informed existing pedagogical thought.
The impact of these paradigms on i) the curriculum and ii)
teaching methodology is discussed below[48].

In the first of these paradigms, communication is equated
with the clear sending and receiving of messages.   The emphasis
is on the efficient transfer of a message from A to B.   This is
a commonsense view of communications and has been a traditional
focus of pedagogical aims and objectives for many years,
implicitly shaping the English curriculum throughout primary to
upper secondary levels and beyond, to "vocational" education:
the receiver of a message, in order to receive efficiently must
be able to listen and read with understanding; the sender in
order to send must be able to write and talk with clarity.
"Bad" spelling, writing, grammar or vocabulary will interfere
with the message being sent.   Similarly, poor, inefficient, or
non-existent reading or listening skills will cause communication
difficulties.

It seems apparent that it is from this paradigmatic framework that the vocational courses in communication have grown. The following extract from the 1977 Guidelines of the Associated Examining Board in England can be seen to have been written from this distinctly functional perspective:

"A student who has successfully completed a communication studies course at 'A' level is bound to be better equipped in his [sic] approach to the writing of letters, handbooks, manuals and other documents."[49]

Communication is viewed in an equally utilitarian light by the Scottish Education Department, revealed in the following quotation from the 1984 SED 16+ Action Plan Guidelines in Communication:

"Communication underpins a range of vital functions in industry and commerce, including planning, organisation, control, marketing, selling and buying, public relations and industrial relations."[50]

Thus, communication in this first paradigm takes its importance from its functional value in society and is equated, generally, with the development of the personal expressive skills of reading, writing and talking and has shaped the English curriculum to these standards, perhaps even dominating teachers' methods in the past: the transmission model - teacher to pupils, whole class and no noise which is compatible with an understanding of communication as "the clear sending and receiving of messages". Communication viewed from within this paradigm is explicit and straightforward. Because of their

obvious commonsense values, the theories which have grown from this perception represent a widely accepted, and firmly entrenched, popularized view of what communication should be "about". Any consideration of how *school* – as a totality – is capable of "generating meaning" would, therefore, be an alien concept to someone who understands only the first communication paradigm. Considerations concerning the verbal ebb and flow of teacher and pupil-talk is a much more familiar concept and one which, as previously discussed, has been dealt with eloquently by Douglas Barnes.

Take, for example, the following summary of contents of an article on communication in the classroom: "The Communication Process: A. Originator, B. Encoding, C. Transmission, D. Message, E. Channels, F. Communication Climate, G. Interference, H. Reception, I. Decoding, J. Responder, K. Feedback."[51] Each of these words indicate a particular "way of seeing" communication in the classroom. For example, the text for "A. Originator" begins in the following way:

> "In classroom communication the teacher is frequently the
> originator of the message. In one investigation of
> teacher verbal behavior it was discovered that, depending
> on the degree of teacher dominance, teachers initiated from
> 55.2% to 80.7% of all messages in the classroom. The
> communication "cycle" is usually initiated as a result of
> the originator-teacher's need to impart information or the
> student-originator's need to seek information. The need
> to communicate may also result from a stimulus (or stimuli)

which affects the originator. These stimuli may evolve from within the originator, such as hunger or thirst, a headache, or a sudden "flash" of an idea." [52]

Pupils, therefore, are seen here in a particularly detached way and as having only a minimal part to play in classroom interaction. They are rarely "originators"; they may, however, be subject to physiological needs with the odd attack of inspiration which prompts them to communicate with the teacher.

The text for "G. Interference" further emphasises the mechanistic perceptions which dominate this communication paradigm:

"In most communication settings noise or interference is present which can alter the message." [53]

and similarly with "H. Decoding":

"The decoding process is the reverse of the encoding process previously described. It is the process of transforming words and gestures into thought symbols. Though behavioral scientists are not certain of the exact form in which messages are stored by the brain, most agree that people think in terms of electrochemical nerve impulses or waves." [54]

Pupils, here, are reduced to bundles of nerve impulses; metaphorical radio receivers who might fail to decode the message because of interference. The need to draw attention to "storage" of information as "electrochemical nerve impulses or waves" is consistent with the rationale which informs this approach to communication; one might ask if this is consistent

with the idea of "thought symbols", an almost poetic phrase, which sits uncomfortably amid metaphorical whirring cogs and clicking electronic synapse!

Communication, therefore, is reduced to a purely mechanistic level with originators and responders who **must** respond, otherwise the communication cycle cannot be considered complete:

> "In the classroom some responses may be delayed for an extended period, while others may be transmitted immediately after the message has been received and decoded. When delayed responses occur, the originator must be sensitive to this fact and be willing to wait during an incubation period while the response is being formed. *Learning theory would suggest that delayed responses should be avoided, when possible, so that oral reinforcement and punishment will be more effective.*" (My emphasis)[55]

This last sentence contains overtones of the Dickensian character Gradgrind, a cruel and despotic school master who insisted on rote-type answers to packaged information and, I suggest, contains the kind of implicit message which encourages a "way of seeing" teaching methodology which is as antiquated as Bell's first system of telephone communication is to laser and satellite communication, today.

Although I do not deny that this "way of seeing" communication has a part to play in explaining how we communicate, it traps the processes of communication within its own parameters, insisting on a mechanistic and linear vision of human interaction. Semiotics, or the study of signs and sign

- 87 -

systems, which informs what I have called the "second communication paradigm", the generation of meaning, is integral to all forms of communication:

> "The subject matter of semiotics is, quite simply, messages - any messages whatsoever. ..... every message is composed of signs according to some ordered selection.....[56]

The second paradigm, therefore, as discussed in a previous section, involves a shift in perspective from a preoccupation with the clarity and quality of the message - the channels of communication - to how meaning is generated. Communication, within this paradigm, loses its purely utilitarian function (and thus much of its commonsense attraction) and moves into the realms of culture and society: from message to meaning. The focus shifts to how we make meaning and, therefore, to the encouragement of personal responses in the student, the choice and structure of pedagogical methodology, and the method of delivery by the teacher.

This second paradigm for explaining communication has been adopted by the relatively new discipline of media studies. It is unusual to find "semiotics" as a topic for study in school but a unique course in Semiotics is currently available to High School students in Brookline, Massachusetts, U.S.A.[57]

Furthermore, if we look carefully at the module descriptors and some of the exemplar materials being produced for the 16+

SCOTVEC modules on Communication, many of these take into account the communicative value of graphic styles and the meaning of graphic representations such as road signs and other non-verbal signs used to convey meaning to the public in general. A semiotic perspective is, therefore, in evidence in these approaches even although no overt reference is made to its presence.

Inherent within the "semiotic" paradigm is the idea of choice and structure. We apply semiotics (or semiology in deference to Barthes) in media studies to discover the meaning of television images and show that the media is a construct which has involved an element of choice on the part of those who are employed in the "media industry": we can identify the codes which are used to structure television and we can develop critical responses in students using these and similar techniques.

The teacher in the classroom is also likely to impose structures (see Chapter Three, Section Four, Regulating, Instructing, Controlling), albeit for different purposes, but these are not taught in an overt way. Trainee teachers are allowed to watch other teachers at work and try to emulate them (or not). It seems, however, that this emulation (or otherwise) is intended to be carried out by a process of osmosis since there is neither a critical language nor an apparent structure within which trainee teachers can work. Like the received ideas about

nonverbal communication, what the teacher does in the classroom

is seen to be dominated by a subjectivity and it seems there is,

as yet, no adequate language which would allow interpretation of

teacher behaviour in the classroom.

2.6   Verbal Aspects of Meaning

Schools are likely to be perceived, as Barnes (1976) reminds

us, "as places where people talk to one another."[58] and verbal

exchanges in the classroom are likely to be examined in

connection with the formal teaching and learning of socially

valued knowledge.   There have been many valuable and extensive

works produced in this connection[59] but this thesis is not so

much concerned with the explicit properties of language as with

the implicit structures of meaning which are built upon language

exchanges in the classroom.   This point can be illustrated from

Barnes:

> "Every secondary school teacher will have met classes of
> older adolescents who do not answer teachers'
> questions......They have learnt during the years that most
> teachers only wish to hear the expected reply, that they do
> not want discussions that include divergent view-points and
> which raise different questions from theirs."[60]   (my
> emphasis)

Although Barnes uses this statement to reinforce his main

thesis that pupils should be more involved in classroom

discussion but are prohibited from doing so because of prevalent

teaching styles and, therefore, his intentions are different from mine, it illustrates the point that patterns of classroom discourse, experienced over many years of schooling, impose certain standards. This is discussed in more detail in Section Three.

Verbal aspects of meaning are, therefore, examined from the point of view of what they are likely to convey in the implicit, informal, sense rather than for what they convey in the formal learning process.

2.7 Conclusion

In this thesis, I have adopted the perspective that it is possible for all aspects of school to carry meaning. Although semiotics has been linked to the code model of communication, it is not necessarily linked to the transmission model. A dichotomy exists, therefore, between the commonly understood mechanistic, transmission model of communication which suggests the notion of being "communicated *to*" and the notion that meaning is generated through socially and culturally motivated sign systems which involves individuals in active meaning making.

In the following chapters, it will be found that I have concentrated more on the nonverbal aspects of meaning making and less on verbal aspects. This is partly due to the wish to

emphasise that school communicates not so much through what is said in classrooms during the dissemination of formal knowledge but through the implicit meanings which are generated during such interaction and from the physical environment of the school.

Eco (1976) remarks that:

"Semiotics suggests a sort of molecular landscape in which what we are accu∽stomed to recognise· as everyday forms turn out to be the result of transitory chemical aggregations and so-called 'things' are only the surface appearance assumed by an underlying network of more elementary units....Semiotics, like musical theory, states that where we recognize familiar melodies there is only a sophisicated intertwining of intervals and notes, and where we perceive notes there are only a bunch of formants." [61]

An examination of the "molecular landscape" of the classroom would reveal that lessons consist of far more than a prepared content and a verbal delivery by the teacher; the interplay of verbal and nonverbal aspects of meaning surrounding the communication process generates other meanings. Similarly, meaning is generated by the physical environment of school such as school buildings, classrooms and the objects common to school, creating **environments which communicate** in the widest sense, rather than schools being places, as Barnes suggests, where "communication goes on". [62]

N O T E S

1. "For Eco, the term [semiosis] is synonymous with 'the process by which empirical subjects communicate, communication processes being made possible by the organization of signification systems'", *in* Sebeok, *Encyclopedic Dictionary of Semiotics, op.cit.*, p.887.

2. Fiske, *op cit.*, p.42: makes this distinction between "communication as a process" i.e. "the transfer of a message from A to B" and which is concerned with "medium, channel, transmitter, receiver, noise and feedback" and the semiotic model of communication viewed as "the generation of meaning".

3. The words "stand for" are taken from Sless, *op. cit.*, p.5, who simplifies the relationship between signs by giving them a *stand-for* relation which he sees as a core concept in semiotics: "The heart of semiosis is the *stand-for* relation...There are two readily obvious ingredients to the *stand-for* relation: an object, and whatever the object *stands for.*" The act of semiosis – or making meaning – begs this kind of analogy because, taken on the simplest terms, the *sign* refers to something other than itself: central to this is the notion of a collective or individual *act* of making something "stand for".

4. Thomas, Donald W., *Semiotics 3: Communication, Codes and Culture,* Ginn Custom Publishing, Massachusetts, 1982, p.2

5. *ibid.*, p.2

6. Cherry, Colin, *On Human Communication,* Massachusetts: The MIT Technology Press, 1966, pp.6/7.

7. Sebeok, Thomas A., 'Zoosemiotic Components of Human Communication' in Innes, Robert E. (Ed.), *Semiotics: An Introductory Reader*, London, Hutchison, 1985, p.295

8. McQuail, Denis, *Communication* London and New York: Longman, 1984, p.25.

9. Eco, *op cit.*, p.16.

10. Sebeok, 'Zoosemiotic Components of Human Communication', *op cit.*, p.311.

11. Hess, Eckhard H., *The Tell-Tale Eye: How your Eyes Reveal Hidden Thoughts and Emotions,* New York, Van Nostrand Reinhold, 1975 quoted by Sebeok, *ibid.*, p.311.

12. Thomas, *op. cit.*, p.2

13. Eco, *op. cit.*, p.9.

14. Fiske, *op. cit.*, p.42

15. Frake, Charles O., 'The Ethnographic Study of Cognitive Systmes' quoted by Thomas, Donald W., *op. cit.*, p.165.

16. "The Greek term σημειωσις 'semeiosis' means either the action of a sign itself or the correlative act of interpreting the sign" quoted by Sebeok, *Encyclopedic Dictionary of Semiotics*, *op. cit.*, p. 887.

17. Morris, Charles W., *Foundations of the Theory of Signs*, University of Chicago Press, 1938, p.3.

18. Eco, *op. cit.*, p.316.

19. Gibson, *op. cit.*, p. 19.

20. Watzlawick, P., Beavin, J. and Jackson, D. *Pragmatics of Human Communication*, London, Faber, 1968, quoted by Corner, John and Hawthorn, Jeremy, *Communication Studies*, London, Edward Arnold, 1980, p. 23

21. Oehler, Klaus, 'An Outline of Peirce's Semiotics', quoted by Krampen, Martin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas A.; Uexküll, Thure von, (Eds) *Classics of Semiotics*, New York and London, Plenum Press, 1987, p.8.

22. Barnes, *op. cit.*, p.191.

23. McQuail, Denis, *op. cit.*, p.67.

24. Sebeok, 'Zoosemiotic Components of Human Communication', *op. cit.*, p.307/308.

25. Lyons, John, *Semantics I*, Cambridge University Press, 1977, pp.57/58.

26. *ibid.*, p.57.

27. Sebeok, 'Zoosemiotic Components of Human Communication', *op. cit.*, p294.

28. Sebeok, Thomas A., *Perspectives in Zoosemiotics*, The Hague, Mouton, 1972, p.61.

29. Sebeok, 'Zoosemiotic Components of Human Communication', *op. cit.*, p. 295.

30. Baer, Eugen, 'Thomas A. Sebeok's Doctrine of Signs' in Krampen, *op. cit.*, p.184.

31. Sebeok, 'Zoosemiotic Components of Human Communication', *op. cit.*, p.295.

32. *ibid.*, p. 304.

33. Introduction: "Reading" Meaning, p. 10/11.

34. Eco, *op. cit.*, p. 9.

35. Chapter Four, Section Two, Pupils' Responses to Surroundings.

36. Eco, *A Theory of Semiotics*, *op. cit.*, p. 9.

37. Andersen, Peter, and Andersen, Janis, 'Nonverbal Immediacy in Instruction', in Barker, Larry L. (Ed.), *Communication in the Classroom*, New Jersey, Prentic-Hall, 1982, p. 103.

38. Paterson, H. M., Thomson, E. *A Semiotic Analysis of School Meaning: a Pilot Study*, Department of Education, University of Glasgow, 1988, p. 32.

39. Eco, *op. cit.*, p. 12.

40. *ibid.*, p. 10.

41. Trager, George L., 'Paralanguage: A First Approximation' in Hymes, Dell, (Ed.), *Language in Culture and Society*, New York, Harper, 1964.

42. Eco, *op. cit.*, p. 10.

43. Sebeok, 'Zoosemiotic Components of Human Communication', *op cit.*, p. 309

44. Sebeok, *ibid.*, p. 307

45. Sebeok, *ibid.*, p. 306, criticises two authors for adding to the "conceptual confusion" which exists in relation to the use of "language" when referring to aspects of human communication which concern gesture, use of space, etc.

46. The word "language" appears in the title of the following texts: Critchley, Macdonald, *Silent Language*, London, Butterworths, 1975, and Hall, Edward T., *The Silent Language*, Garden City, New York, Doubleday, 1959. Neither of these books, strictly speaking, are concerned with language; the subject-matter of Critchley's being gesture and Hall's being man's perception of space.

47. Sebeok, 'Zoosemiotic Components of Human Communication', *op cit.*, p. 306.

48. Much of the following argument was developed for an article in The Association of Media Education Journal: Thomson, Eleanor, 'RedeSIGNing the Curriculum', *in The Association of Media Education Journal*, No. 6, 1987, pp 46/48.

49. Associated Examining Board, *Expanded Notes for the Guidance of Teachers of AEB GCE A Level Communication Studies*, Associated Examining Board, 1977.

50. Scottish Education Department, *16+ Action Plan Guidelines in Communication*, Scottish Education Department, 1984.

51. Barker, Larry L., 'An Introduction to Classroom Communication', *in* Barker, *op. cit.*, p.3

52. *ibid.*, pp.3/4

53. *ibid.*, p.6

54. *ibid*, p.7

55. *ibid*, p.7

56. Sebeok, 'Nonverbal Components of Human Communication', *op. cit.*, p.295

57. A set of text books have been produced for this course: Thomas, Donald W., *Semiotics 1: Signs, Language & Reality (1980); Semiotics 1: Students' Handbook (1980); Semiotics 2: Communication in Man & Beast (1983); Semiotics 3, op cit.; Semiotics 4: Language in the Making* (1983), Massachusetts, Ginn Custom Publishing, dates as quoted above.

58. Barnes, *op cit.*, p. 11

59. See, for example, Michael Stubbs, *Educational Linguistics*, Basil Blackwell, 1988 for an extensive bibliography in this connection.

60. Barnes, *op cit.*, p.127

61. Eco, *op cit.*, p.49

62. See p.11/12, this thesis, Introduction: "Reading" meaning....

CHAPTER THREE

ASPECTS OF SCHOOL MEANING

The previous chapters have been devoted to creating a theoretical perspective informed by two interrelated subjects: semiotics and communication. By accepting the premise that meaning is not something which is packaged and "transmitted" but resides in every aspect of school, the reader is offered another "way of seeing". School should be understood as a milieu which generates meaning in many different ways, some of which are not always obvious. This chapter is devoted to an examination of school and teaching from this perspective.

Amongst the points which will be covered are those relating to the hypotheses that schools generate meaning through convention; that teachers are mediators of school and classroom convention; that they teach within certain parameters defined by these conventions and the task of teaching large numbers of children; that there are different structures of meaning created in the different "contexts" of primary and secondary schools, and that teacher training should emphasise the nonverbal aspects of teaching more than is presently the case.

"old tried and true methods" which discourage ideas for change. In this connection, the "agreements" reached or the habits which have been "legitimized" amongst the teaching community of the school are very often of an implicit nature and it is commonly accepted that there is no other way of learning about these conventions except to "live with them" and learn through experience. Experience, however, can be enhanced by knowledge; a perspective of school which draws explicit attention to the ways in which meanings are generated in school would provide a valuable insight to the school process.

The problem concerning convention, or the habit of tacit agreement, is that it is rarely thought about and even less rarely articulated because it is simply "there" as part of the flow of meaning surrounding our daily activities. We tend not to think about our habits because habits grow from constantly doing the same things over and over again. How can we articulate what we don't think about any more? The answer to this is that we must question what we do and why we do it even if the act of questioning might seem ridiculous. The feeling that there is no need to question might well arise from the fact that habit or convention is so completely part of the fabric of meaning that it often dictates our actions to the extent that we do not have to think at all.

There is very little which happens in school which cannot be seen to have meaning - even the ringing of the school bell (which

3.1   Meaning and Convention

> "We must learn the meanings, or, to be more exact, we must
> be informed, directly or indirectly by the community we
> want to communicate with, what contents are to be
> associated with a given object according to the agreements
> that they have reached - what selections they have made or
> what habits they have legitimized." [1]

The above extract from the *Encyclopedic Dictionary of
Semiotics*, concerning convention, is of central importance when
examining school meaning.   Schools tend to generate their own
methodology - their own "way of doing things" - but there are
overlapping parameters of meaning created by the defining
influences of curriculum content, the expectations of society
monitored by local and national government, and the surrounding
community which the school serves.   These influences must be
seen to be acknowledged as these are part of the "content" which
has been defined by society as being associated with the "given
object" of schools: primarily the transmission of socially and
culturally valued knowledge.

There are other "contents", associated with teaching,   and
related to the task defined above, which also require to be
acknowledged and this can pose problems for new entrants to the
profession.   For example, in each school in the country there
are   punishments   which   are   conventionally   meted   out;
conventionally accepted ways of organising pupils in the school
and   classroom;   conventional   methods   of   teaching   and   the
stultifying influence of convention which dictates that there are

"old tried and true methods" which discourage ideas for change. In this connection, the "agreements" reached or the habits which have been "legitimized" amongst the teaching community of the school are very often of an implicit nature and it is commonly accepted that there is no other way of learning about these conventions except to "live with them" and learn through experience.   Experience, however, can be enhanced by knowledge; a perspective of school which draws explicit attention to the ways in which meanings are generated in school would provide a valuable insight to the school process.

The problem concerning convention, or the habit of tacit agreement, is that it is rarely thought about and even less rarely articulated because it is simply "there" as part of the flow of meaning surrounding our daily activities.   We tend not to think about our habits because habits grow from constantly doing the same things over and over again.   How can we articulate what we don't think about any more?   The answer to this is that we must question what we do and why we do it even if the act of questioning might seem ridiculous.   The feeling that there is no need to question might well arise from the fact that habit or convention is so completely part of the fabric of meaning that it often dictates our actions to the extent that we do not have to think at all.

There is very little which happens in school which cannot be seen to have meaning - even the ringing of the school bell (which

some would argue is a *signal* rather than a sign) has meaning.
Eco (1976) maintains that:

> "...a sign is always an element of an *expression plane*
> conventionally correlated to one (or several) elements of a
> *content plane.*" [2]

The fact that the sound of the bell *happens within a school
context* i.e. can be "conventionally correlated" (agreed by
everyone that its sound "stands for" something) to a "content
plane" (within the school context) makes it not a signal but a
sign.

The bell ringing in school has many connotations, all
dictated by convention: the meaning varies in direct relation to
the length of the sound and the time of day. The bell usually
rings continuously for several seconds to signify the beginning,
end and division of a school day. The bell has semiotic
importance in that it dictates to, and contests with, lesson
content (especially in Secondary Schools). Two short rings in
one school I am familiar with signifies that the janitor is
required at the main entrance to the school. Thus, it happens
that in this particular school the bell ringing in the middle of
a lesson is generally ignored!

The duration of the sound of the bell, therefore, placed
within the context of the school "day" can be seen as belonging
to a code which relates specifically to school. If we place the

ringing of the bell within other contexts, however, we can perceive other meanings.

The school bell has different connotations when placed within a social context. Bells are generally used to warn or draw attention to something which is happening and are, therefore, usually connected with danger. But their clamour in contemporary society is gradually being replaced by other kinds of warning devices; other sounds. Burglar alarms, fire alarms, police cars, ambulances, now have different sounds - electronically produced sounds which bear no resemblance to the old-fashioned sound of the bell. The school bell, therefore, is becoming a dated sound. The children of today will be less ready to understand the meaning of the bell **in relation to other sounds** which they hear in society, something which children of earlier generations were able to do because of its common use. The sound of the school bell is becoming unique in this contextual sense.

An ideological "reading" of the school bell might prompt us to ask: why use the bell? The short answer to this from an ideological context is that it is a controlling device. Its institutional nature is clear; control of large numbers of people - in this case children - (in the first half of this century factory workers were controlled in the same way; a siren, horn or other device marked the beginning and end of the day). Left to their own devices, individuals might claim

ignorance of the time - come wandering in, interrupting the smoothly running machinery of production in workshop/classroom.

The bell, therefore, has organisational, social and ideological meanings which are bound to convention. Remove these and the bell becomes something strange, punctuating the day with Pavlovian-like responses from those who are controlled by it. The fact that it almost seems ridiculous to question such a tangible and inherent feature of school meaning, the simple and taken for granted school bell, demonstrates the powerful influence exerted by convention in the generation of meaning. It is here, within parameters of habitual thought and action, that the implicit nature of school meaning resides. The apparently common sense features of school are seen to be not so much part of the given order of things, constant like the seasons, but habits or conventions which have been created for a variety of reasons, some of which are dated, and which should be tested for their validity in a contemporary society.

3.2 School Convention and Maintenance of Meaning

From this perspective, it is perhaps easier to understand why change is slow to happen in schools. The antipathy which is often expressed by teachers towards any kind of change can be explained in terms of the amount of time, energy and resources required to undertake change and the fact that, very often,

educational "innovators" such as successive governments, pay scant attention to these practicalities. If we add to these problems the influence of convention and the desire to "maintain meaning" as an entropic function, i.e. from the point of view of ensuring less work, then the initial problems are further exacerbated. The everyday, routine functions of school are designed to "maintain meaning" precisely because, by adhering to conventional ways of doing things, there is no need to think, thus allowing cognitive space in an environment which demands constant thought. The complex relationship between teaching methodologies which are practised because they are in the pupils' best interests and teaching methodologies which are followed in order to maintain meaning - thereby creating circumstances for the teacher which allows economy of thought and, therefore, economy of energy - might be worth investigating.

The maintenance of meaning, the guarding of tried and true ways of behaving, is a common practice in schools. The necessity for routine in school, brought about by the exigencies of dealing with, sometimes, vast numbers of children dispenses with the need to think too deeply about "the way things should be done". Conventional ways of dressing (school uniform/"personable" teachers); of presenting lessons; of addressing teachers and pupils etc. have become the recognised currency for everyday use in school, and manifestations of the implicit way in which meaning is generated in schools. Through the agreement of successive school "communities", these meanings

are perpetuated, elaborated upon and, indeed, become controlling factors in the way school operates and is perceived.   Thus, successive generations of schoolchildren, taught by successive generations of previous schoolchildren, produce future generations of schoolchildren who have learned not only the explicit lessons which fill the curriculum but the implicit lessons about "the way things should be done".   As a result, convention becomes so deeply embedded that it becomes a "way of seeing" that is difficult to question.

3.3 The Maintenance of Meaning in the Classroom

If we accept that meaning resides in signs, codes and their inherent conventions, then it can be construed that the teacher is mediator of the school and classroom conventions upon which structures of communication are based.

Each teacher will work within certain structures which are dictated by school and teaching convention and these structures will vary in accordance with the teacher's idiosyncratic communication habits.   By this, I mean – for example – that each teacher will have a repertoire of teaching methods – a *paradigm* from which they will choose their approach for teaching a lesson.   Each teacher may have access to similar paradigms but the *syntagm* – that is, the finished total lesson–is likely to alter in relation to the choice made by each teacher.   If a

teacher favours mostly group work then the lesson structure will be different from that rendered by the teacher who favours whole class instruction. The commonly used methodology of the other teachers in the school is likely, also, to effect the kind of approach which a teacher makes to teaching.

Recent experience during the period of time when the teachers in the English Department where I worked were introducing new Standard Grade methodologies which demanded that group work be favoured, demonstrated the difficulties which can occur when "habit" or "convention" is broken in school. Other departments in the school were using the traditional methods of seating: pupils were seated in serried ranks along the length of the classroom. Teacher-centred instruction methods (the transmission model of communication) which, implicitly, demands silence from the pupils were also favoured. This meant that there was disparity in methods between the English Department, who were being pushed into using group work, and other Departments in the school who were still teaching in the traditional way.

When the pupils were faced with group work in the English classrooms, many of them found this daunting. They were being asked to discuss, to talk, in class when, for many years, this had been discouraged. Some had not worked in groups since leaving primary school and reverted to the kind of behaviour one would expect from primary school pupils! In order to teach in

groups, pupils needed to be taught, first, how to behave in groups. This was an added burden to the already onerous task of devising new lessons and worksheets for Standard Grade English. Added to this was the fact that many teachers who had taught for years – twenty or more years in some cases – by using a repertoire which was mainly teacher-centred, found great difficulty in understanding the basic concepts which inform pupil-centred approaches. This was evident from work units being produced in the department which were obviously intended for teachers to use with no supporting material for pupils to look at. The fact that pupils should have "worksheets" and, therefore, some control over the speed at which they produced their work caused a temporary break-down in the maintenance of meaning: convention was being broken by asking teachers to change their methods of delivery. New parameters were being defined for them which meant that habit no longer sufficed to get through the day. "Tried and true" methodologies were being called into question and all of this created extra work and stress amongst the teachers concerned because the entropic factor was missing – there was no cognitive space left – constant thinking was compulsory!

Teachers, in general, therefore, are likely to work within certain common parameters which are rooted contextually by the nature of the task in hand, teaching, and which are dictated, largely, by convention. These common parameters form the basis for the variety of communication codes which are evident in each

classroom. By introducing new methods of working, the above teachers were forced to seriously disrupt the communication codes which they had established in their classrooms; codes which at the very least would have taken them months of work and which, in the case of longer serving members of staff, would have been informed by years of classroom practice. Pupils were being seated together, in groups, which implies by the very nature of the arrangement, that talking will take place. If pupils have been taught that talking is not allowed in class, then the normal conventional way of behaving in class is being radically altered. This, coupled with an inability on the part of many of the teachers to control group work properly, i.e. supplying work of a suitable nature for the pupils to get on with, or taking general cognizance of group interaction, created stress in many classrooms.

The fact that the school community is "ruled by the bell" in a literal and metaphorical sense means that pupils are exposed to a learning milieu which encourages certain expectations about how teachers should behave. When dealing with children it is acknowledged that it is important to have a regular routine; classroom conduct and teacher's behaviour should be predictable. This, however, creates a dialogue between teachers and pupils in schools which is covert and not immediately discernable. When child or adult enters that community they are required to learn a set of conventions which in many cases have been in existence for generations. There is a need to learn rapidly - teacher and

pupil alike - what is and is not acceptable behaviour in given circumstances. Rules can easily be broken without the newcomer being aware of the fact that this has happened.

Many probationary teachers can find themselves floundering because they have been literally "thrown in at the deep end" by being asked to take classes before they have had sufficient opportunity to observe how other classrooms in the school are operated. New teachers entering the profession for the first time would benefit from being taught how to work out the significance of the hidden dialogue which is an undercurrent of teaching in schools. Experienced teachers entering a new school are equally as likely to benefit from an induction programme which allows access to classroom practice.

During the course of my research in the school in which I worked, being able to observe how experienced teachers behaved in class in that specific school, was a revelation. I observed that a punishment, which was meted out by two teachers in two different subject areas, for children who had fallen off their chairs (connotations of inattentiveness, "swinging" or attention seeking) consisted of making the children stand for a few minutes. I cast my mind back to the first year of my service in that school and realised that in one particularly difficult class, all the chair-swinging and collapsing off chairs which had taken place - nine times out of ten for effect - was not being dealt with properly on my part.

Furthermore, I later realised that my failure to mete out, on a regular basis, "punny eckies" (punishment exercises), as I preferred instead to talk to the children concerned, had not only resulted in a gradual escalation of incidents but was seen by the pupils as a symptom of my failure to understand the system. I was using the wrong "language" by merely talking to them. They required tangible confirmation that they had offended. They required that the "*sign*" - a punishment exercise - should be articulated. By the time I understood this, several months had elapsed, and it was too late - a dialogue had been created between pupils and teacher which was marked by uncertainty. "Will they behave?" "Will she punish?" I was being perceived as "soft" by not having carried out what was conventionally understood throughout the school to be a "proper punishment" at the outset of the dialogue!

3.4 Regulating, Instructing, Controlling

The classroom teacher, therefore, is dictated to in a very subtle manner by the undercurrent of significance which is attached to the status of teacher. A teacher is expected, by both colleagues and pupils, to act like a teacher. Nash[a], for example, demonstrates that pupils expect teachers to be able to keep control - and to teach! These expectations are implicit, unarticulated, but, nevertheless, are understood as significant. Although teachers will develop their own style of teaching, they

-109-

are likely to do so, therefore, within the parameters which have been dictated by the above considerations.

Whilst viewing video recordings of classroom interaction taped during the Pilot Study, to be discussed in the next section, it became apparent that teachers, in general, behaved in a similar fashion to each other when teaching.   Personal characteristics aside, there were similar methods used to begin and end lessons, to maintain control and to teach.   These approaches, I believe, grow from the common task of teaching large numbers of children but are also dictated by convention. I have chosen to call these common parameters "Regulating Codes", "Instructing Codes" and "Controlling Codes".   (See Fig. 5)
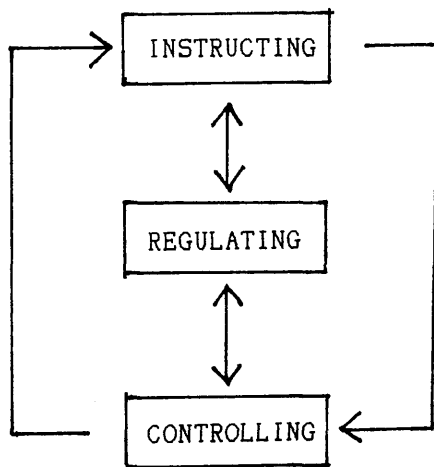
Fig. 5

These common parameters have been formulated from the broad concepts which have been identified above, i.e. that "teacher",

as sign, is meaningful in terms of teaching classes and controlling classes. The binary opposition of the two concepts, "teaching" and "controlling", is moderated by the concept of "regulation", i.e. regulating the system. The model illustrated is intended to represent the idea of wholeness and interchangeability which is inherent in this idea. Taking Eco's dictum that codes "provide the rules which *generate* signs as concrete occurences in communicative intercourse", I intend to illustrate the hypothesis that maintenance of meaning whilst teaching is likely to generate similar sign systems.

Teaching codes are rules which are formulated during classroom interaction and are, therefore, contextually based. Such codes generate signs which are part of the shared communication conventions in the classroom. Teaching codes, therefore, are dynamic in nature since they are formulated through classroom interaction and involve an exchange of meaning between teachers and pupils. Classroom communication will be devoted in large part to maintaining these codes.

Birdwhistell (1971) makes the following observations about communication in general. These observations become of particular significance when considered in relation to classroom interaction:

"It is all too easy to assume that there is in any social interchange a *central*, a *real* meaning which is only modified by a redundant surround...Our temptation to so classify certain aspects of a transaction as the central message and other aspects as serving only as modifiers rests upon untested assumptions about communication. **One of these assumptions is that communication is about the passage of *new information* from one person to another.** Certainly, this new-information activity is one aspect of the communicative process. But passage of new information is no more important than what we call the integrational aspects of the communicative process."[4] (My emphasis)

Birdwhistell defines the "integrational aspect" as including:

"...all behavioural operations which:
1. serve to keep the system in operation;
2. serve to regulate the interactional process;
3. cross-reference particular messages to comprehensibility in a particular context;
4. relate the particular context to the larger context of which the particular interaction is but a special situation."[5]

The classroom would seem to be a classic example of Birdwhistell's "integrational aspect" of communicative processes. Teaching or the "passage of new information" takes place amid many already established communication codes and much of teacher talk takes place within parameters which are constantly being reconfirmed. From their earliest moments at school children are learning what is expected of them in relation to classroom conduct – this could be argued to be reciprocal in that pupils will have learned not only what is expected of them, but *what is expected of teachers in school.*

This concept is evident not only from Nash's findings discussed above, but from a study by Regan (1984)[6] made in

-112-

America which investigated discourse patterns between teacher and pupil, based on thirty six tapings of classroom discourse during the first two or three years of Government schooling in six countries: Australia, New Zealand, Denmark, Canada, England and the U.S.A. The study indicated that in each of these countries a similar pattern of discourse exists between teacher and pupils: a pattern which helps to establish pupil expectations of what occurs in school and, according to the author, helps to instil implicit cultural information during the early years at school.

Pupils and teachers gain a shared understanding of how discourse in the classroom should proceed through the implicit instruction of the teacher during classroom interaction. For example, no overt reference is made regarding such things as when questions are allowed and when pupils should remain silent. Instead, signals are implicitly contained in teacher-talk. An example of shared understanding is apparent in one teacher's use of the verbal signal, "Well, then..." to finish the preliminary exchange prior to a lesson and the moment when the actual content of the lesson begins. The child also learns when praise is given during lessons and how intensive the praise will be. This "classroom infra-language" as the author calls it, presents implicit messages to the child through certain verbal signals such as pauses, intonation, and word use.

According to the author these are "organizational, regulatory functioning messages which, in turn, have a deeper

level of influence on the child's world view about knowledge"[7].
The child, in effect, is provided with implicit cultural
information which will affect his perception of society. As the
author points out, even the role of the teacher becomes an
implicit lesson: the teacher as "public person" gives
information by example through everyday interaction in the
classroom: the child learns about formal information and
authority, about who controls and who asks what of whom through
the presence of the teacher in the pedagogical setting; an
authority figure asking questions and dispensing rewards.

This is significant in that it indicates that through the
semiotic function of language, the foundations of an implicit
epistemological pattern is being set during a child's early
school years. This implicit pattern "tells" him that he takes
the passive role in gaining knowledge: knowledge is *given* to him
by the teacher. Furthermore, his behaviour is controlled by an
external moderator: an authoritarian figure "tells" him how to
behave through patterns of discourse, i.e. the pupil is party to
a "shared understanding" of:

    when content (of the lesson) begins

    the times of pupils' answers;

    when their questions are allowed and disallowed;

    when they are altered, extended, cut off;

    when summations of transitions occur;

when praise is given; and

the intensiveness of that praise.[8]

According to Regan, the teacher as "explicator" and "inquirer" is seen as both a "source of knowledge and a source of authority"[9].

The implications of Regan's study are more evident when viewed in relation to a study carried out by Nash. Nash's study revealed, amongst other things, that pupils believe that their behaviour should be controlled by the teacher (and that they should not be given the opportunity of controlling their own behaviour) and that they should be "taught things" (and are, thereby, disinclined to demand that they should be given the opportunity to find things out for themselves).

It is possible that the foundations for this predisposition towards passivity in the learning process and the belief that the teacher is there to control behaviour are being laid during early school pupil/teacher interaction such as those examined and discussed by Regan.   Studies conducted by Regan throw into relief a hitherto hidden apsect of teacher discourse: patterns of discourse are capable of introducing the child to certain expectations about teachers and knowledge.

Not only patterns of discourse but use of space in the classroom can communicate meaning.   Shultz and Florio (1979)[10] carried out a study in a kindergarten/first grade classroom in a

Boston suburb which examined the way in which a teacher indicated

to her pupils that something new was about to happen in the

classroom:

> "In a classroom, the teacher and students need ways of
> signaling to each other that the context has changed and
> that something new is about to happen.   The teacher, as
> the locus of social control in the classroom, needs to
> communicate to students that activity and behavioral [sic]
> expectations are changing.   Signals for contextual change
> are especially critical in the early grades where children
> are not yet fully socialized into the culture of schools,
> and at the beginning of the school year, when students
> haven't yet learned what constitutes a new context for
> interaction."[11]

The authors conclude that:

> "Making sense of classroom order and thereby navigating
> appropriately across the contexts for interaction within it
> are   important   aspects   of   social   competence.   A
> kindergartener's failure to interpret appropriately the
> social meaning inherent in the teacher's calls, movement,
> and use of space can quickly contribute to the formation of
> a less than promising "institutional biography" for that
> child." [12]

Significantly, the Boston teacher whose classroom was the

subject of the study used an idiosyncratic sign which was also

used by a teacher in one of the primary schools observed during

research for this thesis.   The order to "Freeze!" was used by

the Boston First Grade teacher to indicate that the children

should stop whatever activity they were involved in and listen to

what the teacher had to say.   A Primary School teacher in

Scotland used exactly the same method.   When questioned to

establish the source of his method, he said he did not recall

having read about it nor having seen it in operation elsewhere -
it was a strategy which, to the best of his knowledge, he had
devised on his own. Further enquiries have revealed, however,
that this signal is commonly used in this country in groups such
as the Scouts. The point is, however, that similar techniques
for drawing attention have grown out of the task in hand -
controlling large numbers of children.

The organization of the Scottish teacher's groups would
appear to have a similarity to the group work described in the
Boston study. The pupils in the Scottish teacher's class
devoted part of the time to a variety of group activities; the
pupils in the Boston class were involved in similar activities:
"Worktime is an active, multifocused time in which students work
together in small groups, and the teacher customarily joins one
of the groups."[13] The contextual aspects of teaching,
therefore, in two different countries and in two quite different
classrooms - in that the children are of different age groups and
being taught quite different things - brought about an unusual
semiotic similarity.

The use of the verbal marker "Freeze!" can be compared to
other devices used by teachers to gain attention. Another
teacher from a Scottish Secondary school was observed using a
hand-clap to draw attention and as an indication of an alteration
in classroom activities.

Movement to a particular area of the classroom is also an indication that pupils are expected to stop and listen: again, most teachers in the small-scale study carried out demonstrated that they have a particular "communication area" in the classroom which could be related to what Hall (1959:187) calls "territoriality"; "the act of laying claim to and defending a territory". Territoriality is discussed in greater detail in Chapter Four. Teachers were largely unaware of the fact that they used such an area but when questioned sometimes suggested a completely different area as "their" area - usually a place where they had left their jackets or handbags. This area is used by the teacher whenever they start the lesson or break the lesson to talk to the class.

This same phenomenon is documented in Shultz and Florio:

"The first step in the process of making announcements involved the teacher's movement to the circle area....Typically, as the teacher was beginning to make an announcement, she would walk towards the circle area, if she was not already standing there."[14]

Voice modulation and the repetitious use of certain phrases which might ordinarily be regarded as the preamble to a statement during normal conversation plays a large part in regulating classroom interaction: voice modulation and/or a "preamble phrase" such as "Right, now..." is used extensively by many teachers. An example of such patterns in communication has already been discussed.[15]

It would appear, therefore, that there are patterns of communication used by teachers at an unconscious level to maintain or "regulate" classroom interaction: these repetitious behaviours form a large part of classroom interaction and are, perhaps, necessary in some form in order to create the necessary climate for instruction in the classroom.

Regulating Codes

I have used "Regulating Codes" as a generic term for the codes used by teachers to reinforce previously laid down patterns of communication: "Instructing Codes" and "Controlling Codes" should be seen as an integral part of the Regulating Codes used by teachers in the classroom. Regulating Codes should be seen as reminders of the implicit codes already in existence and, therefore, are much more covert in nature such as "Right, then...", frequent name use, etc.

These codes stem from the wish to guide and control pupil behaviour. ("Guiding and controlling" should not be perceived purely in terms of "discipline" but should be seen also to encompass the guiding and controlling of pupils' learning.)

Instructing Codes

Much of the communication which occurs in the classroom is concerned with organisational aspects. Signs which can be

categorised under "Instructing Codes" include the request for particular jotters to be used thus indicating that a particular kind of lesson is about to begin; "algorithms" such as a list of written rules on classroom walls; ostension[16], when the teacher shows an item to the class as an example, and other verbal and non-verbal signs or sign systems which, through repetition, have come to be part of the recognised conventions of the classroom relating directly to the organisational aspects of the lesson being given.

It is possible for Instructing Codes to vary from teacher to teacher but observation of twelve teachers produced the following examples. These examples are not intended to be definitive but merely indicators of what could be understood as instructing codes. There are a variety of teaching structures used in classrooms dictated by organisational aspects of the pupils' learning processes. One or several codes can operate at different times throughout the lesson depending on what is being taught and how the teacher wishes to approach the subject. These codes are part of the teacher's repertoire of methods and form a paradigm, i.e. a range from which selection can be made at random to produce the finished syntagm - the lesson.

Instructing Codes used by the teachers in this study took the following forms:

i) whole class instruction (usually issuing directions and orders, checking whole class movement)

ii) group instruction: formal (where pupils have been called together to form a group for lesson purposes): lessons consist of predefined tasks to be carried out by groups.

iii) group instruction: informal (an *ad hoc* group, where pupils either gather round and listen to one child receiving instruction (which also concerns them) or where there is a gathering of children at a spot for another reason (e.g. teacher marking jotters at desk) and pupils listen to another individual receiving help. This usually happens in Primary School and not in Secondary School

iv) individual instruction: formal (usually a "help" situation where child receives detailed explanation and singleminded attention from teacher once the class have "settled")

v) individual instruction: informal (usually instruction on the move where teacher gives instruction to pupils who ask as s/he moves around the other pupils or groups of pupils in the classroom)

Informal Group instruction was not apparent in the Secondary school where research took place. It was found in the Primary

Schools where the instructing codes were less rigid and formal than Secondary Schools.

Controlling Codes

"Controlling Codes" are groups of signs which are used by teachers to remind pupils of the explicit rules for behaviour in the classroom. Although it has been shown that many of the teacher-subjects in the study use a word-sign to indicate that a lesson is beginning, it is just as likely that these signs which are part of a control code will be idiosyncratic in nature and largely drawn from recognised verbal and non-verbal codes used in society at large. For example, the paralinguistic sound "Ssh!" is used extensively by one Secondary School teacher observed, throughout one lesson and toward the end of another lesson by another Secondary School teacher, and at the beginning of teaching by a Primary School teacher. The non-verbal attitude of teachers can also form such controlling codes. For example, one Primary School teacher stands, waiting for her class to settle, and gives a strange little twist of her head to the left, shrugs her left shoulder and accompanies this with an impatient little stamp of her foot which is a series of totally idiosyncratic actions indicating impatience with the class's failure to settle quickly and which contains, nevertheless, a clear message — especially since it all happened within her "communication area" and is likely to be part of the conventional methods used by that teacher.

A further set of sign systems which can be categorised under controlling codes can be found in the methods used by teachers to dismiss their classes. Often, classes are dismissed according to sex: girls first, boys last. This practice could be attributed to other implicit codes which exist in society at large in relation to rather old fashioned "sexist" attitudes, such as "Ladies first!" or - much more likely - they could be attributed to a concern, born of observation, for the safety and orderliness of pupils leaving the class! They are, nevertheless, examples of "controlling codes" when used in the classroom by the very fact that the teacher has taught the pupils that this is what is expected of them and by the fact that they obey..

It is not claimed that these codes are definitive; other studies might reveal other teaching devices used in different teaching situations. The codes merely provide a framework for analysis which could be useful for many purposes including "teaching teachers".

It is clear, however, that teaching in Primary and Secondary Schools, through the necessity of organising large numbers of young people on a continuous daily basis for many months, involves more repetitious forms of communication than popularly conceived notions of teaching might allow.

The clear example of disruption which occurred during the

transition of teaching methodology from whole class instruction
to group work discussed at the beginning of this section
supports this argument. The hypothesis that there is an
underlying structure of communication created through the common
task of teaching is further borne out by the research carried out
in schools for this thesis which is discussed in full in the next
section.

3.5 Comparing Primary and Secondary School Meanings

The following discussion is made on the basis of research
carried out in furtherance of this work, and partly sponsored by
the Scottish Education Department, which was intended to
highlight the differences between Primary and Secondary schools
by examining the structures of meaning which are generated in
Primary and Secondary school classrooms. A Report was
produced[17] on the findings, to which I will refer from time to
time in this section. No final conclusions can be made as the
research was limited in scope but it seemed to support the
argument, at least tentatively, that there are, indeed, different
communication codes generated by Primary and Secondary school
teachers.

The general findings are that, in the Primary Schools,
pupils were permitted to move about physically and were allowed
to be much more talkative than they were in the Secondary School
visited. The kinds of pupil talk observed in primary schools

varied from that of structured talk in groups (i.e. discussing set work), to unstructured talk in groups. (childish chat, usually about classwork being carried out). Pupils also seemed less inhibited about questioning the teacher (usually during group work or set tasks). Talk in the Secondary School classrooms observed was more likely to be controlled by the teacher with less group work in evidence and more teacher-dominated whole class instruction than at the Primary School classrooms observed. Physical movement was much more prevalent in the Primary Schools than it was in the Secondary School.

These findings might seem, in themselves, quite unremarkable but if they are perceived as forming a learning milieu to which children will respond by building concepts of what school **means** in behavioural terms, they become more significant. An acceptance of the concept that the teacher is mediator of school and classroom convention[18] is to say that:

i) it is assumed that teachers, as adult mediators of convention in school will uphold certain generally accepted meanings which exist in their particular school, and about schools in general, in relation to the function of schools and how pupils should behave, and that

ii) teachers generate these meanings to pupils.

The implicit learning process brought about by the whole school environment as mediated through classroom convention and which will influence pupil perceptions is, therefore, seen as a process related to the second paradigm of communication as defined in Chapter Two, Section Two, Semiosis, above,[19] i.e. the pupils will make meaning from the whole school process. School as *sign* will, therefore, emerge with certain common meanings for pupils. Primary school pupils will take with them to secondary school the meanings which have been generated to them over a number of years in primary school.

It is posited, therefore, that the separate environments of primary and secondary school form an implicit learning process which pupils undergo at school and that the transition of pupils from one set of communication codes to another, when moving from P.7 to S.1, creates confusion through temporary *"loss of meaning"*. If one accepts the premise that certain conventions — or legitimized habits — exist in relation to instructing and controlling pupils in primary and secondary schools, and that these are contextually bound (i.e. that these will be formulated differently in primary and secondary schools) then it follows that pupil movement from one context to another will cause problems. The fact that problems exist is already evident and well documented elsewhere but they have never been approached, as far as I know, from the theoretical perspective offered in this thesis.

The Discussion Paper published by the Consultative Committee
on the Curriculum in 1986, "Education 10-14 in Scotland" briefly
mentions "Teaching Style" and suggests that because there is
evidence that pupil behaviour varies in relation to teaching
style this:

> "...calls for a heightened awareness on the part of the
> teachers of their own teaching and the effects it has on
> the learning process."[20]

Although this is undoubtedly a logical step in light of the
evidence cited by the Consultative Committee on the Curriculum[21]
perhaps further insight would be gained from examining the
implicit learning processes which are at work within a total
school environment.   Sless's idea that "Understanding is
achieved when, for a moment there are no more questions to ask"[22]
applies during the long "moment" when pupils are at Primary
School and are totally familiar with the communication codes
which are in operation there.   Entering Secondary school is the
moment   when,   to   continue   with   Sless's   quotation,
"...incomprehension continues."   School is no longer what they
have been led to believe it is through their Primary School
experience and pupils must set themselves the task of rebuilding
their structures of understanding in a new environment consisting
of changed surroundings, teachers and communication codes.

The following extract from a video recording of the
conversation of three S.2 secondary school pupils concerning

their personal experiences and opinion about the transition from P.7 to S.1 encapsulates the main differences to be found. The three pupils visited a primary school for an afternoon and were asked to comment on what they thought were the differences between primary and secondary school. Many of their comments were of a wistful nature indicating that, although they accepted secondary school as a mark of "progress" and "maturation" in their lives, primary school was an experience they were sorry to have lost.

> "I think the main difference in primary is people's attitude towards each other because when we were at primary....everyone worked in a group....everyone worked together....if you were off you hadn't to catch up yourself....it's a happier - a slightly happier atmosphere at primary because people were all working together - everyone worked in groups."[23]   (An S.2 Pupil discussing the differences between primary and secondary school).

Although the above comments are the opinion of only one child, with the tacit agreement of the two other children present, what she has said seems to epitomise the sense of loss which many children feel when they leave behind the first phase of their education at primary school and enter secondary school. The emphasis seems to be on the "collective" in primary school and the "singular" in secondary school; there are references to group work and the fact that "everyone worked together" which infers the reverse is the case in secondary school. The above extract was taken from a conversation recorded on video tape for this research and has been included in the worksheets[24] which accompany the in-service teacher training video, "What do YOU

mean?"[25]   The video and the worksheets form part of this thesis

and can be examined as materials which accompany this work.

When one considers primary school in comparison with

secondary schools, we are well aware that there are marked

differences between the two.   Many of these differences come

about as a direct result of the age range of the children being

taught and the attitudes of teaching staff towards pupils will

vary in relation to these age differences.   A remark by the S.2

pupils which supports this argument is that "...in primary school

you were not expected to know any better but now..."[26]   This

difference in attitude, like the findings discussed at the

beginning of this section, might in itself appear to be

insignificant and commonplace but what is significant is that it

has been communicated in some way and that an accumulation of

such meanings have created ideas about school in the minds of

these pupils.

A semiotic analysis should not only look for **explicit**

meanings but **implicit** meanings.   If we analyse the extract which

appears at the beginning of this section, we might ask ourselves

why she should make the lexical choice that she did, e.g., she

speaks of a "happier atmosphere".[27]   We might ask how this

particular "meaning" about primary school was generated to her.

She supplies some of the clues by remarking that "everyone worked

together" and that "everyone worked in groups"[28] which could

suggest that group interaction created a pleasant working

- 129 -

atmosphere.   This, however, does not account for the idea of a

generally happier atmosphere which is what she appears to mean by

the use of the word "everyone".   She uses the word in the sense

that it includes the whole school and, therefore, does not relate

only to group work.   If the pupils can only **look back** on

enjoyment in their learning environment, we might ask ourselves

what this says about secondary school.

In 1986, arrangements were made to explore some of the

differences between primary and secondary schools by analysing

the classroom interaction of P.7 and S.1 classes from a semiotic

perspective.   The research was designed to explore the implicit

meanings contained in the verbal and non verbal behaviour of

teachers and pupils in primary and secondary schools.   It was

hoped,   by recording classroom interaction on video and

analysing this, that common codes would be identified which

belonged specifically to primary schools and secondary schools

and that, by comparing these codes, we could capture the

underlying structures of meaning in primary and secondary

classrooms.   Between November . 1986 and March 1987, a pilot

study[29] was set up, sponsored, in part, by the S.E.D. in order to

"address the question of the structures of meaning which are

generated in a number of primary school classrooms and secondary

school classrooms in Scotland."[30]

The teachers who agreed to participate in the pilot study

were deliberately chosen for their experience of teaching and

none of the teachers were "probationers" i.e. teachers who have recently left teacher training college in Scotland and who are serving a statutory two-years probationary teaching period prior to becoming fully Registered with the General Teaching Council. The teacher who had least experience, therefore, was a secondary school teacher who had been teaching for just over two years. The teacher who had most experience was a secondary school teacher who had been teaching for 22 years. The decision to choose only teachers who had, at least, served a two year probationary period in the classroom was important in view of the perspective discussed in Chapter Three, Section Three, above, "that the teacher is mediator of school and classroom convention upon which structures of communication are based."[31] The following extract from the Report produced on the pilot study explains this line of reasoning thus:

> "It seems to us reasonable to assume that the longer a teacher works in a school the better will that teacher be able to deploy the particular school code; further, the longer a teacher works with a particular class, the better will the teacher be able to read the codes deployed by the class as a group and the codes deployed by individual children in the class."[32]

Similar assumptions were made about the pupils' abilities in both primary and secondary schools.

Approximately 21 hours of classroom interaction was recorded on video tape from six teachers and classes in three different primary schools and six teachers and classes in one secondary

school.   Interaction in each classroom was recorded on two separate occasions.   In choosing to record for two sessions, it was hoped that some of the problems mentioned above[33] relating to having an observer present during the lessons, could be avoided. Each of the recordings was analysed, independently by myself and another viewer, and transcripts were obtained by viewing the videos repeatedly and noting down relevant information.

Disappointingly, some of the sound recording was of a poor quality.   This was unavoidable because of the rather basic equipment available -. a home-video camera with built-in microphone.   Nevertheless, a sufficient amount of clear verbal interaction was available to enable analysis.   Furthermore, to encumber the teacher with equipment in his or her classroom such as clip-on microphones and trailing flex (which would have ensured good sound quality *from the teacher* and not the pupils) was felt to be a further unnecessary intrusion which would only act as a constant reminder of the observer's presence.

The research was useful in that it did seem to indicate that there were, indeed, codes in operation which were common to many of the teachers in both primary and secondary schools and that there were also basic differences in the codes which operated in primary and secondary school classrooms.   Codes,   the rules which *generate* signs, in primary and secondary school classrooms are, as discussed,   linked to convention or the acceptance that meaning resides in certain things or actions.   For example, it

was observed that teachers habitually chose to begin their lessons from a particular area in the classroom:

> "Once inside the classroom the teacher would move to her "communication spot" - that place in the classroom in which the teacher does her didactic lecturing, issues orders, attracts the attention of the whole group and so on. With most teachers this was at or near the teacher's desk, which acts as a natural semi-private area for the teacher's use.   However, a number of our primary teachers had two communication spots, one at the desk and another one towards the centre of the room and about one metre in diameter from which whole class teaching was delivered. Teacher movement to this second communication spot gave a clear signal to the class that some change of activity was about to occur."[34]

Teachers were largely unaware that they had this habit and it would be doubtful whether or not the pupils would have been able to articulate the explicit action of the teacher as meaning that the teacher was going to begin a lesson or interrupt a lesson by taking up this position.   To suggest that teachers merely had to enter the spot for classes to fall silent would be ridiculous but when the teacher accompanied the movement with some of the verbal and non verbal signs described below, this was then taken as an indication that the teacher was about to speak to the whole class.

Some of the accompanying signs observed were: standing silently on the spot and looking round the classroom;   using stylised word formulae such as "Right, then...!" and hand claps to attract attention.   This is an example of a code which existed in both primary and secondary school and is, therefore,

common to both, indicating that it is, possibly, an integral part of a general teaching style.

Intrinsic differences between primary and secondary schools were, however, also observed. In many of the secondary school classrooms observed, there was a distinct discouragement of pupil movement or talk:

"In contrast to the primary classrooms, the children in the secondary classrooms which we saw were much less talkative, both amongst themselves and with the teachers. Although the secondary school children are already engaged in verbal communication amongst themselves on entering the classrooms, in almost every classroom we observed this verbal communication ceased very shortly after entry as the verbal dominance of the teacher was asserted."[35]

This was in marked contrast to the atmosphere of co-operative conviviality we found in primary schools marked by pupil talk and physical movement around the class (depending on the work being done).

The organisation of classroom space in the primary schools observed was totally different to that of the classrooms in the secondary school. The primary schools tended to have seating arranged in groups whilst the secondary school favoured single or double placing of desks. These arrangements carry powerful messages to pupils. Arranging desks in groups *stands for* pupil-centred interaction. Pupils are allowed to interact freely and discuss their work with each other and the teacher. The arrangement of desks in the secondary school *stands for* individual

work and, therefore, "no talking".[36] The desks face the "front" of the room, and the blackboard, and their attention is, therefore, directed quite firmly towards the blackboard and the teacher who will, usually, be standing next to it. The arrangement of space in the rooms, therefore, generates meanings which arise from the implicit codes in existence in primary and secondary schools.

The implicit codes in existence in primary schools allow for pupil-talk whilst the implicit codes which are in existence in secondary schools positively discourage pupil-talk. Indeed, the talkative or "fidgety" child is seen as deviant by not observing these rules for behaviour. An example of a secondary school teacher's reaction to her class' failure to observe these codes of silence in her room can be viewed on the video, "What do YOU mean?" Briefly, the teacher stopped the whole lesson and warned the class about a series of relatively minor movements which they were making (playing with pencils, wriggling in their seats, etc) but which, collectively, meant inattentiveness to the teacher.

An interesting example of the more idiosyncratic codes or patterns of communication which operate in individual classrooms was found in a home economics classroom in the secondary school. The teacher concerned had devised a list of rules which should be observed at the start of each lesson. This list was on a poster sized board on the opposite wall from the blackboard, i.e. at the "back" of the room. This area could be seen immediately upon

- 135 -

entry to the room and was, obviously, intended to remind pupils of classroom proce_dure and the need to be clean and tidy to begin their lesson on preparing food.   The display contained an algorithmic set of instructions as follows:

Ready, Steady, Go!

1. Put blazer and schoolbag under the table.

2. Put on apron and tie back your hair.

3. Wash your hands thoroughly - use a nailbrush.

4. Collect a tea towel and net cloth between two.

5. Wipe your table with a damp net cloth.

6. Hang net cloth and tea towel on rail behind.

7. Check contents of unit drawers and cupboards.

8. Set out equipment needed.

We found the second rule interesting because it appears "to have been designed with an apparent disregard for the mixed classes of girls AND boys who took Home Economics as a subject."[37]   The teacher concerned had been teaching for many years and would have remembered the time when boys did not participate in these classes.   We felt, therefore, that, "The explicit absence of address to the boys (since, presumably, few boys would have hair long enough to tie back) carries an implicit message of exclusion."[38]   I am not suggesting that the teacher consciously excluded boys from the list but, if the use of the possessive adjective "your" throughout the list had been

consciously directed at **boys** and girls, it would have been
spotted by the teacher as anomolous when used in rule two on her
list.

This is also a classic example of maintenance of meaning
(see Chapter Three, Section Two, above) on the part of the
teacher. By following the same conventional pattern she,
herself, did not require to think closely about what she was
doing thus leaving cognitive space for herself during the lesson.
This teacher combined her algorithmic instructions "with a
constellation of body gestures which seemed to indicate some
fatigue."[39] The additional information that this teacher was
close to retirement age is a possible contributory factor to the
disengagement which she displayed:

> "Thus, for example she would frequently lean against the
> back wall of the classroom with her arms folded across her
> chest or lean against one of the side units of the
> classroom with a somewhat dejected facial expression."[40]
>
> (This posture can be compared with Neil's findings, Chapter
> Three, Section Six, below)[41]

These points, however, although negative in nature only seem
so because we have chosen to isolate them for analysis. This
teacher was not disliked by her pupils and was respected amongst
other staff members. The identification of what we see as
negative features, and the articulation of these events on these
pages, ignore the flow of events of which these features are an
integral part. The dangers inherent in making an analysis of

individual features of this nature, as already discussed in the Introduction, "Reading" Meaning, lies in the fact that wrong impressions can be given because it appears that, "some kind of entity is being created, an entity which stands alone as being meaningful and which ignores the flow of other significant meaning which surrounds it."[42]   If one were using these points of analysis for elucidation of, for example, teaching style, then they would require to be understood as forming only a **part** of that teacher's style, otherwise the whole concept could become extremely destructive.

Idiosyncratic codes of communication are the hallmark of individuality in classrooms and teachers must inevitably express their own ideas and project their personality whilst teaching but perhaps it would be of benefit to teachers to have their attention drawn to the **implicit nature** of the codes of communication which they create in their classrooms.   Apart from the generation of meaning exemplified above, created by the manipulation of objects in the classroom, meaning is also generated by a teacher's non verbal behaviour: voice modulation, facial expression, body posture, clothing, are all indicators of mood and attitude.   Some of these points are discussed in more detail in Chapter Three, Section Six, Teacher Training from a Semiotic Perspective, below.

By observing the conduct of pupils and teachers, it can be construed from their actions that certain unwritten rules exist.

The existence of these implicit rules of conduct which we found in the classrooms observed are evidence that there are, indeed, common codes used by teachers and pupils in primary and secondary schools and that there are very definite differences between the codes in the primary and secondary sectors.

There were, however, several flaws in the basic research design which were partly due to limitations in time and resources and partly due to an excess of enthusiasm which may have hindered clarity of thought! Initially, it was intended that twelve secondary school teachers and twelve primary school teachers would take part in the study but this proved to be too ambitious as time was limited and, instead, only six from each sector were observed. The research was carried out on a part-time basis during non-contact time on my teaching timetable in the secondary school in question.

Permission was sought from several primary schools in the region in question in Scotland to record classroom interaction on video. Some did not wish to take part and others were happy to co-operate. Whether or not schools and teachers were willing to co-operate dictated which schools would be included in the study, which was rather unfortunate. This meant that only one of the primary schools who took part was a "pilot" or "feeder" primary for the secondary school concerned. The secondary school was chosen for similar reasons to the primary schools and by virtue of the fact that video recording of classroom interaction could

take place, with my colleagues' permission, without having to travel elsewhere.

I now feel that a much more fruitful research design, which would have taken a little more time and the co-operation of primary schools other than those involved, would have been to conduct research only in the "pilot" or "feeder" primaries of the secondary school involved. The project should have taken place in two stages. The first stage would have commenced at the primary schools in the last session of one school year and the second stage would, then, commence at the secondary school the following school year, immediately after the summer holidays. This would have slightly reduced the variables in relation to the pupils involved since the same pupils would have been recorded working in primary school classrooms as P.7 pupils and then as S.1 pupils in secondary school classrooms. In this way, some continuity would have been achieved and, perhaps, comparisons in observed pupil behaviour, and between feeder primary schools, could have been made. Questionnaires for a pupil survey should have been designed and issued to the new S.1 pupils. As an alternative, or as a supplement to questionnaires, interviews could have taken place with target-ed pupils - perhaps those who seemed to be having difficulty in settling down - which would be designed to reduce the amount of speculation involved about the effect of the change in environment on pupils' perceptions.

As it stands, the nature of the research – the possible uncovering of *implicit* behaviours – and the fact that this was a pilot study, created difficulties in that I had targeted a very general area of attention, i.e. the behaviour of pupils and teachers which, in itself, was not undesirable, as only in this way, through a comparison of classroom practices, was it possible to see a pattern emerge, but the scope of the work was too ambitious for the time and resources available. Setting up a future project of a similar nature would require a much more carefully planned research design which would include contact with the pupils involved to gauge their reactions to their new school. I feel that this would be of great importance and would elminate much of the subjective nature of the project.

A valuable addition to the project would have been comparisons made by the pupils about such things as:

- classrooms (appearance and arrangement of objects)
- teaching style as defined by, e.g.

    voice modulation

    posture

- "atmosphere" in the school e.g. emotionally distancing/pleasant/strict, etc.

Finally, the gap between the primary school environment and the secondary school environment is marked and does appear to be related to the implicit meanings which are generated to pupils.

Although we remain, for the purposes of this enquiry, largely unaware of the effects of this change of environment on pupils so that we must speculate that they undergo some kind of temporary loss of meaning, it would seem (if we are to understand teachers as the mediators of school convention) that there might exist a strong case for ensuring that primary school teachers have a real idea of secondary school conventions and vice versa in order that modifications can be made to P.7 and S.1 environments. If, for example, primary school teachers were made explicitly aware of secondary school meanings in relation to pupil behaviour, P.7 teachers could spend the final year of their pupils' primary schooling orienting their pupils perceptions towards secondary school. This would have to take place implicitly rather than explicitly by changing teaching methodologies. Secondary school teachers would require to undergo a similar process whereby they might be more willing to understand, and gently correct, particular behaviour patterns which have been taught to their new charges in primary school.

3.6 Teacher Training from a Semiotic Perspective

There has been frequent mention throughout this thesis of the need for a more structured approach to teaching the act of teaching. At present, one can either do it or read about it. There is certainly no substitute for experience but my impression is that there is a yawning gap between theory and practice in secondary school teacher training. (I cannot draw on any

experiences of primary school teacher training but I would imagine that a similar gulf exists.) Some teacher training Colleges and Universities who offer undergraduate teacher training rely heavily on the theory/practice method during which students follow a theoretical course in the College or University, augmented by a programme of practical teaching which consists of being released into schools for several weeks at a time to gain experience. Often, this can lead to traumatic experiences in the classroom, with trainees being left to "sink or swim" by the teachers whose classes the trainee is being allowed to "practise on".

In Scotland there is often, but not always, a "Regent" in the secondary school being attended by a student, i.e. someone who has the specific remit for care of student teachers. The Regent is generally a Deputy Head Teacher, Assistant Head Teacher, or some other senior member of management whose remit is onerous enough without having to undertake a programme of talks to student teachers. In these schools, therefore, support is, theoretically, offered to student teachers and many of the Regents undertake to provide a programme of talks and informal discussion about the students' experiences or the nature of the school. These meetings can bring several students together who are training in the same school and who might, otherwise, never see other trainees because of the geographical location of different departments in the school. Many secondary schools, however, do

not have a Regent and, in these schools, student teachers have to rely on other members of staff for guidance and assistance.

Once the student is released from College or University to embark on practical experience in school, therefore, the quality and amount of support offered varies from school to school. The attitudes of established teachers in these schools will vary from supportive and caring to bossy and utilitarian or simply disinterested. Very often the regular class teachers see students as a useful means of achieving a few minutes away from classes, (thereby gaining some cognitive space) and meet student requests and questions with impatience. Even with the best support available, however, the trainee is left to a guessing game about exactly how teachers are successful in the classroom. Certainly, trainees are warned to have their lesson material thoroughly prepared with enough of it to span the class time allocated, to suit mixed ability classes, and with, perhaps, alternative plans should the planned lesson have to be substituted for some reason. The actual *act* of teaching is, however, either being watched from the sidelines by the trainee or being embarked upon with varying degrees of success or failure.

A clear dichotomy exists, therefore, between theory and practice. I believe that this situation can be changed by recourse to two interrelated methods:

1) showing for analysis, video recordings of authentic classroom interaction; and

2) *structured* observation based on the implicit meanings of non verbal signals in the students' own lessons on video tape and observation of the teachers to whom they are assigned at school on the same basis.

During an earlier discussion[43], I made the point that little (as far as I know) is done in teacher training to structure student responses to the actual act of teaching because this is seen to be dominated by subjectivity. On this basis, teaching appears to be a charismatic act steeped in mystery or something "which has to be learned the hard way". There is *no* doubt that experience cannot be substituted but experience can be damaging if nothing structured is done to show where failure might lie. There are structured courses available called "micro-teaching" but these, I understand, are more concerned with lesson content and pupil reactions to these than with the kind of structured analysis of non verbal behaviours which will be explored in this section. The *idea* of micro-teaching is more likely to be used in an unstructured way which simply allows student teachers to view themselves at work.

The reason why these exercises are only of limited assistance to the new teacher is that they are, generally, contrived in nature, and allow the trainee teacher to remain entrapped within his or her own subjectivity. "Doing" and

"viewing" afterwards provides no real basis for criticism: what are the criteria for "good" teaching? Certainly, teachers must always question their own actions, test the quality and effect of their lesson materials, constantly keep themselves under surveillance in the classroom, and micro-teaching provides the first steps to this attitude of mind, but we are still left wondering exactly what makes the teacher successful in class.

Certainly, there are reasons why no one is prepared to define, in concrete terms, what students should be striving towards as teachers; there is no single answer to what makes an effective teacher, there are too many variables to take into account such as what the individual can offer in terms of knowledge, his or her characteristics, i.e. whether s/he is naturally retiring, extrovert, lazy or hard working, and, moving from the personal attributes of the teacher to the pupils, the range of abilities which demand to be catered for in the classroom, and so on. Lazy teachers need not be ineffectual teachers depending on which criteria we are measuring the word "effective" by.

I have since discussed "micro-teaching" proceedures with a student teacher who is currently training at a University in Scotland and he revealed that there were no specific guidelines relating to non verbal signals which might assist them in approaching the task of examining their behaviour in the classroom. He admitted to having "used his own intuitive

response" to what he saw of himself on video, being shocked at seeing his "shambling gait", as he put it, and attempting to remedy some of the other nonverbal points he had noted. He said, however, that (as far as he knew) no one had actually been guided towards these general concepts. He thought that other students may not have had the insight to identify and remedy these points. The points mentioned are, anyway, still of an extremely subjective nature; appearances are important but these meanings are explicit rather than implicit, and are usually based round explicit ideas about non verbal communication such as habitual hand or body movements which might be distracting, rather than an understanding of the implicit meanings of teacher gestures.

Recent research by Neill (1983; 1986) has demonstrated that the "effectiveness" or "ineffectiveness" of probationer teachers correlated with whether or not they acknowledged the existence of nonverbal communication in the classroom,[44] and that children recognised nonverbal expressions of teachers' specific emotional states.[45]. These are interesting findings in that they seem to indicate that i) an explicit acknowledgement of the importance of nonverbal behaviours might have made probationer teachers more insightful about meaning in the classroom and that, therefore, these features should be given more attention in teacher training, and ii) that teachers are judged by pupils on the basis of these behaviours. Some of the behaviours which pupils identified were "baton forward" (arm extended, finger pointing)

which was seen as "'dour' or strict"; a teacher kneeling on the

floor next to a child's desk and thus getting down to the child's

level was seen as "friendly/helpful"; and "Lean back, sad face,

taken from a videotape of a teacher with discipline problems;

seen as 'boring/unhelpful'".[46]

Neill admits that "considerable caution" is required when

drawing conclusions from his experiment for reasons already

mentioned in this thesis; the static nature of judging "frozen"

gestures which are divorced from contextual values.

Nevertheless, these studies can be viewed as important steps in

the direction of providing structured ideas for student and

probationery teachers to work with.

Neill's statement that:

"The importance of nonverbal communication in classrooms
contexts is...generally little appreciated, especially by
inexperienced teachers..."[47]

has a bearing on the point made earlier in this thesis[48] that

ideas about communication in schools is dominated by the common

sense paradigm, "the clear sending and receiving of messages"

(transmission model) which sees communication as a purposeful act.

In order for non verbal communication to be acknowledged as

important, it would be necessary for a change in perspective to

come about which would allow the understanding that meaning in

school is not necessarily based on verbal interaction and is not

something which is given but which is generated, and that we are
likely to draw on prevalent social and cultural codes in order to
make meaning from the environment.   Until that change in
perspective is made, it is doubtful that those responsible for
teacher training will change current methods.

The following extract from Neill's work also has a bearing
on the notion that we draw on social and cultural knowledge to
make meaning:

> "An analysis of video-tapes of classrooms...suggests that
> teachers use a characteristic set of nonverbal signals.
> These signals are not unique to them, but some signals
> which are rare outside the classroom are common in it, and
> vice versa. **This reflects the marked differences between
> the types of social interaction in which teachers are
> involved in the classroom and those common in normal social
> interaction, especially among adults, outside.**   If new
> teachers react to nonverbal signals, and produce them
> themselves, on the basis of their experience of informal
> social interaction among adults, their reactions may be
> unsuited to class teaching and control, through they may be
> quite adequate when the teacher is going round the class
> giving individual instruction."[49] (my emphasis)

Although nonverbal behaviour is important, this is not the
only consideration which should be made from a semiotic
perspective.   By examining patterns of communication in a
classroom as an exercise in semiotics, I mean that it would be
necessary to identify not only nonverbal gesture such as those
discussed above but that cognizance would have to be taken of the
total nonverbal environment discussed in Chapter Two, Section
Four, Nonverbal Aspects of Meaning.   The student should be
brought to understand the classroom as a total environment (see

also Chapter Four: School Environment) ranging from the fabric

of the room, the use of space, the mediation of school convention

by the teacher, the teacher's personal style compared to the

codes used by teachers in general, verbal and nonverbal codes,

etc., which contribute to the generation of meaning in the

classroom.

It would be necessary, therefore, to have video recordings

of authentic classroom settings, pupils and teachers, in direct

contrast to the contrived classroom experience offered by micro-

teaching sessions which would then have much more structured

terms of reference available than the student teacher's

subjective response to seeing him- or herself on video. Video

recordings of micro-teaching carried out by students could be

used at a later stage of analysis when an understanding has been

gained of the implicit meanings generated in the classroom.

Practical knowledge of how communication codes work in the

classroom would, therefore, be of enormous benefit to student

teachers.   Viewing communication skills as the "science of

teaching", would create a more cohesive idea of what a teacher is

expected to do in the classroom.   Semiotics, we recall, is

defined by Sebeok as: "concerned, successively, with the

generation and encoding of messages, their propagation in any

sensorially appropriate form of physical energy, their decoding

and interpretation."⁵⁰   The generating and encoding of messages

by teachers would be the basis of this science.   There would

require to be a close link between theory and practice, with trainees being encouraged to analyse their own work and that of others in an informed way, thus avoiding the subjectivity which presently fudges the issue of how student teachers "present" in a classroom situation.

Examples of the implicit and explicit codes which generate meaning would require to be provided such as the framework for address which all of the teachers observed during research used, i.e. movement to a particular area of the classroom to address the class, the use of a definite word, phrase or gesture to draw the class's attention to the fact that the lesson was about to begin, etc. and any other subsequent findings from research of this nature. In this way shape and substance could be given to what we might, otherwise, say was an "instinctive feeling" and might encourage students and probationary teachers to take firm controlling action by demonstrating that without such action, they are likely to destroy implicit and fundamental rules for teacher behaviour. Certainly, the act of ostension i.e. showing and demonstrating by providing examples of teaching, which exists in instructive video, would have more impact on a student audience than mere theory, verbiage, or unstructured observation.

In this connection, I would like to discuss the video mentioned previously[51], intended for in-service teacher training, which was commissioned by the Scottish Education Department in 1987. The video draws on previous work undertaken during the

Pilot Project discussed in Chapter Three, Section Five, Comparing Primary and Secondary School Meanings. It was previously pointed out that the methodology for this research involved the recording on video of classroom interaction of primary and secondary school teachers. Some of these interactions were used to compile the commissioned video. The aim of the video is to show a proposed audience of teachers that they are the "mediators of classroom convention" i.e. that teaching involves a basic communication structure of which they may, at first, be unaware but which, nevertheless, exists. The ultimate aim of "laying bare" this structure is intended to heighten teachers' awareness of their own methods of communicating and, in the process, provide an insight into teachers' methods of generating meaning. The video does not lay claim to the dissemination of an all-encompassing methodology nor to didactic "advice" but is intended as an initial guide to common structures of communication in the classroom.

The video (which can be viewed as material which accompanies this thesis) is accompanied by a pack containing ideas for discussion and worksheets which can be photocopied and distributed to participants.[52] The worksheets have been devised to help structure participants' responses to exercises taken from the content of the video. Obviously, a verbal description of what is essentially an "iconic experience"[53] is problematic. It is difficult to replace pictures with words and so it is recommended that the video should be viewed. A further

problem regarding representation arises in relation to camera
angles, editing, anchorage of meaning with a voice-over, mise en
scene, etc.   These problems largely relate only to the first
part of the video as this is heavily structured in this way.
The last section of the video is less structured in that there
are extracts taken from classroom interaction with no verbal
interruptions from the presenter, although, of course, it can be
argued that the camera as mediator presents other kinds of
problems, e.g. the pictures shown were chosen by the person who
compiled the video, recorded from certain camera angles, leaves
out details, etc.   Showing pictures as an act of ostention is,
essentially, the purpose of the video: the existential act of
showing is far more effective than merely explaining.

Students of media studies might argue, however, that such a
video is a *representation* of classroom interaction   on the
grounds that classroom interaction has been mediated through
video recording and is subject to editing, framing, lighting,
etc., which affects point of view.   For this reason, some might
see the video as being of less value because it is an artifact
which "mediates" classroom interaction.   This is true of the
first section of the video;   the viewer is presented with images
based on a voice-over of a poem by Roger McGough, which
encapsulates his view of a child's first day at school.   The
editing and camera work of the producer introduces further
mediation through choice of pictures to depict the poem visually.
A voice-over anchors meaning when actual classroom scenes are

shown, giving them a particular meaning, and a conclusion is reached which is subject to aberrant decoding[54]. The final part of the video is less likely to be subject to such a complexity of problems and, I would argue that, as an act of ostention it becomes more effective by the addition of language and not less so.

The video and the pack is divided into two parts:

Part One - entitled "Looking at Schools" , and
Part Two - entitled "Looking at Teachers"

Part One begins with the poet, Roger McGough's, voice reading his poem "First Day at School". The voice-over is accompanied by images of school which match the words of the poem. The intention, here, is to demonstrate that school has "meaning" over and above the commonly held notion of teaching and learning. School is shown "through the eyes" of a small child who is attending school for the first time. The inherent meaning contained in McGough's poem is that all of the things which we, as adults and teachers, take for granted about school seem strange, unusual and threatening to infants as they enter primary school for the first time.

The way in which meaning is communicated in both the poem and the video is then examined and this information is applied to the classroom with a scene of a Secondary School classroom and

then a Primary School classroom. The idea of what is and is not representative of primary and secondary school classrooms in general is problematic. I have attempted to alleviate a similar problem which occurred in writing this thesis by making the reader aware of the fact that "my school" may not match that of the reader and is, in fact, a "projection". To attempt a similar warning within the structure of the video would have been unnecessarily instrusive, and instead, the idea of construction was used as a point for discussion in the accompanying workpack.[55]

The conventional meanings which were shown to manifest themselves in the classroom scenes in the first section of the video is that in Secondary School, pupils are expected to sit quietly and listen whilst in Primary School, it is generally accepted that pupils can move around and talk. These, of course, are only generalisations extrapolated from the results of the research which preceded the production of the video and the fact that they are generalisations is pointed out in the workpack which accompanies the video.

Part One also features three S.2 pupils who visited a primary school and a transcript of their reactions to the changeover from Primary to Secondary School is included in the workpack, with points for discussion.

Part Two of the Video briefly examines the verbal and non-verbal attitudes of teachers such as the use of repetitious words or phrases to start and punctuate lessons;   voice modulation, movement, facial expressions, and position in the classroom whilst teaching.

One of the main problems encountered in making this video was that of setting up a dialogue in sound and vision informed by ideas with which the intended audience would almost certainly have been unfamiliar:

> "Any consideration of how *school* - as a totality - is capable of "generating meaning" would, therefore, be an alien concept to someone who understands only the first communication paradigm.   Considerations concerning the verbal ebb and flow of teacher and pupil-talk is a much more familiar concept..."[56]

To solve this problem, there would have had to be a series of videos, each progressing towards a greater understanding of the concepts involved.   This was not possible, however, and although I was given carte blanche regarding the contents of the video (apart from one stipulation that it should contain something about voice modulation) there were restrictions of time and money involved.   The video had to be produced very quickly and the amount of money allowed by the Scottish Education Department had, for administrative reasons, to be within a certain low budget range.

The first problem, therefore, lay in how to communicate effectively with the intended audience and Roger McGough's poem seemed like an apt introduction to the main points which were being made. The point which the poem makes to its audience seemed akin to the points which I wished to make. The poem is reproduced in the workpack which accompanied the video and can be found in Appendix A in this thesis. This first part of the video was reasonably successful in conveying the message intended, as it has since been shown to a number of people who have been able to understand the ideas which it contains. The second half of Part One and Part Two are less successful as an artifact which conveys meaning. These sections, however, were intended to promote discussion and analysis, rather than specific meanings, and the worksheets which accompanied the video were intended to structure these discussions.

Further problems were encountered due to the fact that much of the video would contain extracts of classroom interaction taken during the Pilot Study discussed in this section and, putting it quite baldly, I did not wish to "use" the teachers who had agreed to allow access to their classrooms and video recording to take place, in any way which would have been detrimental to them. In other words, I could not be openly critical but had to remain non-judgemental when presenting these recordings of classroom interaction. I had to bear in mind who the intended audience would be in view of the fact that the video

was intended for teacher in-service training; the colleagues of those teachers who appeared in the video!

This particular problem was tackled by not making any specific reference to the styles of teaching adopted by each teacher and by inserting under "Points for Discussion" in the accompanying workpack[57] these words, "The extracts viewed were taken from whole lessons. This could have distorted our perspective." This idea was then utilised (and further reinforced) in one of the questions, by emphasising the idea of misunderstandings caused by misinterpretations. The extracts, therefore, together with a worksheet which was intended to structure audience response to nonverbal aspects of communication, were utilised as material to promote thought and discussion about the nonverbal aspects of classroom interaction.

The video which forms part of this thesis, therefore, would only go some of the way towards meeting the criteria proposed at the beginning of this section (pp. 143/4) for providing authentic training materials for students and probationers. In conclusion, making the video was an interesting experiment which resulted in a far from flawless piece of work which is too general in nature. The most profound lesson to be learned from this exercise is that too many concepts were crammed into the space of just under twenty minutes of video tape. (A time-scale which was necessary due to the fact that a video longer than this could not have been properly utilised within the space of time

available for in-service work in schools. The "in-service day",
which is segmented into mornings, afternoons, hours or even half-
hours set aside for a variety of activities, would have had to
undergo a nominal and chronological change to become the "in-
service week" if the video had been longer!) Furthermore, the
ideas which informed the video are, even yet, in an embryonic
state requiring many more hours of research before they can be
confirmed or otherwise.

I still believe, however, that many of these ideas are valid
and that the theoretical perspectives outlined in this thesis are
capable of providing an insight into school and classroom
communication which would be useful for intending, new and
experienced teachers.

3.7 Conclusion

In this chapter the reader has been offered, and asked to
accept, a different "way of seeing" school; a perspective which
asks that we understand the active meaning making processes in
which teachers and pupils are engaged in the classroom, and which
explores ideas for teacher training based on these processes.
By far the most dominant theme is that convention is the key to
meaning.   Although, from a semiotic perspective, this is
generally so - any meaning which ultimately can be shared is only
meaningful through convention - it could be argued that this

applies even more so to school which seems to thrive on
conventional meanings – the "legitimized habits" of generations.

N O T E S

1. Sebeok, *Encyclopedic Dictionary of Semiotics,* op. cit., p.942/943

2. Eco, *op. cit.,* p.48

3. Nash, Roy, 'Pupils' expectations for their teachers', *Research in Education,* No. 12, No. 1974, pp.47-61

4. Birdwhistell, *op. cit.,* p.86.

5. *Ibid.,* p.87.

6. Regan, John, 'Metaphors of Information' *in The Semiotics of Culture and Language, Vol.I: Language as Social Semiotic,* London, Pinter, 1984.

7. *ibid.,* p.45.

8. *ibid.,* p.45

9. *ibid.,* p.46.

10. J. Shultz and S. Florio, 'Stop and Freeze: The negotiation of social and physical space in a kindergarten/first grade classroom' in *Anthropology and Education Quarterly.* Volume 10, 1979, pp 166–181

11. *ibid.,* p.167.

12. *ibid.,* p.180.

13. *ibid.,* p.168.

14. *ibid.,* p.172.

15. Regan, *op. cit.*

16. "Ostension is the action of showing, exhibiting, displaying, presentating.   The term appears in its verbal form (Latin: *ostendere* 'to show') for the first time in the theoretical framework of St. Augustine's *De Magistro* 'Concerning the Teacher'", Sebeok, *Encyclopedic Dictionary of Semiotics, op. cit.,* p.656.

17. Paterson and Thomson, *op. cit.*

18. See above, Chapter Three, Section Three, The Maintenance of Meaning in the Classroom, p.104.

19. Chapter Two, Section Two, Semiosis, p.65/66.

20. Consultative Committee on the Curriculum, *Education 10-14 in Scotland*, A CCC Discussion Paper, 1986, p.120.

21. Galton M. and Willcocks J. *Moving from the Primary Classroom*, London, Routledge, 1983: "In 'Progress and Performance in the Primary Classroom' it was shown that the behaviour and achievement levels of pupils are significantly influenced by their teacher's style." p.25.

22. Sless, *op. cit.*, Preface.

23. See Appendix A.

24. *ibid.*

25. *What do YOU Mean?* A video for in-service teacher training, compiled by Eleanor Thomson, (1988), with funding from the S.E.D. Accompanies this thesis in separate slip-cover.

26. Appendix A.

27. *ibid.*

28. *ibid.*

29. Paterson and Thomson, *op. cit.*

30. *ibid.*, p.7

31. Chapter Three, Section Three, The Maintenance of Meaning in the Classroom, p.104

32. Paterson and Thomson, *op. cit.*, p.8.

33. Chapter One, Section Six, Semiotic Methods and Methods of Research, p.45.

34. Paterson and Thomson, *op. cit.*, p.24.

35. *ibid.*, p.40

36. Further confirmation that meaning is generated by the arrangement of desks and chairs in classrooms came about during a casual conversation with an English Adviser who remarked that the "old methods" (transmission model, teacher-centred) of teaching were being replaced by the new (group work and pupil interaction) and that these changes were evident from pupil seating arrangements in the classes he had

visited in the region. However, as previously discussed in Chapter One, Section Two, Paradigm and Syntagm, above, although the Adviser was able to recognise this particular sign, his assumption that group work was in progress may have been erroneous in view of the fact that teachers might only *think* that they are catering for group work when, in fact, they are still deploying traditional, whole-class, teaching methodologies.

37. Paterson and Thomson, *op. cit.*, p.47.

38. *ibid.*

39. *ibid.*, p.49.

40. *ibid.*

41. Chapter Three, Section Six, Teacher Training from a Semiotic Perspective, p.148

42. Introduction, "Reading" Meaning, p.11

43. Chapter Two, Section Four, Nonverbal Aspects of Meaning, pp.71/72.

44. Neill, S.R. St J., Fitzgerald, J.M., Jones, B., 'The Relation between reported awareness of non-verbal communication and rated effectiveness in probationer and student teachers', *in Journal of Education for Teaching*, Vol. 9, No.1, 1983, pp.16-29.

45. Neill, S.R. St.J., 'Children's Reported Responses to Teachers' Non-verbal Signals: a pilot study' in *Journal of Education for Teaching*, Vol.12, No.1, 1986, pp. 53-63

46. *ibid.*, p.55.

47. *ibid.*, p.53.

48. See above, Chapter Two, Section Four, Communication, Semiotics and Pedagogy.

49. Neill, 'Children's Reported Responses to Teachers' Non-verbal Signals: a Pilot Study', *op. cit.* p.53.

50. Sebeok, 'Zoosemiotic Components of Human Communication', *op. cit.*, p.295, quoted in Chapter Two, Section One, Communication from a Semiotic Perspective, p.56.

51. *What do YOU Mean?* A video for in-service teacher training, compiled by Eleanor Thomson, (1988), referred to in Chapter Three, Section Five, Comparing Primary and Secondary School Meanings, p.128/9.

52. See Appendix A.

53. *Iconic* is one of Pierce's three sign categories but the term has passed into wider use. For example, a photograph, painting or other *representational* thing such as a video is considered to be iconic in nature. An instructional video of actual teaching in progress would be considered to be "highly motivated" because the pictures must match up to reality as closely as possible, whereas, word signs (apart from onomatopoeic words such as "*cu*ckoo", etc.) are unmotivated or random in nature.

54. "aberrant decoding" is a term used by Eco to describe the effect of a message being decoded in a different way to that originally intended. Eco, Umberto, 'Towards a semiotic inquiry into the television message' *in* Corner and Hawthorn, *op. cit.*, p.131.

55. See Appendix A.

56. See above, Chapter Two, Section Five, Communication, Semiotics and Pedagogy, p.85.

57. See Appendix A.

CHAPTER FOUR

THE EDUCATIONAL ENVIRONMENT

In Chapter Two, Section Four, Nonverbal Aspects of Meaning above, a brief point was made about school buildings and the notion that the physical environment of schools conveys implicit meaning, an idea which I will expand upon in this section.

School buildings are cultural artefacts which generate meaning through convention. As such they are usually similar in nature and remain recognisably school buildings due to a number of features, namely: they are generally surrounded by fences or railings; have open areas situated between railings and buildings; and, especially in urban areas, are built to accommodate large numbers of people. These are some of the identifying external features of buildings called "schools". There are many other internal identifying features of a similar nature. These features are conventionally understood and, therefore, generally recognisable as belonging to school and, therefore, these buildings remain recognisably schools even after their functional nature has been altered and they no longer contain schoolchildren. These features, however, have become so implicit to our patterns of understanding that it has become difficult to think about schools in any other way than how we have learned to perceive them; they have become part of the

commonsense way of thinking. Buildings, and the objects inside
buildings, however, are capable of generating meaning and perhaps
much would be gained from changing our perspective and
acknowledging that, far from being merely a place of learning,
the physical aspects of schools convey powerful meanings.

Eco maintains[1] that architecture communicates and is not
merely functional:

> "A phenomenological consideration of our relationship with
> architectural objects tells us that we commonly do
> experience architecture as communication, even while
> recognising its functionality."[2]

Some might argue that it makes little difference to children
what surroundings they inhabit and that efficient teaching should
produce good results no matter where it takes place.   I will
argue in this section that, far from being unaware of their
surroundings, school children take great interest in - and are
possibly affected by - where they are taught and can articulate
their preferences.   Furthermore, I will argue that school
architecture generates meaning to such an extent that it is
capable of influencing teaching methodologies and teacher
behaviour.   An integral part of this perception of school
environment is a consideration of the space in which pupils and
teachers work.   Edward T. Hall's[3] studies in *proxemics*
demonstrate that space is capable of generating meaning and I
will explore some of the uses and meanings which result from
application of these studies to schools.

-166-

4.1 Architecture and Space

The physical environment of the classroom is discussed in Cohen and Manion and the following comments are made in this connection:

"The physical environment is the framework for learning; and as it can contribute to either promoting or impeding learning, it must be under the teacher's control as far as possible."[4]

The authors suggest that teachers should order and control their physical environment by:

"....arranging, organizing or utilizing satisfactorily such matters as seating and layout, teaching aids, equipment for practical lessons, audio-visual apparatus, activity corners and areas, notice boards, blackboards and display tables."[5]

It is obvious from the above that Cohen and Manion are excluding architectural features.   It is often impossible to change the position of blackboards as they are a fixture in some classrooms.   Similarly built-in cupboards, radiators, window positions, door positions and a multiplicity of other fixtures proliferate in the classroom making it difficult for teachers to organise themselves in any other way than that which has already been stipulated through architectural fixtures and features of furnishing.   Many classrooms are out-dated, the inheritance from long-dead architects who built schools over a century ago.

Purpose-built schools can suffer from similar problems which I will discuss later.

Eco[6] observes that architecture "communicates the function to be fulfilled." In other words, architecture dictates what one can and cannot do within a given space - indeed, it dictates what one is *supposed* to do within a given space. To illustrate his meaning, he makes an analogy about the eating implements which Western cultures use:

> "The spoon *promotes a certain way of eating and signifies that way of eating...*"[7]

Similarly, classrooms and school buldings promote a certain way of organising children and signify that way of organising. Our choice of eating actions when using a spoon is restricted by the shape of the spoon. Similarly, our choice of actions within architectural space is limited by its shape and function.

The secondary school in Central Region, where I conducted most of my research, consists of several different buildings, one of which is situated approximately half a mile away from what is known as the "Main Building". Many years ago, before the school population became so large, the Assembly Hall in the Main Building was exactly that - a hall where the school population could assemble. Now, whole-school assemblies are impossible because the hall was built to house half the number of pupils, and staff, that the school currently contains. In one sense,

the space provided by the architects still remains an Assembly
Hall but if one were to define "School Assembly" as the total
school population gathering together, then the Assembly Hall
remains as such only nominally .

In the open-plan primary school previously mentioned, one of
the teachers who assisted with my research made a remark about
her surroundings which I found strikingly similar to that made
by Eco:

> "Your building [the school building in which a teacher
> teaches] demands a certain way of expressing....."[8]

Eco's observations about the communicative value of
architecture become interesting in view of this statement. The
teacher felt that the building "communicated" something; that
she should teach in a particular way. The fact that this
teacher felt a compulsion to express herself in a "certain way" –
which she defined as "more informal" – is likely to have been
partly related to the functional problems imposed by the building
and partly to her perception of recognised teaching conventions
in relation to "formal" and "informal" methods of teaching and
open plan schools.

I will discuss functional problems first of all before
moving on to teaching methodology but, first of all, it is
important to clarify certain points. I am not concerned, here,
with creating a taxonomy of school architectural signs, nor am I

concerned with the larger issue of architectonic signification[9].
To paraphrase Sless, I will leave this to the semioticians.   I
have found it necessary, however, to evaluate a small part of
the discourse which has been taking place over the past twenty
five years or more in relation to architecture as *a signification
system.*

In search of the architectural *sign,* Eco turns to the
definition offered by Koenig:

> "...architecture is a system of 'sign vehicles that promote
> certain kinds of behavior [sic]....'"[10]

This seems to explain the phenomena experienced by the primary
school teacher discussed above.   She felt that the building
elicited certain behaviour from her.

Eco, however, is unhappy with this definition because it
demonstrates a deference to a behaviourist approach to semiotics.
Koenig's interpretation is inextricably interwoven with human
reactions to architecture when, in fact, Eco is attempting to
structure a semiotic framework which would encompass *all* kinds of
architecture and architectural features, quite independent from
human behavioural considerations.   He makes the following point
in this connection:

> "That a stair has obliged me to go up does not concern a
> theory of signification;   but that occurring with certain
> formal characteristics that determine its nature as a *sign
> vehicle*.....the object communicates to me its possible
> function....and can be established *independently of
> apparent behavior*....In other words, in the cultural
> context in which we live....there exists an architectural
> form that might be defined as 'an inclined progression of
> rigid horizontal surfaces.....'"[11]

Eco maintains that stairs do not require to be climbed in order

to understand them as architectural manifestations and so they

can be viewed as part of our cultural existence quite

independently of any human behaviour which they might elicit.

Koenig's definition would make this impossible.   A behaviourist

approach to semiotics such as Koenig's invalidates a general

architectronic code, which is what Eco is searching for.

Eco makes further reference to the unsuitablity of Koenig's

definition by pointing out that it is Koenig's contention "that

the denotata of the architectural sign are *existential* ('quanta'

of human existence)"[12].   Koenig's definition infers that function

and use are inseparable:

> "'When a school is built, the denotata of this sign
> complex....are the children who go and study in that
> school, and the significatum is the fact that those
> children go to school.   The denotata of a house are the
> members of the family that lives [sic] there, while the
> significatum of a dwelling is the fact that people as a
> rule divide up into families as far as living under the
> same roof with others is concerned.'" [13]

Although Koenig's definition, which is based on Morris's

theory of the sign[14], is inadequate for the   purpose of

establishing a general framework of architectural semiotics, his observations are, nevertheless, of interest within the present discourse. In the case of the primary school teacher mentioned above, she felt compelled to conduct her lessons in a "certain way" - her behaviour was, therefore, influenced by architectural features which perhaps, at the end of the day, supports Koenig's contention that architecture "promotes certain kinds of behaviour".

Hall (1966)[15] makes the following observation about "fixed-feature space" which supports the behaviourist view:

> The important point about fixed-feature space is that it is the mold [sic] into which a great deal of behavior is cast. It was this feature of space that the late Sir Winston Churchill referred to when he said: "We shape our buildings and they shape us." During the debate on restoring the House of Commons after the war, Churchill feared that departure from the intimate spatial pattern of the House, where opponents face each other across a narrow aisle, would seriously alter the patterns of government."[16]

Theoretical implications aside, it cannot be ignored that architecture communicates, which is the theme of the following observation taken from the The Encyclopedic Dictionary of Semiotics:

> "...whatever the ontological source of an artifact, it is the user (the subject) who is the principal orchestrator of signification. The subject appropriates, maintains, transforms, and reckons with the made world in meaningful ways, and in so doing (and in this sense) may be said to potentially transmit information to himself and to others regarding the nature, status, and import of such

appropriations and orchestrations."[17]

We are left in little doubt as to the "nature" and "import" of open-plan schools for the primary school teacher discussed above who felt that the building demanded a "certain way of expressing" and it is at this point that I will discuss the problems encountered by this teacher in the open plan primary school which was the subject of my research.

The primary school in question is a modern building built on the "Open Plan" principle in the early eighties. "Open Plan" is defined by Cohen and Manion as:

> "..schools in which the traditional architectural arrangements have been replaced by an arrangement of learning bays and teaching areas that lend themselves to learning and teaching in a more flexible and informal manner. With its emphasis on space, a design of this nature facilitiates a freer flow of children and assists teachers in implementing progressive concepts...In theory at least, all the amenities of the school and all its teachers are available to all the children."[18]

In this case, the interior of the school building conformed to type. Each teaching area had a ground-level space and a space above - a mezzanine-type structure, or balcony - with stairs for access. The obvious intention of the architects was to provide extra space but, in fact, they had created a hazzard for teachers who had infants in their care. Primary 1 children (four to five years old) were forbidden access to the balconies above their teaching space for reasons of safety. This,

-173-

ultimately, cut down the amount of usable space for that class and the balconies tended to be utilised for storage purposes only.

The class which I visited consisted of Primary 7 children who were aged between eleven and twelve. Since there was less danger amongst this age group of falling down stairs and, by virtue of the fact that, physically, they took up more space, they were, of necessity, allowed access to the balcony above their teaching area. This, however, meant that the pupils were out of sight of the teacher below. This, the teacher felt, called for a "more informal" way of teaching or, to quote her further, the architectural arrangement of space necessitated the removal of "the 'sit down and listen to me' aspect of teaching."

This remark reflects the perceived need of this teacher to discount one of the aspects of teaching which is related to traditionalist methodology which demands passivity from pupils. Cohen and Manion maintain that the "..philosophy of open education...questions the value traditionalists place on it."[19] Barth[20] is then quoted to provide an explanation as to why this should be the case:

> "'Implicit in the ideas of open education are assumptions that bring into question not only the importance of knowledge *qua* knowledge, but also its meaning for the learner. Rather than an end in itself, knowledge is seen as a vehicle for the development of processes of thinking

such as logic, intuititon, analysis and hypothesis formation and as a catalyst that facilitates the individual's development towards the ultimate goals of education - self-esteem, dignity and *control over himself and his world.*'"[21] (My emphasis)

This last phrase is interesting in view of the further remarks made by the primary teacher. "Children have to learn from the beginning to do things on their own." Each time, therefore, she sends a group of children to the balcony area, she is reinforcing an implicit message which has been generated to her through the architectural features of the space in which she works.

And what of the pupils and "incidental learning"? The architectural characteristics of the building have, by definition, allowed them more freedom of movement and helped to encourage a particular teaching response. What "message" about school will they carry with them to the "traditionalist" and slightly authoritarian regime of the local Secondary School?

4.2 Pupils' responses to School Surroundings

In order to test the premise that children at school have preferences about the kind of classrooms and buildings in which they are asked to work, I decided to circulate a questionnaire with two photographs[22] depicting two kinds of classroom situation to a new intake of secondary school pupils (very few

of whom would have transferred from the primary school discussed above).

The photographs are iconic signs, that is, they are representations of classrooms which depict two different teaching methodologies in operation: "traditional" and "open". Both pictures are in black and white.

The photograph captioned "Classroom A" is interesting in that the photographer has used the angles of the desks to "point" at the teacher who is situated symmetrically in the far distance of the shot, standing facing the class and slightly angled to the camera but so far away that his features are indistinct. The teacher is wearing a black gown and gesticulates with his hands to the class who are either listening or writing. Many of the pupils have pens in their hands and all have books and/or jotters on the desk in front of them. In the foreground of the picture are two empty desks with ranks of seated pupils moving into the middleground and far distance of the photograph, sitting in pairs at similar desks. The pupils are shown in back view and, therefore, their faces are hidden. This photograph depicts "traditionalist" teaching methodologies evidenced by the dominant presence of the teacher, the passive role of the pupils, and the arrangement of seating..

The photograph captioned "Classroom B" is taken from a similar angle but creates the illusion of a smaller space.

There is no teacher in evidence within the frame of the shot. Desks are set at angles to each other and pupils are seated asymmetrically, obviously working in pairs or groups. Pupils' work displays are in evidence on the wall in the background of the picture and four of the pupils are standing, three of whom are looking at papers or the contents of folders at cupboards providing worktops situated under the windows. This photograph depicts "open" teaching methodologies evidenced by the absence of teacher dominance within the frame of the picture, the impression of pupil-centredness given by work displays and work-folders ranged on the worktops, the active role of the pupils (standing, sitting, exploring), and the arrangement of seating.

The pupils who took part in the survey were, in effect, being asked to make a preferential choice between the two photographs by carrying out a similar but less rigorous "reading" of the two pictures to that above; a task which I have found from experience is not beyond young children. They are perfectly able to look at pictures and infer situations from them - a skill which is nurtured through, for example, story book illustrations, television, film and video.

Two hundred and seventy seven pupils took part in the survey and, of those, two hundred and twenty preferred "Classroom B". Pupils stated a variety of reasons for choosing this classroom in particular. The most frequently quoted reasons were:

"interesting"; "pictures on walls"; "modern"; "room" and "space"; "can walk about"; "friendly atmosphere/nice atmosphere"

Twenty percent preferred the picture because it showed pupils working in groups.

A few interesting sample replies to the question "What did you like about it?" [Classroom B] are as follows:

"I like the nice warm feeling of being in that classroom and the unbareness and also the way the walls and the desks are."

"It wasn't so formal and it looked comfortable"

"I liked the way it looked interesting and the pupils were enjoying it although they were still working."

"You are sitting in groups and moving about."

"It looked interesting. Everyone seemed to be doing something, while in the other one [Classroom A] they were just listening to the teacher."

The connotative value of "Classroom B" is predominantly that of depicting group work and the pupils' response to this were marked, i.e. their replies centred on concepts such as "friendly

atmosphere"; "informal"; "pupil-centred activities", etc. It can be seen from the foregoing that, in some cases, pupils showed a remarkable command of the language which accompanies the concept of group work. The fact that "Classroom B" contained evidence that classroom work is displayed on walls was another feature which drew comment. Being able to "move around" was a point raised fairly often in the pupils' replies.

It became obvious from the pupils' responses that bright rooms, warmth (in both the physical and social sense), and the fact that pupils were not tied to desks or teacher-centred instruction came high on the list of reasons why "Classroom B" was preferred.

Group work, a composite part of "open" teaching, is practised, with very few exceptions, throughout Central Region's primary schools. In marked contrast, the secondary school in which the survey was conducted shows a predominance of "traditionalist" teaching methods which would be closer to the kind of arrangement which can be seen in "Classroom A". The children's responses are, therefore, all the more interesting from this perspective and, had the research design been more comprehensive, a natural follow-up from the pupils' responses would have been to query their reactions to Secondary School methodology. This, however, was not done and the question remains unanswered although it might be possible to extrapolate, from the stated preferences of the pupils, the kind

of answer they would have given.

Apart from Question 7 on the questionnaire which elicited a response to the two photographs discussed above, there were five questions which elicited responses about the actual school buildings and a sixth question which asked the child to describe his or her "dream classroom".

The school referred to in the survey has an unusual variety of buldings ranging from a building which is over 100 years old, housing the English Department's classrooms, to wooden huts which house the R.E., Chemistry and Maths Departments' classrooms and some Technical Department classrooms, to a comparatively new building, built in the 1970s and situated about half a mile away from the cluster of huts and older buildings which was the original school.   This building houses the P.E., Geography, History, Music, Art, Business Studies and Computing Departments.

The "New Building" referred to in the questionnaire is known as "The Annexe" and was built in the 1970s.   It has a flat roof and admits plenty of daylight: each classroom has a waist high "wall of windows".   The building has low ceilings, carpeted or linoleum tiled floors throughout, new-looking and well-maintained furniture, a reasonably efficient central heating system (although complaints have been heard about the rooms being "too hot in summer") and the general look of the building-interior is clean with either white or cream walls which reflect light.   For

reasons which can only be speculated about such as the totally different architecture, the "new-ness" of the building or the physical division between the Annexe and the main buildings, it is often said by teachers and pupils alike that this building has a "different atmosphere".

The "old building" referred to in the questionnaire was opened in 1886 and was a former public school which catered for pupils from five years of age, upwards to fourteen. This building houses classrooms for the English Department. The building is two stories high with a linoleum cover in the ground floor hall. All classrooms have bare wooden floorboards. Stairs at either end of the hall lead to a concrete walkway covered with linoleum which surrounds the upper floor, with classrooms on one side and high metal railings on the other, protecting pupils from a sheer drop into the hallway below. The ceilings in the classrooms are about fifteen feet high which, coupled with the lack of floor coverings in classrooms, creates an echo and a noisy atmosphere when children are participating in group work. (This can lead to frayed nerves on the teacher's part after participating in five one hour long sessions in the day). The school desks in these classrooms are scarred with initials and other grafitti although some new desks have been supplied which are scattered throughout the rooms. The paintwork on the door and window frames is dull and the walls are covered either in a soiled but still garish yellow or a cold blue emulsion. The rooms are badly in need of redecoration, with the

emulsion flaking and peeling off in places.   One of the classrooms upstairs shows signs of dampness, most probably caused by seepage of water from choked copings or crumbling away of pointing work on the gable end.   The central heating is inefficient and the classrooms are often cold in the winter.

The "Huts" are grouped to the rear of the main buildings of the school and house two classrooms to each hut.   There are approximately one dozen huts situated at various points behind the school, housing classrooms used for a variety of subject areas.   The huts are about twenty to thirty feet long with a classroom at either end and a storeroom in the centre.   The decor is nondescript (usually cream emulsion, cream paintwork). There are windows at either side of the classrooms which run for the whole length of the walls at waist level.   Access to the hut is gained by climbing three wooden steps into a tiny hallway with doors leading to the right and left into classrooms and another door to the centre which allows access to the storeroom. Heating is inefficient and the huts are either stuffy, because opening windows creates drafts, or cold in the winter.   (Bunsen burners have often been put to good use in the winter months!)

Of this choice, 72% of pupils stated a preference for the Annexe.   Some pupils ticked more than one box and, therefore, the percentages are spread.   Nevertheless, only 23% of pupils stated that they liked the "Old Building" and 22% stated that they liked the "Huts".

The replies elicited from Question 5, reasons for "not liking" a classroom, were mainly concerned with physical comfort (e.g. the wish not to be "too hot or too cold", to have comfortable seating, desks with no graffiti, etc.), and being able to sit in groups with space to move.

A selection of the answers to Question 6 which asks the pupils to describe their "dream classroom" follows. With the exception of a few odd answers e.g. "My dream classroom would have a swimming pool" and "...you should have a blackboard each. And you were [sic] allowed to bring your pets to school", a large percentage of the answers were located around such considerations as physical comfort, group work and colourful classrooms with pupils' work displayed, reflecting the preferences for "Classroom B" in the answers elicited from Question 7:

"I would like nice posters....a desk with no graffity [sic] on."

"I thing there should be big and coulerfull." [sic]

"It should be painted in bright colours and should have children's work on the walls."

"I think there should be groups of desks together and a computer in the class."

"It should be quite big and tidy, and it should have heating on when its cold, the desks should be further apart and seats more comfortable." [sic]

"I think they should be just like they are at the Annexe."

It is clear that classrooms, both in terms of fixed variables such as architecture - and in terms of other variables such as the use of classroom space as a reflection of teaching methodology (seating arrangements, wall displays) are of extreme importance to young people entering secondary school for the first time. The features mentioned have, obviously, generated meaning to the pupils indicating the indexical value of such things as seating arrangements, colours, state of furniture, buldings, etc., within the total signification system which is school.

The evidence gathered is, of course, not conclusive but it does answer the basic question which prompted this survey: "Do school surroundings matter to schoolchildren?" The clear answer, at least in the case of this small-scale survey, was "Yes, very much so...!."

4.3   The connotations of school surroundings

In the Spring of 1981, the Centre for Educational Sociology
(CES) at Edinburgh University in conjunction with the Scottish
Education Department carried out a survey amongst Scottish school
leavers.[1]   Questionnaires were distributed to a cross-section of
leavers from the 1979/80 session in Scottish schools.   Although
the comments in the survey covered a wide range of subjects, I
found Part I.1 "The Perfect School" to be of most interest for
the purposes of my research: this section contained thirteen
responses to the following question:

> "8.   (The perfect school)
> Can you tell us what your perfect school would be
> like?   What would you do there?   What would the
> teachers be like?   Would you have to go?   Would
> there be any rules?   And how would your ideal school
> compare with the school you actually went to?[2][3]

From the selected answers which have been published in reply
to all of the above questions, I have selected the part of the
answer which reflects the children's notions about the physical
environment of their school.   The answers, although sparse, are
taken from the answers given by nine non-certificate and O Grade
Certificate leavers.   There were no answers relating to the
physical environment of school from the Higher leavers and,
unfortunately, there is no way of finding out why this should be
the case.   The answers given are interesting, however, in that

they show that pupils notice their surroundings at school and have opinions relating to these surroundings:

> "My perfect school would be a new modern school which is **brightly decorated**.....This school [my perfect school] would be fantastic compared to the school that I went to. **The school was so cold and dreary**...."[24] (My emphasis)

> "...**The school would be a new school** and have heated classrooms and decent P.E. equipment"[25] (My emphasis)

> "My Ideal School compares a lot better than the School I went to because **the house blocks were always in a mess**, there were people smoking in the toilets also **the toilets were vandalised**....."[26] (My emphasis)

> "**No vandalism. Better equipment and materials. My school is wasted with vandalism**...."[27] (My emphasis)

Unfortunately, since the survey was not specifically designed to reveal pupils' responses to their actual school surroundings, we are left with only a tantalising, and oblique notion of pupils' observations about their own school through reference to their "ideal school". Nevertheless, the information is still interesting in that it reveals an awareness relating to the physical, as opposed to the social, surroundings of school.

With semiotics, however, the social and the physical can be linked through convention. Cultural value is attached to our physical surroundings and the objects and structures which have been placed in these surroundings have meaning beyond their face value. These objects can stand for cultural value systems and

produce evaluative or emotive reponses from individuals and evoke certain attitudes. Attitudes can be learned from others or can be formed through the direct experience of individuals. The stated preferences of the pupils in Chapter Four, Section Two, above, **Pupils' Responses to School Surroundings**, and the statements made by the school leavers at the beginning of this section show that pupils prefer comfortable, well cared-for surroundings which is not surprising in view of the cultural value which is attached to these things, quite apart from any considerations of physical comfort.

Two American researchers, Rosenfeld and Civikly[28], determined, on the evidence from a study carried out by the Connecticut Department of Education[29] over a number of years, that students are likely to feel proud of their schools if they have been given a new colour scheme; refurbished colour schemes appeared to "'be associated with decreased vandalism and other behavioral problems.'"[30]

We are left, however, with no more than hints about the importance of physical surroundings for school children. I have come across no substantial works relating to this, and have found difficulty in locating articles which deal specifically with data of this kind. Todd-Mancillas[31] has made the following observation about such data relating to American schools:

"There are perhaps nearly seventy extant textbooks on educational psychology.....the author is unable to find even one such textbook giving serious attention to environmental factors affecting learning processes."[32]

It seems that a similar situation exists in Britain. "Classroom environment" is generally interpreted in terms of relationship to social and psychological environments rather than the effects of physical environments and yet, from a semiotic perspective, these are interconnected.

Designers who cater for the commercial world have been, for many years now, exploiting the fact that colours, space, objects and the general appearance of the interiors of buildings have meaning. Supermarket design and colour-sensitive packaging for goods are manifest examples of this knowledge.

Milton Glaser, one of the foremost designers in the United States and Europe, tells an amusing story about the creation of a marketplace called "Basics" which was designed to sell goods which were intended to look as though no money had been spent on their packaging, thus cornering a section of the American market which favoured low cost items (which, incidentally, cost just as much to package as any other brands). The client who was funding the work insisted that the supermarket should have a concrete floor because "one of the signals that it is not a fancy place is that you have a concrete floor."[33] The supermarket which was bought over to house the low-cost brand names already had, according to Glaser, a "perfectly good tile floor", but, he

continues, "at a cost of $50,000 they tore up that perfectly good tile floor so that they could reveal the rather crummy-looking concrete underneath!"[34]

Supermarket floors in America may seem far removed from school buildings in Scotland, but the important point to be taken from the above account is that it supports the premise that objects have connotative value. Concrete floors are conventionally recognised as utilitarian objects which have little to do with aesthetics. In the market place it is understood that aesthetics costs money and so this client was wise enough to exploit the implicit meaning of a concrete floor: utilitarian, "cheap" and basic.

It seems that the arbitrary and conventional cultural meanings which enabled the above businessman to decide that concrete floors contained a message, also exist in relation to our concept of schools if one is to compare the following observation about American schools with our own:

> "..despite the occasional attention given to open classroom design, the vast majority of American classrooms are much as they were seventy years ago – square or rectangular rooms containing under- or oversized desks arranged in rows and columns with the walls painted uninspiring moss green or insipid grey, and with few furnishings or artistic artifacts unrelated to formal teacher-student interactions."[35]

Apart from some of the more modern comprehensives built in the seventies to hold swelling school numbers, and some of the

primary schools I have visited, most of the secondary schools I know of in this part of Scotland are housed in very old buildings with a decor and furnishings and fittings which would compare to those described above. The most likely reason for this is lack of funds but even if we were given limitless funding to rebuild schools, it is unlikely that we would change what we conventionally understand as the physical environment of school.

Schools as cultural artefacts reflect conventional notions about their physical shape and function. With this implicit understanding there seems little need to consider how physical environment might generate meaning. Certainly, the physical features of school relate to their institutionalised nature and the practicalities involved in sheltering large numbers of children for teaching purposes.

The "commonsense" ideas shared in society are unlikely to allow connections to be made between objects, space and meaning. Most of our learned cultural value systems, or attitudes, are at an *implicit* rather than *explicit* level of awareness and the commonly accepted, mechanistic, communications framework i.e. *sending* and *receiving* messages seems counterproductive to the idea of *generating meaning*. Thus, within what was, earlier, called the "first communication paradigm", it would be considered strange to say that the colour of walls, or a building can "communicate". Within the second paradigm, however, it is a perfectly feasible idea. Colours are signs with conventional

cultural[36] meanings.   The first paradigm appeals to an empirical

and pragmatic turn of thought.   Practicalities are of the essence

when running a school.   From this perspective, the ideas within

the second paradigm are less likely to make sense.   A teacher is

much more likely to ask for new textbooks than a coat of paint on

the classroom walls and school management are only likely to

worry about the fabric of the building if it shows signs of

dangerous wear and tear.

Colours and appearance are seen as being only of aesthetical

value and,   therefore,   are "impractical" considerations in

relation to the physical environment of school.   Either that, or

considerations such as these are categorised under "psychology"

and, therefore, subtly tainted with the idea of attempts to alter

behaviour by experimenting with colour and space.   In short,

generally speaking, there is no "language" which would allow us

to easily see how these connections are made and, consequently,

they are rarely considered except in terms of the "aesthetic" or

"practical".

Rutter et al (1982)[37], claim that there might be some

connection between the conduct and work of pupils and the

conditions under which they work:

"The findings showed that pupil outcomes (especially with
respect to behaviour and academic attainment) tended to be
better when the schools provided pleasant working conditions

for their pupils.   This was evident in the significant
association between good pupil behaviour and good
maintenance of decorations and care of the building
generally."[38]

From the sociological point of view there could be several
hidden variables causing such an apparent link.   From a semiotic
perspective, however, it is possible that pupils responded
positively to their surroundings as expressions of a cultural
system which demonstrates value through care.

Cohen and Manion (1977) utilise the findings of Rutter et al
to demonstrate a point about a subtle form of learning   which
they call "modelling" and which they claim socializes children by
"influencing attitudes and values":

"'*Modelling in the school*

Our observations of good care of the buildings, and the
willingness of teachers to see pupils about problems at any
time, provide some examples of *positive* models.   These
actions convey the message that the school is valued and
thought to be worth keeping clean and in good decorative
condition....'"[39]

Thus Rutter et al and Cohen and Manion agree that there
exists a   specific connection   between school surroundings,
teacher behaviour and learning.   Both sets of authors use the
sociological terms "model" or "modelling" which infers a rather
clumsy concept of communication which involves some kind of
"middle man" whom pupils "imitate" and who takes on some kind of
symbolic role as mediator between care of buildings and pupil
reactions.

If, however, we simply acknowledge the fact that children are likely to be implicitly aware of the cultural and social values placed on well-cared for buildings, we can see that there may, indeed, be a direct link between these things and pupils' responses to their surroundings. If something is well-cared for, it is generally understood that this thing is valued and thus worth having.

The connections between surroundings and behaviour are blurred by using sociological terms:

> "Incidental learning is a more subtle form of modelling than imitation. The learner observes the model's behaviour in specific situations and on the basis of these observations makes inferences about the model's beliefs, attitudes, values and personality. These inferences may subsequently affect a child's own behaviour.[40]"

Although the idea of learning, in the above extract, is being broached within a specifically sociological framework involving the ubiquitous "model", we are coming closer to the idea of the generation of meaning; both authors, are in effect, claiming that *some form of communication is taking place* but in describing this communication process, they are trapped within the parameters of the language of sociology. If we strip the key word, "modelling" away, we can find another kind of semantic clue which relates to the idea of communication rather than sociology:

"...good care of the buildings and the willingness of the teachers.... *convey the message*...."[41] [my emphasis]

A *message* is, therefore, being seen to be conveyed: the pupils "observe" and learn "incidentally"; they are "socialized"; they have their "attitudes and values" influenced because they "make inferences" about the model's beliefs, attitudes, values and personality". Meaning is seen to be gained through a "subtle" process. Plainly these things are being treated as implicit "meaning carriers" but by using sociological models, Cohen and Manion and Rutter et al are restricted to indirect means of declaring that they are likely to affect pupils. Pupils are seen to, somehow, "model" themselves on these things instead of making direct connections by bringing into play the learned attitudes children are likely to have about cultural value systems; attitudes are formed not so much from the actions of the model or the state of a building but from the cultural and social values attached to these things.

The validity of this argument can only be proved or disproved by further investigation. Meantime, we can, perhaps, admit to the fact that the physical environment of school is likely to be of significance within a semiotic frame of reference and may, indeed, have a bearing on the attitudes and behaviour of the children in that environment.

4.4 The Classroom Environment as Sign System

4.4.1. Examining accepted ideas

Michael Marland, an acknowledged expert in school organisation, devotes a whole chapter to "classroom environment" in his readable and reassuringly (for a busy student teacher) slim little book entitled *The Craft of the Classroom*.[42] Six or seven reprints of the book over the dozen or so years since it was first published speak to its popularity amongst the teaching profession. Marland's perspective throughout the book is decidedly functional, born of hard teaching experience, as the following legend which prefaces his book reveals: *"To the pupils I have taught, still teach, and will teach, whom I have learnt to like more as I have learnt to manage them better."* A sentiment which I – amongst, undoubtedly, many other teachers – have aspired to.

Many of the points which Marland makes are of great significance from a semiotic perspective and perhaps part of the secret of Marland's undoubted success as a teacher has been his ability to understand how implicit meaning is generated in the school and classroom and to put this understanding to use. Marland begins his chapter on classroom environment by listing the reasons why a classroom can be an invaluable aid to teaching:

"A room of your own means that you can create an atmosphere
that reflects your character and what you have to offer the
pupils who come to you; it allows you to use wall displays
as teaching aids; ....it means, above all, that you can
use the physical environment of the room as an ally in
influencing your pupils....Put simply, not only is a well-
kept and aesthetically pleasing room with functional
displays an education in itself, but also pupils behave
better in a room which is well organized and has individual
character."[43]

Marland makes an interesting lexical choice during the
course of this introduction: we are told that we can *create an
atmosphere*; *reflect* our characters; *influence* our pupils;
educate our pupils and make them *behave better.*   I find his
choice of words interesting for similar reasons to those
expressed in Chapter Four, Section Three, The Connotations of
School Surroundings, above.   Like Cohen and Manion (1977) and
Rutter et al (1982), Marland claims that **meaning is being
generated implicitly**; a subtle process whereby pupils "observe"
and are "influenced".   And, in a similar fashion to Cohen and
Manion, **exactly how** they might be "influenced" remains
unarticulated but Marland's empirical knowledge - his
"experience" and the tried and tested knowledge that these things
do work - satisfy the reader and the question is never asked.   It
is assumed that there is no need to explain - surely common sense
will prevail and you will understand the connection between
Marland's well-organised classroom and pupil attitudes?

In view of the statement made by Rutter et al, and quoted in
this chapter, Section Three, The Connotations of School
Surroundings, above, there is possibly some truth in Marland's

-196-

observations that well-cared for surroundings have a positive effect. Certainly, if we remember, Rutter et al attempt to uphold this premise:

> ".....the care and decorations of both the classroom and the school generally...based on our own observations of cleanliness and tidiness of classrooms and the use of plants, posters and pictures...correlated significantly with pupil behaviour...."[44]

Obviously, more than one explanation could be offered for these findings. Taking into account Marland's functional perspective throughout the book which highlights the importance of organisational abilities, perhaps he is claiming that the well-organised classroom with wall-displays, etc. signifies the well-organised teacher who is more likely to have better-behaved pupils. I will, however, offer another explanation which takes a semiotic perspective, and argues that classroom environments generate meaning as sign systems.

Marland offers the following points for consideration which I have numbered consecutively for the convenience of later discussion:

> 1. "You are lucky if you are going to have a classroom of your own....A room of your own means that you can create an atmosphere that reflects your character and what you have to offer the pupils who come to you...."[45]

> 2. "Opening the door, the pupil's first impression is of the layout of the desks. There is something infinitely depressing about a scatter of desks and chairs with no recognizable pattern, chairs in aisles, desks at all angles....."[46]

3. "He [the pupil] often notices the blackboard second. Is it clean? Has it carefully prepared work on it? Or does it still bear smudged traces of earlier lessons, or, worse still, pupils' playful scrawls?.....it flies like an advertising flag across one side of the room, declaring it as a room of work or a room of chaos at a moment's glance."[47]

4. "....it is the general cleanliness and tidiness of the room which strikes the incoming pupil....It will affect his attitude and behaviour if [it] is messy and there is litter about."[48]

5. "...there is bound to be damage from time to time...Arrange for graffiti to be removed immediately. Any breakages or signs of abuse are invitations to further damage."[49]

6. "Most classrooms have display boards and it is wise to make good use of them."[50]

7. "Some teachers cultivate simple pot plants on window-sills or shelves."[51]

These are the seven main points about classroom environment which Marland offers for discussion and elaborates upon to varying degrees during the course of the chapter. Seating arrangements, however, including positioning of the teacher's desk, is emphasised more than any of the other points, and he devotes approximately two thirds of the chapter to this subject.

Item 1 in Marland's list is concerned with the classroom (having "a classroom of your own") which would suggest that it is, by far, the most important point and, from a semiotic viewpoint, it is very important. The key words in Marland's

statement are *your own*.   This emphasis on possession does not

merely have its roots in organisational considerations but stems

from deep instinctive behaviour and relates to Hall's (1959;

1966) work on *proxemics* which, amongst other things, identifies

the concept of "territoriality", an anthropological term, as

being integral to human social behaviour:

> "The act of laying claim to and defending a territory is
> termed territoriality.......In man, it becomes highly
> elaborated......." [52]

In view of this, having "your own" classroom, therefore,

takes on greater significance than a merely organisational one

and, whether consciously or not, Marland is discussing this very

point: "...you can create an atmosphere that reflects *your*

character..."[53] (my emphasis).   Territoriality is instinctive

human behaviour which can also be found in animals:

> "The boundaries of the territories remain reasonably
> constant, as do the locations for specific activities
> within the territory...[Territory] is in every sense an
> extension of the organism, which is marked by visual,
> vocal, and olfactory signs.   Man has created material
> extensions of territoriality as well as visible and
> invisible territorial markers."[54]

The material extensions of territoriality which Hall

identifies are such things as buildings and the layout of cities

and their cultural variations.   He calls this *fixed-feature*

space and elaborates further by pointing out that houses in

Western society are organised spatially with special rooms for a

variety of functions such as eating, sleeping, etc. and makes the point that:

> "*If*, as sometimes happens, either the artifacts or the
> activities associated with one space are transferred to
> another space, this fact is immediately apparent.   People
> who "live in a mess" or a "constant state of confusion" are
> those who fail to classify activities and artifacts
> according to a uniform, consistent, or predictable spatial
> plan."[55]

The classroom from this perspective is, therefore, the teacher's "territory" and the teacher who does not have his or her own classroom is being denied the opportunity of fulfilling a quite basic and instinctive need.   Since pupils also use the classroom - sometimes as many as 200 in groups of thirty or so at various times in the week - it becomes more important to establish "territoriality" as the occupant of the room, as one must remember that pupils also require to establish their own territoriality.

This brings us to Item 2 in Marland's list - seating.   There are obvious organisational and administrative reasons why it should be necessary to take cognizance of seating arrangments; teachers may choose to seat their pupils alphabetically by surname, or in carefully planned mixed ability groups, noting the position of each child in the class on a record which can be kept in a convenient place for the information of the class teacher or a temporary substitute teacher.   Apart from these considerations, seating is important in the *proxemic* sense: Hall

(1966) identifies three categories within the proxemic framework of which the second, *semifixed-feature space*,[56] is concerned with "moveable" elements in interior or exterior spaces.

These elements include items of furniture inside the home or office. In general, it would be considered ill-mannered of a guest to rearrange the furniture in their host's home. Hall observes that different cultures have different ideas of what is fixed and semi-fixed. For example, Hall tells us that a guest in a Chinese home "*does not move his chair* except at the host's suggestion."[57]

In American homes he has noticed that visitors "hesitate to adjust furniture in another person's house or office." and "Of the forty students in one of my classes, half manifested such hesitation."[58]

Similarly, children in Scottish classrooms are unlikely to change the position (except minimally) of their desk or chair, e.g. lifting desk and chair and moving it to another point in the room without receiving prior permission from the teacher. If they did so, this would be seen as a manifestation of bad behaviour. A child's desk and chair, however, are not merely pieces of furniture in the classroom, they are, possibly, the only claim to territoriality which pupils have (especially in secondary school where a pupil's day is, in the main spent in peripatetic activity, moving from classroom to classroom).

Even so, laying claim to a desk and chair is not true territoriality because the positioning of pupils at desks is something which is foisted upon them in the organised teacher's classroom. Pupils, generally, are not allowed to choose where they will sit in the classroom and, the teacher, in ensuring that he chooses seating, is exerting control not only over his environment but over his pupils as an integral part of that environment. Marland's remark about there being "something infinitely depressing about a scatter of desks and chairs with no recognizable pattern..."[59] has greater impact if we recall Hall's observations that we are breaking with the basic human trait of classifying "activities and artifacts according to a uniform, consistent, or predictable spatial plan"[60] when we fail to organise furniture and belongings. If a teacher fails to readjust the classroom furniture, then the demarcations of territoriality are eroded: it indicates a lack of care and, to the pupils entering the room, is evidence of another class's recent occupancy - evidence of that other class's "territoriality" which has taken precedence over that of the person who occupies the room - the teacher.

The blackboard in a classroom, which is Marland's third item, generates meaning in a variety of ways. It is at once symbolic and indexical and it is used as a frame for the conveyance of symbolic and/or iconic meaning. The blackboard symbolises school and classrooms in general: a blackboard *stands for* "school". With Marland's observations, however, its

meaning becomes symbolic (i.e. significant through convention or rule). Its state - whether blank, containing work from earlier lessons, or the "playful" scrawls of pupils - generates meaning about the teacher in whose room it is. The notations which appear on its surface will be symbolic, iconic or both - i e. the frame within which words, numbers, diagrams or drawings are displayed. In this way, the blackboard generates meaning about the possible content of the lesson about to be taught, the content of the last lesson, or the attitude of the teacher upon whose board the "scrawls" appear. The blackboard, therefore, is not merely a piece of equipment for illustrating lessons, it is a lesson in itself.

Item 4 concerns the general "cleanliness and tidiness of the room". Litter and general disarray are, again, markers of another class's territoriality, discussed above in relation to the placing of desks and chairs but it is also possible that litter and disarray can have a connotative value. The *denotata*, i.e. litter and lack of neatness can give rise to connotations of a sloppy or disinterested attitude on the part of the teacher in whose room these things are observed. This message would gain strength if there were, in the understanding of pupils, conventional associations with tidiness in classrooms in general.

Item 5 warns against allowing graffiti to remain in the classroom. Graffiti are perhaps an expression of territoriality - that a pupil "possessed" a desk or a chair or a book albeit for

-203-

a little while can be advertised by the presence of a name or initials.   When issuing different text books to classes, there is an immediate flurry of activity amongst pupils to find out by looking at the flyleaf who had the book before them, the name, or initials, drawings or any gossip in the shape of linked initials (T.S. luvs D.D.) being greatly prized whereupon great pleasure is taken in inscribing their own names on the flyleaf.   Graffiti, of course, are not confined to offensive scrawls but can become a distinctive art form in themselves.   Several of my pupils can lay claim to such distinction and it has been known for the implicit invitation,   extended by these pupils by tracing their personal art form or message on the surface of their desk, to be taken up by their peers who sit at the same desk in each successive class so that graffiti does, indeed, proliferate if left unchecked!   Graffiti in the classroom, therefore, is another, but much more permanent, claim to territory.

Display boards, Item 6 in Marland's list, have teaching value.   Ostention is a valuable aid to teaching: displaying items which have an instructional value is *showing* in the sense that ostention is showing.   Furthermore, there are connotations of brightness, liveliness and interest attached to pictures or wall displays by pupils.   It will be recalled that, in the last section, the small-scale survey of S.1 pupils entering Secondary School revealed that many of the children remarked on the display boards depicted in Photograph B and that the question concerning "dream classrooms" also revealed that displays of children's own

work was important.   Marland advises that they be used for teaching displays as well as children's own work.   Again, these are marks of territoriality but they also have connotations of pride in work which is considered good enough by the teacher to be displayed.

The function of display boards, therefore, can be both educational i.e. "showing"[51], or emotive, i.e.   showing childrens' own work which demonstrates the value placed on the work and the teacher's attitude towards pupils;   one which shows interest.   "Pictures on walls" are not only bright and attractive but, as Marland points out, "they show you care."

Pot plants help to offset the institutional nature of schools.   Plants are "natural", growing things which contrast with the controlled and "constructed" enviornment of a classroom.

4.4.2 A semiotic perspective

The classroom environment, therefore, can be viewed as a multiplicity of signs which generate meaning through social, cultural and conventional knowledge.   Marland's empirical approach makes "common sense" because it appeals to basic human traits, social and cultural value systems and the value systems which the school generates;   of which most teachers will be implicitly aware.   The first relates to proxemics, the second to

the learned knowledge or experience gained through the implicit structures of social interaction and language, the third to the conventions which prevail within the school. If Marland's formula works, it is likely to do so because these things give rise to attitudinal or evaluative nuances of meaning on the part of the pupils. The general decorative repair of the classroom generates meaning about the value systems of those in control; the general tidiness or untidiness of the room generates messages about territoriality and teacher attitudes, a message which is reinforced by school convention. If one classroom is untidy when most of the other classrooms are neat, then the statement made by an untidy classroom is reinforced.

The successful teacher, as Marland implies, learns a "craft" - the analogy which appears in the title of his book, *The Craft of the Classroom* - like a good carpenter or builder. This reassuring idea of a craft which can be learned, an idea which is reinforced by the alliteration present in the words "craft" and "classroom", adding power to the title, is an attractive proposition to offer to new teachers. As I have tried to prove, however, good classroom practice is not a "craft" in the purest sense of the idea - skillful handling of tangible objects to create a tangible end result - but is more likely to be the result of a much more subtle process involving the intangible: the manipulation and control of extremely complex processes of communication. The expert teacher is not so much a good "craftsman" as an expert communicator.

4.5 Offering another perspective

This chapter, thus far, has drawn heavily on the concept of
the *sign* and of the idea of communication based on this concept
and outlined in Chapter Two of this thesis.   By viewing the
physical environment of schools and classrooms as sign systems
which convey meaning, the focus of our attention is changed.
Instead of buildings and classrooms forming a nebulous background
to educational practice, barely noticed and merely incidental to
where learning happens to take place, the communication
perspective offered in this thesis brings a child's physical
environment in school sharply into focus.

If we accept that it is possible for individuals to make
meaning from the observable phenomena of their environment, this
must include the physical as well as the social aspects of
schools.   We cannot predict that each pupil (or teacher) will
make meaning in one specific way from his or her surroundings,
but we can assume certain interpretations under certain, assumed,
circumstances.   These assumed circumstances rely heavily on the
concept of the sharing of social and cultural meanings through
the convention of language.

Objects and their placing in the space which we inhabit have
meaning: Marland finds a scatter of desks and chairs in a
classroom "infinitely depressing" [62] which, I would suggest, is
the result of his emotive or attitudinal response to his

-207-

"reading" of the objects in the classroom. This reading brings into play connotative meanings derived from the learned value systems of culture, society and school, and which he recognises as signs of "disorganisation" and "lack of care". The shape and size of rooms act as "context" in meaning making, changing the importance of actions inside them, e.g. speaking recently to a Home Economics teacher in the Secondary school which is featured in this thesis she mentioned that the size of the room where she teaches changes her reactions to pupils. She preferred a larger room because she felt that she could put up with the constant buzz of conversation which often accompanies group work of the practical kind common in Home Economics, whereas, in a smaller room, she felt as though the pupils "were on top of her" (i.e. too close to her) and, consequently, her tolerance of this kind of pupil-talk diminished. A similar point is made in Chapter Four, Section One, above, **Architecture and Space**, when the primary school teacher feels that the building demanded "a certain way of expressing"[63].

These points are made on the basis of concepts gained from semiotics, communication, and structuralism and many of them, although based on case studies, are speculative in nature. Further investigations would require to be carried out before they could be confirmed or otherwise but, nevertheless, it does seem apparent that the physical environs where education takes place merit a greater amount of attention than they presently appear to be given.

N O T E S

1. Eco, 'Function and Sign: Semiotics of Architecture', *op. cit.*

2. *ibid.*, p.131.

3. See Hall (1959) and (1966).

4. Cohen, Louis; Manion, Lawrence, *A guide to teaching practice*, London, New York, Methuen, 1977, p.218.

5. *ibid.*, p.219.

6. Eco, 'Function and Sign: Semiotics of Architecture', *op. cit.*

7. *ibid.*, p.131.

8. This remark was made by one of the primary school teachers who agreed to take part in the Pilot Project referred to in Chapter Three, Section Five, Comparing Primary and Secondary School Meanings.

9. Eco states that architects, "*While looking outside architecture.... for the code of architecture, [the architect] must also fashion his significative forms in such a way that they will remain relevant under different codes of reading.*" This would mean that if an architect defines architecture from a behaviourist or proxemic viewpoint, then architecture would only be able to be understood from that particular viewpoint and no other. The search is for a code which would stand for **any** architecture. Eco, 'Function and Sign: Semiotics of Architecture', *op. cit.*, p. 152.

10. Koenig, Giovanni Klaus, *Architettura e comunicazione, preceduta da Elementi di analisi del linguaggio architettonico*, Florence, Libreria editrice Fiorentina, 1970, quoted by Eco, 'Function and Sign: Semiotics of Architecture', *op. cit.*, p.134.

11. Eco, 'Function and Sign: Semiotics of Architecture', *op. cit.* p.134.

12. Koenig, *op. cit.*, quoted by Eco, 'Function and Sign: Semiotics of Architecture', *ibid., p.134.*

13. *ibid.*

14. Morris's concept of *semiotic* is based on human behaviour and
    draws on work by Mead.   This work should not be confused
    with that of the behaviorist psychology of the Watson school.
    "sign behavior", according to Morris, "..lends itself to
    treatment within the categories of a general *theory of
    behaviour*."   Morris, C.W. *Signs, Language and Behavior*,
    Englewood Cliffs: Prentice Hall, 1946 quoted by   Roland
    Posner, 'Charles Morris and the Behavioral Foundations of
    Semiotics', *in* Krampen et al, *op. cit.*, p.26.

15. Hall, Edward T., *The Hidden Dimension*, London, The Bodley
    Head, 1966.

16. *ibid.*, p.100.

17. Sebeok, *The Encyclopedic Dictionary of Semiotics*, *op. cit.*,
    p.48.

18. Cohen and Manion, *op. cit.*, p.114.

19. *ibid.*, p.116.

20. Barth, R.S., (1975) 'Open education: assumptions about
    children, learning and knowledge   *in* Golby, M., Greenwald, J.
    and West, R. (eds), *Curriculum Design*, London: Croom Helm in
    association with the Open University Press.

21. *ibid.*, p.116.

22. See Appendix B.

23. Hughes, Joan, (Ed.), *The Best Years?   Reflections of School
    Leavers in the 1980s*, Aberdeen University Press, 1984, p.135.

24. *ibid.*, p.7.

25. *ibid.*, p.7/8.

26. *ibid.*, p.8.

27. *ibid.*, p.9.

28. Rosenfeld, L. and J. Civikly, *With Words Unspoken*, New York:
    Holt, Rinehart & Winston, 1976, quoted in Todd-Mancillas,
    William R., 'Classroom Environments and Nonverbal Behaviour',
    in Barker, Larry L., *Communication in the Classroom*, New
    Jersey, Prentice-Hall, 1982.

29. Connecticut   Department   of   Education,   *School   Building
    finishing and Economy*, The School Building Economy Series,
    No.6, Hartford Conn.:   State Department of Education, June,
    1966.

30. Rosenfeld et al, *op. cit.*, quoted in Todd-Mancillas, *op. cit.*, p. 860.

31. *ibid.*

32. *ibid.*, p. 863.

33. Glaser, Milton, 'I Listen to the Market', *in* Blonsky, Marshall (Ed.) *On Signs*, Oxford, Basil Blackwell, 1985, p. 470.

34. *ibid.*, p. 470.

35. Todd-Mancillas, *op. cit.*, p. 78.

36. Eco, 'How Culture Conditions the colours we See', Blonsky, *op. cit.*, p. 157

37. Rutter, Michael; Maughan, Barbara; Mortimore, Peter; Ouston, Janet and Smith, Alan, *Fifteen Thousand Hours: secondary schools and their effects on children,* Somerset: Open Books, 1982.

38. *ibid.*, p. 195.

39. *ibid.*, quoted in Cohen and Manion, *op. cit.*, p. 234.

40. *ibid.*, p. 232.

41. Rutter et al, *op. cit.*, quoted in Cohen and Manion, *op. it.*, p. 234.

42. Marland, Michael, *The Craft of the Classroom,* London, Heinemann Educational Books, 1982.

43. *ibid.*, p. 24.

44. Rutter et al, *op. cit.*, quoted in Cohen and Manion, *op. cit.*, p. 127.

45. Marland, *op. cit.*, p. 24.

46. *ibid.*, p. 24.

47. *ibid.*, p. 25.

48. *ibid.*, p. 25.

49. *ibid.*, p. 25.

50. *ibid.*, p. 26.

51. *ibid.*, p. 27.

52. Hall, Edward T., *The Silent Language*, Garden City, New York, Doubleday & Co., 1959, p.187.

53. Marland, *op. cit.*, p.24.

54. Hall, Edward T., *The Hidden Dimension*, London, The Bodley Head, 1966, p.97.

55. *ibid.*, p.97.

56. *ibid.*, p.101.

57. *ibid.*, p.104.

58. *ibid.*, p. 104.

59. Marland, *op. cit.*, p.24.

60. Hall, *The Hidden Dimension*, *op. cit.*, p.97.

61. *cf* note 16,'Ostension', p.161.

62. Marland, *op. cit.*, p.24.

63. See p.169.

CHAPTER FIVE

SCHOOL IN "CONTEXT"

The suggestion at the outset of this thesis that school can be "read" may, in retrospect, have created the impression of something concrete - a "text" with which the reader cognitively engages, producing his or her own meanings. "Reading texts" is, of course, merely a convenient analogy which has become associated with semiology. Teaching and the educational environment are not static entities to be "read" in the sense that one might read a book but, more realistically, school as a community, teaching, and the educational environment (including, for the purposes of this thesis, the physical surroundings of school) should be seen to be combined to form a complex and dynamic milieu which is capable of generating many meanings to children. Implicit in this notion of a complex milieu is the assumption that **cultural and social knowledge play a reciprocal part in the generation of meaning, serving to both explain and reinforce school meaning.** It is for this reason that I have chosen to describe teaching and the educational environment in semiotic terms, thus allowing for the widest possible definition of how meaning is created by, and between, human beings in relation to their social, cultural and physical environment.

Teaching and the educational environment, however, are only part of a wider social spectrum of which we should not lose sight; we must bear in mind that the semiotic "web" - the meaning generated by the school process - does not begin and end at the school gates: it extends beyond and reaches into the surrounding community which the school serves and, even further, into the society to which the school belongs. In the following sections, I will place school in "context" by exploring what I perceive to be the meanings which are generated during the communicative interplay between school, community and society, and which help to shape our perceptions of school.

5.1 The Community and the School

The school is a community within a community, generating meaning not only to the children who are taught inside its walls but to all those people beyond, in the surrounding community, who care for or have a responsibility for these children: they also share in the meaning making process. School, in this way, sets up a form of dialogue; meanings are exchanged and the significant centre of that meaning is the child shared by school and family. The resulting dialogue is complex in nature. The school is community but it is also institution and as such the lines of communication open to an institution are limited. We might recall that Gibson offers:

"...the timetable, the grouping of pupils, the subjects of the curriculum, the written information provided to parents, parents evenings...."[1]

as worthy of study in the semiological sense. These are examples which can be categorised under what I have called the first paradigm of communication: the clear sending and receiving of messages. Because, however, these things not only transmit information (of the written sort as in letters), or of the verbal sort (as in parents' evenings) but generate meaning, they can be categorised as *signs*, the conventional dimensions of which, belong not only to the school community but to society at large.

The report form is, for example, a powerful sign; it informs parents of their child's progress and can generate feelings of pride, shame, or indifference from both parties. It is, however, also indicative of the institutional nature of school that a child's educational and social growth are reduced to formulae on a piece of paper.

The significance of the report form is discussed in Thomson[2] as follows:

[The report form] "...effectively stands for something other than itself, i.e. it has a connotative value beyond its mere face value as a list of marks and is significant from this point of view. It is capable of drawing the

praise, wrath or indifference of parents, teachers and fellow pupils. It "places" a pupil in the school's hierarchy and it is representative of the school system. Clearly, the report form is part of the semiotic, or sign, system which is shared in schools."[3]

Written communication between schools, parents and pupils such as report cards;   letters to parents from the headmaster informing parents and pupils of forthcoming items on the school calander; expectations regarding school uniform;   school rules, and other information exchanges carry meanings beyond their immediate face value.   They communicate not only the institutional nature of these communications but the power which the school has to influence pupils and encroach on family life.

Letters to parents, for example, transmit information about the school such as school closures, holidays, forthcoming "attractions" such as fund raising events, concerts, galas, etc., and parents' evenings, or extol the virtues or tell of the misdemeanours of their offspring.   Their significance extends beyond these matters which give them immediate face value;   they are also capable of influencing family life and from this point of view they are powerful meaning makers.   Letters bearing tidings of school holidays indicate whether or not a working mother should arrange for care of her children;   letters announcing parents' evenings, or school concerts struggle for dominance over parental decisions about their own, private evening arrangements.   They are, therefore, powerful carriers of meaning as both transmitters of information and generators of

secondary, connotative, meanings which are capable of altering
concepts about the school. For example, a school which is seen
to be actively involved with the pupils; galas, sports days,
concerts, fetes and fairs, etc., is seen as promoting a positive
image - a part of the community. The school letter, leaflet or
programme signifies this.

Expectations about school uniform also generates meaning.
Private schools have very rigid expectations about school uniform
as it is important to the school image that uniforms should be
worn with pride as a recognisable symbol of that school. The
connotative meaning of such uniforms in terms of social and
cultural values is paramount in certain social circles. Local
authority schools also promote their own policies regarding
school uniform, some less rigidly than others. The dialogue
about uniform which the local primary and secondary school enters
into with the families who populate their catchment area is
likely to be modified by community reactions. Insisting on the
strict adherence to the rule that school uniform should be worn
by children in a poor area, for example, is likely to generate
meaning about the school as one which is overly authoritarian and
"out of touch". School uniform, therefore, is not a mere item
of clothing; it is meaningful. Rejection of the school uniform
by a minority of pupils amongst a school population of children
who normally wear uniform could be construed as a rejection of
the school, if not society's value systems. Conversely, in a
school where those who wear school uniform are in the minority, the

wearing of uniform could be construed as a wish to join the
"establishment"; to be seen to be conforming and playing by the
rules.

School, therefore, in context of community or the
surrounding catchment area generates a complexity of meanings.
It may hold the key to success or failure of one's children or
may evoke feelings of indifference, depending on the individuals
or groups within the community who are connected with it.
Within this context, therefore, the school community generates
meaning to the surrounding community and can, to some degree,
through the dialogue which takes place between the two,
influence that community in its understanding of one example of
the institution we call "school". But what of school in the
context of society, as opposed to the community as a small
section of society?

The important need of societies throughout the ages to
transmit socially and culturally valued knowledge to their
populace has perpetuated the concept of schools and schooling.
In direct relation to this, what supposedly goes on inside
schools has inevitably attracted debate and there are as many
perspectives of education as there are people and sections of
society willing to give them but the further away from individual
schools this debate takes place, the more likely they are to
resort to wide generalisations about school and the nature of
schooling and so to distance the process of schooling in this

way.   Schools and education   have often become ideological and

political battle-grounds.   The meaning of school in these

contexts can vary in direct relation to who is describing school.

School in this sense becomes   public property and, as such, is

often generalised in the public eye by the media, politicians,

and other factions of society.   Sometimes it is suitable to see

schools as institutions for the peddling of mass knowledge.

Sometimes it is suitable to see schools in a less harsh light

but, whichever way, teachers, pupils, the educational processes,

education itself, are often distanced and discussed in the most

general terms.   School, in this sense, "belongs" to society;

an integral part of our culture, at once revered and denigrated,

valid currency for public discussion and private debate.   We are

left, therefore, with a dichotomy which exists between a concept

of school which is community-based and private and another which

is subjected to the distancing forces of mass social opinion:

school in this context becomes an abstract;   a collective "they"

who teach children.

5.2 Schools and the media

The most prevalent force in this process of abstraction and

generalisation is the media.   Information now travels quicker

than it ever has done in the whole of society's history.   In

this age of instantaneous information, an important part of our

culture is the media industry.   The images created by various

media are powerful and often influential.   In the case of

generating meaning in the community, first hand experience and the experiences of others in the community can be brought together to form attitudes towards individual schools. Media images are not gained by the public at first hand. They are a construct of the media industry; journalists, producers, editors, reporters, film makers, writers, actors, and many others have a hand in the shaping of these images. Because of the limitations of the various media genres, the people employed to construct media artifacts have to resort to conveying messages by generalising. Stereotypical images are used extensively; representations of teenagers, the elderly, families, the police – teachers – are constructed in order to appeal to certain audiences and are rarely concerned with truth to the nth degree but with the manipulation of images to achieve certain effects.

Even the most purportedly authoritative of programmes on television such as documentaries and the news are constructed. What appears to be the most balanced of accounts is still only a presentation of the facts gleaned by researchers or journalists and shaped by those who have had a hand in making the programme: the producers, directors, editors, presenters, and others. In television broadcasting, for example, the image which we see on television has been *constructed*. Even if the camera is pointing at a "real life" situation – for example – a train accident, the viewpoints selected by the cameraman, the subsequent editing of filmed sequences, the voice-over of the journalist reporting on the incident, the ultimate verdict of the newscaster as to

numbers of injured, deaths, and other such information provides only a *constructed version* of truth.

These processes of construction tend to produce a generalised view of society. Stereotypes are generalisations of the supposed common traits of certain sections of society and stereotypical ideas of teachers, amongst others, are often used to generate meaning in the fictional products of the media. One of the most startling examples of how stereotypical images are common currency amongst audiences came to light during the filming of the Scottish Television Schools programme "Time to Think" in 1983. During the filming of this programme, primary school children, who were unlikely to have known what teachers in schools earlier this century wore, were asked to draw a "typical teacher" without any further prompting. Many of them drew figures sporting mortarboard and gown and were able to explain why they had depicted the figures in this way; as a means of identifying what the figures were intended to be. Along with stereotypical styles of clothing go stereotypical – or generalised – ideas about behaviour – usually negative.

Just as the many stereotypical representations are usually negative in nature (consider "typical teenagers", "typical old people", "typical teachers"; each of these groups are likely to have been presented in a negative way – the cheeky, wilful pubescent child; the cantankerous old person who is physically infirm; the schoolmaster snarling at his class or the prissy

schoolmistress) so, also, are items of news likely to be negative in nature - otherwise many items are not considered newsworthy. The resulting television images generated tend to reflect a style of newsgathering which is only interested in the cataclysmic with "lighthearted" items used in slots at the end of programmes.

National newspapers are unlikely to report about particular schools unless there has been some sensational happening at the school. Local newspapers, however, are more likely to report in a positive way about the school, as newsworthiness in local areas doesn't necessarily .mean sensationalism. The success of children at the local swimming gala or the fact that it rained on the Spring Fayre gathering are, for the local newspaper, equally as, if not more, newsworthy as reports of violence in schools or dissatisfaction amongst the teaching profession.

In brief, therefore, the media acts as a powerful element in helping to create a generalised image of school. This image, however, is likely to be an abstraction of school and education in general, coloured by prevalent ideological and cultural values. On the other hand, the meaning of school which is generated in the community by the schools which serve the area is gained in a more direct way and is likely to be related to that "significant centre" of meaning - the child shared by school and family. In summing up, therefore, it is important to bear in mind these social and cultural dimensions of school; to place

school "in context" as an integral part of social and cultural meaning.

5.3 Conclusions

School convention, teaching methodologies, and schools, serve to both produce and perpetuate the complex melange of personal, social and cultural attitudes and beliefs which surround education. Teachers teach against a background of social and cultural expectations as well as expectations born of received school and classroom convention. Ultimately, this spills over into the interpersonal relationships between teacher and pupils in the classroom which, in turn, is likely to influence "learned attitudes" towards school and schooling; a process of never ending semiosis which makes it difficult for change to occur. Hence we have teachers thinking one way and being forced into teaching in another way; new ideas are seen to erode the bedrock of convention in schools and real change creates stresses in the educational system. Schools, therefore, are "environments" in which learning takes place. If we adopt the perspective offered by the idea of semiosis, then it logically follows that these environments will generate meaning and people will make meaning from them. Two strands have emerged in this process, one emerges from considerations about the people who are actively engaged in the construction of these environments - the people who actively generate meaning - the teachers and the teaching process; the subject matter of Chapter

Three of this thesis. The other emerges from considerations about the physical construction of that environment - the objects and space which generate meaning; the subject matter of Chapter Four of this thesis.

To enable analysis of such a complexity of meaning, semiotic theory has been applied. Semiotics, as I made clear at the beginning of this thesis, is not so much one single theory as a collection of theories which take their rationale from the central idea of the *sign*; what has been called the "doctrine" of signs. I chose to work with theories taken from the whole field of semiotics rather than from one single viewpoint and, therefore, readers will find ideas taken from "semiotics" and "semiology". Although these two separate themes have emerged in semiotic theory, creating divergent ideas, the central motivating factor which provides coherence is the notion of the *sign* and semiosis. The idea of constant meaning making which semiosis engenders allows us to see that we are actively involved in creating meaning from our surroundings and that, consequently, surroundings - social *and* physical - are important factors in the education of children.

Schools have been described in this work as places which generate their own special rules and conventions. Many of these are clearly articulated such as lists of "school rules" for the pupils, printed signs which forbid entry to certain corridors or rooms, and so forth, but many more remain unarticulated. These

-224-

conventions are so deeply embedded that they have become habits which are no longer thought about in a conscious way and many relate to social and cultural expectations as discussed above. It is easy to understand why people react in certain ways if explicit conventions have been broken but it is not so easy to understand reactions when implicit conventions are broken. The implicit conventions represent meanings for action and these can only be articulated by studying particular schools and asking "why?" These conventions set the communicative tone in schools: in this thesis primary school classrooms were compared with classrooms in a secondary school, conventions concerning punishment and control were discussed, together with the effects of changing teaching methods but these represent only a small sample of the whole language of convention which belongs to schools.

By far the most important point which has to be made is that effective communication is the linchpin for effective teaching and that, if teachers are to be truly professional, they should be taught these skills. Many would argue that these things cannot be taught but I have tried to demonstrate that such an attitude stems from a received "way of seeing" how communication works and that, by adjusting our perception of communication in education, steps can be taken towards making a structured and informed examination of overall communication skills in the classroom in order that these may be passed on to the teaching profession, in general, and new entrants in particular. We all

require to make "mental maps" of people, places, situations. Some are quicker than others at making a "map" of classroom interaction and the act of teaching; indeed, so quick that they appear to have been born with the ability to teach. Others need guidance which is only provided at present by a dichotomised system which relies on theory and practice - with no real indication, except through "trial and error" of how the two can be reconciled.

A more structured approach to training teachers could be offered by making a semiotic analysis from video recordings of the individual teaching styles of teachers during everyday classroom interaction. There should be no need to look for the person who is defined as having some special gift for teaching. There should be no need to look further than the local school where teachers go about their everyday business. Successful teachers are in the majority; they control classes; teach subjects and interact with pupils day after day, year after year - and there are thousands of them.

The semiotic analysis of everyday teaching practice by experienced professionals which concentrates on the *act of teaching viewed as the generation of meaning* i.e. concentrating not only on lesson content and lesson structure (which cannot be dismissed as unimportant in themselves) but upon the sign systems which teachers create whilst working in the classroom would assist trainee and probationary teachers. Retrospective

analysis on video of the act of teaching by probationery teachers would also be beneficial. Such an analysis should not be critically judgemental, indeed it would be extremely damaging if it was; a series of videos which examined the sign systems created by experienced teachers in the classroom followed by properly structured micro-teaching sessions which examined the importance of, for example, non verbal signals prior to entering "real" classrooms, might help to alleviate the trauma of initial attempts to teach and control classes. This, however, as discussed in Chapter Three, is unlikely to happen unless received ideas about communication are altered and replaced with a more comprehensive view of how we make meaning from our surroundings.

This caveat must also stand in relation to current perceptions of the educational environment. Not the psychological or social environment which is the common definition of "educational environment" but the physical environment which has been created through social and cultural factors which is equally as capable of conveying meaning. Speaking in global terms, learning takes place in many physical environments: it can be argued that it is the quality of teaching which matters and not the quality of the space in which this act takes place. Values and attitudes, however, are learned through our experiences in society and expectations differ in relation to these. Expectations will also differ from culture to culture. The reason, therefore, for studying the physical environment in which teaching takes place should stem from the

fact that children are aware of their surroundings and can "read" meaning from them using learned experience; this, therefore, makes physical surroundings an integral part of the learning experience. Consequently, it follows that the physical environment should be given more priority in schools; the effects of these should be studied and perceived as an integral part of the educational process.

The objects, space and colours of classrooms convey meaning. Children love to see their work displayed on classroom walls. I have hypothesised that this is not only the result of pride in their achievements or implicit praise and appreciation from the teacher but seeing their work thus displayed meets a basic human instinctive need stemming from the concept of territoriality. These basic instinctive drives relate to the space which we occupy. It has been shown[4] that aggressive/destructive behaviour can occur in children in over-crowded conditions, a finding which complements the ideas which have been discussed, earlier, concerning space. If there is overcrowding, as many schools are, and the space in which children work is devoid of meaning in the sense that it does not belong to anyone (consider the nomadic existence of the secondary school child who moves from classroom to classroom) what does this signify to the child? Colours, too, are important. These have pride of place in the market place because it has been proved that colours are meaningful and can sell goods. No such motivation exists for schools and considerations such as these take a low priority.

The hypothesis in this thesis is that, collectively, these things amount to a learning milieu which must be given a higher priority than it presently enjoys. Environment as an agent for learning, in this sense, is equally as important as text books and equipment.

School is a total environment which can be explained as a complex process of semiosis. I have tried to explore as many concepts of school as possible in this thesis, sometimes raising more questions than answers: the meanings to be found within school and the educational environment are not closed and complete, they are open to interpretation and reinterpretation. Thus, I have not attempted to offer a neatly packaged structure which can be lifted and applied unproblematically. I have offered instead "a way of seeing" schools and the educational environment which, as far as I know, is unique.

The ideas presented in this thesis are intended to encourage further exploration of teaching and the educational environment from a different perspective - one which offers semiotics as the key to the communicative processes of school.   School, as defined in this thesis, influences and shapes minds in ways which often remain unarticulated.   If it is agreed that mind is thought, then I will always be moved, with Peirce, to argue:

> "...as the fact that every thought is a sign, taken in
> conjunction with the fact that life is a train of
> thought...."[5]

so, school shapes the childish foundations upon which mature

thought grows.   As such, school should be perceived as a *total*

learning environment - an environment which generates meaning by

reflecting and shaping future social and cultural attitudes, and

which, in turn, is judged in the face of these attitudes.

N O T E S

1. Gibson, *op. cit.*, p.19, *cf.*, p.38

2. Thomson, Eleanor, 'When the bell rings...' *Times Educational Supplement Scotland*, 3rd May, 1985, p.2.

3. *ibid.*, p.2

4. Hutt, Corinne; Vaizey, M. Jane, 'Differential Effects of Group Density on Social Behaviour' in *Nature*, March 26, 1966, Vol. 208, pp.1371/2

5. An extract from a famous passage from the writings of Charles S. Peirce, quoted in Innes, *op. cit.*, p.2. and Eco, *A Theory of Semiotics*, *op. cit.*, p.316.

QUESTIONNAIRE FOR FIRST YEAR PUPILS
SESSION 1986/87

The questions on this page ask you about the classrooms in this school. The
questions are about the differences between the classrooms in the new building
(the Annexe), the old building (the English block), and the wooden huts (the
maths and science classrooms).

IMPORTANT: YOUR ANSWERS SHOULD BE ABOUT THE CLASSROOMS AND NOT THE TEACHERS
INSIDE THEM. (Whether or not you like or dislike the teachers who are in
the classrooms which you have attended should not count when you answer).

YOU DO NOT HAVE TO GIVE YOUR NAME ON THIS FORM.   ONLY YOUR OPINION COUNTS
(THAT IS, WHAT YOU THINK) AND NOT WHO YOU ARE.

1. Have you been in a classroom in the:

    NEW BUILDINGS (the Annexe)   ☐   TICK THE BOX NEXT

    OLD BUILDING (the English Block)   ☐   TO THE BUILDINGS

                                                             YOU HAVE BEEN IN.
    HUTS (the Maths and Science classrooms)   ☐

2. What were the differences which you noticed between the classrooms?

3. Which did you like?

    CLASSROOM IN THE NEW BUILDINGS   ☐
                                                             TICK THE BOX NEXT
    CLASSROOM IN THE OLD BUILDING   ☐
                                                             TO THE CLASSROOM(S)
    CLASSROOM IN THE HUTS   ☐   YOU LIKED.

4. What was good about the classroom(s) you liked?

5. What was wrong with the classroom you didn't like?

6. What do you think a classroom should look like? (Write down what you
    think would be inside your dream classroom).

7. You will be given two photographs to look at showing different styles of
    classroom.   When you have looked at the photographs , answer these questios:

    a) Which classroom did you like?   CLASSROOM A   ☐

                                             CLASSROOM B   ☐

    b) What did you like about it?

CLASSROOM   A

CLASSROOM A   (copyright OU 1977)

CLASSROOM B (copyright OU 1976)

What do (YOU) mean?

A video and inservice activities
for exploring the
meaning of
school convention

Schools are essentially engaged in a variety of forms of communication but
not all that is communicated in school is openly articulated.   When we
think of communication in schools, we think of written and verbal messages,
perhaps in the form of school lessons, printed school rules, etc, but the
process is not as straightforward as this - many more messages are conveyed
to the pupil through *school convention*, that is, the implicit and shared
meaning of certain actions,

Implicit meanings are also present in the non-verbal attitudes of teachers
such as voice modulation, movement, facial expressions, and positioning in
the classroom whilst teaching,

'What do YOU mean?' is designed for in-service use to help teachers become
more aware of the existence of such "hidden messages" and to stimulate
discussion about their meaning,

INFORMATION

The worksheets and ideas for discussion in this pack are designed for use with the video *"What do YOU mean?"* Like the video, the pack is divided into two sections:

* Part One: Looking at Schools and

* Part Two: Looking at Teachers

Part One of the video concentrates on the transition from P.7 to S.1, generalising about accepted conventions in Primary and Secondary Schools and asking teachers to consider and discuss the effects of this transition.

Part Two takes a look at the non verbal behaviour of teachers working in their classrooms and asks teachers to examine their own non verbal attitudes. This section is mainly non-didactic and leaves the participants to discuss the various behaviours and draw their own conclusions from these discussions.

Although it might seem that the two sections are unconnected this is not the case. The pack and video concentrate on *SCHOOL CONVENTION* and *TEACHERS' NON VERBAL BEHAVIOUR* as two examples of *HOW MEANING IS CREATED IN SCHOOL.* These two concepts can be categorised, generically, under *COMMUNICATION.* *IT IS IMPORTANT THAT THE TWO CONCEPTS – SCHOOL CONVENTION AND TEACHERS' NON VERBAL BEHAVIOUR – ARE SEEN TO BE CONNECTED AS FORMS OF COMMUNICATION.* ∗

USES: The pack is suitable for in service aimed at the transition between Primary and Secondary schools and as a consciousness-raising exercise for teachers in relation to their own non verbal habits and behaviour in the classroom.

USING THE PACK

* It is advisable that the in-service organiser should set aside at least one hour to preview the pack and video prior to use.

* The organiser should decide which worksheets will be of use and have these photocopied in advance.

* If the whole of the video is to be used, it should be shown in two parts with time for discussion at the end of each part.

* It is important that time is allowed for a plenary session and feedback from participating groups or individuals. (Whether the session is organised for participation of "groups" or "individuals" will depend on the numbers attending the in-service session but it is suggested that participation should be organised for group – rather than individual – participation in order that discussion can take place during and after the sessions).

Duration of Video:

Approximate length of Part One: Looking at Schools – 7 minutes

Approximate length of Part Two: Looking at Teachers – 8 minutes

First Day at School

A millionbillionwillion miles from home
Waiting for the bell to go.   (To go where?)
Why are they all so big, other children?
So noisy?   So much at home they
must have been born in uniform
Lived all their lives in playgrounds
Spent the years inventing games
that don't let me in.   Games
that are rough, that swallow you up.

And the railings.
All around, the railings.
Are they to keep out wolves and monsters?
Things that carry off and eat children?
Things you don't take sweets from?
Perhaps they're to stop us getting out
Running away from the lessins.   Lessin.
What does a lessin look like?
Sounds small and slimy.
They keep them in glassrooms.
Whole rooms made out of glass.   Imagine.

I wish I could remember my name
Mummy said it would come in useful.
Like wellies.   When there's puddles.
Yellowwellies.   I wish she was here.
I think my name is sewn in somewhere
Perhaps the teacher will read it for me.
Tea-cher.   The one who makes the tea.

<div align="right">

Roger McGough

(from *in the glassroom* (1976))

</div>

WHAT DO YOU MEAN?

WORKSHEET FOR PART ONE: LOOKING AT SCHOOLS

TASK ONE

ABOUT SCHOOL: Rough notes should be written in the columns below.

What is being communicated?	How is this information being communicated?
1. In the McGough poem	
2. By schools	

After discussion of the above points and those of your neighbour(s), fill in the spaces below:

I think that the following things are being communicated in the McGough poem:

_____

_____

I think that the following things are being communicated about school:

_____

_____

In the McGough poem the information is communicated by:

_____

In schools the information is communicated by:

_____

WHAT DO YOU MEAN?

WORKSHEET FOR PART ONE: LOOKING AT SCHOOLS

The following suggestions are offered in reply to the core questions set in Task One.   They are not intended to be prescriptive but are included for comparison with those of individual teachers taking part and to stimulate discussion.

Ideas for discussion in relation to Task One appear at the end of this section.

1.   What is being communicated about school by the McGough poem?

School is being shown "through the eyes" of a small child who is attending school for the first time.   Only certain immediately visible aspects of school are shown and all the information provided about school is extraneous: that is, the child has no knowledge of school and, therefore, picks on the immediately obvious, interpreting everything in an odd way, revealing ignorance about a variety of things connected with school.   The inherent meaning contained in McGough's poem is that all of the things which we, as adults and teachers, take for granted about school seem strange, unusual and threatening to infants as they enter primary school for the first time.   (This observation might be generalised to include older children as they enter secondary schools for the first time.)

[N.B.   The child's inexperience contrasts with our own, extensive, knowledge of school and we can, therefore, appreciate the clever play on words and ideas which feature throughout the poem such as "waiting for the bell to go (To go where?)";   the "lessin" which sounds "small and slimy";   and other strange perspectives such as the interpretation of why there are railings surrounding the school playground and of the sheer size and apparent roughness of the older children in the playground.   The poem also acts as a reminder about childish thought-patterns as McGough humo rously underscores the child's obvious ignorance of the school system and its conventions by assuming a childishly innocent logic which concludes that school contains whole rooms made of glass "glassrooms" and that "tea-cher" is the "one who makes the tea".   The fact that the poet's wry humour and idiosyncratic view of school are effortlessly conceptualised by the reader (or listener) makes the poem particularly relevant when pointing out that we *share an implicit knowledge of school and society* which is, as yet, unavailable to the new primary school pupil.]

2.   What is communicated by schools?

School convention dictates how teachers should conduct their classes. Conventionally, secondary schools are "serious" places of learning which are geared towards bringing pupils through an exam-orientated system.   It might be frowned on, therefore, to have noisy classes which, in turn, could be construed as the result of a teacher lacking in teaching skills/discipline.   Inattentive children in large classes will gain little from secondary schooling if they are not controlled

and made to listen - hence the tradition of classes being "quiet and attentive".

Primary schools are conventionally seen as receptive to the needs of younger children. Consequently, they are usually organised to take into account the active and lively aspects of a young child's nature - "finding out", "discussion", "movement in class".

Task One - Ideas for discussion:

* Do you think that the generalisations made above about Primary and Secondary schools are accurate?

* Is it possible to generalise that children entering secondary school for the first time are likely to be as confused as infants entering primary school for the first time?

* Is the transition from primary school to secondary school likely to be traumatic?

* Can you, as a primary school teacher, pinpoint any possible areas where you might be in a position to ease the transition of P.7 pupils to secondary school?

* Can you, as a secondary school teacher, pinpoint any possible areas where you might be in a poition to ease the transition of S.1 pupils from primary school?

NOW LOOK AT THE TRANSCRIPT OF THE S.2 PUPILS' CONVERSATION

Task Two - Differences between Primary and Secondary School

* Use the Worksheet for Task Two and try to find the main differences, as identified by the S.2 pupils, between Primary and Secondary Schools

* When you have completed the Worksheet, look at the Points for Discussion which follow.

TRANSCRIPT OF S.2 PUPILS' CONVERSATION

* The information in the following transcript is a subjective account given by three S.2 pupils concerning the schools which they have attended. Their account cannot, therefore, be considered to be representative of all schools.

* The pupils were not prompted in any way apart from being asked to comment on the differences which they found between primary school and secondary school and, therefore, the discussion is disjointed in places. Names have been substituted throughout.

Elizabeth: I think the main difference in primary is people's attitude towards each other because when we were at primary we had to be...everyone worked in a group...everyone worked together.

Maureen: ...now it's individuals....

Elizabeth: ...if you were off you hadn't to catch up yourself. It's not..it's a happier - slightly happier atmosphere at primary because people were all working together - everyone worked in groups....

Maureen: ...groups...same with exams - just did them in groups....

Elizabeth: ..yes..didn't have exams just small tests...thing is - the work itself, you're expected to be able to keep up....

Catherine: ...not always putting your hand up and asking questions....

Elizabeth: ....yes...got to keep up for yourself...You can't, sort

of, sit and stare about you and expect.....You've got to work a lot harder....

Catherine: ....the uniforms as well - in primary you could wear what you wanted....Here you've got to wear skirts and blouses...

Elizabeth: ...when we were across in primary school a couple of girls were wearing jeans. You would never be allowed to do that here because...em.....(looks up for inspiration)

Maureen: .....there's just too many people.....

Elizabeth: ...yes, there's too many people for that kind of thing. There's a lot more people than at Primary School. It's a lot bigger.....

Maureen: ...and it's much nicer if you wear ......

Elizabeth: ...and..ehm...you know, there's stricter discipline. I think that's because there are more people....

Catherine: Uh-hu...people would think you can just do what you want - but....

Maureen: ...in primary school you were not expected to know any better but now...

Elizabeth: ....here, you're expected to know. If you - if your off and you miss something you're just expected to have caught up with that in your own time.

Maureen: ...and not bother the teacher....not come....

Elizabeth ...that's right - another thing, with the lessons.....the classrooms...

Maureen: ....you're supposed to listen more - in primary school if you didn't hear something or dropped something you could

put up your hand....

Elizabeth: ...you still got a row...

Maureen: ....but not very much - but now...

Elizabeth: ...but now you've really got to pay attention...or...
              Another thing's the classrooms are....In primary school
              they're a lot brighter...

Catherine: You're always travelling...

Maureen: ....here you've not got a set classroom...

Catherine: ....yes...like going over to the annexe...

Elizabeth: ...I think we waste a lot of time - travelling. You
              know, you could probably - if you take all the time
              travelling in the one week - all that time - it would
              probably work out quite a lot....

Maureen: In primary school you got a lot more play-time, didn't
              you?

Elizabeth: Yes, uh-hu, but in primary school everyone gets outside
              whatever the weather - they all play games - like tig and
              chase but it's not the expected behaviour here
              (laughter). Everyone stands about.....

Elizabeth: (Summing up)   I think the main differences are the
              atmosphere. People worked in a group at primary school
              and no one bothered who they were or where they came
              from. In high school you have to work on your own.

Maureen: You get a row if you talk - you've got to be an
              individual and think for yourself........

WHAT DO YOU *MEAN?*

WORKSHEET FOR PART ONE: LOOKING AT SCHOOLS

TASK TWO

ABOUT PRIMARY AND SECONDARY SCHOOLS: Rough notes should be written in
the columns below.

Comparing Primary and Secondary School	
What makes Primary School different from Secondary School	What makes Secondary School different from Primary School

After discussion of the above points which you (and you neighbour(s))
have made from the transcript of the S.2 girls' conversation, complete
the following:

The main differences, which the pupils identified, between Primary
Schools and Secondary Schools are:

_____

_____

_____

_____

_____

WHAT DO YOU *MEAN?*

PART ONE: LOOKING AT SCHOOLS

POINTS FOR DISCUSSION: TASK TWO

1.   Is there a connection   between what is communicated in the
accompanying video, and what the S.2 pupils thought were the main
differences between primary and secondary school?

2.   The pupils were, in fact, talking about the accepted conventions
of their primary school and their secondary school.   Can you identify
similar conventions which exist in your own school?

3.   The video you have been watching is a "construct" i.e. someone
deliberately decided to choose the McGough poem, the images, and the
accompanying voice-over.   Can school meaning, which works through
accepted conventions, be constructed like this?

4.   Should we accept that there are significant differences between
primary and secondary school convention and leave it at that?

5.   Do you think that either primary or secondary schools are "at
fault" for their own conventional "behaviour"?

PART TWO: LOOKING AT TEACHERS

LIST OF EXTRACTS

The extracts which feature in Part Two of "*What do* YOU *Mean?*" have been taken from complete lessons to serve a very specific purpose. It is important, therefore, that the following explanations are read before viewing the video in order to clarify what is happening.

The sound in some of the extracts which feature in the accompanying video may seem, in places, to be of poor quality but this is of no consequence for the task in hand.   You are being asked to examine voice pitch, body posture, facial expression and how the teacher uses space in the classroom.   What is said, in this case, is less important than how it is said.   The extracts are of a sufficient quality to allow judgement of this.

EXTRACT ONE:

A Primary school teacher is featured in this extract with a group from her P.6/7 composite class.   The group are looking at a thermometer and its uses are being discussed while the remaining children are working in the background, out of camera range, in groups.

The sound in this extract seems poor but, in fact, the teacher and the class were exceptionally quiet.   Even with specialist equipment, which was not available at the time this video was recorded, the sound would not have been louder but would merely have been of a slightly better quality which would have enabled us to hear exactly what was being said.   For the purposes of this exercise, perhaps that very point is remarkable!

EXTRACT TWO:

In this extract, a Secondary school English teacher is featured, along with her S.1 class.   Many of the pupils were out of class attending the school dentist, the class having been chosen to attend at intervals a few minutes apart for check-ups during that part of the school day which happened to co-incide with the hour-long English lesson, and the lesson was constantly being interrupted by children arriving back from the block of appointments.

EXTRACT THREE:

A Secondary school English teacher is featured in this extract taken from an hour long lesson.   He is working with his S.1 class, some of whom were slow learners.

EXTRACT FOUR:

A Languages teacher is featured in this extract working with her S.1 class during a Tour de France oral lesson. The pupils are talking in pairs.

EXTRACT FIVE:

In this extract, a Primary school teacher is shown working with her P.7 class. The lesson involved groups working at various stages in a maths lesson. Some of the children were scaling triangles and others were finishing numbers work.

When you have read these extracts, view the video and complete the worksheets provided.

It is suggested, if there are a sufficient number of participants in this exercise, that groups should concentrate on only one or two extracts and discuss their findings prior to further discussion with the other participating groups.

POINTS FOR FURTHER DISCUSSION

* The extracts viewed were taken from whole lessons. This could have distorted our perspective. Have you ever come across an incident when your viewpoint or that of another person's has been distorted by misinterpretation of tone of voice (perhaps on the telephone?) or some other non-verbal aspect of communication, such as those we have been looking at, (possibly by a child in the classroom?) thereby causing misunderstanding between you?

* How important do you think it is to modulate your voice in the classroom to a pitch which is easy on the ear? Give reasons.

* Can we ever NOT communicate? To help you with your answer, you should take into account all of the non-verbal aspects which are present in communication. You might like to imagine yourself walking into the classroom without speaking to the pupils.

* How do you use space in the classroom? (e.g. Where is your desk in relation to the pupils' desks? Are you conscious of using a special place in the room where you are more likely to stand, or sit, or make announcements to the class? If so, do you think the pupils are conscious of this? If you are conscious of using such a spot in your room, what do you use it for?).

* Test your own "personal space" by allowing someone in your group to approach you. Do this in pairs. One person stands still while the other moves towards them. As soon as the person who is moving reaches a point when the other person begins to feel uncomfortable, the person who is making the approach should be asked to stop. What is the distance between you? Try this with someone else.

Does it vary very much?   Now discuss "personal space" in relation
to what happens in a classroom between pupil and pupil and between
teacher and pupil.

* How important do you think the teacher's appearance is?   Is it
  necessary to "look smart", for example?   Are you conscious of
  making a special choice of clothes for the classroom?   Do you
  think clothes and general appearance "communicate" in any way?

* Do you think that the appearance of your room "communicates"?

* How important do you think it is to be conscious of the variety of
  ways in which we communicate?   Is it important in classroom work?

* To what extent do you think teachers' non verbal behaviour is
  likely to influence similar behaviour on the part of pupils?

* Are there ever occasions in class when you find yourself listening
  to pupils without speaking, yourself?   Do you think that it is
  desirable to do this whether or not lessons require it?

WHAT DO YOU *MEAN?*

PART TWO: LOOKING AT TEACHERS

WORKSHEET FOR USE WITH EXTRACTS

EXTRACT NUMBER: _____

Rough notes should be made in the columns below during or after
watching the extact(s) allocated to your group.   The extracts should
be viewed several times.

Voice Pitch	Body Posture	Facial Expression	Proximity to Pupils

POINTS FOR DISCUSSION

What was being communicated by the adoption of a particular voice
pitch (or silence in the case of Extract 4)?

What was being communicated by the facial expression of the teachers?

What was being communicated by the body posture of the teacher?   Did
the teacher touch any children?   If so, what does this communicate?

What was being communicated by the proximity of teacher to pupils?

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

I. SEMIOTICS/LANGUAGE/STRUCTURALISM

Baer, Eugen, 'Thomas A. Sebeok's Doctrine of Signs' *in* Krampen, Martin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas; Uexküll, Thure von, (Eds.), *Classics of Semiotics*, New York and London, Plenum Press, 1987.

Barthes, Roland, *Elements of Semiology*, London, Jonathan Cape Ltd., 1967.

Barthes, Roland, *Mythologies*, London, Paladin, 1983.

Barthes, Roland, *Selected Writings*, London, Fontana, 1983.

Barthes, Roland, *Camera Lucida*, London, Flamingo, 1984.

Beer, Norman, 'Structuralism in the Classroom' *in Use of English*, Vol.35, No.1, pp.15-23.

Birdwhistell, Ray L., *Kinesics and Context*, The Allen Lane Penguin Press, 1971 and University of Pennsylvania, 1970.

Blonsky, Marshall, (Ed.), *On Signs*, London, Basil Blackwell, 1985.

Bryan, James, Sauer, Rolf, (Eds.), *Structures Implicit and Explicit*, Publication of the Graduate School of Fine Arts, University of Pennsylvania.

Cassidy, Michael F., 'Towards Integration: Education, Instructional Technology and Semiotics', *in Educational Communication and Technology: a Journal of Theory, Research and Development*, Vol.30, No.2, 1982, pp.75-89.

Culler, Jonathan, *Saussure*, London, Fontana, 1976.

Cunningham, Donald J., 'What every teacher should know about semiotics', a paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, L.A., 1984.

Deely, John, 'The Doctrine of Signs: Taking Form at Last' *in Semiotica*, Vol.18, No.2, pp.171-193, 1976.

Deely, John, *Introducing Semiotic: its history and doctrine*, U.S.A., Association of American University Presses, 1982.

Eco, Umberto, 'Function and Sign: Semiotics of Architecture'. translation by Eco of *La struttura asente: Introduzione alla ricerca semiologica*, Milan, Bompiani, 1968, *in* Bryan, James;

Sauer, Rolf, (Eds.) *Structures Implicit and Explicit*, publication of the Graduate School of Fine Arts, University of Pennsylvania, 1973.

Eco, Umberto, *A Theory of Semiotics*, Bloomington, London, Indianna University Press, 1976.

Eco, Umberto, *The Role of the Reader*, London, Hutchison University Library, 1979.

Eco, Umberto, *Semiotics and the Philosophy of Language*, London, MacMIllan, 1984.

Eco, Umberto, 'How Culture Conditions the Colours we See', *in* Blonsky, Marshall, (Ed.), *On Signs*, London, Basil Blackwell, 1985.

Ekman, Paul; Freisen, Wallace V.; Tomkins, Silvan S., 'Facial Affect Scoring Technique', *in Semiotica*, Vol.3, 1971, pp.37-58.

Ekman, Paul; Freisen, Wallace V., 'Hand Movement' *in The Journal of Communication*, No.22, 1972, pp.353-374.

Elam, Keir, *The Semiotics of Theatre and Drama*, London, Methuen & Co., 1980.

Fawcett, Robin P.; Halliday, M.A.K.; Lamb, Sydney M.; Makkai, Adam, (Eds.), *The Semiotics of Culture and Language*, Vols. I and II, London, Francis Pinter, 1984.

Foster, Susan Leigh, *Reading Dancing: Gestures towards a Semiotics of Dance*, Unpublished Ph.D. thesis, University of California, 1981.

Frake, Charles O., 'The Ethnographic Study of Cognitive Systems' quoted by Thomas, Donald W., *Semiotics 3: Communication, Codes and Culture*, Ginn Custom Publishing, Massachusetts, 1982.
Germain, Claude, 'Etudes Semiologique d'Images Pedagogiques' *in Etudes de Linquistique Appliquee*, Vol. 17 Jan-Mar, 1975, pp.44-60.

Gibson, Reχ, *Structuralism and Education*, London, Hodder and Stoughton, 1984.

Gillan, Garth, *From Sign to Symbol*, Sussex, The Harvester Press; New Jersey, Humanities Press, 1982.

Glaser, Milton, 'I Listen to the Market', *in* Blonsky, Marshall (Ed.), *On Signs*, London, Basil Blackwell, 1985.

Guirard, Pierre, *Semiology*, London Routledge, 1975.

Hall, Edward Twitchell, *The Silent Language*, New York, Garden City, Doubleday & Co., 1959.

Hall, Edward Twitchell, *The Hidden Dimension*, London, The Bodley Head, 1966.

Hawkes, Terrence, *Structuralism and Semiotics*, London, Methuden, 1978.

Hjelmsler, Louis, *Prolegomena to a Theory of Language*, The University of Wisconsin Press, 1963.

Hymes, Dell, (Ed.), *Language in Culture and Society*, New York, Harper, 1964.

Innes, Robert E. (Ed.), *Semiotics: an introductory reader*, London, Hutchison & Co., 1986.

Koenig, Geovanni Klaus, *Architettura e comunicazione, preceduta da Elementi di analisi del linguaggio architettonico*, Florence, Libreria editrice Fiorentina, 1970.

Krampen, Martin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas; Uexküll, Thure von, (Eds.), *Classics of Semiotics*, New York and London, Plenum Press, 1987.

Kristeva, Julia; Rey-Debove, Josette; Umiker, Donna Jean, *Essays in Semiotics*, The Hague, Paris, Mouton & Co., 1971.

Lamb, Sydney M., 'Semiotics of Language and Culture: a Relational Approach' *in* Fawcett, Robin P.; Halliday, M.A.K.; Lamb, Sydney M.; Makkai, Adam, (Eds.), *The Semiotics of Culture and Language*, Vol. II, London, Francis Pinter, 1984.

Lanigan, Richard, 'Semiotic Phenomenology: a Theory of Human Communication Praxis', *in Journal of Applied Communication Research*, Vol. 10, No.1, Spring, 1982.

Leach, Edmund, *Levi-Strauss*, Glasgow, Fontana, 1970.

Lévi-Strauss, Claude, *Structural Anthropology*, London, Allen Lane, 1972.

Lotman, J.M., 'The Sign Mechanism of Culture', *in Semiotica*, Vol.12, No.4, 1974, pp.301-305.

Lyons, John, *Semantics*, Vol.1, Cambridge University Press, 1977.

McNeill, David, *The Conceptual Basis of Language*, New Jersey, Lawrence Erlbaum Ass., Hillsdale, 1979.

Mandelbaum, David G. (Ed.), *Selected Writings in Language, Culture and Personality*, Berkley, University of California Press, 1949.

Morris, Charles W., *Foundations of the Theory of Signs*, Foundations of the University of Science Series, Vol.1, No.2, The University of Chicago Press, 1938.

Norris, Christopher, *Deconstruction: Theory and Practice*, London, Methuden, 1982.

Oehler, Klaus, 'An Outline of Peirce's Semiotics', *in* Krampen, Marin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas A; Uexküll, Thure von, (Eds.) *Classics of Semiotics*, New York and London, Plenum Press, 1987.

Ostwald, Peter F., *The Semiotics of Human Sound*, The Hague, Paris, Mouton & Co., 1973.

O'Toole, Michael, 'The Negotiated Curriculum – is there a Hidden Curriculum?', *in*, *English in Australia*, No.72, June, 1985, pp.3-14.

Peirce, Charles S., 'Logic as Semiotic: The Theory of Signs' *in*, Innes, Robert E. (Ed.) *Semiotics: An Introductory Anthology*, London, Hutchison, 1986.

Piaget, Jean, *Science of Education and the Psychology of the Child*, London, Longman, 1971.

Posner, Roland, 'Charles Morris and the Behavioural Foundations of Semiotics', *in* Krampen, Marin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas A.; Uexküll, Thure von, (Eds.), *Classics of Semiotics*, New York and London, Plenum Press, 1987.

Rauch, Irmengard; Carr, Gerald F., (Eds.), *The Signifying Animal*, Bloomington, Indiana University Press.

Regan, John, 'Metaphors of Information', *in* Fawcett, Robin, P.; Halliday, M.A.K.; Lamb, Sydney M.; Makkai, Adam, (Eds.), *The Semiotics of Culture and Language,* Vol. I: *Language as Social Semiotic*, London, Francis Pinter, 1984.

Rossi-Landi, Ferruccio, 'Signs about a master of signs', *in Semiotica*, Vol.13, No.2, 1975, pp.155-197.

Saussure, Ferdinand de, *Course in General Linguistics*, Fontana, 1974.

Schiffrin, Deborah, *Discourse Markers*, Cambridge University Press, 1987.

Sebeok, Thomas A.; Hayes, Alfred S.; Bateson, Mary Catherine, (Eds.) *Approaches to Semiotics*, London, Paris, The Hague, Mouton & Co., 1964.

Sebeok, Thomas A., *Perspectives in Zoosemiotics*, The Hague, Mouton & Co., 1972.

Sebeok, Thomas A. *The Tell-Tale Sign: a Survey of Semiotics*, The Peter de Ridder Press, 1975.

Sebeok, Thomas A. *Contributions to the Doctrine of Signs*, Bloomington, Indiana University Press, 1976.

Sebeok, Thomas A., 'Final Report to the National Endowment for the Humanities on the Pilot Program in Semiotics in the Humanities at Indiana University, Bloomington, August 1, 1975 – July 31, 1976', June 1, 1976: Research Centre for Language and Semiotic Studies, Indiana University, Bloomington, Indiana.

Sebeok, Thomas A., *Encyclopedic Dictionary of Semiotics*, 3 Vols, including Bibliography, Berlin, Walter de Gruyer & Co., 1986.

Semiotica, Journal of the International Association for Semiotic Studies, Vol. I, No. 1, 1969 – Vol. 18, No.4, 1976.

Silverman, Kaja, *The Subject of Semiotics*, Oxford University Press, 1983.

Sless, David, *In Search of Semiotics*, London, Sydney, Croom Helm, 1986.

Stubbs, Michael, *Educational Linguistics*, London, Basil Blackwell, 1988.

Sturrock, John, *Structuralism*, London, Paladin, 1986.

Suhor, Charles, 'Towards a Semiotics-based Curriculum', *in Journal of Curriculum Studies*, 1984, Vol.16, No.3, 1984, pp.247-257.

Thomas, Donald W., *Semiotics 1: Signs, Language and Reality*, Mass., Ginn Custom Publishing, 1977.

Thomas, Donald W., *Semiotics 2: Communication in Man and Beast*, Mass., Ginn Custom Publishing, 1978.

Thomas, Donald W., 'Project Semiotics and the Schools', *in* Borbe, Tasso (Ed.) *Semiotics Unfolding: Vol. I*, Paris, The Hague, Mouton & Co., 1979.

Thomas, Donald W., *Semiotics 1: Handbook*, Mass., Ginn Custom Publishing, 1980.

Thomas, Donald W., *Semiotics 3: Communication, Codes and Culture*, Mass., Ginn Custom Publishing, 1982.

Thomas, Donald W., *Semiotics 4: Language in the Making*, Mass., Ginn Custom Publishing, 1983.

Thomas, Donald W., 'Levels of Understanding Language in Semiotics' – a paper presented at the Annual General Meeting of

the American Educational Research Association (68th), New Orleans, L.A.

Thomson, Eleanor, 'When the Bell Rings', *Times Educational Supplement Scotland*, 3 May, 1985, p.2.

Thomson, Eleanor, 'RedeSIGNing Communication', *The Media Education Journal*, No.6, 1987, pp.46-48.

Todorov, Tzvetan, *Theories of the Symbol*, Oxford, Basil Blackwell, 1982.

Trager, George L., 'Paralanguage: A First Approximation' *in* Hymes, Dell, (Ed.), *Language in Culture and Society*, New York, Harper, 1964.

Uexküll, Thure von, 'The Sign Theory of Jacob von Uexküll' *in* Krampen, Martin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas; Uexküll, Thure von, (Eds.) *Classics of Semiotics*, New York and London, Plenum Press, 1987.

Voigt, Vilmos, 'Classification of Signs in Social Semiotics', a paper read during the Second International Summer Institute for Semiotic and Structural Studies, Vanderbilt University, Nashville, T.N., 1981.

Von Raffler-Engel, Walburga, 'The Ontogeny of Communication' - a paper presented at the Annual Meeting of the International Summer Institute for Semiotic and Structural Studies, Vanderbilt University, Nashville, T.N., 1981.

Winner, Irene Portis; Umiker-Sebeok, Jean (Eds.), *Semiotics of Culture*, Paris, The Hague, Mouton & Co., 1979.

II. COMMUNICATION/COMMUNICATION AND EDUCATION

Andersen, Peter, and Andersen, Janis, 'Nonverbal Immediacy in Instruction', *in* Barker, Larry L. (Ed.) *Communication in the Classroom*, New Jersey, Prentice-Hall, 1982.

Andersen, Peter A.; Andersen, Janis F.; Mayton, Shirley M., 'The Development of Nonverbal Communication in the Classroom: Teachers' Perceptions of Students in Grades K-12' *in The Western Journal of Speech Communication*, 49, Summer, 1985, pp.188-203.

Argyle, Michael, *Bodily Communication*, London, Methuen & Co., 1975.

Barker, Larry L. (Ed.), *Communication in the Classroom*, New Jersey, Prentice-Hall, 1982.

Barnes, Douglas, *From Communication to Curriculum*, London, Penguin, 1984.

Broms, Henri; Gahmberg, Henrik, 'Communication to Self in Organizations and Cultures' *in Administrative Science Quarterly*, 28, 1983, pp.482-495.

Buck, Ross, 'Spontaneous and Symbolic Nonverbal Behaviour and the Ontogeny of Communication' *in* Feldman R.S. (Ed.), *Development of Nonverbal Behaviour in Children*, New York, Springer.

Buck, Ross, *The Communication of Emotion*, New York, London, The guilford Press, 1984.

Bull, P., *Body Movement and Interpersonal Communication*, Chichester, Wiley, 1983.

Camras, Linda, 'Ethological Approaches to Nonverbal Communication' *in* Feldman, R.S. (Ed.), *Development of Non-verbal Behaviour in Children*, New York, Springer.

Cherry, Colin, *On Human Communication*, Massachusetts: The MIT Technology Press, 1966.

Corner, John and Hawthorn, Jeremy, *Communication Studies*, London, Edward Arnold, 1980.

Doyle, Walter, 'The Uses of Nonverbal Behaviours: towards an ecological model of classrooms' *in Merrill-Palmer Quarterly*, Vol. 23, No.3, 1977.

Feldman R.S. (Ed.), *Development of Non-verbal Behaviour in Children*, New York, Springer, 1982.

Fiske, John, *Introduction to Communication Studies*, London, Methuen & Co., 1982.

Grant, Ewan C., 'Human Facial Expression', *in Man*, 4, 1969, pp.525-536.

Hess, Eckhard H., *The Tell-Tale Eye: How your Eyes Reveal Hidden Thoughts and Emotions*, New York, Van Nostrand Reinhold, 1975.

Journal of Applied Communication Research, Vol.10, No.1, 1982.

Kreckel, M., *Communicative Acts and Shared Knowledge in Natural Discourse*, London, Academic Press, 1981.

McKeown, Neil, *Case Studies and Projects in Communication*, London, Methuen & Co., 1982.

McQuail, Denis, *Communication*, London and New York: Longman, 1984.

Neill, S.R. St.J., 'The Relation Between Reported Awareness of Non-verbal Communication and Rated Effectiveness in Probationer and Student Teachers' *in Journal of Education for Teaching*, Vol. 9., No.1, 1983, pp.16-29.

Neill, S.R. St.J., 'Non-verbal Communication in the Classroom', Department of Education, University of Warwick, 1984.

Neill, S.R. St.J., 'Children's Reported Responses to Teachers' Non-verbal Signals: a Pilot Study', *Journal of Education for Teaching*, Vol.12, No.1, 1986, pp.53-63.

O'Sullivan, Tim; Hartley, John; Saunders, Danny; Fiske, John, *Key Concepts in Communication*, London, Methuen & Co., 1983.

Plax, Timothy G.; Kearney, Patricia; McCroskey, James C.; Richmond, Virginia P., 'Power in the Classroom VI: Verbal Control Strategies, Nonverbal Immediacy and Affective Learning', *in Communication Education*, Vol.35, Jan. 1986, pp. 43-55.

Porter, L.W.; Roberts, K.H., *Communication in Organisations*, London, Penguin, 1974.

Rosenfeld, L.; Civikly J., *With Words Unspoken*, New York, Holt, Rinehart and Winston, 1976.

Sarbin, T.R. and Hardyck, C.D., 'Contributions to role-taking theory: role perception and the basis of postural cues' in Argyle, Michael, *Bodily Communication*, London, Methuen, 1975.

Shultz, J; Florio, S., 'Stop and Freeze: the negotiation of social and physical space in a kindergarten/first grade classroom', *in Anthropology and Education Quarterly*, Vol.10, 1979, pp.166-181.

Stokoe, William C., 'Gestural Signs in Codes and Languages: Redefining "Nonverbal"' - a paper presented at the Annual Conference on Applied Linguistics, University of Maryland, U.S.A.

Todd-Mancillas, William R., 'Classroom Environments and Nonverbal Behaviour', *in* Barker, Larry L., *Communication in the Classroom*, New Jersey, Prentice-Hall, 1982.

Watzlawick, P., Beavin, J. and Jackson, D. *Pragmatics of Human Communication*, London, Faber, 1968.

Woolfolk, Robert L.; Woolfolk, Anita, E.; Garlinsky, Karen S., 'Nonverbal Behaviour of Teachers: Some Empirical Findings' *in Environmental Psychology and Non-Verbal Behaviour*, Vol.2, No.1, 1977, pp.45-61.

Woolfolk, Anita E., 'Student Learning and Performance Under Varying Conditions of Teacher Verbal and Nonverbal Evaluative Communication', *in Journal of Educational Psychology*, Vol.70, No.1, 1978, pp.87-94.

Woolfolk, Anita E.; Galloway, Charles M., 'Nonverbal Communication and the Study of Teaching' *in Theory into Practice*, Vol.24, Part 1, 1985, pp.77-84.

Woolfolk, Anita E.; Brooks, Douglas M., 'the Influence of Teachers' Non-verbal Behaviours on Students' Perceptions and Performance' *in Elementary School Journal*, Vol.85, No.4, 1985, pp.513-528.

Zivin, G. 'Watching the Sands Shift: conceptualising development of nonverbal mastery' *in* Feldman, R.S. (Ed.), *Development of Nonverbal Behaviour in Children*, New York, Springer, 1982.

III. EDUCATION

Anderson, Linda M.; Evertson, Carolyn M.; Emmer, Edmund, 'Dimensions in Classroom Management Derived from Recent Research' *in Journal of Curriculum Studies*, Vol.12, No.4, 1980, pp.343-356.

Associated Examining Board, *Expanded Notes for the Guidance of Teachers of AEB GCE A Level Communication Studies*, Associated Examining Board, 1977.

Barth, R.S., 'Open Education: assumptions about children, learning and knowledge' *in* Golby, M., Greenwald, J. and West, R. (Eds), *Curriculum Design*, London: Croom Helm in association with the Open University Press.

Bernstein, Basil, 'Social Class, Language and Socialisation', *in* Karabel, Jerome and Halsey, A.H., *Power and Ideology in Education*, Oxford University Press, pp.511-534, 1975.

Cohen, Louis; Manion, Lawrence, *A Guide to Teaching Practice*, London, Methuen & Co., 1983.

Consultative Committee on the Curriculum, *Education 10-14 in Scotland*, A CCC Discussion Paper, 1986, p.120.

Cornbleth, Catherin, 'Beyond Hidden Curriculum?' *in Journal of Curriculum Studies*, Vol. 16, No.1, 1984, pp.29-36.

Docking, James, *Control and Discipline in Schools*, London, Harper & Rowe, 1980.

Doyle, Walter, 'Paradigms for Research on Teacher Effectiveness', *in* Shulman, L.S. (Ed.), *Review of Research in Education*, Vol.5, Itasca, Ill., F.E. Peacock, 1977.

Doyle, Walter, 'Academic Work', *in Review of Educational Research*, Summer, 1983, Vol.53, No.2, 1983, pp.159-199.

Edwards, A.D.; Furlong, V.J., *The Language of Teaching*, London, Heinemann, 1978.

Galton, M. and Willcocks, J., *Moving from the Primary Classroom*, London, Routledge, 1983.

Golby M., Greenwald, J. and West, R. (Eds), *Curriculum Design*, London, Croom Helm in association with the Open University Press, 1975.

Hughes, Joan (ed.), *The Best Years? Reflections of School Leavers in the 1980s*, Aberdeen University Press, 1984.

Marland, Michael, *The Craft of the Classroom*, London, Heinemann Education Books, 1982.

Nash, Roy, 'Pupils' Expectations for their teachers', *in Research in Education*, No. 12, November, 1974, pp. 47-61.

Robertson, John, *Effective Classroom Control*, London, Hodder and Stoughton, 1982.

Rowe, Mary Budd, 'Wait-time and Rewards as Instructional Variables, their Influence on Language, Logic, and the Fate Control: Part One – Wait-time' *in Journal of Research in Science Teaching*, Vol. II, No. 2, 1974, pp. 81-94.

Rutter, Michael; Maughan, Barbara; Mortimore, Peter; Ouston, Janet, *Fifteen Thousand Hours: Secondary Schools and their Effects on Children*, Somerset, Open Books, 1979.

Scottish Education Department, *16+ Action Plan Guidelines in Communication*, Scottish Education Department, 1984.

Stubbs, Michael, *Educational Linguistics*, London, Basil Blackwell, 1988.

IV. GENERAL

Agar, Michael H., *Speaking of Ethnography*, Beverly Hills, C.A. Sage University Paper Series on QUalitative Research Methods, Vol.2, 1985.

Connecticut Department of Education, 'School Building Finishing and Economy', *The School Building Economy Series, No.6*, Hartford Conn., State Department of Education, June, 1966.

Davies, Paul, *Other Worlds*, London, Abacus, 1982.

Fiske, John and Harley, John, *Reading Television*, London and New York, Methuen, 1978.

Galton, Maurice (Compiler), *British Mirrors: a collection of classroom observation systems*, School of Education, University of Leicester, July, 1978.

Gombrich, *Art and Illusion*, New York, Bollingen Series, 1956.

Hartley, John, *Understanding News*, London and New York, Methuen, 1982.

Hodge, Bob; Tripp, David, *Children and Television*, Cambridge, Polity Press, 1986.

Hutt, Corinne; Vaizey, M. Jane, 'Differential Effects of Group Density on Social Behaviour' *in Nature*, March 26, 1966, Vol. 208, pp.1371/2.

McGough, Roger, *In the Glassroom*, London, Jonathon Cape, 1976.

Williams, Raymond, *Marxism and Literature*, Oxford University Press, 1977.