METAPHOR IN EDUCATION

by

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ABSTRACT

THE MAGIC OF METAPHOR

Without metaphor there would be no legs on the table, no hands on the clock. These are dead metaphors. Even that expression is a metaphor, for how can something be dead that has never literally been born. It is an expression which cannot be taken literally. In its first use it was 'alive' in the sense of being new or witty or apt and memorable.

Without metaphor we are reduced to the bare bones of language, to a kind of Orwellian Newspeak. One can hardly avoid using metaphors to explain them. Even scientists and mathematicians use metaphors but they usually refer to them as models.

Metaphor is a function of language which enables us to be creative. Not only the person who coins, invents, or thinks of the new metaphor but also the listener or reader who constructs a personal meaning for him or her self.

We speak of creativity in education, as a human capacity to be encouraged and developed. How creative can humans be? Do they ever really 'create' anything new apart from reproductions of themselves? Any creative activity such as painting, building or gardening is really re-organising elements already created. So humans enjoy 'creating' their own order,

forms, or patterns which we call art.

Language is capable of endless patterns. The basic patterns, usually known as grammar, appear to be innate and in speech and writing we use these 'inbuilt' structures to create new sentences of our own. At its highest level we call this literature. It has taken us some time to realise that a word in itself has no meaning as it is a symbol only.

For those aspects of experience which are difficult to explain we turn to metaphor. Thus religions often use myths and symbols. Anthropology describes many human activities as metaphoric, for example myths or totemism.

Practically every sphere of human activity is imbued with this magical quality of metaphor, for it extends our understanding of the world by giving us a kind of 'elastic' way of describing our experiences. It is not the prerogative of writers or poets but a power we all possess and one which has been derided and abused at times in our history. Only now is it increasingly being recognized as a human capacity worthy of study.

In this work I delve into some aspects of the use of metaphor to show how we need to be aware of its potent, pervasive power, especially those of us involved in teaching for whom I will attempt to demonstrate that teaching is itself a metaphoric activity.

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INTRODUCTION

> You'd be a brave human who would say where all the influences come from, but I think the word sets the whole thing up.1

This study is partly an enquiry into the nature of metaphor and its role in education but more particularly into the implications of that nature for teaching and learning. My special concern is for my fellow colleagues, teachers of English, those members of the teaching profession who have the most exciting and daunting of tasks, to develop in their students both an understanding of language and an appreciation of literature. Within this brief there is a wilderness of territory some of which has never been fully explored.

The dichotomy between ordinary language and literature is not the chasm some would have us believe. To extend this basic metaphor; if language acquisition is the kitting of oneself with map, compass and equipment, then becoming familiar with literature and learning to enjoy it is the great climb to a far-reaching peak; an achievement within sight of all but attainable only with determination and skill. The teacher is both guide and fellow climber.

Several years ago the examiner's report for the bursary English

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1. Keri Hulme, Te Kaihau The Windeater, Victoria University Press, New Zealand, 1986, P.12.

examinations in New Zealand exhorted teachers to be sure their students understood metaphor for without this there could be no understanding of literature. When children first meet the term metaphor it is usually when they are grappling with the more condensed language of poetry. They discover that poets particularly have great expertise in conveying ideas and images by using language imaginatively. This may not be a novelty to students if they have been encouraged in creative writing and have written poetry. Similes are fairly easily understood because they are simply comparisons and the words 'like' or 'as' are clear markers but metaphor is a little more difficult to recognise and understand. Here the writer says something or some person IS something or someone else. He or she makes a statement which cannot be taken literally.

Language is confusing even in ordinary everyday situations. We speak of e.g.'taking a break'. What is a break ? Where are we taking it ? We speak of being 'in love', but is it something you fall or climb into ? Every word we use carries a range of meaning which confuses learners especially second language learners. Metaphors are not peculiar to literature alone. Even jokes and riddles have many of the attributes of metaphor. It is strange therefore that we tend to examine metaphor as a literary phenomenon. Often it is learnt as a literary term along with assonance and onomatopoeia, items on a checklist to be learned for tests. This is unfortunate, as an exploration of metaphor can become a fascinating multi-disciplinary study, possibly the kind of study which could break down subject barriers and enable students to appreciate learning in school more holistically.

It is the ability to visualise, to imagine, which makes us human, not merely intelligence or feeling or even language. "The imagination" said Coleridge in his seventh lecture on New Systems of Education "is the distinguishing characteristic of man as a progressive being." Language

aquisition is more than collecting new words--it embraces meanings which are distinct and unique for each of us. My concept of love or faith or even of a house will be unique to my mind and different to yours or that of any other person. This is a private mental world of images, ideas, which I may wish to try to share with you, but to do so I have to create messages which you can interpret even though your images and ideas can never be precisely the same as mine. Communication therefore is sharing and finding links between these private worlds of ideas. Sometimes the common ground may be in a metaphor.

It has been said that "Many traditions treat language as a sacred thing; they are justified in so doing, for it is language that gives order and significance to primal chaos."[1] Prophets and leaders often speak in metaphoric terms of their visions, dreams, ideals. The Bible for example is full of metaphors as are other holy books. To my mind one of the most moving and mysterious expressions is the opening line of St. John's gospel: "In the beginning was the word: and the word was with God: and the word was God."

In seeking for truth and understanding, language is the medium we use. We communicate in symbols which can never express our exact meanings. When our own language fails to be precise or descriptive enough we often turn to other languages which sometimes seem more expressive or in the case of science or technology we make up words from existing words. The way we organise our words alters the shade of meaning and by use of analogy or metaphor we can suggest new meanings, for example love poetry is forever trying to find ways to express the wonder of human love or to describe the

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1. R.H.Robins, 'The Structure of Language,'in _Language in Education_, Routledge and Kegan Paul in Association with Open University, London,1972.P.24.

beloved. The endurance of certain images is illustrated in Greek Anthology[1] by Lord Neaves, for example in the first part of a poem ascribed by some to Rufinus, by others to Dionysius the Sophist:

> Oh that I were some gentle air,
> That when the heats of summer glow,
> And lay thy panting bosom bare,
> I might upon that bosom blow!

Secondly, in the familiar lines from Romeo and Juliet:

> Oh that I were a glove upon that hand,
> That I might touch that cheek!

and finally from Burns:

> O that my love were yon red rose
> That grows upon the castle wa',
> And I myself a drop of dew,
> Into her bonny breast to fa'!

Whatever way we twist or shape or turn the language we challenge the reader or listener to interpret our novel creations. If we share with that person similar feelings or experience or culture or education then the chances of a mutual understanding are very high even though we can never know exactly what that understanding is. This is the mysterious aspect of metaphor which makes it so fascinating to study.

Metaphor is not peculiar to poets either. An earthquake in New Zealand in March 1987 was recorded by children in language reflecting their feelings. One twelve-year old known to his friends as 'Pizza-face' (in itself a descriptive although unkind metaphor) said that they all "hit the ground." Another boy " went white as a sheet' and one girl used a more original description "if all the school had got any more nervous we would have mowed the lawn with our hands." One has an anthropomorphic view "The earthquake decided it would go to another town so it went to Kawerau.

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1. Lord Neaves, The Greek Anthology, ed.W.Lucas Collins, William Blackwood and Sons, Edinburgh, MDCCCLXXIV, p.93.

Kawerau people didn't want it, but it obeyed the master's rules." Another said "Our house was turned upside down like a giant had picked up our house and then just dropped it."

Other reports from the children included the following: "our desks were moving from side to side like boats in a giant storm...my heart felt like it had been ripped to threads....screams pierced the air...My heart felt as if it had missed a beat and jumped up towards my throat..I rushed out in terror that was floating out of my ears...when the earthquake struck it looked like my snail was break-dancing...it felt like being on waves that were about to burst...the courts were like jelly and the buildings like they had come to life...it felt as if you were very small, sitting on a blanket being shaken out...The lamp-posts were just like bendy bits of plastic...The concrete was moving like the sea, but at the same time it was jumping up and down like the electric bop...The cars looked like they were playing jump-rope." Metaphors abounded as reporter Richard Rau noted.[1]

The interesting thing about these examples is that they illustrate how figurative language is used naturally by children to recount their experiences, in this case a frightening and unusual one. Some use cliches e.g.'white as a sheet' from the common stock of well known expressions but others are more fanciful and original, some are even in myth-like form, but all share a common factor, to express this experience they have all used similes and metaphors and most of the references are based on associations with experiences already known and familiar to them e.g. break-dancing, bop, jump-rope, giants from fairy stories etc. That is, they use the known

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1. Brian Rudman,'The Day Our Buildings Came to Life,'Listener, New Zealand, April 11, 1987.

to describe, explain and presumably accept and understand the new. Fear, shock and visual effects of movement are recorded in figurative language which vividly captures the moment and the mood. Metaphor has this characteristic of being involved with tension and emotion and with visual images. It is noticeable that in a report written by slightly older children there was a more restrained, more literal style of language.[1] It would be interesting to study the development of this facility in children and to compare their metaphors with those of adults.

Language in some senses seems to have a life of its own over which we have minimal control. You cannot own a word, but you can give life to a new one. Children often do this spontaneously. You cannot keep a word to yourself, even one's own name is a kind of abstract symbol which you are known by. Everything spoken travels on sound waves ad infinitum. Children chant that "Sticks and stones may break my bones but names will never hurt me," yet in fact names can hurt permanently. Words take on multiple and complex meanings. They experience a kind of birth, they evolve over time, and with use; each has uniqueness but they can also die. We speak of 'dead' metaphors and 'dead' languages such as Latin, though it is not entirely defunct for it is still used but is no longer developing or evolving.

One theory of how language developed says that in its initial stages there was only a literal use of words which had a bearing on concrete or perceptible things, qualities, occurences etc., but when there came a need

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1. Kim Gray,Edgecumbe Teenagers Look back on Quake, Children's Express,Evening Post, Wellington, New Zealand, May 4,1987.

2. J.J.A.Mooij,A Study of Metaphor, North Holland Pub.Co.,1976, P.11. For this theory Mooij refers us to F.M. Muller, Lectures on the science of language,(2 vols.,London 1861-1864), Ch.B.

to speak of abstract ideas this was met by the use of metaphors. If we find this theory too simplistic says Mooij the "still less acceptable is the contrary view that the very initial stage of language would have been completely metaphorical" because as its opponents say "the metaphorical use of language is only possible if a literal use of language is already in existence."[1] Many descriptions of phenomena perceived by the senses do reveal a metaphorical origin e.g. 'high pitch' and 'vivid colours', which may indicate that metaphors have always played a part in the development of language. Many abstract words have concrete origins e,g.'grasp' meaning to understand, and the word 'metaphor' itself meaning to 'bear' or transfer. There is much speculation and research in this area of the history of language but as yet no definite conclusions.

Metaphor-making is an associative process which has been likened to recognition in Rorschach tests. We need metaphors to explain but we are surrounded by them also. Even the sports and business pages of the newspapers are full of metaphors, many of these taken from the language of war because of their aggressive and competitive nature. Others are frozen as it were in the art around us. Even the willow-pattern on a dinner plate might be telling us the sad story of an unrequited love and is a permanent and daily reminder of another time, another place and strange unknown people but with whom we can identify emotionally at least. The 'bridge' of this scene could be a metaphor for metaphor itself. Metaphors are more than words. They can capture as they do in art and literature and in science, time, history, culture, feelings, ideas. They illustrate the times we live in too for as Leavis has said "people cannot live without a sense of significance."[2]

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1. J.J.A.Mooij,A Study of Metaphor, North Holland Pub.Co.,1976,p.11.

2. F.R. Leavis, quoted in TIMES Profile, London,February 17,1975.

No-one can deny that metaphors are endemic but to understand them we really need to know how the human mind works.

Earlier writers capitalized on this need for imagery by sometimes supplying volumes of instant stock imagery for writers, sermon makers or orators. They were used in much the same way that a crossword neophyte might use a dictionary or thesaurus. Carol Clark describes these reference books in her Web of Metaphor in which she scrutinizes the imagery in Montaigne's Essais. Apparently in his time many stock images were in common use. Although noted by critics for his lively and novel imagery he did borrow as others did from authors of antiquity and this was expected: "The culling of sentences, examples and similitudes from the work of one's predecessors was a recognized method of literary composition."[1] The source books were known as commonplace books.

Clark says that in the Ratio Colligendi Exempla of Erasmus he gives instructions on the collecting of such samples and how to classify them, and in his Parabolae sive similtudines published in 1513 is a collection of nearly two thousand similes, mainly from classical authors especially Plutarch and Seneca. There was, "a whole world of shared imagery...imagery, and the arguments from analogy that it provided formed nothing less than a method of thought, or more accurately a substitute for thought for men of the sixteenth century..."[1] They were used not merely for flowery adornment but in this pre-scientific age as rhetorical devices to convince listeners or readers in situations where rational argument was not available. One is reminded of Plato resorting to myth in similar situations.

Clark is particularly interested in Montaigne because although he uses stock images such as "pedants as birds carrying food to their

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1. Carol Clark, The Web of Metaphor, French Forum, Kentucky, 1978, p.43.

young."(11 25)

> He does not, indeed as a man of the modern age would, simply reject imagery as a means of investigation--he still thinks images have some power to reveal relations between things, and that these relations have some factual reality. But the patterns thus disclosed are fragmentary and arbitrary, mere glimpses of a universal network of connections which, in its complexity, is immeasurably beyond human power to grasp.1

There are several ideas here which I will extrapolate and discuss in further chapters because they relate to important aspects of metaphor; they are: patterns, network, and the description of metaphor as a kind of 'grasping', or 'groping' for meaning. These I believe to be key issues inherent in the study of metaphor.

Metaphors are of interest in Philosophy, Psychology, Linguistics, Science, Art, Literature, Metaphysics, Semantics, Semiotics, even Religion, and more recently Computer Technology. Practitioners in each area all have slightly different views on metaphor but all of them go back to Aristotle some of whose ideas are summarised in the next chapter.

By giving separate chapters to Art and Science I do not wish to imply a division betwen them for in fact the evidence shows that any gap that may have existed between them is narrowing quite rapidly. If metaphor is part of both the process and product of literature it is equally part of the process particularly of science. Writers on the subject of metaphor are legion, as a bibliography by Shibles testifies, but among the most influential appear to be Max Black, I.A.Richards, and Paul Ricoeur.

Every aspect of metaphor impinges on education both in the way we view teaching and children and educational institutions and the manner in which we instruct and educate the young. There are metaphors for education itself, for what goes on in educational institutions and for the people who

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1. Carol Clark, The Web of Metaphor, French Forum, Kentucky, 1978, p.43.

administer them and those on the receiving end. Agricultural and horticultural metaphors abound presumably because children are so vulnerable, so dependent on adults for so long. This very vulnerability means that parents and teachers can choose to be protectors or bullies, cultivators or destroyers. Even at our supposedly advanced evolutionary stage there are still children deliberately maimed, abandoned, neglected, exploited, tortured, and sold. Legislation has tried to stamp out most inhumane practices, especially the institutionalized ones such as mining, and slavery, but society cannot prevent the abuse and neglect of children merely by laws. It is interesting to examine some of the metaphors concerning attitudes to children as I have done here and to see and how these are reflected in our educational practices, also to examine whether the writers of a more scientifce age still revert to the same imagery and metaphors to explain the educational imponderables. This leads one to wonder just what constitutes knowledge and makes one also aware of the need to more fully understand just what is involved in teaching and learning. Metaphor seems to me to be an integral part of this.

Many metaphors have been used in education, some of which will be examined here, but I have come to believe that the journey one is still appropriate, with the teacher, parents and community as guides. The pursuit of knowledge and truth is a well-trodden path which appears to get wider as well as longer and we seem like so many hunters chasing an elusive quarry which pereptually slips forever just over another hill in the distance. Elliot however considers the guidance metaphor to be somewhat outdated and warns us that "no metaphor can give us insight into the essence of education for it is not a natural species and does not have an essence."[1] Never-

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1. R.K.Elliot,Metaphor, Imagination and Conceptions of Education, in Metaphors of Education,ed.W.Taylor,Heinemann,London,1984,p.52.

theless a metaphor can have imaginative appeal, as he says. I am also impressed by Sylvia Ashton Warner's metaphor of the teacher as conductor of an orchestra where, each performer and instrument is individually in tune and well prepared but needing the leadership of the conductor to produce their finest performance.[1]

Breal[2] has said that the topic of metaphor is inexhaustible and I have come to agree with him, it is difficult to do justice to this inter-disciplinary topic which is none the less fascinating, appearing as it does wherever one turns. Shibles has even claimed that it ought to be a subject of study at universities.[3] There is no part of a school syllabus where it is not relevant but not all subjects are considered in this study. Mathematics and Art are two neglected ones that must prove rich sources particularly in the area of learning and teaching. As a researcher one can be encouraged however by what I.A.Richards has said in his Philosophy of Rhetoric: "In this subject it is better to make a mistake that can be exposed than do nothing, better to have any account of how metaphor works (or thought goes on) than to have none."

This work, based as it is on a selection of readings relating to the topic, will add nothing to the theory of metaphor but aims to raise the consciousness of teachers, particularly as to the nature and importance of metaphor in teaching and learning.

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1. Sylvia Ashton Warner, Teacher in America, Cassell, London, 1972, p.186.

2. Warren A.Shibles, Metaphor an Annotated Bibliography and History, Whitewater, Wisconsin, 1971. P.V11.

3. William Taylor ed., Metaphors of Education, Heinemann, London, 1984, p.7.

CHAPTER I

THE NATURE OF METAPHOR

> Metaphor has by now been defined in so many ways that there is no human expression, whether in language or any other medium, that would not be metaphoric in SOMEONE'S definition. [1]

Aristotle said metaphor was a sign of genius,[2] Locke called it an art of fallacy, a cheat, a great fault, wholly to be avoided.[3] Hobbes likewise believed it was a form of playing with words and a way of deceiving others.[4] According to Cohen it is a wonderful topic which has become academically respectable.[5] Questions which he thinks need to be applied concern :

1.The relationship between 'poetic' metaphors and ordinary speech and prose.

2.How to incorporate metaphor with theories of language and meaning.

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1. Wayne C. Booth,'Metaphor as Rhetoric:The Problem of Evaluation', in Sheldon Sacks,On Metaphor,University of Chicago Press 1978, p.48.

2. Aristotle,'On Poetics',The Works of Aristotle Vol.II, Encyclopaedia Brittanica publisher William Benton U.S.A. 1952,p.694

3. J.Locke, quoted in W.Taylor ed. Metaphors of Education,Heinemann, London 1984,p.115.

4. Thomas Hobbes, Leviathan,Encyclopaedia Brittanica, William Benton U.S.A.1952,Ch.4,p.55.

5. Ted Cohen,'Metaphor and the Cultivation of Intimacy', in Sheldon Sacks On Metaphor, University of Chicago Press 1978,p.1.

Metaphor appears to be something of an embarrassment to philosophers and causes problems between departments of schools and universities when defining the bounds of their type of discourse or fields of enquiry. The subject is problematic.

This chapter examines some of the many descriptions of metaphor and something of its history and its problems.

No-one seems to be able to give us a generally accepted or standard definition of metaphor, but as Wayne C.Booth says we can all recognise one : "We seem to have a kind of common-sense agreement about a fairly narrow definition, one that survives even while our theory expands the original concept beyond recognition."[1] Because the subject is so controversial and value-laden I will turn first to a semiotician for a 'general' or supposedly 'scientific' description of metaphor. According to Bela Buky metaphors are fundamentally based on comparisons: "Whatever the aim is, there is always--in any metaphor--a concept related to another one."[2] Each of these can be classified into one of five categories:

1 = concept of a (real or imaginary) object, place, time, action, event or phenomenon, quality or any other abstract notion.

2 = concept of a (real or imaginary) plant

3 = concept of a (real or imaginary) animal

4 = concept of a (real or imaginary) human being

5 = concept of a supernatural being (God,Satan etc.)

Likewise the concepts to be compared fall into the same

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1. Wayne C. Booth,'Metaphor as Rhetoric:The Problem of Evaluation', in Sheldon Sacks, On Metaphor, University of Chicago Press, 1978,p.49.

2. Bela Buky 'The system of metaphors semiotically considered ' in Semiotics Unfolding ed.Tasso Borbe Mouton, 1983, p.783.

categories. This results in at least twenty-five permutations. Buky also mentions artistic metaphors such as Iconic signs and Indexic signs but these are more properly related to art so I will refer here merely to those comments on spoken or written metaphors. According to Buky :

> Metaphors reach their effect through characterization (a type of qualification). There is always an abstractness characterized by a concrete quality. (When Simon is called Peter i.e.a rock, here e.g. Simon's personality (abstractness) is characterized by the quality of the rock (solidity-concrete quality.) [1]

Buky says (as Carol Clark does when explaining Montaigne's essais)[2] that metaphors were used when scientific terminology was not available to explain phenomena, and claims that the use of metaphors in science is on the decline but that they proliferate in journalism and in literary texts where poetic metaphors prevail. In private conversations many emotive or phatic metaphors can occur, such as endearments or nicknames.

Buky confirms my earlier comment that people have to decode metaphors in social groups :

> If one wants to adapt himself to the community of a group, he has to learn to use appropriately the allusion-system and metaphor system current among the group members.[3]

Shibles refers to 'universes of discourse' which Urban says are created not by individuals but by groups or speech communities: "The word does not have the same meaning in each universe of discourse in which it is used."[4] It is obvious that teachers need to be aware of this factor in their

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1. Bela Buky 'The system of metaphors semiotically considered ' in _Semiotics Unfolding_ ed.Tasso Borbe Mouton 1983 p.785.

2. Carol Clark, _The Web of Metaphor_ , Studies in the imagery of Montaigne's Essais, French Forum Publishers, 1978

3. Buky p.789.

4. Warren A. Shibles, _Analysis of Metaphor In The Light of W.M. Urban's Theories_, Mouton, The Netherlands, 1971,p.45

subject areas where specialists tend to use language without considering that it may be unfamiliar to children and also in preparing youths for adult life where they will meet many unfamiliar metaphors. As Buky says:

> To be able to decode, as quickly as possible, the newest metaphors, the ones created in the hurry of the spoken language, a high 'elasticity 'of mind is needed. 1

Interesting that the term 'elasticity' is used here which is one I have used myself in trying to describe metaphor. Implicit in metaphor there is always a concept of stretching, of tension, of straining for new meanings. Literary critics particularly refer to this aspect of metaphor e.g. I.A.Richards speaks of .."a resultant tension between the particular similarity employed and more stable habitual classifications..."[2] and Philip Wheelwright stresses the 'energy tension' which characterizes metaphor and believes that similes lack this "degree of intensity...depth of penetration (and) freshness of recombination."[3]

Aspin believes that there are in fact some 'universal metaphors or key ideas in that they are common to all cultures:

> ...there is a universality about human language and the power to conceptualize that is a function of certain features that are basic to all human perceptions of ourselves and our environment and, whether we describe these as being fixed in time, space, quantity, quality, modality and relation; or based on colour, spatial extension, natural dimension and substance, the outcome is the same. It is that there are certain fixed points that are the ground of our appraisal of reality...4

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1. Bela Buky, 'The system of metaphors semiotically considered ' in Semiotics Unfolding ed.Tasso Borbe, Mouton, 1983 p.789.

2. I.A.Richards, Interpretation in Teaching, Routledge and Kegan Paul, London 1949, p.59

3. David Cooper, Metaphor, Blackwell, Oxford, 1986 p.59 and p.186, quoting Philip Wheelwright, The Burning Fountain (Indiana University Press,1954)p.100

4. David Aspin,'Metaphor and Meaning in Educational Discourse' in Metaphors of Education, ed. W.Taylor,Heinemann, London 1984,p.30.

Aspin quotes Hannah Arendt (1963) "The categories and ideas of human reason have their ultimate source in the human senses and, all conceptual or metaphysical language is actually and strictly metaphorical."[1]

Aspin also refers to Bollinger who said "Metaphor...brings us to a world to some extent prefabricated in our language."[2] And Quine "Metaphor, or something like it, governs both the growth of our language and our acquisition of it."[3] To Donald Davidson "Metaphor belongs exclusively to the domain of use."[3] He agrees also with what I said earlier that metaphors can resemble jokes for they play with language, are a novelty, a surprise which captures the imagination, and create a response which sometimes guarantees their longevity and extended use. 'Dead' or 'cliche' may be their eventual designation but in fact they do not die, they become part of ordinary usage or part of our common word stock.

There seem to be as many interpretations of metaphor as there are writers on the subject but without fail they all acknowledge a debt to Aristotle, as the first person to describe its use. According to Paul Ricoeur "It is he [Aristotle] who actually defined metaphor for the entire subsequent history of Western thought, on the basis of a semantics that takes the word or the name as its basic unit."[5] In his treatise on Rhetoric Aristotle gives advice, for those who wish to excel in politics, on how to be an effective speaker, for to persuade people is to use words with consummate

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1. Davis Aspin, 'Metaphor and Meaning in Educational Discourse'in Metaphors of Education ed. W.Taylor,Heinemann London 1984,p.31.

2. Ibid.,p.32.citing Bollinger 1980 p.145.

3. Ibid.,p.32.

4. Ibid.,p.33.

5. Paul Ricoeur,The Rule of Metaphor, trans. by Robert Czerny, University of Toronto Press, 1975, p.3.

skill. Persuasion is, he says, a sort of demonstration.[1] One of the techniques for this is the use of the enthymeme, a sort of syllogism. Facts alone will not always win an argument: "Argument based on knowledge implies instruction, and there are people whom one cannot instruct."[2] Here one must use persuasion. To argue well is also to see both sides of an argument and rhetoric is useful "to discover the means of coming as near such success as the circumstances of each particular case allow."[3] In this it resembles other arts in that it depends on how and why it is used and on the user--man. It may be defined as "the faculty of observing in any given case the available means of persuasion."[4]

With the spoken word, persuasion depends on the personal character of the speaker, on how he puts his audience into a certain frame of mind as well as on the proofs in his argument. A person of good character is more generally believed says Aristotle but persuasion should be achieved by what the speaker says rather than what people think of him. To do this he needs to stir the emotions of his listeners, for our judgments are affected says Aristotle on the mood we are in as we listen. Persuasion therefore requires logical reasoning and an understanding of human character and human emotions.

To Aristotle Rhetoric is an offshoot of Dialectic and of Ethical Studies which may be called political and sometimes masquerade as political science. In Prior Analytics (9II 23.24) he says "Every belief comes either through syllogism or induction." The example is an induction the

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1. Aristotle,<u>Rhetoric</u> <u>Bk.I</u>, Encyclopaedia Brittanica, University of Chicago 1952 trans. by W. Rhys Roberts p.594.1355a [5]

2. Ibid.,p.594. 1355a [25]

3. Ibid.,p.594. 1355b [10]

4. Ibid.,p.595. Chap.2.

enthymeme a syllogism--and everyone who affects persuasion through proof does in fact use either enthymemes or examples.

Aristotle states that when we base the proof of a proposition on descriptions of similar cases this is called deduction in Dialectic, example in Rhetoric. Having shown that certain propositions are true and that another proposition must in consequence be invariably or usually true this is called syllogism in Dialectic, enthymeme in Rhetoric. Both occur in different oratorical styles.

Rhetoric deals with general subjects as does Dialectic but for a more general audience i.e. Dialectic for the layman, thus :

> The duty of rhetoric is to deal with such matters as we deliberate upon without arts or systems to guide us, in the hearing of persons who cannot take in a complicated argument, or follow a long chain of reasoning. [1]

He proceeds to give us advice and says that most of the things about which we make decisions present us with alternatives i.e. "all our actions have a contingent character, hardly any of them are determined by necessity." [2]

The varieties of rhetoric are political (deliberative and dealing mainly with the future), forensic (legal) and epideictic (the ceremonial oratory of display). Each has a different audience and aim. He describes the nature of rhetoric which he claims is a combination of science and logic, of the ethical branch of politics, partly like dialectic and partly like sophisticated reasoning and believes that if we tried to make it scientific we would destroy its true nature. In his day it dealt mainly with ways and means, war and peace, national defence, imports and exports and legislation. Not much different to our current affairs. The use of

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1. Aristotle, Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago 1952, trans. by W.Rhys Roberts, p.596. 1357a

2. Ibid.,p.597.

persuasive speech was intended to lead to decision-making.

Maxims are parts of enthymemes, and in arguments by example one variety consists of mentioning actual past facts, the other depends upon the invention of facts as in the parallel or fable e.g.(Aesop's fables). As he says, the illustrative parable is the sort of argument Socrates used. [we are familiar with them in the New Testament also] Fables, he says, are suitable for addresses and popular presentations, as they are easy to invent "all you require is the power of thinking out your analogy, a power developed by intellectual training."[1]

When we are unable to argue by enthymemes we are to use Examples and when we can use enthymemes to use examples as supplementary evidence. Maxims are to be statements of a general kind about how to behave and not particular facts. The demonstrative enthymeme is formed, he says, by the conjunction of comparable propositions and the refutative by incomparable. One example he gives of a maxim is :

> Never should any man where wits are sound
> Have his sons taught more wisdom than their fellows
> (Euripides Medea 295)

Once the reason is added the whole thing becomes an enthymeme:

> It makes them idle; and therewith they earn
> Ill-will and jealousy throughout the city.
> (Ibid. 297) [2]

Following on from this he goes into all the various types of proof and lines of argument that rhetoricians can follow to be successful. He also makes an interesting comment on why the refutative enthymeme has a greater reputation than the demonstrative:

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1. Aristotle,Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago Press,1952,trans. by W.Rhys Roberts.p.641. 1394 [5]

2. Ibid.,p. 642.

> Because within a small space it works out two opposing arguments, and arguments put side by side are clearer to the audience. But of all syllogisms...those are most applauded of which we foresee the conclusions from the beginning, so long as they are not obvious at first sight-- for part of the pleasure we feel is our own intelligent anticipation; or those which we follow well enough to see the point of them as soon as the last word has been uttered. 1

The same I believe is true of metaphors also. Aristotle has made an important point here relative to what one might call the rhetoric of teaching, that is the art of 'leading on' one's listeners to take note of an important fact and also the necessity of keeping them with you along the way. What he says applies to both metaphors and jokes. They both invite and need participation from listeners, who enjoy recognizing and making the links which the speaker has led them to. They may be an important useful clue also to our way of thinking, the fact that we cope with two ideas sometimes more easily than with one. One balances or 'feeds' the other--do we in fact register and manipulate data in a binary fashion--must we always be making links and chains such as those which computer programmers call 'loops'?

There are as Aristotle points out spurious enthymemes based on false misleading statements, but usually enthymemes are based on one or other of four kinds of alleged fact--they are, probabilities, examples, infallible signs and ordinary signs.

In his treatise on Rhetoric Aristotle also analyzes 'style', for as he claims "the way a thing is said does affect its intelligibility" [2] even though its purpose may be merely to charm listeners for no-one needs fine language to teach geometry. Dramatic ability, which he considers a

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1. Aristotle, Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago 1952, trans. by W.Rhys Roberts, p.649 [25]

2. Ibid.,p.654.

natural gift, can also be used to good effect.

> To poets he ascribes the development of fine language in oratory:
> It was naturally the poets who first set the movement going; for words represent things and they also had the human voice at their disposal, which of all our organs can best represent other things. 1

To be good, style must, he says, be clear and convey a plain meaning. Moreover it must be appropriate, but some novelty in language is appreciated by listeners "people like what strikes them, and are struck by what is out of the way."[2] Naturalness he considers persuasive and he does not approve of strange, compound or invented words. On the other hand "metaphorical terms can be used with advantage..." for they occur even in conversation, and are of "great value both in poetry and prose."[3] Prose writers must however pay careful attention to their use of metaphor because they have not got the same resources as poets.

> Metaphor, moreover, gives style, clearness, charm and distinction as nothing else can: and it is not a thing whose use can be taught by one man to another. Metaphors, like epithets, must be fitting, which means that they must fairly correspond to the thing signified: failing this, their inappropriateness will be conspicuous: the want of harmony between two things is emphasised by their being placed side by side.4

Aristotle also draws attention to the need for metaphoric expressions to sound well: "A metaphor may be amiss because the very syllables of the words conveying it fail to indicate sweetness of vocal utterance."[5] The beauty of a metaphor can be, he says, in the sound or the meaning for he does not follow the school of thought which says there can be no foul

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1. Aristotle. Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago, 1952,trans. by W.Rhys Roberts, p. 654.

2. Ibid.,p.654.

3. Ibid.,p.655.

4. ibid.,p.655.

5. Ibid.,p.655.

language: "The materials of metaphor must be beautiful to the ear, to the understanding, to the eye or to some other physical sense."[1] As an example he says it is better to say 'rosy-fingered morn' (Iliad I 477) than 'crimson' or 'red-fingered'.

Metaphors can be inappropriate even ridiculous. Some he thinks are too grand and theatrical and if far-fetched may be obscure. This seems an important point for as he has said earlier in his work people like to feel they are a step ahead of the speaker or at least come to the same conclusion finally--so presumably when using metaphor we have to bear in mind that the reader or hearer has to be able to follow our train of thought and find our matching of ideas appropriate and convincing--almost as if he or she had thought of them.

Aristotle believes the Simile also to be a metaphor with only slight differences and more natural to poetry:

> They are to be employed just as metaphors are employed since they are really the same thing ...and those [ideas] which succeed as metaphors will obviously do well also as similes, and similes with the explanation omitted will appear as metaphors. But the proportional metaphor must always apply reciprocally to either of its co-ordinate terms. For instance, if a drinking bowl is the shield of Dionysus, a shield may be fittingly called the drinking bowl of Ares. 1

He gives much advice on good style. One example is the right use of connecting words and punctuation, the avoidance of ambiguities and the need for clarity to ease delivery. Language of prose may use the devices of poetry such as metaphor but above all language must be appropriate. Emotional speeches can he says use compound words, fairly plentiful epithets and strange words, as can ironical speeches also, but they are more "fitting

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1. Aristotle, Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago,1952,trans. by W.Rhys Roberts,p.656.

2. Ibid.,p.657.

in poetry, which is an inspired thing."[1] The main difference is that prose is to be rhythmical but not metrical and he explains the various types of rhythms. It is when he comes to describing how to make speeches lively and interesting that he deals again with metaphors in a way which is perhaps particularly interesting to teachers:

> We will begin by remarking that we all naturally find it agreeable to get hold of new ideas easily; words express ideas, and therefore those words are most agreeable that help us to get hold of new ideas. Now strange words simply puzzle us; ordinary words convey only what we know already; it is from metaphor that we get hold of something fresh.[2]

He considers the simile less attractive because it is longer; with which I agree. It is a characteristic of human nature as he says to find an idea attractive which is not made too obvious "We see then that both speech and reasoning are lively in proportion as they make us seize a new idea promptly."[3]

Aristotle describes the characteristics of metaphor:

1. The antithetical which might include opposing ideas.
2. Use of metaphorical words--provided they are not far-fetched.
3. Those in which the words vividly create a scene for us, an 'actuality' by using expressions that represent things as if in a state of activity.
4. The proportional (which he considers the most attractive) e.g. Pericles describing the loss of young men from the country 'as if the Spring were taken out of the year.'

He considers Homer to be a master of metaphor for he creates an illusion of activity and often personifies otherwise inanimate objects e.g. 'And the

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1. Aristotle, Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago, 1952, trans. by W.Rhys Roberts,p.659.

2. Ibid.,p.662.

3. Ibid.,p.662.

point of the spear in its fury drove full through his breastbone.' (Iliad XV 542) As Aristotle says:

> Liveliness is especially conveyed by metaphor, and by the further power of surprising the hearer, because the hearer expected something different, his acquisition of the new impresses him all the more. His mind seems to say 'Yes, to be sure; I never thought of that.'[1]

Acquisition of new ideas, words and concepts is a large part of learning.

Epigrams and riddles and jokes are similar. The more briefly and antithetically a saying is expressed says Aristotle the more effective it is "for antithesis impresses the new idea more firmly and brevity more quickly."[2] The best ones have personal application as well as merit of expression and are true without being commonplace. The more of these qualities that can be incorporated the better i.e. to be metaphorical, antithetical, balanced and conveying a sense of activity.

Each kind of rhetoric says Aristotle, has its own style. The written is more finished and the ceremonial more literary. It would seem from Aristotle's account that a metaphor is like the conclusion to an argument without the argument that leads up to it, a contracted or compressed syllogism.

Aristotle's analysis of poetry includes for him Tragedy, Comedy, Dithyrambic, Poetry and Flute and Lyre playing--all arts of imitation (mimesis) their common elements being rhythm, language and harmony. He claims that the origin of poetry is due to two characteristics in human nature:

> Imitation is natural to man from childhood, one of his advantages over the lower animals being this, that he is the most imitative

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1. Aristotle, Rhetoric Bk.I, Encyclopaedia Brittanica, University of Chicago,1952, trans. by W.Rhys Roberts,p.664 [20]

2. Ibid.,p.665.

creature in the world, and learns at first by imitation.[1]

It is also natural, he says, for us to take pleasure in works of imitation for:

> To be learning something is the greatest of pleasures not only to the philosopher but also to the rest of mankind...for learning is the gathering of the meaning of things. 2

So imitation is natural to us, as is the sense of harmony and rhythm which in poetry we call metre and from this research I have come to believe that a sense of pattern is also probably innate and important.

Aristotle is mainly concerned with epic poetry on serious subjects and grand scale, such as Homer's Odyssey. He says such works are pleasurable and contain certain general truths and represent human action, for;

> All human happiness or misery takes the form of action; the end for which we live is a certain kind of activity, not a quality. Character gives us qualities, but it is in our actions, what we do, that we are happy or the reverse. 3

This is why in a tragedy the plot is of utmost importance. And in a painting even the most beautiful colours will fail in their effect he says if they are laid on without order. Beauty is a matter of proportion "of size and order" and must be "of a size to be taken in by the eye."[4] In all of these aspects Homer is to him the artist par excellence.

Of poetry he says that it is "something more philosophic and of graver import than history, since its statements are of the nature rather

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1. Aristotle, On Poetics, Encyclopaedia Brittanica, University of Chicago, 1952, trans. by W.Rhys Roberts, p.682.

2. Ibid.,p.682.

3. Ibid.,p.684.

4. Ibid.,p.685.

of universals, whereas those of history are singulars."[1] It depends on certain elements of language for its art. Among these are nouns which can be 1) the ordinary word for the thing 2) a strange word (foreign) 3) a metaphor 4) an ornamental word 5) a coined word 6) a lengthened word 7) a word curtailed 8) one altered in form. It is to this statement that many later writers turn and are critical because it tends to deal with metaphors as single words. Aristotle's actual definition of metaphor follows:

> Metaphor consists in giving the thing a name that belongs to something else the transference being either from genus to species, or from species to genus, or on grounds of analogy. 2

He gives examples of these and then says there is also another form that qualifies as metaphor "Having given the thing the alien name, one may by a negative addition deny one of its attributes naturally associated with its new name."[3] He gives the example of 'the cup of Ares' referring literally to a shield, as 'a cup that holds no wine.' 'Coined' words appear to be those created by the poet [which we would probably term examples of poetic licence]. A word lengthened is one with a short vowel made long or an extra syllable inserted.

Perfection in diction Aristotle says, is "to be at once clear and not mean."[4] Clear, by using ordinary words as far as possible, and 'mean' is illustrated by reference to the poetry of Choptra and Stenelus. For meaning can become unclear by use of unfamiliar terms i.e. strange words, metaphors, lengthened terms etc., for overuse of these leads to barbarism and

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1. Aristotle, On Poetics, Encyclopaedia Brittanica, University of Chicago, 1952, trans. by W.Rhys Roberts, p.686.

2. Ibid.,p.693.

3. Ibid.,p.693.

4. Ibid.,p.694.

riddles which provoke laughter. What Aristotle advises is that "a certain admixture ...of unfamiliar terms is necessary"...[for] the strange word, the metaphor the ornamental equivalent etc. will save the language from being mean and prosaic, while the ordinary words in it will secure the requisite clearness."[1]

The poet is not to be ridiculed Aristotle says, for his unusual use of words but must be aware that "the rule of moderation applies to all the constituents of the poet's vocabulary; even with metaphor, strange words, and the rest..."[2] Abuse makes for a laughable effect but on the other hand one has only to substitute ordinary language into poetry to see sometimes what effect is lost by this. Choice of words is critical, for changing a single word can make the difference between a fine line or otherwise.

It is at this point that he gives his well-known comment on metaphor:

> It is the greatest thing by far to be a master of metaphor. It is the one thing that cannot be learnt from others; it is also a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars. 3

Of the kinds of words that he describes, he believes that compounds suit the dithyramb, strange words the heroic style, and metaphor iambic poetry. Iambic verse models itself on the natural rhythms of speech and can contain the words one might have in an oration, such as ordinary words, metaphors and ornamental equivalents. Epic poetry can contain this same mixture for "it is to be remembered that there is not the same kind of

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1. Aristotle, On Poetics, Encyclopaedia Brittanica, University of Chicago, 1952, trans. by W.Rhys Roberts, p. 694.

2. Ibid.,p.694.

3. Ibid.,p.694.

correctness in poetry as in politics, or indeed any other art."[1]
This does not excuse faulty expression, but he does say that critics need to be aware that expressions which seem strange may in fact be instances of metaphor and "For the purpose of poetry a convincing impossibility is preferable to an unconvincing possibility."[2] Where confusion and contradictions seem to occur Aristotle believes these can be tested by dialectical argument. Finally he states that of the two arts Tragic and Epic Poetry the first is to his mind superior.

Aristotle's statements about the nature and use of metaphor have, as I said previously , become the basis for all subsequent study of metaphor which is why I have summarised his work. His influence has been acknowledged by most writers and he is also blamed for what some see as a rather limited view. One thing is certain he has established an ongoing dialectic on this now controversial topic.

Max Black is currently recognized as a seminal writer on metaphor and he poses questions that he would like answered e.g. how do we recognize them--can we translate them literally--are they mere decoration--what are the relations between metaphor and simile--is metaphor creative--what is the point of using it--and what do we really mean by metaphor? This in spite of the fact that "To draw attention to a philosopher's metaphors is to belittle him."[3]

Black's choice of quotation in his introductory chapter gives a clue as to why metaphors are considered with some contempt:

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1. Aristotle, On Poetics, Encyclopaedia Brittanica, University of Chicago 1952, trans. by W.Rhys Roberts, p. 696.

2. Ibid.,p.698.

3. Max Black, Models and Metaphors, Cornell University Press, New York 1962,p.25.

"Metaphors are not arguments,
My pretty maiden." [1]

Black selects a bundle of 'obvious' metaphors which he trusts we would accept as such (like Booth he obviously believes we do easily recognize metaphors) and makes the statement:

> In general when we speak of a relatively simple metaphor we are referring to a sentence or another expression in which SOME words are used metaphorically while the remainder are used non-metaphorically. An attempt to construct an entire sentence of words that are used metaphorically results in a proverb, an allegory or a riddle...cases of symbolism also need separate treatment.[2]

His first example is the sentence "The chairman plowed through the discussion'... 'plowed' being the word metaphorically used he calls this the FOCUS of the metaphor and the rest of the sentence the FRAME. In a different FRAME the same word might not create a metaphor. The metaphor used (i.e.the whole statement) could be translated into another language which leads him to infer that "to call a sentence an instance of metaphor is to say something about its MEANING, not about its orthography, its phonetic pattern, or its grammatical form." [3] Metaphor therefore belongs to semantics not syntax and, as he adds in a footnote, "any part of speech can be used metaphorically."

Using the same word 'plowed 'metaphorically in different frames he says it would be difficult to decide whether this constituted two metaphors for 'metaphor' is a word ill-defined and "the established rules of language leave wide latitude for individual variation, initiative and creation." [4]

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1. Sir Walter Scott, The Fortunes of Nigel, Book 2, Chapter 2.

2. Max Black, Models and Metaphors, Cornell University Press, New York, 1962,p.27.

3. Ibid.,p.28.

4. Ibid.,p.29

Therefore one has to note the "particular circumstances " of its use. How serious, intense or meaningful a metaphor is intended to be, is always dubious, because, as Black says there are "no standard rules for the degree of WEIGHT or EMPHASIS...yet this somewhat elusive 'weight' of a (suspected or detected) metaphor is of great practical importance in exegesis."[2]

Because the 'rules of language ' are not a great deal of help there is a sense in which he believes metaphor also belongs to 'pragmatics' rather than to semantics. Where anyone believes that a metaphor is used in place of a literal expression Black calls this a SUBSTITUTION VIEW OF METAPHOR. According to him most writers have held this view of metaphor and he gives examples such as :

1. Whately Elements of Rhetoric 7th rev. ed London 1846 p.280

2. The Oxford Dictionary definition: "Metaphor: The figure of speech in which a name or descriptive term is transferred to some object different from, but analogous to, that to which it is properly applicable; an instance of this, a metaphorical expression." [Interesting to note that a later version has no reference to analogy: "application of name or descriptive term to an object to which it is not literally applicable (e.g.a glaring error), instance of this; mixed metaphor, combination of inconsistent metaphors." This is from the Pocket Oxford 1964. The example given is actually one of personification].

3. Owen Barfield in "Poetic Diction and Legal Fiction", in Essays presented to Charles Williams (Oxford 1947) pp.106-127 who defines metaphor as "saying one thing and meaning another".

The substitution view means metaphors have a literal equivalent:

> The author substitutes M (meaning the metaphorical expression) for L (literal expression); it is the reader's task to invert the substitution, by using the literal meaning of M as a clue to the intended literal meaning of L. Understanding a metaphor is like deciphering a code or understanding a riddle.2

This is only true I believe with newer metaphors. Many are understood as a

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1. Max Black, Models and Metaphors, Cornell University Press, New York, 1952,p.30.

2. Ibid.,p.33.

code e.g dead metaphors, jokes, jargon. For Black, metaphor "plugs the gaps in the literal vocabulary",[1] by supplying words of equivalent meaning where no substitute ones exist. Science and maths for example use metaphors in this way. So used, says Black, "metaphor is a species of CATACHRESIS" i.e. "the use of a word in some new sense in order to remedy a gap in the vocabulary; catachresis is the putting of new sense into old words."[2] [It also usually means improper use of words, which he acknowledges but chooses to ignore.) He feels that any living language absorbs 'new' meanings for words in this way--and cites as an example the word 'orange' for both fruit and colour; which we would no longer consider as metaphor. However "when catachresis cannot be invoked, the reasons for substituting an indirect, metaphorical expression are taken to be stylistic."[3]

Words are used to give pleasure to readers--both in the solving of analogies and images created, and to add novelty. This subterfuge explains the function of metaphor when there is no real explanation for its use. This is therefore the decorative use of metaphor and Whately is quoted as saying that they are always a deviation from the "plain and strictly appropriate style." If this is so Black says they are scarcely useful for philosophy. His view of most figurative language is that it likewise inverts meanings as in e.g. irony, saying the opposite to what one means or hyperbole when one exaggerates meaning. What then he asks is the characteristic TRANSFORMING FUNCTION involved in metaphor? He sums up what he has said so far:

[It is] either ANALOGY or SIMILARITY. M is either similar or

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1. Max Black, _Models and Metaphors_, Cornell University Press, New York, 1952, p.32.

2. and 3. Ibid.,p.33.

> analogous in meaning to its literal equivalent L. Once the reader has detailed the ground of the intended analogy or simile (with the help of the frame, or clues drawn from the wider context) he can retrace the author's path and so reach the original literal meaning (the meaning of L). [1]

My criticism of this view of metaphor is that it is assumed that the receiver of the metaphor wants to get back to the original literal meaning which if this is so, does make the use of metaphor merely a trick or decoration, an unnecessary difficulty for the listener or reader. If he/she is struggling with the metaphor this may be needed. However, an apt metaphor tunes in as it were to its audience, is clever and yet reasonably obvious in most cases as with jokes e.g. a Fijian chief recently in an interview (at time of the Fijian coup) cleverly twisted the usual translation of Aotearoa 'Land of the long white cloud" to 'Land of the wrong white crowd'. Few New Zealanders would need to have this pun explained and traced back to the original expression. This sharing of mutually understandable information reflects our ability to play imaginatively with words and ideas, part of a necessary ability to cope with a complex world.

Black says that "if a writer holds that a metaphor consists in the PRESENTATION of the underlying analogy or similarity, he will be taking... a comparison view of metaphor."[2] This is really the same as a condensed or elliptical SIMILE "for it holds that the metaphorical statement might be replaced by an equivalent literal comparison."[2] He quotes Whately as saying: "The Simile or Comparison may be considered as differing in form only from a Metaphor; the resemblance being in that case STATED, which in in the metaphor is implied."[3]

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1. and 2. Max Black, Models and Metaphors, Cornell University Press, New York, 1952, p.35.

3. Ibid.,p.36.

An objection to this description or definition can be made on the grounds that LIKE or AS is not as strong (in weight or suggested emphasis) as IS; that in fact a metaphor is much more a statement of fact than a simile which simply invites comparison and can be rather tentative whereas a metaphor makes a definite declaration e.g. If I describe a place saying "It is Hell" rather than "It is like Hell" surely the latter expression is saying it is similar to or resembles Hell but gives no idea how much like Hell it is. It could also be like many other places also, whereas the metaphor states categorically IT IS HELL which must embrace every possible connotation of that place. Ironically my choice is a place of which we have no concrete evidence but nevertheless we have a concept of Hell (from religion, literature, mythology) as the ultimate in discomfort, degradation, misery and hopelessness. If this IS Hell can we go further?

This same strength can be seen in metaphor even when the copula is not used e.g.' Thatcher the milk-snatcher' a catch cry some years ago in the U.K. No doubt as to what the original inventor of that epithet thought of the British P.M. who was then Minister for Education and had stopped free milk issue in the schools. If we change this to 'Thatcher is like someone who snatches milk from young children' the force of the expression is gone, partly because of wordiness which weakens it.

Alexander Bain, quoted by Black says that "the metaphor is a comparison implied in the mere use of a term."[1] This idea of metaphor as condensed simile or comparison was a widely held view. Yet surely something condensed is more compressed and generally stronger than the original. Black thinks the comparison view stems from Aristotle in all probability because in the

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1. Max Black, Models and Metaphors, Cornell University Press, New York, 1952, p.36.

POETICS he says:

> Metaphor consists in giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to species, or on grounds of analogy.[1]

Black says the comparison view is accused of vagueness, but "metaphorical statement is not a substitute for formal comparison or any other kind of literal statement, but has its own distinctive capacities and achievements".[2]

Another view of metaphor which Black describes is the INTERACTION VIEW of metaphor, as expounded by I.A.Richards, "where the reader is forced to 'connect' the two ideas. In this 'connection' resides the secret and mystery of metaphor."[3] Further reference to this view is made in more detail in the next chapter.

Black says we now have to use metaphor to explain metaphor, a point I made previously. For instance he uses the metaphor 'filter' to analyse what a metaphor does. It assists the reader to use his system of associated commonplaces (this is a kind of folk-wisdom or accumulated experience). So the important fact here is not that the reader knows exactly what all the associations are, for a word used as a metaphor, but he has a range of experience which is 'readily and freely evoked'. For this reason a metaphor does not always translate into another culture or language with precisely the same impact. What I believe is being called on here is that cultural experience we all acquire, possibly some mythology, beliefs, ideas philosophy, religion, common practices and knowledge, the lore of one's

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1. Max Black, Models and Metaphors, Cornell University Press, New York, 1952, p.36.

2. Ibid.,p.37.

3. Ibid.,p.39.

time and place. It does not even have to be first hand experience, for example one need not have experienced an earthquake to have some idea of the effect of such an event. Likewise vicarious experience from literature can also be part of our knowledge. As Black says of the 'man as wolf' metaphor "it suppresses some details and emphasises others, in short [and this I feel is VERY important] ORGANIZES our view of man."[1]

Another analogy Black draws on is that of looking through the night sky through smoked glass which has some clear lines. What one sees is limited and controlled by those clear lines or spaces. Metaphor thus focusses our attention on just some aspects of a field of vision. Similarly in a game of chess the language used circumscribes how the game can be described to anyone else.

This circular account takes in all the various metaphorical shifts that occur in the understanding of particular metaphors. If there is too much metaphor, confusion occurs, as in mixed metaphors. In literature Black suggests the writer creates his own field as "a novel pattern for implications for the literal uses of the key expressions, prior to using them as vehicles for his metaphors," or, as he says, "they can be made to measure and need not be reach-me-downs."[2] This is like the author drawing us into his night sky or chess game. He reminds us also that a metaphor works in two directions e.g.if we call a man wolf-like we are also attributing something of human characteristics to the wolf.

It is probably worthwhile to give in full, Black's summary of the 'interaction' view and its seven claims:

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1. Max Black, Models and Metaphors, Cornell University Press, New York, 1952, p.41.

2. Ibid.,p.43.

(1) A metaphorical statement has two distinct subjects--a "principal" subject and a "subsidiary" one.
(2) These subjects are often best regarded as "systems of things" rather than "things."
(3) The metaphor works by applying to the principal subject a system of "associated implications" characteristic of the subsidiary subject.
(4) These implications usually consist of "commonplaces" about the subsidiary subject, but may, in suitable cases consist of deviant implications established ad hoc by the writer.
(5) The metaphor selects, emphasises, suppresses, and organizes features of the principal subject by implying statements about it that normally apply to the subsidiary subject.
(6) This involves shifts in meanings of words belonging to the same family or system as the metaphorical expression; and some of these shifts, though not all, may be metaphorical transfers. (The subordinate metaphors are, however, to be read less "emphatically.")
(7) There is, in general, no simple "ground" for the necessary shift of meaning--no blanket reason why some metaphors work and others fail. 1

As he points out (1) is incompatible with the simplest forms of a "substitution view", and (7) is formally incompatible with a "comparison view", while the remaining points elaborate reasons for regarding "comparison views" as inadequate.

Black's analysis makes it clear that the term 'metaphor'as we have traditionally used it is too loose, too vague, too wide. Within the set of metaphors there are obviously many sub-sets. There is room as he says for the 'substitution view',the 'comparison view' and the 'interaction view'. These 'labels' fit different situations and different examples, but he believes it is the latter group which are of interest to philosophers. I would add that this area must also be of interest to teachers. He says :

> Substitution-metaphors and comparison metaphors can be replaced by literal translations (with possible exception for the case of catachresis) by sacrificing some of the charm, vivacity, or wit of the original, but with no loss of cognitive content. But 'interaction -metaphors' are not expendable [an important point]. They require

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1. Max Black, Models and Metaphors, Cornell University Press, New York, 1952, p.44.

> a distinctive intellectual operation (though one familiar enough through our experiences of learning anything whatever), demanding simultaneous awareness of both subjects but not reducible to any comparison between the two.1

Any literal meanings we try to replace them with will lack force and effect- most importantly "it fails to give the insight that metaphor did."[2] Explication of such metaphors does not reduce this power viz: literary criticism or Black's example of analysis of music.

His final comment in the chapter is "no doubt metaphors are dangerous and perhaps especially so in philosophy. But a prohibition against their use would be a wilful and harmful restriction upon our power of enquiry."[3] He might have added that they are also exciting, intriguing and endlessly fascinating.

Has Black in fact answered the questions he posed? He has given us clues for recognising metaphors but there is no specific definition or criteria to measure them with. His reference to a frame, a focus and a context are useful. He says translation is possible with those that are more nearly literal i.e. the analogous or comparative type (i.e. akin to simile) and that some are merely a form of catachresis. They can be decorative and used for creating interest, surprise and novelty. At their most creative they involve their readers. Black always refers to readers and never listeners as if the metaphor were peculiar to writers only, yet they are important orally too. The term 'metaphor' is too vague to give a definitive definition. To recognize a metaphor is to understand its allusive meaning (sometimes elusive). It will draw our attention either to an analogy

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1. Max Black, <u>Models and Metaphors</u>, Cornell University Press, New York, 1952, p.45.

2. Ibid.,p.46.

3. Ibid.,p.47.

or the equivalent of a literal transcription (substitution) or to a network of linked ideas to form new meanings. The traditional view has tended to be dominated by the metaphor as a type of simile and emphasis has been on its stylitic use. The new view sees a potential in the study of metaphor for revelations about how we think and perceive and communicate i.e. the focus now is on how and why we create metaphors--how they work-- what effect do they have--rather than whether they are really necessary. It is for this reason that philosophers and others are interested in them especially in the 'interaction view' of metaphor as first propounded by I.A.Richards. Their greatest merit then is the challenge presented by trying to understand their construction and their function.

One noted expert on metaphor is Paul Ricoeur of the universities of Paris and Chicago. His preoccupation with metaphor stems partly from his philosophical studies of such terms as evil, guilt, sin etc. because direct language does not adequately describe them: "We speak of evil by means of metaphors such as estrangement, errance, burden and bondage."[1] These terms are also often interwoven with narratives of myth explaining for example the origin of evil. First he wanted to inquire into the structure of symbolism and myth--then into hermeneutics as a general theory of symbolic language, before it became for him less romantic and more objective through the influence of structuralism:

> For structuralism, language does not refer to anything outside of itself, it constitutes a world for itself. Not only the reference of the text to an external world, but also its connections to an author who INTENDED it and to a reader who INTERPRETS it are excluded by structuralism.2

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1. Paul Ricoeur, <u>The Rule of Metaphor</u>, trans. by Robert Czerny, University of Toronto Press, 1977, p.316.

2. Ibid., p.319.

Thus he distinguishes between the 'objective' meaning of text as opposed to the 'subjective' intention of the author. What has to be interpreted in a text is what it says and what it speaks about, the 'world' it creates. So first he questions what it is to interpret symbolic language and secondly what it is to interpret text but the connection between the first and second definition is he says an unsolved problem. His concern therefore is for a philosophical hermeneutics.

Ricoeur's conclusion is that ordinary language in no way approximates to those 'ideal' languages constructed by logicians and mathematicians.

> The variability of semantic values, their sensitivity to contexts, the irreducibly polysemic character of lexical terms in ordinary language, these are not provisory defects or diseases which a reformulation of language could eliminate, rather they are the permanent and fruitful conditions of the functioning of ordinary language. This polysemic feature of our words in ordinary language now appears to me to be the basic condition for symbolic discourse and in that way, the most primitive layer in a theory of metaphor, symbol, parable etc. 1

Influenced by Wittgenstein and Austin, he also believes that ordinary language is

> ... a kind of conservatory for expressions which have preserved the highest descriptive power as regards human experience, particularly in the realms of action and feelings....the whole problem of text-interpretation could be renewed by the recognition of its roots in the functioning of language itself.2

Ricoeur seems to be saying 'back to basics'..look closely at language first to understand its uses, and also that in any discourse, communication, there are three elements the sender (whose exact meaning may not be clear in his words) the receiver (who interprets according to ability with that mode of discourse) and alternative interpretations which may be construed

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1. Paul Ricoeur, The Rule of Metaphor, trans. by Robert Czerny, University of Toronto Press, 1977, p.321.

2. Ibid., p.322.

by other listeners, readers, observers. They are not necessarily fused as in 'understanding'....can one ever know what interpretation another puts on what one has said or written? A word may not have meaning intrinsic to itself but once it is patterned in language it assumes shades of meaning as difficult to understand sometimes as to translate into another language. Is this unknown element the 'world' of structuralism ? It is certainly the challenge to the poet, to create this world. In functional discourse as in commands this is the element which one tries to eliminate. In areas where personal interpretation is important as in say prayer the language is more open. Who worries for instance what our interpretation of heaven is whereas it is vitally important in human terms to be able to read, for example, a poison warning or a job instruction.

Rhetoric was originally important because speech was: "A weapon, intended to influence people before the tribunal, in public assembly, or eulogy and panegyric; a weapon called upon to gain victory in battles where the decision hung on a spoken word."[2] But rhetoric died when the fashion for classifying figures of speech supplanted its political function. A clever rhetorician could be dangerous. One reason why Plato condemned it, because it could be an art of illusion and deception. Rhetoric and sophistry created doubt and suspicion. Metaphor has inherited some of this and been stigmatised as mere decoration or as lies until quite recently when the mystery of how it actually works has become of more concern, particularly as we have developed more insight into thinking processes and the nature of creativity in humans.

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1. Paul Ricoeur, The Rule of Metaphor, trans. by Robert Czerny, University of Toronto Press, 1977, p.16.

2. Ibid., p.10.

Aristotle's RHETORIC according to Ricoeur was an attempt "to institutionalise rhetoric from the point of view of philosophy",[1] especially the skills of argument from which it later got separated. He developed a link between the rhetorical concept of persuasion and the logical concept of the probable, as a necessary component of philosophy. Greek rhetoric "had not only a much broader program, but also a problematic decidedly more dramatic than the modern theory of figures of speech."[2] Poetics was a separate field of study:

> Poetics--the art of composing poems --as far as its function and its situation of speaking are concerned, does not depend on rhetoric, the art of defence, of deliberation, of blame, and of praise. Poetry is not oratory. Persuasion is not its aim; rather it purges the feelings of pity and fear....Metaphor however has a foot in each domain. With respect to structure, it can really consist in just one unique operation, the transfer of the meanings of words, but with respect to function, it follows the divergent destinies of oratory and tragedy. Metaphor will therefore have a unique structure but two functions: a rhetorical function and a poetic function.3

Thus Ricoeur perceives the problem of defining metaphor to lie in these two differences in structure and function. The semiotic description I have quoted earlier does not distinguish these two aspects, it is more concerned with structure. The rhetorical (in the sense of political eloquence) or what Aristotle defines as 'the art of inventing or finding proofs' is one field of metaphor and the poetic another where the aim is not to prove but to speak the truth by means of fiction, fable and tragic muthos, what Ricoeur calls two distinct universes of discourse. These divisions persist in some minds to the present day.

To Ricoeur metaphor is a strategy of discourse and he thinks that

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1. Paul Ricoeur, The Rule of Metaphor, trans. by Robert Czerny, University of Toronto Press, 1977, p.11.

2. Ibid., p.11.

3. Ibid., p.12.

imagination must cease being seen as a function of the image, in the quasi-sensorial sense of the word, for it consists rather in 'seeing as', a Wittgensteinian expression. So for Ricoeur "metaphor is the rhetorical process by which discourse unleashes the power that certain fictions have to redescribe reality."[1] By linking fiction and redescription in this way he believes that we restore full depth and meaning to Aristotle's discovery that the POIESIS (poetry) of language arises out of the connection between MUTHOS (fable or plot) and MIMESIS (imitation). He therefore concludes that:

> ...the 'place' of metaphor, its most intimate and ultimate abode, is neither the name , nor the sentence, nor even discourse, but the copula of the verb TO BE. The metaphorical 'is' at once signifies both 'is not' and 'is like'. If this is really so, we are allowed to speak of metaphorical truth, but in an equally 'tensive' sense of the word 'truth'.2

Ricoeur concludes that there is a plurality of modes of discourse and each impinges on the other but no philosophy for instance flows directly from poetry. Nor is there "a non-metaphorical standpoint from which one could look upon metaphor and all the other figures for that matter, as if they were a game played before one's eyes."[3]

More recently Ricoeur has considered a particular aspect of metaphor theory, exploring the metaphorical process as cognition, imagination and feeling--a problem falling between semantic and psychological theories of metaphor. He is interested in the capacity of metaphor to give us information and insights about reality in a form not easily translated. Images and feelings, he says, are usually only considered in those theories which do

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1. Paul Ricoeur, The Rule of Metaphor, trans. by Robert Czerny, University of Toronto Press, 1977,p.7.

2. Ibid.,p.7.

3. Ibid.,p.18.

not inform or claim to reveal truth, in such they are considered "substitutive explanatory factors,"[1] that is they evoke images and feelings which are mistakenly taken as truths or insights.

Ricoeur's thesis is that "it is not only for theories which deny metaphors any informative value and any truth claim that images and feelings have a CONSTITUTIVE function."[2] He believes that theories such as those of Richards, Black, Beardsley and Berggren, fail to achieve their goals, if not "assigning a SEMANTIC function to what seem to be mere PSYCHOLOGICAL features and without, therefore, concerning itself with some accompanying factors extrinsic to the informative kernel of metaphor."[3] He claims that feeling as well as imagination are genuine components in the process described in an interaction theory of metaphor "They both achieve the semantic bearing of metaphor."[4] It is also Heidegger's thesis that we are attuned to reality mainly through feelings.

Ricoeur believes that Aristotle hinted at the semantic role of imagination, and therefore by implication, feeling also, in a metaphorical sense for he refers to the PICTURING FUNCTION of metaphorical meaning. We speak says Ricoeur of FIGURES of speech "as though tropes gave to discourse a quasi-bodily externalization. By providing a kind of figurabiity to the message, [humanizing them] the tropes make discourse appear."[5] Other writers such as Jakobson, Todrov and Genette have also commented on this giving of form to language. What therefore is this semantic role asks Ricoeur. "It seems that it is in the work of RESEMBLANCE that a pictorial or iconic

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1. Paul Ricoeur, 'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978, p.141.

2. 3. and 4. Ibid., p.141.

5. Ibid., p.142.

moment is implied."[1]

Metaphor in classical rhetoric was described as a term of DEVIANCE, but, "this deviance was mistakenly ascribed to denomination only,"[2] merely a change of name. So chiefly it was used to name new things, to decorate discourse and to persuade or please. In Black's interaction theory (as opposed to substitutive theory) we see that "The bearer of the metaphorical meaning is no longer the word but the sentence as a whole."[3] It is no longer simply a name for a name, which is really metonymy but "an interaction between a logical subject and a predicate."[4]

If metaphor consists in some deviance--this feature is not denied but is described and explained in a new way-- this deviance concerns the predicative structure itself. Metaphor then has to be described as a deviant predication rather than as a deviant denomination."[5] Jean Cohen has described this as semantic impertinence. A new pertinence or new congruence arises as a result. Classical rhetoric overlooked the production of this "semantic twist" at the level of sense and "While it is true that the effect of sense is focussed on the word, the production of sense is borne by the whole utterance...the theory of metaphor hinges on a semantics of the sentence."[6] Ricoeur focusses now on the metaphor-maker:

> The MAKER of metaphors is this craftsman with verbal skills WHO, from an inconsistent utterance for a literal interpretation, draws a significant utterance for a new interpretation which deserves to be called metaphorical because it generates the metaphor not only as deviant but as acceptable."7

There are two aspects of this which I would draw attention to, one is that where he uses the term 'inconsistent' it is suggesting that the maker of

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1. 2. 3. 4. and 5. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling',in <u>On Metaphor</u>, Sheldon Sacks,University of Chicago Press, 1978.p.143.

6. and 7. Ibid.,p.144.

metaphor is perhaps not aware of his inconsistence but presumably he is in fact deliberately inconsistent for a metaphorical purpose. Acceptance of a metaphor is not guaranteed either. What a metaphor-maker considers a metaphor can in fact fail like a misunderstood joke can fail. This also does not take into account the reception of the metaphor by the listener or hearer, a factor scarcely ever considered by the various theories of metaphor, it only implies that the maker is aware of his own metaphor. However what Riccoeur says is true and disagrees with Mooij's idea of a 'clash':

> In other words metaphorical meaning does not merely consist of a semantic clash but of the NEW predicative meaning which emerges from the collapse of the literal meaning, that is from the collapse of the meaning which obtains if we rely only on the common or usual lexical values of our words. The metaphor is not the enigma but the solution of our enigma.1

Ricoeur's ideas put more emphasis on the creativity of the person constructing the metaphor and also on the effect it has even if he does not specifically mention the receiver. He is concerned then with the received meaning which arises as a result of the making of a metaphor.

It is in the mutation characteristic of the semantic innovation that Ricoeur says that similarity and imagination play a role--not in Humean terms of the image as a faint impression or perceptual residue--or the tradition inherited by Jakobson in which imagination "can be reduced to the alternation between two modalities of association."[2] What we have to understand says Ricoeur is:

> ...a mode of functioning of similarity and accordingly of imagination which is immanent--that is, nonextrinsic--to the predicative process itself. In other words, the work of resemblance has to be appropriate and homogeneous to the deviance and the oddness and the freshnesss and of the semantic innovation itself. 3

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1. and 2. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978.p.144.

3. Ibid.,p.145.

The answer, Ricoeur thinks, began with the interaction theory of metaphor in delineating but not solving "the transition from literal incongruence to metaphorical congruence betwen two semantic fields."[1] He now uses a metaphor of space, a logical space.

> It is as though a change of distance between meanings occurred within a logical space . The NEW pertinence or congruence proper to a meaningful metaphoric utterance proceeds from the kind of semantic proximity which suddenly obtains between terms in spite of their distance. Things or ideas which were remote now appear as close. Resemblance ultimately is nothing else than this rapprochement which reveals a generic kinship between heterogeneous ideas. 2

This transfer or shift of meaning is what Aristotle called the epiphora of the metaphor. An appropriate theory of imagination must draw on Kant rather than Hume, thinks Ricoeur, and on Kant's concept of productive imagination as "SCHEMATIZING A SYNTHETIC OPERATION." There are three steps; in the first, imagination is understood as the 'seeing', still homogeneous to discourse itself, which effects the shift in logical distance. This is insight into likeness which is both a thinking and a seeing and he suggests that we call this productive character of the insight "PREDICATIVE ASSIMILATION." This is likened to the attraction of atoms. It is interesting that he uses a scientific analogy to explain what has traditionally been considered a literary phenomena. "The assimilation consists precisely in MAKING similar, that is semantically proximate, the terms that the metaphorical utterance brings together."[3] The tension created is not that between a subject and predicate but between semantic incongruence and congruence. Imagination therefore produces under what Ricoeur calls its quasi-verbal aspect rather than its quasi-optical aspect new kinds of

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1. and 2. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978.p.145.

2. Ibid.,p.146.

assimilation.

> "Remoteness" is preserved within "proximity". To see THE LIKE is to see the same in spite of, and through, the different. This tension between sameness and difference characterizes the logical structure of likeness. Imagination, accordingly is this ABILITY to produce new kinds by assimilation and to produce them not ABOVE the differences, as in the concept, but in spite of and through the differences.1

Gadamer has concluded says Ricoeur that metaphors allow us to glance at the general procedure by which we produce concepts. Presumably concepts are more embedded in our geological layers as Vygotsky calls them. This whole process Ricoeur describes as schematism of metaphorical attribution. He believes that the visual or what he calls the pictorial dimension is not fully accounted for by Richard's distinction between tenor and vehicle. Henle has said that "If there is an iconic element in metaphor it is equally clear that that the icon is not presented, but merely described." And further "What is presented is a formula for the construction of icons."[2] It is the discourse which sets the imaging in motion:

> Imaging or imagining, thus, is the concrete milieu in which and through which we see similarities. To imagine, then, is not to have a mental picture of something but to display relations in a depicting mode.3

This is why as previously mentioned Ricoeur sees Wittgenstein's 'seeing as' as apt. In The Meaning of Poetic Metaphor says Ricoeur, Hester has extended this concept to poetic or bound images where "the metaphorical sense is generated in the thickness of the imagining scene displayed by the verbal structure of the poem."[4] Ricoeur sees that the intuitive grasp of a predicative connection functions in a similar way.

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1. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978.p.146.

2. and 3. Ibid.,p.148.

4. Ibid.,p.149.

Metaphorical meaning is then says Ricoeur "the inner functioning of the proposition as a predicative operation"[1] as in Black's 'filter' or the 'screen' effect of the subsidiary subject on the main one. Meaning is what Frege calls SINN (sense) as opposed to BEDEUTUNG (reference or denotation). The referential and the poetic function of metaphor seem somewhat problematical. Ricoeur says that there is a point when the theory of metaphor tends to merge with that of models and they become a way of looking at the world. They are what has been called 'insightful.' Besides reference we assume some search for truth. Ricoeur suggests that the expression 'split reference' takes care of this problem, and he reminds us of Majorcan storytellers who begin their tales with: AIXO ERA Y NO ERA (it was and it was not). Likewise the poetic metaphor. What this suggests is that we can find in a metaphor several levels of reference which may relate to various levels of thinking of which we are capable. Cirlot describes various levels: "the subconscious (instinctive and affective thought); consciousness (ideological and reflexive thought; and superconsciouness (intuitive thought and higher truths)", though in Jungian terms he says that 'subconscious' would be called 'unconscious'. This may be what Riceour is suggesting when he speaks of primordial reference that "suggests, reveals, unconceals...the deep structures of reality to which we are related as mortals who are born into this world and who DWELL in it for a while."[3]

One can see that to explain metaphor becomes metaphysical for there is an element of mystery not about how a metaphor appears to be constructed

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1. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978.p.146.

2. Ibid.,p.149.

3. Ibid.,p.151.

or recognized but both how it comes about and how it achieves its effect.

The sense of a novel metaphor says Ricoeur "is the emergence of a new semantic congruence or pertinence from the ruins of the literal sense shattered by semantic incompatiblity or absurdity."[1] All of which has led people such as Berggren to conclude that: "The possibility or comprehension of metaphorical construing requires, therefore, a peculiar and rather sophisticated intellectual ability" which has been described by W.Bedell Stanford as "stereoscopic vision."[2] Ricoeur believes this to be the same as 'split reference', Jakobson's term , or ambiguity in reference. Imagination he thinks does not merely SCHEMATIZE or PICTURE the sense from the images aroused it is also involved in what Ricoeur terms EPOCHE or suspension, that is to the PROJECTION of new possibilities of redescribing the world. I have said elsewhere that in making metaphors we are only ever truly creative and this assertion by Ricoeur upholds this idea. He says the poet is "this genius who generates split references by creating fictions."[3]

Imagination and feeling have always been linked in classical theories of metaphor, and he believes that feeling and imagination are genuine components in the process known as the interaction theory of metaphor "They both achieve the semantic bearing of metaphor."[4] Ricoeur distinguishes between emotion and feelings which accompany imagination in the work of SCHEMATIZATION, For the new congruence is 'felt' as well as 'seen'. As a person we are assimilated in the predicative and "We feel LIKE what we see

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1. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978.p.146.

2. Ibid.,p.151.

3. and 4. Ibid.,p.153.

LIKE."[1] Feelings help to make the schematized thought our own. When we speak of poetic feeling he says that it abolishes the distance between knower and known, it is not contrary to thought "It is thought made ours."[2] Frye explains this, when he speaks in Anatomy of Criticism of 'mood', which is how the poem affects us as an icon, and according to Goodman's concept of DENSE v.DISCRETE symbols "Dense symbols are felt as dense."[3] Feelings also have split reference for when reading says Ricoeur we do not literally feel e.g. anger or fear. The terror and pity experienced in tragedy for example "are both a denial and transfiguration of fear and compassion."[4] Ricoeur's suggestion is that:

> There is a STRUCTURAL ANALOGY between the cognitive, the imaginative, and the emotional components of the complete metaphorical act and that the metaphorical process draws its concreteness and its completeness from this structural analogy and this complementary functioning.5

Metaphors then are quite complex even if they are easy to recognize. A musical analogy seems appropriate, for like the separate notes which make up a new sound or chord in music the parts of a metaphor create new meaning. Nelson Goodman has described metaphor as both important and odd for:

> Metaphorical use of language differs in significant ways from literal use but is no less comprehensible, no more recondite, no less practical, and no more independent of truth and falsity than is literal use. Far from being a mere matter of ornament, it participates fully in the progress of knowledge: in replacing some stale "natural kinds with novel and illuminating categories, in contriving facts, in

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1. Paul Ricoeur,'The Metaphorical Process as Cognition, Imagination, and Feeling', in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978.p.154.

2. Ibid.,p.154.

3. Ibid.,p.154.

4. Ibid.,p.155

5. Ibid.,p.156.

revising theory, and in bringing us new worlds.[1]

In one of the most recent works on metaphor David Cooper explains why an understanding of the phenomenon of metaphor is "an urgent task for the philosophy of language",[2] and not just for poetics and rhetoric. He recalls little useful teaching on metaphor at school, but two writers have impressed him with their work on metaphor--Nietzsche and Pascal. Nietzsche, because he considered metaphor the basic principle of language and so-called 'literal' talk "a kind of frozen sediment of metaphor."[3] Pascal was interested in the figurative language of the Bible which he believes is in ciphers which only the good can truly understand but which has some meaning for all of us for we are fond of symbols and "the things of God are inexpressible, they cannot be said in any other way."[4] He is intrigued, as is Hegel, as to why people talk metaphorically. As Cooper says, of Pascal "his thoughts on metaphor nicely encapsulate some of the perennial tensions in reflections on this subject,"[5] even if he himself is not aware of this tension.

Most other writers are divided, he believes, on whether metaphor is a 'cognitive' tool or an 'aesthetic' device. They vacillate between "a metaphor is a condensed model" or "a metaphor is a poem in miniature."[6] The first thing we need to know about metaphor says Cooper is what it is,

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1. Nelson Goodman, Metaphor as Moonlighting, in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978, p.175.

2. David Cooper. Metaphor,Basil Blackwell,Oxford 1986,p.12.

3. Ibid.,p.2.

4. Ibid.,p.3.

5. Ibid.,p.4.

6. Ibid.,p.5.

but there are no definitions available, therefore we must see where metaphor resides or "What are the bearers or vehicles of metaphor."[1] First Cooper thinks we should decide on two major categories--the literal and the non-literal and how to distinguish these; also how to distinguish metaphor from its relatives such as metonymy, irony and synecdoche. He looks at various examples of figurative language and decides "there is no generally intuitive ability to identify metaphors."[2] Aristotle included them all under the umbrella of metaphor and was criticised for so doing. Now says Cooper we are seeing a reversal to his more generous term because of dissatisfaction with terms such as trope, figure etc. This reflects a general shift, he believes, from an intellectual preoccupation with classification to more recent demands for theories of language.

Hobbes and Locke typify the old school who saw metaphor as an 'abuse' and inimical to 'ratiocination'. Max Black rescued metaphor and showed it to be a distinct mode of activity. Cooper says that Symbolic theories such as those of Mallarme and Valery were influential also. Valery believed metaphor evoked earlier stages of language and that the poet who multiplied figures was only finding within himself language in its natural state and seeing a world of extraordinary associations. Among others Ullman subordinates metonymy to metaphor and Umberto Eco writes:

> A metaphor can be invented because language, in its process of unlimited semiosis, constitutes a multi-dimensional network of metonymies...all associations...are (first) grasped as a contiguity internal to semantic fields. 3

It is difficult to distinguish metaphor from so-called literal

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1. David Cooper, Metaphor, Basil Blackwell, Oxford, 1986, p.5. note: not vehicles in Richards' sense of the word.

2. Ibid., p.11.

3. Ibid., p.20.

language because some would assert that even words like 'at' or 'up to' can be used metaphorically and literal translations can also contain metaphors. Some authors insist that phrases such as 'win an argument' or 'attack another's position ' are not poetic, fanciful or rhetorical and cannot be claimed to be metaphoric--they are to all intents and purposes literal--Cooper would say they were merely dead metaphors and I would agree with him. People who refuse to accept such as metaphor are avoiding the issue and the fact that the most 'ordinary' language is imbued with metaphor, it is almost inescapable. Cooper states his view quite clearly "If expressions really are metaphorical, then they are not literal--however familiar and mundane they may be."[1]

Jacques Derrida's work says Cooper, shows us how "the language of metaphysics--the language of 'ideas', 'concepts', 'substances', 'essences', and so on is imbued with faded metaphor."[2] 'White Mythology', to which Cooper is referring is apparently taken from Anatole France's story and the words "sad poets, they take the colour out of ancient fables, and are no more the collectors of fables. They produce a white mythology."[3]

Hegel said dead metaphors had lost their power to call up ideas and Heidegger that "the metaphorical exists only within metaphysics."[4] Derrida sums up the difficulty..."what constitutes the concept of metaphor is the opposition of literal (propre) and non-literal...of intuition and speech, of thought and language." This statement comes closer to embracing the complexity of metaphor. As he says senses although non-physical, have to

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1. David Cooper, Metaphor, Basil Blackwell, Oxford, 1986, p.21.

2. Ibid., p.23.

3. Ibid., p.23.

4. Ibid., p.25.

be portrayed in "a language saturated with the terminology of the physical."[1] That is to say that we only have the physical to explain the non-physical. It rests as Derrida says on "l'unique these de la philosophie."[2]

Cooper agrees that many theories so far have simply confused the issue. The nominalist perspective says that similarity is an illusion which we create with words, so the nominalist must either, says Cooper, deny the literal metaphysical distinction or draw it in a totally circular manner and thus metaphor rejects nominalism. The most obvious signal for metaphor is that of the falsity of any literal 'translation', but those analysing it so far have usually concentrated on "the reality or otherwise of certain related distinctions: the necessary and the contingent, the conceptual and the empirical, and above all perhaps, the analytic and synthetic...Any definition of metaphor which relies on unreflective adherence to these distinctions is unsatisfactory for this reason alone."[3] So those who focus on how a metaphor "violates the semantic rules and boundaries between categories" are wrong in Cooper's estimation, for the terms they use are equally unclear.[4] Such a one is Jean Cohen who says that "all semantic figures of rhetoric [are] violations of fundamental principles of logic"...[5] He admits to a degree of violation but Cooper argues that there cannot be degrees of contradiction or validity. He has also compared speaking to chess-playing where 'unstable' or 'implicit' rules can be broken. If there are rules says Cooper, he fails to give an account of them.

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1. and 2. David Cooper, Metaphor, Basil Blackwell, Oxford, 1986, p.26.

2. Ibid., p.30.

3. Ibid., p.31.

4. Ibid., p.32.

Recent philosophizing on metaphor has therefore looked to a more holistic view of metaphor and the division between the literal and the non-literal The disciplines particularly involved are semantics, pragmatics, poetics and rhetoric--but it has also come to the attention of psychologists and sociologists. Jakobson has told us how sufferers from aphasia confuse metaphor and metonymy--handling only one or mistaking one for the other--which has led him to consider that we have two basic modes of relation "the internal relation of similarity (and contrast) underlies the metaphor; the external relation of contiguity (and remoteness) determines the metonymy."[1] Cooper agrees with this and considers this work seminal but not with Jakobson's attempts to integrate his idea with Saussurean semiotics and a theory of discourse, because such attempts "treat non-literal talk as if it were a detachable linguistic skill which might be studied in isolation."[2]

Sociologists have been interested, particularly since the Frankfurt School, in social intercourse and the political functions of metaphor. Lakoff and Johnson wrote that "a metaphor in a political or economic system by virtue of what it hides, can lead to human degradation."[3] They give us an example, the persistent metaphorizing of human labour as a natural resource to be tapped. This is endemic in current job advertisements where the phrases 'human resources' and 'human resource development' are used.

Roland Barthes draws interesting links with myth where the speakers can never be pinned down to be responsible for what they speak of. This device is used in ordinary language and can become a powerful tool, in his

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1. David Cooper, <u>Metaphor</u>, Basil Blackwell, Oxford, 1986, p.35.

2. Ibid., p.38.

3. Ibid., p.40.

eyes, the hands of the bourgeoisie. So language is a powerful force which power groups can use to wield control even by suggestion. Advertisers exploit this power also. Cooper speaks also of the Child as poet myth. "This is one favoured by 'progressive' educators, of the child as a naturally creative being, the organic development of whose talents must not be interfered with, but gently nurtured by his green-fingered teachers."[1] He suspects this myth as well he might for we are aware that even gardeners can poison plants and the environment is not always healthy for growing organisms. The metaphor of education he is so sceptical of is discussed more fully in a later chapter of this work.

As Cooper sees it metaphor has become an important topic because of three main factors: Our need to fit metaphor into an overall account of language, our awareness of how pervasive metaphor is and therefore of the need to understand its workings and the recognition of its power "as a vehicle of knowledge and truth."[2] Cooper looks at metaphor from a philosophical angle though he is aware of all the other interested viewpoints too. However, like them, even when he describes their definitions and standard views he still seems to be searching for one himself. The problem seems to be how to define the undefinable.

Reading a metaphor might well be likened to reading a very complicated map and trying to discern not only the direction of a route but all the relational aspects such as road levels, nature of the locality, flora, fauna and weather conditions, all in an instant. Familiarity with the terrain would be helpful but the impact of a metaphor comes from its novelty so one is never to know in advance what map page one will need to read.

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1. David Cooper, Metaphor, Basil Blackwell, Oxford, 1986, p.43.

2. Ibid., p.43.

Many writers testify to the rich use of metaphor in the writings of Nietzsche. J.P.Stern finds it difficult to decide whether Nietzsche's style is philosophic or literary. He tells us that Nietzsche had a loathing of democracy and for the fragmentation of knowledge. He also claimed that language "far from giving us a true account of things as they are in the world, and far from having its grounds in reality, is in fact no more than a referentially unreliable set of almost arbitrary signs."[1] Language, he said is related to 'the hygiene of life', its principal function to hide the hostile universe from men and from it we would get no knowledge of a world beyond.

In 'The Birth of Tragedy' says Stern, "a pre-rational, instinctive intuition of primal suffering and fear is postulated as the grounding of humanity."[2] The world, to Nietzsche, works on an illusion, on an 'as if' principle. We act as if we were in touch with a benevolent reality. This is a key theme in his work says Stern and explains his style which captures "with metaphorical intimations of divers spheres of experience...the metaphorically inexact intimation of our being in the world."[3] That is, that the relationship between words and the real world is a metaphoric or aesthetic one. To Nietzsche all words are metaphors:

> What then IS truth? A mobile army of metaphors, metonymies, anthropomorphisms--in short, a sum of human relations which poetically and rhetorically intensified, became transposed and adorned, and which after long usage by a people seem fixed, canonical and binding on them. Truths are illusions which one has forgotten ARE illusions... 4

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1. J.P.Stern,'Nietzsche and the idea of metaphor',in Nietzsche: Imagery and Thought ed. Malcolm Pasley, Methuen,London,1978.p.67.

2. Ibid.,p.67.

3. Ibid.,p.68.

4. Ibid.,p.70.

They are likened to coins no longer current. Concepts are described as "the residue of metaphors"[1] and scientific language is said to come also from the common ground of metaphor. So truth is something we agree on merely to play a game as we might do with dice.

Nietzsche considers language primarily as an aesthetic phenomenon. Metaphors become 'hard' and 'fixed' in meaning from long usage and can become instituionalized just as individual experience can. Stern finds that Nietzsche seems to have little time for single discrete insights or feats of human endeavour "he always favours the unique against repetition, genius against justice"[2] and assigns to aesthetic activity a central role in human experience: "his understanding of it as a mode of experience which, more than any other mode, escapes the sphere of association and lives by the appearance of uniqueness."[3]

The person who epitomizes this, says Stern, is not Goethe but Rilke "ONCE, each thing but ONCE. ONCE and no more. And we also are ONCE. Never again..."[4] Nietzsche's rejection of the sphere of association is criticized by Stern and seen by him as a German tradition which can be traced back to Luther and beyond.

Our real experiences, Nietzsche believed, cannot be communicated with words:

> ...Whatever we have words for, we have already outgrown. In all talk there is a grain of contempt. Language, it seems, has been invented only for the average, for the middling and communicable. Language vulgarizes the speaker. 5

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1. J.P.Stern,'Nietzsche and the idea of metaphor',in <u>Nietzsche:Imagery and Thought</u> ed. Malcolm Pasley, Methuen, London,1978.p.71.

2. 3. and 4. Ibid.,p.73.

5. Ibid.,p.74.

Yet, he had a passion for writing. Perhaps he should have been a painter for art can also be seen as metaphor. Metaphors, Nietzsche thinks, are perhaps as near as we can get to an ideal word-free world. In the world we have, the artist is supreme "Art is then neither esoteric and marginal, nor in any way dispensable, but becomes the human activity PAR EXCELLENCE: it IS creative existence."[1]

Our existence appears to be justified by aesthetic experience and expression. Meaning is imprinted on the world by man-made metaphors. Nietzsche has suggested "the existence of a hostile universe of silence before and beyond language within which the little human world of language is an oasis of life, of comfort and sustenance, but not of truth."[2] Language then merely enables us to cope with living in the world, it is not truly part of it.

Man can only experience harmony with the world in the act of creation. The artist is nevertheless aware of the metaphorical and 'lying' nature of all his productions. This is what Nietzsche calls the divine comedy of life--living and suffering with the scenes or shadows of life. For Nietzsche life is never a concept but a vision, a metaphor: "The metaphysics of metaphor is a sample and paradigm of the metaphysics of being."[3]

Life is seen by Nietzsche as a game, a sport [We are as wanton flies to the Gods ?] His ideas have been criticised and he is seen as indulgent in metaphor-mindedness. Critics try to demythologise him says Stern and others see him as a poet. Stern sees him as using "a mode of writing

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1. J.P.Stern,'Nietzsche and the idea of metaphor', in Nietzsche: Imagery and Thought ed. Malcolm Pasley, Methuen,London,1978.p.75.

2. Ibid.,p.76.

3. Ibid.,p.77.

somewhere between the individualism and concern with particulars which is the language area of fiction and poetry, and conceptual generalities and abstractions which make up the language area of traditional Kantian and post-Kantian philosophy."[1] The metaphor that he uses for language that of currency or coinage "is intended as an intermediary between two modes of thinking and writing, as a pattern which determines neither a narrative line nor a piece of philosophical poetry or 'Begriffsdichtung' but a philosophical argument."[2] It is neither poetry nor prose nor aphorism but a middle mode which Stern calls 'literary-philosophical' to preserve "the dynamic, unsteady, the irregular and above all the individualized nature of life."[3]

Nietzsche therefore created a style of his own as if he refused to acknowledge any order, rules or laws because in reality there are none. As Stern says "Language, metaphor and thought are related to the real world as patterns and paradigms of our being"[4] and Nietzsche challenges the divisions we make so artificially between science and imagination, between 'concept' and 'metaphor', 'abstract' and 'concrete'. For him philosophy and literature intertwine. The fragmentation of knowledge, says Stern, Marx, Carlyle and Mathew Arnold also saw as one of the chief blights of Western civilisation. I believe they would now also consider them one of the greatest blights in education where the various disciplines find it difficult to communicate with each other.

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1. J.P.Stern,'Nietzsche and the idea of metaphor', in<u>Nietzsche: Imagery and Thought</u>ed. Malcolm Pasley, Methuen,London,1978.p.79.

2. Ibid.,p.79.

3.and 4. Ibid.,p.80.

Ted Cohen sees that attitudes to metaphor have changed particularly since Max Black's seminal work, arguing as we have seen for their "cognitive" status. To prove whether metaphors do contribute to meaning Cohen considers that we have to explore and understand how metaphors are made and responded to and whether they are matters of meaning. For his own part he is content to consider what use they are and he is led to believe that they are peculiarly crystallized works of art which achieve intimacy.

Even though there can be intimacy in the literal use of language sometimes we wish to share a "cooperative act of comprehension...something more than a routine act of understanding."[2] Metaphors create more than basic communication, they offer a sense of community. Like jokes and jargon they create a sense of comradeship, "for a figurative use can be inaccessible to all but those who share information about one another's knowledge, beliefs, intentions and attitudes. I think the community can be as small as you like, even a solitary pair...surely the self-dialogue of the soul is often figurative."[3]

Cohen concludes that "There can be no effective procedures for dealing with metaphors"[4] no routine method, for one must detect them as one does jokes and unravel them as they come. One must not presume however that such intimacy is always desirable for it can be generated as he says for malicious purposes. The cruel joke is one example but propaganda and advertising also exploit the power of metaphor.

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1. Ted Cohen, Metaphor and the Cultivation of Intimacy, in On Metaphor, ed. Sheldon Sacks, The University of Chicago Press, Chicago, 1979, p.4.

2. Ibid., p.7.

3. Ibid., p.8.

4. Ibid., p.9.

Susanne Langer in her study of the symbolism of reason, rite and art seems to favour a theory of language origin which relates to how sound became symbolic, particularly to one advanced by J. Donovan, that the voice was used like a musical instrument which played with rhythm and patterns of sound enjoyed particularly in early dance and ritual rites. His theory is interesting because it advances the idea that the original use of language consisted in "NAMING, FIXATING, CONCEIVING objects"[1] and the communicative use of words is a secondary application of something already developed at a deeper psychological level. Langer favours this idea because "it suggests the very early, very primitive operation of METAPHOR in the evolution of speech,"[2] for to her mind the nature of metaphor cannot be understood without a symbolistic rather than a signalistic view of language. Literal language she describes as "a stiff and conventional medium, unadapted to the expression of genuinely new ideas, which usually break in upon the mind through some great and bewildering metaphor."[3] The strength of metaphor is its generality, a vital principle of language and perhaps all symbolism. Our language is of course full of now 'faded' metaphors and "only the novel predication can be metaphorical."[4]

> Metaphor is our most striking evidence of ABSTRACTIVE SEEING, of the power of human minds to use presentational symbols. Every new experience, or new idea about things evokes first of all some metaphorical expression....The use of metaphor can hardly be called a conscious device. It is the power whereby language, even with a very small vocabulary, manages to embrace a multimillion things; whereby new words are born and merely analogical meanings become stereotyped into literal definitions...

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1. Susanne K.Langer, Philosophy in a New Key, Harvard University Press, Cambridge, Massachusetts, U.S.A., 1942, p.132.

2. Ibid., p.132.

3. Ibid., p.201.

4. Ibid., p.140.

> One might say that, if ritual is the cradle of language, metaphor is the law of its life. It is the force that makes it esentially RELATIONAL, intellectual, forever showing up new, abstractable FORMS in reality, forever laying down a deposit of old, abstracted concepts in an increasing treasure of general words.1

Every word has a history says Langer and Vygotsky who speaks of language and speech as a psychological tool also says that, like the genetically differentiated layers in human behaviour a concept may have different roles depending which layer is activated. He found that word meanings are dynamic rather than static formations, and that thought and word are not cut from one pattern "The structure of speech does not simply mirror the structure of thought; that is why words cannot be put on by thought like a ready-made garment."[2] To understand another's speech it is not sufficient to understand his words we must understand his thought and also his motivation. This is the point Cohen makes about understanding metaphors. Vygotsky concludes from his research into the relation between thought and speech that:

> Thought and speech turn out to be the key to the nature of human consciousness...Consciousness is reflected in a word as the sun in a drop of water. A word relates to consciousness as a living cell relates to a whole organism, as an atom relates to the universe. A word is a microcosm of human consciousness.3

A metaphor as we have seen can be constructed from one word or many. The origin of language is still in dispute but what we know of the nature of metaphor, even if it is almost impossible to define, is obviously significant, for we are metaphor-makers moulded in part by the metaphors of those who have gone before us.

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1. Susanne K.Langer,Philosophy in a New Key,Harvard University Press,Cambridge,Massachusetts, U.S.A.,1942,p.141.

2. Lev Vygotsky,Thought and Language,MIT Press, Cambridge, Massachusetts,1987, 219.

3. Ibid.,p.256.

CHAPTER II

METAPHOR AS LITERARY DEVICE

> The poet by his conscious use of metaphor, is actively engaged in a 'stretching' process whereby new areas of reality are constantly enclosed in the language, new dimensions of experience recorded, and made available within its confines. 1

Terence Hawkes gives a clear overview of metaphor in literature. From an explanation of the original meaning of the word META meaning 'over' and PHEREIN 'to carry', to a realisation that the very notion of metaphor "itself is shaped at any given time by linguistic and social pressures, as well as by its own history: it has no pristine form."[2] Quintilian, he thinks, summarises the classical attitude to metaphor as something to be used on appropriate occasions, to achieve the 'sublime'. This is the legacy inherited by writers since.

> Where Aristotle had simply isolated metaphor and distinguished four types of it ...Quintilian and others seemed to REDUCE metaphor to one of a group of tropes which themselves form part of the merely decorative category of Figures of Speech. As such, it has no real claim to positive 'meaning' in its own right, since it works negatively by subverting the proper meanings of words.3

Consequently some have considered that we could well do without metaphor.

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1. Terence Hawkes, Metaphor, Methuen, London, 1972, p.63.

2. Ibid., p.5.

3. Ibid., p.14

To the Christian mediaeval society the world appeared, says Hawkes, like a book written by God and the world was full of His metaphors. The poet's task was not to express his own view of the world but to discover God's meaning. And by the time of Donne poets looked for order in the world not to express personal responses to it. So "The seventeenth century poet...constructs his metaphor from 'public' elements with 'established' ranges of relationships."[1] To us they may seem rather artificial, but they act, says Hawkes, as an 'ordering' imposed on nature. "Elizabethan metaphors speak, and they ask for a response"[2] as if to draw their audience into completing the metaphor. One influential voice at this time was that of Ramus who defined metaphor in terms of a logic. To the Ramist metaphors are arguments.[3] This further emphasised the additive or artificial aspect of metaphor. An effect of this influence it is now thought, was to create a division between speech and the written word giving a superior status to the latter.

Not surprisingly the Puritans favoured what was called Plain Style. Metaphor, if used, was for a rhetorical purpose rather than a semantic one. The notion of metaphor as ornament is a result of such attitudes. The search for clarity also meant a loss of the multi-level nature of meaning in language. This search for plain clear language was given the blessing of the Royal Society. So that by the time we come to Johnson's dictionary definition says Hawkes there is a sense of metaphor being an ABUSE of language.

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1. Terence Hawkes, Metaphor, Methuen, London, 1972, p.19.

2. Ibid., p.22.

3. Ibid., p.24.

It was the Romantics who rejected this classical view of metaphor and could find some justification in Plato's notion of organic unity. It is important to understand, Hawkes stresses, that "the Romantic notion of the imagination establishes and stresses that faculty's CONNECTIVE power, and sets it against the DIVISIVE character of another faculty sometimes termed the Reason, but which for convenience may be thought of as a faculty of discursive analysis."[1] So for them the difference between Plato and Aristotle could be simplified as the difference between Imagination and Reason, and "It follows that Imagination will embody itself in man's distinctive feature of language in the form of metaphor."[2] Shelley thought all language 'vitally metaphorical' and that we had all been poetic originally and now the poet

> ...marks the before unapprehended relations of things and perpetuates their apprehension until the words which represent them become, through time, signs for portions or classes of thoughts instead of pictures of integral thoughts.3

Vico in Italy had also said that primitive man possessed an instinctive 'poetic' wisdom "which evolved through metaphors, symbols and myths towards modern abstract and analytical modes of thought."[4] He saw the development of children as a mirror of what had happened to us with language, and believed that myths were not 'lies' but "poetic METAPHORICAL responses to the world on the part of wholly responsible people."[5] Metaphor therefore is not merely fanciful but a way of experiencing reality.

Wordsworth in the same Romantic mode as Shelley also sought for metaphors which would most naturally express his vision of the world. He

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1. Terence Hawkes, <u>Metaphor</u>, Methuen, London, 1972, p.36.

2. Ibid., p.37.

3. and 4. Ibid., p.38.

5. Ibid., p.39.

saw no essential difference between the language of prose and that of poetry. So now we see a move away from the idea that metaphor is an ornament to be applied to language. Likewise Coleridge sought to establish the link between imagination and language. To him says Hawkes the mind was "an active, self-forming, self-realizing system" and imagination played the most important part in its work, so that "the process, whereby words construct a 'reality' from within themselves, and impose this on the world in which we live, is a process of metaphor."[1] He even went so far as to say that language is the "armoury of the human mind" containing the "weapons of its future conquests."[2] I.A. Richards said of him "With Coleridge we step across the threshold of a general theoretical study of language capable of opening to us new powers over our minds."[3] We might say the same of Richards himself for most writers on metaphor acknowledge a debt to him as one of the first to analyse metaphor meaningfully with his context theory of meaning.

In 1936 Richards gave a series of lectures on Rhetoric which he called 'a tangled subject'. These lectures are now his book _The Philosophy of Rhetoric_. He begins and ends it with an injunction that "Rhetoric...should be a study of misunderstanding and its remedies."[4] Bad writing he says spreads false ideas but is good writing necessarily plain or simple? He believes not. A study of words in isolation is not fruitful either, for a chief cause of misunderstanding is he thinks 'The Proper Meaning

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1. Terence Hawkes, _Metaphor_, Methuen and Co.Ltd.,1972, p.47.

2. Ibid.,p.50.

3. Ibid.,p.56.

4. I.A. Richards, _Philosophy of Rhetoric_, Oxford University Press, New York, 1936, p.3.

Superstition'[1] or common belief, supported by the traditional textbooks, that a word has a meaning of its own. To study merely the words of a discourse is to misunderstand its composition in toto...

> We have to shift the focus of our analysis and attempt a deeper and much more minute grasp of the STRUCTURES [my emphasis] of the smallest discussable units of meaning and the ways in which these vary as they are put with other units.2

Because words change meanings over time and in different contexts Richards believes that a theory of language may have something to learn from the notion of 'stabilities' in physics "But much closer analogies are possible with some of the PATTERNS [my emphasis] of biology"[3] and its theory of interpretation.

Some traditional mistakes causing confusion, according to Richards, have been the opposition between form and content and between matter and form. For, he says, language is not a dress which thoughts put on "we shall do better to think of meaning as though it were a plant that has grown --not a can that has been filled or a lump of clay that has been moulded."[4] (Croce is cited as an example of a perpetrator). Even worse he thinks are oversimple mechanical analogies such as Associationism which doesn't go far enough, for "Language and Thought are not ...one and the same."..."Thought is accessible to study largely THROUGH language."[5]

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1. I. A. Richards, The Philosophy of Rhetoric. Oxford University Press, New York, 1936, p.3.

2. Ibid., p.9.

3. Ibid.,p.12.

4. Ibid.,p.12.Similar metaphors are often applied to children.See Ch.IV this text.

5. Ibid.,p.13

Rhetoric in the olden days as we have already seen was concerned mainly with skills of dispute but persuasion is only one possible aim of discourse. Richards asks us to consider two problems, the functions of language and the relationship between things and names, which leads us inevitably to considering the origins of thought. It is in our nature he says that "we are things peculiarly expressive of other things."[1] We respond to stimuli, for example, loud music, not merely physically but with experience also. He asks: "Do we ever respond to a stimulus in a way which is not influenced by the other things that happened to us when more or less similar stimuli struck us in the past?"[2] This factor has to have relevance to our reaction to metaphors or any language to which we react with our whole person.

Richards says if we try to trace meanings we go back and back in time, for "meanings grow out of one another much as an organism grows."[3] We do not merely have sensations but perceptions also from the past as well as the present. Which leads him to a major statement that: "All thinking from the lowest to the highest--whatever else it may be--is sorting."[4] He believes that a lack of awareness of this factor led to the development of Nominalist, Realist, and Conceptual controversies of the eighteenth century about the origins of abstract ideas and their nature. Richards' theorem is that : "meanings from the very beginning have a primordial generality and

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1.I. A. Richards,Philosophy of Rhetoric,Oxford University Press, New York,1936.p.29.

2.Ibid.,p.29.

3.Ibid.,p.30. This 'growth' metaphor dominates the literature on education.

4.Ibid.,p.30. This relates also to the importance of patterns.

abstractness."[1] Thus the lowliest organism if it learns at all from its past is a conceptual thinker.*

> The theorem holds that we BEGIN with the general abstract anything, split it, as the world makes us, into sorts and then arrive at concrete particulars by the overlapping or common membership of these sorts. 2

Meaning, to Richards then is "DELEGATED EFFICACY, that description applies above all to the meaning of words, whose virtue is to be substitutes exerting the powers of what is not there. They do this as other signs do it, though in more complex fashions, through their contexts."[3] One can see how this is pertinent to metaphor also.

'Context' is a familiar literary term and can be extended he says to include the circumstances in which anything was written and said--or to the period, as for example the Shakespearean age--but for this particular purpose it is none of these but more particularly 'given conditions' as we would have in any cause and effect situation--i.e. we say under certain conditions, of two events, if one happens then the other does, or vice versa.[4] Richards' theory of meaning is a causal theory of meaning:

> The modes of causal theory on which meaning depends are peculiar through delegated efficacy...In these contexts one item --typically a word--takes over the duties of parts which can then be omitted from the recurrence. There is thus an abridgement of the context only shown in the behaviour of living things, and most extensively and drastically shown by man. When this abridgement happens, what the sign or word--the item

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1. I.A.Richards, The Philosophy of Rhetoric. Oxford University Press, New York 1936, p.31.

* The ability of even the smallest organisms to learn is illustrated by the body's immune system defence against invading germs. See Time May 23,1988.

2. Ibid., p.31.

3. Ibid., p.32.

4. Ibid., p.33.

with these delegated powers--means is the missing part of the context.1

No one knows exactly how this happens, how a sign evolves from an original cause and condition. [One might call it a theory of 'invisible' context.] If we did know, Richards says we would come nearer to understanding the nature of life itself. In summary then "what a word means is the missing parts of the contexts from which it draws its delegated efficacy."[2] Meanings come from "sortings, recognitions, loss of response, recurrences of like behaviours."[3] He goes so far as to say that "Things...are instances of laws."[4] They evolve over time or as Bradley to whom he refers, says, "association marries only universals, and out of these laws, these recurrent likenesses of behaviour, in our minds and in the world--not out of revived duplicates of individual past impressions--the fabric of our meanings, which is the world, is composed."[5]

Meanings develop then over time. To appreciate this one only has to reflect on how a current 'new' word is changing slightly every day. The acronym AIDS for acquired immune deficiency syndrome has become, in a relatively short time, a word synonymous not only with a medical condition but linked to all kinds of public fear and prejudice. The acronym has become the disease itself and a social or rather antisocial one at that. So much so that I doubt at the moment if one could read the word aids such as in 'visual aids' without associating this with the other AIDS even though

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1.I. A. Richards,Philosophy of Rhetoric,Oxford University Press, New York,1936.p.34.

2.Ibid.,p.35.

3.Ibid.,p.36.

4.Ibid.,p.36.

5.Ibid.,p.36.

there is no normal connection and however absurd this may seem on reflection. In time it may become a label for a period of medical history in the same way that we refer to the Black Death. In terms of 'context' then this 'new' word as it has become is peculiar to our time, has entered general vocabulary extraordinarily fast because it has an emotive context as well as medical. Nevertheless the term will mean different things to different people depending on their medical knowledge, their experience of people with or likely to get the disease etc. What each person understands by the term depends on personal context as well as the public one. A definition of the word can never include all of one's personal meaning or the meaning of it as used at any one particular time--even while it is newly coined it is evolving in meaning, in reference--in contexts. This is how I interpret Richards' description of meaning context.

Richards' theorem discourages us from treating any passage as having only one possible meaning: "This theorem...regards all discourse-outside the technicalities of science as over-determined, as having multiplicity of meaning. "[1] An awareness of this he says could even help people to settle controversies, as these normally exploit misunderstandings:" The context theory of meaning will make us expect ambiguity to the widest extent and of the subtlest kinds nearly everywhere."[2] Classical Rhetoric would have considered this a fault, but as Richards sees it this is the source of its potential power and only in very limited situations can language be neutral.

We discover by the study of rhetoric that "the world so far from

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1.I. A. Richards, The Philosophy of Rhetoric,Oxford University Press New York,1936.p.39.

2.Ibid.,p.40.

being a solid matter of fact--is rather a fabric of conventions,which for obscure reasons it has suited us in the past to manufacture and support."[1] Richards says that we have tended since the seventeenth century "to take rigid discourse as the norm and impose its standards on the rest of speech. At the other end of the scale in poetry the virtue of words is "to have no fixed and settled meanings separate from those of the other words they occur with."[2] What we have in an utterance he claims, is "not one meaning but a MOVEMENT among meanings."[3] There is progressive movement in the logical progression of any sentence but what he is suggesting is that meaning grows as we extend our appreciation of e.g. some lines from Shakespeare and "in the extreme case it will go on moving as long as we have fresh wits to study it."[4]

To return to poetry. Where does one find the 'meanings'? Certainly not in any book--they have to come from us--there are no fixed meanings.

In prose, which is more akin to the scientific or rigid, one has to wait for the sense. As Richards points out, the virtues of prose style come from skill in combining various language functions, such as those which might be indicated by voice tone and intonation. As a consequence the words we use to judge language in a literary context are rather mysterious e.g. harmony, grace, tone, rhythm, texture, etc.

A word has no intrinsic worth, goodness or badness, nor can it be considered correct or incorrect, and it is for this reason that he criticizes

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1. I. A. Richards, The Philosophy of Rhetoric, Oxford University Press, New York, 1936.P.41.

2. Ibid., p.48.

3. Ibid., p.48

4. Ibid., p.49

the doctrine of Good Usage and textbooks purveying this idea, even though they suggest that usage is based on the practices of the best writers and speakers, for who can objectively decide on these. He admits that common usage demands some degree of conformity in word interpretation but this in no way fixes word meanings for ever. Wordsworth apparently had this same problem with people who confused the poetic product with the poetic process, and expected poetry to conform to styles and standards of previous authors. Richards says meanings are "resultants we arrive at only through the interplay of the interpretative possibilities of the whole utterance...we have to guess them and we guess them much better when we realise we are guessing..."[1] He might have approved of modern teachers of reading who have learnt to appreciate the importance of guessing. What Richards is emphasising is probably what makes language such an attractive study because it is dynamic, creative, innovative, peculiar to mankind and interpretative of times, moods, dreams etc.

Because words sometimes sound akin to that which they are describing it has often been imagined that this is a possible basis of their origin. Richards discounts this theory. What links words, he says, is very often their common morphemes and "the existence of a group of words with a common morpheme (as e.g.flash, flare, flame, flicker etc.) has an influence on the formation of other words, and on the pronunciation of other words--assimilating them to the group."[2] The sound in itself is virtually meaningless and the context theorem of meaning will help us to avoid assumptions and false beliefs. Aristotle also said that there can be

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1. I.A. Richards, _The Philosophy of Rhetoric_, Oxford University Press, New York, 1936.p.55

2. Ibid.,p.59.

no natural connection between the sounds of any language and the thing signified. Richards takes note also of the fact that "The meaning of a word on some occasions is quite as much in what it keeps out, or at a distance, as in what it brings in."[1] To use the language as a whole or in a masterly way would he claims be to use it as Shakespeare uses it but not as technical discourse does.

To examine a word in isolation is to have no appreciation of its real value--behind it is a wealth of history, meaning and interconnections with other words and other meanings; so we begin by analysing it not as a single unit but as part of the sentence or utterance in which it occurs. Richards seems to me to be saying that to examine words in isolation is like trying to understand a complex organism merely by scrutinizing a sample of its tissue under a microscope. Much can be learnt from this but it gives little idea of the whole. His view would nowadays probably be labelled a holistic approach. It is not difficult to accept it if we relate it to music and the way a single note makes harmony with others and likewise a colour is only significant in relation to the whole range of colours or those near to it: "Everywhere in perception we see this interanimation."[2] The more we focus narrowly the more we lose sight of this interrelatedness of words. Richards is adamant that "the view that meanings belong to words in their own right--and the more sophisticated views which have the same effect--are a branch of sorcery, a relic of the magical theory of names."[2] He believes that obsessive 'naming' as in many

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1. I.A. Richards, <u>The Philosophy of Rhetoric</u>, Oxford University Press, New York, 1936.p.63

2. Ibid.,p.70.

3. Ibid.,p.71.

schools of study is what hinders their progress. This desire for fixed meanings "leads us to think that a shift of meaning is a flaw of discourse, a regrettable accident, instead of a virtue"[1] but outside the technical languages of the sciences such are not possible. We must assume then, if we are to follow Richard's thinking, that words have a life of their own to live and even though they are our servants we do not own them. What we have to do he says is to learn to follow and interpret shifts in meaning. " They recur in the same forms with different words; they have similar plans and common PATTERNS [my emphasis] which experience enables us to observe and obey in practice."[2] [Who is master and servant here?]

Richards believes that "A new era of human understanding and cooperation in thinking would be at hand" if only we would take "systematic cognizance of even a small part of the shifts we fleetingly observe".[3] This might seem an incredible claim but if it is true then he is saying that many of our problems come simply from rigidity in thinking based on the belief in fixed word meanings or what he calls the 'Proper Meaning Superstition' and it is of course with abstract words that we have the most difficulty but if we can master abstract word shifts "thereby we may better find out what we and others are thinking."[4] Writers he says often have their greatest successes by "making a single phrase pull with or against large ranges of language."[5]

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1. I.A.Richards ,Philosophy of Rhetoric, Oxford University Press, New York, 1936, p.72.

2. Ibid., p.73.

3. Ibid., p.73.

4. Ibid.,p.74.

5. Ibid.,p.75.

Our language grows faster and faster and new words create problems in pronunciation, and even in this convention dominates. Deviations from custom are frowned upon because there is a large degree of "social or snob control"[3] in language and "one of the tasks of improved Rhetoric is to question it, whether it concerns pronunciation or matters of meaning and interpretation."[4] In Shakespeare's day he believes there was less of this snobbery but since the seventeenth century it has increased and become a measure of class and status. This preoccupation with 'correctness' has created what he calls a 'Club Spirit' and has become the obsession of grammar book merchants. At the same time a real sense of culture has been lost. So vital is this appreciation that he would be happy to see it become the central discipline of education.[5] It is for this reason that I feel sympathetic to his cause. There is definitely a need at some level of schooling not for traditional grammar study but for courses which give young people an understanding not only of their own language but also an appreciation of others.

Richard's analysis of metaphor begins with Aristotle's definition which to my mind he misinterprets slightly. He says that there are three assumptions which have marred our thinking since his time. One--that the ability to create metaphor is a gift only some have. Two--it cannot be imparted to another. Three--It is something exceptional or a deviation from the norm. What I believe Aristotle is saying, is about metaphor, not

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1. I. A. Richards, Philosophy of Rhetoric, Oxford University Press, New York, 1936.p.74.

2. Ibid., p.75.

3. and4. Ibid., p.78.

5. Ibid., p.86.

about metaphor-making. It is a self-taught process perhaps from experience. One cannot be taught a metaphor because it has to come new-minted as it were from the mind. One can only be shown types of metaphors [models of metaphors?] how to recognise a metaphor and be taught how they seem to be constructed and work. We cannot invent metaphors for someone else no more than we can compose music or poetry for another person. Even in advertising, copywriting or ghost-writing where metaphor is sold for public use, it belongs even if only for a short time to its inventor just as a painting is the 'property' of its painter whereas a business letter for example is hardly personal property in the same sense. This is a difficult area to define in the same way that one can doubt whether one teaches children to be poetical, musical or artistic by training and teaching or how much is one only modifying what is essentially innate. It is possible that there are people who have never written or spoken in metaphor i.e. created or coined a new original phrase or word use but they may still think metaphorically as children appear to do e.g. a four-year old who thought my comb was a 'bridge' something I could not appreciate until I looked at its curved shape and teeth and began to 'see' what he might be seeing, the curved back as a bridge top and the 'teeth' as its supports. Whether this is how he 'sees' it is something I can never know.

Perhaps making metaphors is not common but surely everyone has the potential and if it is a question of genius I am inclined to believe like Katherine Mansfield that "genius lies dormant in every soul".[1] Richards is right, language is imparted to us by others but the ability to create metaphor is part of our unique creative ability perhaps our most individual

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1. Katherine Mansfield, Journal of Katherine Mansfield 1904-1922, ed. John Middleton Murry, Hutchinson, New Zealand, 1984, p.37.

talent. As a result of Aristotle's influence Richards believes metaphor has been treated as "a sort of happy extra trick with words therefore in brief, a grace or ornament or ADDED power of language not in its constitutive form."[1] It would I feel be fairer perhaps to blame the influence of sophistry and the subtle arts of rhetoric which it exploited as being at the root cause of of the tarnished image of metaphor. Richards agrees with Shelley who said that:

> Language is vitally metaphorical; that is, it marks the before unapprehended relations of things and perpetuates their apprehension, until words, which represent them, become, through time,signs for portions or classes of thoughts:and then, if no new poets should arise to create afresh the associations which have been thus disorganized, language will be dead to all the nobler purposes of human intercourse.2

Richards is sure that the implications of this 'exceptional' utterance have never been realised. Historians of language he says have known that intellectual operations are described with metaphors based on physical happenings and Jeremy Bentham, Bacon and Hobbes likewise realised also that "the mind and all its doings are fictitious." It is easy to observe says Richards that "metaphor is the omni-present principle of language."[3] Even in science it cannot be avoided, and in philosophy the more abstract it becomes the more it relies on metaphor. Thus "a word is normally a substitute for (or means) not one discrete past impression but a combination of general aspects."[4] [that is, Richards'context-theory of meaning] So "In the simplest formulation, when we use a metaphor we have two

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1. I. A. Richards, <u>Philosophy of Rhetoric</u> ,Oxford University Press, New York, 1936. p.90.

2. Ibid.,p.90.

3. Ibid.,p.91.

4. Ibid.,p.92.

thoughts of different things ACTIVE [my emphasis] together and supported by a single word, or phrase, which meaning is a resultant of their INTERACTION."[1] This same idea led Dr Johnson to the view that "it is a great excellence in style, when it is used with propriety, for it gives you two ideas for one."[2] What is missing in this view says Richards is the "immense variety in these modes of interaction."[3] This leads him to speculate that the Elizabethans were probably more aware of and sensitive to metaphor than we are. [Has language become more fosssilised and therefore we too ?] This he says made Shakespeare possible, whereas later centuries have narrowed their skills until the Romantic rebellion. Traditionally metaphor was limited:

> And thereby it made metaphor to seem a verbal matter, a shifting and displacement of words, whereas fundamentally it is a borrowing between and intercourse of THOUGHTS, a transaction between contexts. THOUGHT is metaphoric, and proceeds by comparison, and the metaphors of language derive therefrom.4

Therefore he believes we must analyse what exactly skill in thought means, which supports my contention that a study of metaphor is vitally important for teachers above all, because if we are aware of metaphor and attempt to appreciate its existence, persistence and complexity "we find that all the questions that matter in literary history and criticism take on a new interest and a wider relevance to human needs."[5] What we are really doing is asking "how thought and and feeling and all other modes of the mind's activity proceed"[6] --which must surely interest those responsible for

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1. I. A. Richards, Philosophy of Rhetoric, Oxford University Press, New York , 1936. p.92.

2. and 3. Ibid., p.93.

4. Ibid.,p.94.

5. and 6. Ibid.,p.95.

teaching young people. The measure of our success in this says Richards will be what practical application we make with it. It is significant only in its applications and implications.

Having put metaphor in a historical perspective and bemoaned its historical neglect Richards then gives his own analysis of metaphor. For the two essential parts of a metaphor he uses the terms 'TENOR' and 'VEHICLE'.[1] The word METAPHOR is reserved for the whole double unit. A lack of definitive terms has helped to create confusion, similarly with terms such as meaning, expression etc. and especially figure and image: "they bring in a confusion with the sense in which an image is a copy or revival of a sense-perception of some sort...no image of this sort need come in at any point."[2] This fact is stressed by him repeatedly, that words may conjure up mental images, but they do not necessarily have to do so "for words can do almost anything without them, and we must put no assumption about their necessary presence into our general theory."[3] For this reason he berates teachers of poetry who suggest such a necessity to their pupils. [Presumably where one does imagine 'pictures' which illustrate metaphors these would be a kind of mental metaphor--an extra metaphor?] Two morals he draws from <u>Elements of Criticism</u> by Lord Kames are , first "not to see how a word CAN work is never by itself sufficient proof that it will not work...and to see how it ought to work will not prove that it does."[4]

Apparently Kames makes clear that rules about metaphor as

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1. I.A.Richards,<u>Philosophy of Rhetoric</u>,Oxford University Press, New York, 1936.p.98.

2. and 3. Ibid.,p.98.

4. Ibid.,p.106.

comparisons are exposed as faulty when we examine those which do not rely on resemblances between tenor and vehicle. Kames argues that when attributes are bestowed on a subject to which they do not belong this is not mere licence on the writer's part but based on a principle of 'contiguous association'.[1] The mind works in such a way that it easily passes along a linked chain of objects. This leads Richards to state that "the process of metaphor in language, the exchanges between the meaning of words which we study in explicit verbal metaphors, are superimposed upon a perceived world which is itself a product of earlier or unwitting metaphor..."[2] Richards believes we need some general theories of meaning but Coleridge perceived this with his theory of imagination and conception of imaginative growth. For him a symbol represents a whole but is still part of that which it represents. So meditation on one aspect of nature for example helps us key in to the 'universal mode of imagination'. In this way nature itself has fed the imagination of 'gentle and pious minds' and assisted their understanding of the spiritual world. (A quote from Appendix C of The Statesman's Journal - Coleridge)

This point leads in to Richard's sixth and final lecture on The Command of Metaphor. First he stresses the importance of the study of metaphor which was abandoned in the nineteenth century as unprofitable. Skill in using metaphor and understanding it are different things but we need the latter to help teach mastery of the skill.

He divides metaphors into two broad categories, those which are based on resemblance of two things--the tenor and the vehicle--and "those

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1. I.A.Richards,Philosophy of Rhetoric,Oxford University Press, New York,1936.p.107.

2. Ibid.,p.109

which work through some common attitude"[1] (for reasons not always recognised). "A word may be simultaneously both literal and metaphoric, just as it may simultaneously support many different metaphors, may serve to focus into one meaning many different meanings."[2] Failure to realise this, he says, causes misinterpretations, and whether a word is being used literally or metaphorically is not always easy to decide. "If we cannot distinguish tenor from vehicle then we may provisionally take the word to be literal."[3] Richards is aware also that, it is "a contemporary fashionable abberation to juxtapose extremely unlike things for comparison"[4] and he cites Andre Breton leader of the French Super-realists as an exponent of such doctrine. Johnson, he says, would never have approved of far-fetched comparisons whereas Max Eastman in The Literary Mind apparently does. Richards puts extreme views down to excessive reaction to former views and asks us to consider more closely what happens to the mind when we push it to connect disparate ideas:

> The mind is a connecting organ, it works only by connecting and it can connect any two things in an indefinitely large number of different ways. Which of these it chooses is settled by reference to some larger whole or aim, and, though we may not discover its aim, the mind is never aimless. 5

He says that in all interpretations we are making connections. In poetry we have more work to do to make these connections. Deliberately straining this process of connection by presenting ideas difficult to connect ultimately baffles, fatigues and bores the mind [a familiar classroom

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1. and 2. I.A.Richards, Philosophy of Rhetoric,Oxford University Press, New York, 1936.p.118.

3. Ibid., p.119.

4. Ibid.,p.123.

5.Ibid.,p.125.

syndrome1 unless the discourse containing them helps us towards understanding. This is I believe an important aspect of literature. It seems to me that the writer who knows the breaking-strain point for his/her readers, who knows how to stretch our minds and imagination in making connections, is the skilful one i.e. who respects the reader's intelligence and offers puzzles just challenging enough to tease, to titillate, to carry the reader's interest along. At a basic level this is probably the attraction of 'who-dun-its'. Is this also the attraction of the poem to which we keep returning and from which we extract deeper and deeper levels of meaning? Our minds want to be challenged and stimulated, not merely fed. So much teaching forgets this aspect of learning, the thrill of discovery, of making our own connections instead of being offered a 'ready-mix' in the form of notes, worksheets etc.

Forgetting the extremist view, Richards insists that differences are as important in metaphor as similarities. He calls this 'disparity action':

> ...talk about the identification or fusion that a metaphor effects is nearly always misleading and pernicious. In general, there are very few metaphors in which disparities between tenor and vehicle are not as much operative as the similarities. Some similarity will commonly be the ostensive ground of the shift, but the peculiar modification of the tenor which the vehicle brings about is even more the work of their unlikeness than of their likenesses.[1]

Critics he says, have neglected to take full enough account of this and do not fully understand the nature of language as a medium. One example he gives is that of T.E. Hulme whose doctrine of metaphor was, to Richard's view, incomplete, because he considered "Plain speech as essentially inaccurate. It is only by new metaphors...that it can be made precise."[2]

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1. I.A.Richards, <u>The Philosophy of Rhetoric</u>, University of Oxford Press, New York, 1936.p.127.

2. Ibid., p.128, quoting T.E.Hulme.

One can appreciate what he probably meant by this that seeing things in a new way makes us really see them, but Richards objects to his use of 'always' 'visual' and 'see' and proves his point by quoting from Shakespeare where one does not always have to 'see' what one reads for sometimes the abstract cannot be made concrete. He admits that Hulme may have used the word 'see' metaphorically. If so his statement is acceptable but otherwise not. According to Richards teachers constantly make this mistake, exhorting children to 'see' and 'look' for things. He reminds us:

> ...language well used, is a COMPLETION and does what the intuitions of sensation by themselves cannot do. Words are meeting points at which regions of experience which can never combine sensation or intuition, come together. They are the occasion and means of that growth which is THE MIND'S ENDLESS ENDEAVOUR TO ORDER ITSELF.[my emphasis] That is why we have language. It is no mere signalling system. It is the instrument of all our distinctively human development, of everything in which we go beyond the other animals.[1]

Coleridge said "I would endeavour to destroy the old antithesis of words and things; elevating, as it were Words into Things and living things too."[2] This is not so far-fetched an idea. Words are created, 'born', have their idiosyncratic life, just as humans do. They are also a human creation which nothing else truly is. Richards accepts what Coleridge says. We must do so if we are to study metaphor profitably.

Analogies taken too far break down says Richards but the relation of tenor and vehicle are not limited. Writers however often strain words by trying to use them to copy life whereas "their true work is to restore life itself to order." Mistaking tenor-vehicle relationships for the relation between tenor plus vehicle together has consequences beyond literature, Is the Divine Comedy or the Bible, he asks, one vast metaphor? Taking an

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1. I.A.Richards,*Philosophy of Rhetoric*,Oxford University Press, New York, 1936, p.130.

2. Ibid.,p.131.

utterance literally or metaphorically or analogically there are four levels of interpretation, for us to consider:

> We can extract the tenor and believe that as a statement, or extract the vehicle; or taking tenor and vehicle together, contemplate for acceptance or rejection some statement about their relations which together they would give to our living. 1

A command of metaphor is therefore important to how we understand our world. In psychoanalysis the notion of 'transference' has illuminated understanding of psychological problems for "In happy living the same PATTERNS [my emphasis] are exemplified and the same risk of error are avoided as in tactful and discerning reading."[2] Therefore understanding of the nature of metaphor is akin to understanding ourselves our relationships, our world. Richards believes that a study of Rhetoric leads us along the same path as Plato and Spinoza towards the only end for the sciences, and that "Above all things a method must be thought out of healing the understanding--purifying it at the beginning, that it may with the greatest success understand things things correctly."[3]

A study of rhetoric can help us and therefore we can help children to see true. Richards ends with Plato's myth from Timaeus, with the hope that man might learn to:

> regulate the Revolutions in his Head which were disturbed when the Soul was born in the Flesh and by thoroughly learning the Harmonics and Circuits of the All may make that which understandeth like unto that which is understood, even as it was in the beginning; and having made it like, may attain unto the perfection of that Best Life which is offered unto them by the Gods, for the present time and for the time hereafter.4

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1. I.A. Richards, Philosophy of Rhetoric, Oxford University Press, New York,1936.p.135.

2. Ibid.,p.136.

3. Ibid.,p.137.

4. Ibid.,p.138.

C.Day Lewis claims that metaphor is the life-principle of poetry and calls on Herbert Read to support him, who says "we should always be prepared to judge a poet...by the force and originality of his metaphors" and also Middleton Murry who has said that if one tries to be precise one is inevitably bound to be metaphorical.[1] Metaphor is necessary says Lewis to express the relationship between things, and moreover within a poem there should be some linking, that is "images should be linked by some internal necessity stronger than the mere tendency of words to congregate in patterns."[2] Yeats, he says, stated that "wisdom speaks first in images" and H.W.Garrod said that metaphor was in earlier times the natural way to speak. Several people mention this facility as though it is a power that with the exception of poets we now have only in diminished form. For example Vico is quoted as saying:

> Poetry...is the primary activity of the human mind. Man, before he has arrived at the stage of forming universals, forms imaginary ideas. Before he reflects with a clear mind, he apprehends with faculties confused and disturbed: before he can articulate, he sings: before speaking in prose he speaks in verse: before using technical terms, he uses metaphors, and the metaphorical uses of words is as natural to him as that which we call 'natural' [3]

This seems to imply that we have not only fallen from a state of Grace but have lost powers we once had, which makes one wonder if we are searching to find this again and whether prophets, poets and perhaps artists have either retained it or rediscovered it.

Poetic truth unlike scientific truth does not have to be verifiable says Lewis rather it causes pleasure of the kind that Kant has said is a furtherance of life. Lewis quotes Keats who said that "The imagination may

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1. C.Day Lewis, _The Poetic Image_, Jonathan Cape, London, 1947.p.17.

2. Ibid.,p.25.

3. Ibid.,p.26.

be compared to Adam's dream--he awoke and found it truth." and Blake who said that "Everything possible to be believed is an image of truth."[1] Poetry gives us an image-pattern of the real world "Metaphor is the medium through which these correspondences are made known to the reader...the poetic image ...tells us that, in the real world too, there is a pattern."[2] Because metaphors deal with relationships they give us partial intuition of the world which Blake says we would see as infinite if our perception were clear. The poet's task is to recognize pattern. Myths created by a collective consciousness brought us forward from our brute state, says Lewis and now we have outgrown them "they have performed their evolutionary task"[3] and are needed no more. Now we have the poetic image which he calls the myth of the individual:

> It is not merely that, time and again, we find in the images of modern poetry forms and impulses derived from the myths; but the very nature of the image--of poetry in its metaphysical aspect--invokes that consciousness, as though man, even at his most individual, still seeks emotional reassurance from the sense of community, not community with his fellow-beings alone, but with whatever is living in the universe, and with the dead. 4

What poetry tells us says Lewis is that, like the Ancient Mariner discovered, if we shoot a bird we shoot ourselves, or as Hardy said "The human race...[is] as one great network or tissue which quivers in every part when one point is shaken, like a spider's web if touched."[5] And Shakespeare also told us that there is a special providence even in the fall of a sparrow.[6]

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1. C.Day Lewis,_The Poetic Image_,Jonathan Cape, London,1947.p.27.

2. Ibid.,p.28.

3. and 4. Ibid.,p.32.

5. Ibid.,p.33.

6. William Shakespeare,_Hamlet_,Oxford edition,V,ii,232.

Classical poets says Lewis tried to make horrible things pleasing but modern poetry tries to accept them as part of the pattern. I suppose this is similar to the way in which humans try to accept misfortune and ill-health as part of life that they do not understand nor seem to have control over.

There is considerable unanimity over this idea of harmony, unity or pattern in the world says Lewis and "poetry's task is the perpetual discovery, through its imaging, metaphor-making faculty, of new relationships within this pattern and the rediscovery and renovation of old ones."[1] However because the pattern is always changing, absolute truth is never achieved which reminds one of the atoms which scientists can prove to us exist but yet we cannot see them or at least not until very recently for since I first wrote this there is a report that in fact this is now possible.[2] Lewis states that "the poetic image ...searches for connections by the light of an impassioned experience, reveals truth and makes it acceptable to us."[3] As he says we may ask why we need poetry when we have science. His answer is that there are unverifiable truths which in poetry carry the conviction of truth. Even with an image that can be construed literally as true, we will not get the same effect as the pattern the image creates in the poem because it is the pattern which gives us pleasure and satisfies our human need for order and completeness; "Beneath the pleasure we receive from the verbal music, the sensuous associations of a simile or a metaphor, there lies the deeper pleasure of recognizing an affinity. It has been

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1. C.Day Lewis, <u>The Poetic Image</u>, Jonathan Cape, London, 1947. p.34.

2. Dominion Newspaper, New Zealand 10/9/87 Reporting on the work of Dr Peter Knight and Dr Richard Thompson in London, who have discovered a method of capturing and suspending individual atoms by using laser from which they absorb radiation and are revealed to the naked eye as tiny spots of fluorescence.
3. C.Day Lewis, p.34.

called the perception of the similar in the dissimilar..."[1] Lewis describes the threefold effect of a metaphor by Ben Jonson describing lilies as light and the richness of this and its layers of meaning. Cynics may scoff he says but the words of a Danish physicist Niels Bohr bear witness to similar thinking: "the abiding impulse in every human being [is] to seek order and harmony behind the manifold and the changing of the existing world."[2]

So the poet seeks patterns says Lewis, and looks for the love which binds the world. He has tried to express this in poetry of his own but doubts if words suffice. Like Nietzsche he uses the metaphor of dance "Perhaps one should be content to let the principle emerge of itself from that dance of words in which life and art, the real and the imagined, so delicately interweave themselves that even the poet can hardly tell one from the other." For as Yeats said "How can we know the dancer from the dance."[3] Keri Hulme speaks similarly of this same "strange-paced dance" of "the dance of ecstasy" and "the mead-reel, his dance" as if we are all partners in a universal dance yet we are unaware of the tune and who plays it.[4]

Lewis believes that poetry appeals to the unconscious in us and art is to give pleasure. Images he says are to be distinguished from symbols which are denotative and stand for one thing only, whereas images, in poetry are rarely simply symbolic for they are affected by their context and by the reader's response. I find it difficult to accept this totally

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1. C.Day Lewis,*The Poetic Image*,Jonathan Cape, London,1947.p.35.

2. Ibid.,p.36.

3. Ibid.,p.37.

4. Keri Hulme,*The Bone People*,Spiral, New Zealand 1983.pp.2,459,461.

for after all if a symbol e.g. a cross or a crown, is a well-known and entrenched symbol in our culture each person still has individual responses to or connotations of that symbol. If one were for example to ask people about the symbolism of the marriage ring there would be a variety of responses. Symbols differ from metaphors I believe because they lack the novelty and hence dramatic impact of newly-coined metaphors. A symbol can spring from a metaphor, such as the fan used to denote radio-activity danger.

Lewis says Shakespeare understood the consummate art of fusing intellectual and sensual meaning in his images. This is one key to the lure of literature, it invites intellectual and aesthetic response of an intensely personal kind.

Drama gave great scope to imagery which has had to be more restricted and confined in lyric verse which was also often meant to accompany music, says Lewis, "bold, intense and closely wrought images are inappropriate to verse written for music, since they tend to destroy the balance between the word pattern and the melodic line."[1] Moving away from music affected poetry , it moved towads the metaphysical school and the pursuit of the 'conceit'. Symbolic of the seventeenth century says Lewis is Donne's notion of man as a telescope. One sees here the beginnings of introspection and also of scientific observation leading on to our even more self-conscious post-Freudian times. Eventually some poets developed medleys of imagery which were labelled 'wit-writing'. Mathew Arnold condemned poetry which was merely "a show of isolated thoughts and images."[2]

In Romantic poetry says Lewis "the image-making facility is unleashed and wanders at large, whereas with the Classical it is tethered to a

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1. C.Day Lewis,The Poetic Image,Jonathan Cape, London,1947.p.49.

2. Ibid.,p.54.

thought..."[1] The Romantics observed the world of nature and the human condition but the moralizing element became more concealed in the imagery. Whatever the style or the statement it makes, it still seems to Lewis that Aristotle's statement is true, that Poetry is the most intense and philosophical of the arts.

The creative image comes from imagination which is difficult to define. To Shelley imagination was a God and he a prophet. It is, says Lewis, simply the capacity to put oneself in the place of another--a going out from oneself--the nature of poetic sympathy is revealed in images and "The identification of the poet with objects which appeal to his sense in the initial stage of image-making."[2] It was Keats who spoke of 'negative capability' as a state of mind necessary to creativity.

The creative mind does not impose pattern but perceives it as Louis Mac Niece said "The poet is often not completely sure what he is trying to say until he has said it. He works up to his meaning by a dialectic of purification."[3] A key image might lead to others and a process of revising and reviewing leads to the final work. Much the same happens in Science when a creative thinker breaks out from a fairly fixed pattern of thinking and in the desire to solve a problem sees a new possibility. I believe that a similar process goes on in metaphor-making in ordinary language, it is the fast thinker, the intuitive person, who produces a new way of using words.

Image patterns must in fact be patterns and not random collections of 'word-pictures'. A mixed metaphor , says Lewis, lacks

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1. C.Day Lewis,<u>The Poetic Image</u>,Jonathan Cape, London,1947.p.59.

2. Ibid.,p.67.

3. Ibid.,p.71.

'congruity of images'. Consistency is important, otherwise statements lack poetic truth and cannot be communicated. Richards has said that the poet's capacity "is only part of a more amazing capacity for ordering his experience."[1] Images have to persuade the reader that they are natural language and that they came from the poet without strain but "unless passionately realised... [they tend to] produce conventional ornament." Lewis admits that some poetry is flawed, and obscured by a surfeit of imagery for poetry needs a good mind behind it: "Behind the conscious gift that creates coherent image patterns there lies the deep power to organize experience."[3] He says that Rilke, in his Notebook of Malte Larids Brigge wrote of this need to have seen, felt and lived through the experiences one writes of at the point where "they have turned to blood within us."[4]

All imaginative writing, says Lewis, goes through this process, which is presumably why we use the words 'creative' and 'creativity' to indicate the giving of life or form to ideas to be shared whether in poetry, music or art. Sometimes, he says, poets are criticized for excess of this power, as when Trevelyan wrote of Meredith, telling us "...you are meant to catch the first light that flies off the metaphor as it passes: but if you seize and cling to it, as though it were a post, you will be drowned in the flood of fresh metaphor that follows."[5]

A poet, says Lewis, is a person of intense sensitivity to the times in which he lives. Images therefore are often contemporary and poets attempt to come to grips with their experiences through metaphor which is "the

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1. C.Day Lewis, The Poetic Image, Jonathan Cape, London, 1947.p.74.

2. Ibid.,p.82.

3. and 4. Ibid.,p.85.

5. Ibid.,p.83.

language of tension"[1] which helps us to face reality. Arnold believed impatience to be a poet's fault and this causes his problems with images that fail. Rilke agrees that patience is needed and Professor Livingston Lowes believed vitality also to be necessary otherwise poets were like hermit crabs living in the shells of their predecessors.[2] Lewis says these qualities cannot be developed like one builds body muscle but when they exist the work survives for posterity. Teachers of literature like to believe I think that some of these qualities can be developed. More and more we are finding that given the right conditions many minds can flourish. Those who are now aware of the right and left brain dichotomy which has influenced education know that many talents have atrophied through lack of use.[3] However we can appreciate what Lewis is saying, that a poet may speak with a voice that is not understood in his time [likewise the arist] for he sees as no-one else sees at that time.

Even traditional themes can be seen with new images as in the seventeenth century poetry which collected metaphors from science and developments in machinery. Some think that increasing urbanisation drove nineteenth century poets to a keener appreciation of and observation of nature. Even war kindled insights which were presumably heightened by the intensity of war experiences. "In general poetry written during the war was less strained, less anxious, less eccentric"[4] says Lewis.

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1. C.Day Lewis, The Poetic Image, Jonathan Cape, London, 1947.p.74.

2. Ibid., p.100.

3. See Betty Edwards Drawing on the Right Side of the Brain, Fontana/ Collins, 1979 which describes a cognitive-shift model of teaching, encouraging a mental shift from verbal, logical thinking to a more global, intuitive mode.

4. C.Day Lewis, p.110.

Sadly though, when war is over these poets become nonentities, the fate of many poets. Even in our own times it is true that poets are not always valued for their insights or their prophecies. Imagination, says Lewis is the instrument with which the poet explores the patterns of reality. He also thinks that religion and poetry overlap and that atrophy of the general imagination is the result of a divorce between the spiritual and the material meanings of things. Graves considered that we had concentrated on developing analytic powers and neglected the co-ordinating arts of the poet, to this he attributes "the modern coma of religion among our educated classes and for the disrespect into which poetry and the fine arts have fallen."[1] This neglect of poetry and poets creates a nervousness in their work, and conscious mannerisms to claim our attention: "the violence and discordance of his imagery is partly a more or less deliberate shock treatment, by which he hopes to break down this reader's too civilised resistance."[2] A good example I believe would be the work of New Zealand poet David Eggleton whose image-packed 'shock' poetry like much modern music seems to have few spaces for silence, no melody to the ear, only the jarring of nerve-endings.

Lewis believes that images which are too personal fail "Images must have some emotional or sensual source outside the poet."[3] Modern poetry may reflect, with its intensity of imagery, the complexity of modern life but this cannot justify, in his eyes, a disintegrated poem. Lewis gives a lean and simple definition of what a poem is to him:

A poem--let us be quite frank about the physical facts of it--must

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1. C.Day Lewis, The Poetic Image, Jonathan Cape, London, 1947.p.113.

2. Ibid.,p.114.

3. Ibid.,p.116.

> have a beginning, a middle and an end, otherwise it will not be a whole thing. It must have rhythm, which means one group of inflections not merely following but caused by another. Its images drawn from the world of time and space, must develop its theme, or develop out of its theme, in a certain order and a certain relationship: one image begets another as surely as one day telleth another. Moreover, the reader will not take in the whole of a poem simultaneously: for him too it is a series of experiences. Whatever modern philosophy may do, the poet cannot in fact discard sequence, cannot discard cause and effect, cannot work to a continuous present. [1]

So the poet creates order out of chaos and produces formal pattern. Lewis is critical of Gerard Manley Hopkins because he occasionally fails to create structure with his images. Herbert Read claims that poetry which is pure imagery is too fragile for use. An incomplete poem is likewise flawed for it will fail to satisfy.

Because imagery is destroyed by our too curious probing much like a delicate specimen being rudely dissected, we can never be fully satisfied with our study of it, and this has caused Middleton Murry to say that such work can drive us to insanity. The poet 'can only arrive at the truth of his own experience by a circuitous route, by an indirect use of language.'[2] Spender's poem Seascape proves, for Lewis, that there is a law of imagery and that is, that word-pictures only become images in relation to a general truth. Keats has said that a reader should find the words matching his own highest thoughts as if he remembered them. Which again supports the idea that imagination may be memory. Lewis's quote from Coventry Patmore bears this out with reference to the words 'Let not my heart forget the things mine eyes have seen.' And Spender also believes that memory is a faculty of poetry, and imagination an exercise of memory. I am inclined to believe that the same is true of dreams, that we can in fact only dream

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1. C.Day Lewis,The Poetic Image,Jonathan Cape, London,1947.p.120.

2. Ibid.,p.136.

what we already know, no matter how confused, distorted or strange it seems. But as Lewis says the poet applies his experience to different situations and thus metaphors or memories are created.

A theme, says Lewis, is the individual poet's interpretation of a general truth or one interpreted through the language of the poet's experience. This gives us two levels of imagery in a poem, those relating to a theme and the theme imaging a general truth. Not the same truths of science and philosophy but recognizable through their emotional effects. There are truths of unusual potency and universality. Jung has attributed these effects of 'great' poetry to unconscious forces or 'primordial images' or archetypes. So, as Lewis sees it, we have private memories which are expressed in one's poems, but beneath this are "archetypal patterns of response to nature, inherited from numberless generations of ancestors."[1]

Jung apparently distinguished two types of artistic creation, the 'psychological' and the 'visionary', the first drawing on ordinary experience but raised to the level of poetic experience and the second surfacing from 'the hinter-land of man's mind'. Lewis himself does not see such a clear division--he believes that the aesthetic emotion derived from a poem "arises from the satisfaction of man's desire for pattern, for wholeness"[2] and that the archetypal images of poetry indicate our desire, even when we draw apart from fellow human beings, to associate with the community. For he believes "they point us back to a world where the community, hardly as yet differentiated into individuals, felt as one and projected its feelings into myths."[3] This desire for contact with communal experience is part

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1. C.Day Lewis, <u>The Poetic Image</u>, Jonathan Cape, London, 1947.p.141.

2. Ibid.,p.143.

3. Ibid.,p.144.

also of the wish for wholeness and may be as T.S.Eliot said:

> ...the end of all our exploring
> will be to arrive where we started
> and know the place for the first time. [1]

Lewis says that Maud Bodkin has suggested that The Ancient Mariner for example portrays the 're-birth archetype'--of one who descends into Hell and is, as it were, reborn to rise again.

The theory of archetypes, is, just a theory, but appeals to Lewis. He believes that no subject is unworthy for poetry, if the poet "brooding passionately over the object" sees it as part of the scheme of things, the universal pattern. [2] To would-be-poets he would say, that the poem is a re-birth, a re-creation or resurrection of the body after its life journey, and will affect other men too. He is conscious that the new generation after him lives in a different world, one threatened by atomic warfare--but he still believes that the poet can create "gestures of permanence amid the passing, signs of love in the valley of the shadow." [3]

A brooding concentration is what produces poetry, says Lewis, or what he calls 'the prayer of the intellect' which interprets in images. The new images needed in this new world are "images of virtue--natural, consoling, heartening." To poets is revealed the mystery and vision of these things.

Richards hinted as others have that we may have lost some of our poetic powers. Robert Graves has an interesting theory that the language of poetic myth anciently current in the Mediterranean and Northern Europe was:

> a magical language bound up with popular religious ceremonies in

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1. C.Day Lewis, The Poetic Image, Jonathan Cape, London, 1947. p.144.

2. Ibid., p.154.

3. and 4. Ibid., p.156.

> honour of the moon-Goddess, or Muse, some of them dating from the Old Stone Age and that this remains the language of true poetry--'true' in the nostalgic modern sense of 'the unimprovable original, not a synthetic substitute'. The language was tampered with in late Minoan times when invaders from central Asia began to substitute patrilinear for matrilinear institutions and remodel or falsify the myths to justify social changes. Then came the early Greek philosophers who were strongly opposed to magical poetry as threatening their new religion of logic, and under their influence a rational poetic language (now called the Classical) was elaborated in honour of their patron Apollo and imposed on the world as the last word in spiritual illumination: a view that has prevailed practically ever since in European schools and universities, where myths are now studied only as quaint relics of the nursery age of mankind.[1]

So the myths by the time of Socrates became forgotten or kept a close religious secret which we only have evidence of in religious art and fairy tales. Graves proves for himself that the study of mythology "is based squarely on tree-lore and seasonal observation of life in the fields."[2] He also believs that Socrates in rejecting poetic myths was really turning his back on the Moon-goddess and replacing worship and love of her with Platonic love, that is away from women and representing "the male intellect trying to make itself spiritually self-sufficient."[3] The reification of Socrates after his death further helped to push the poetic myths into the background, so that they were only preserved in secret mystery cults until suppressed by the early Christian emperors. So for Graves English poetic education should not begin with the _Canterbury Tales_ (as it still does in U.K., with Shakespeare in N.Z.), the _Odyssey_ or even _Genesis_, but with the _Song of Amergin_, an ancient Celtic calendar-alphabet. His theory helps to explain how 'mythical' has come to mean 'fanciful, absurd, unhistorical'.

" The function of poetry is the religious invocation of the Muse"

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1. Robert Graves, _The White Goddess_, Faber and Faber Ltd, London, 1961, p.9

2. Ibid.,p.11.

3. Ibid.,p.12.

says Graves, but poetry is now dishonoured for in our world "the Moon is despised as a burned-out satellite of the earth and woman reckoned as 'auxiliary State personnel'. In which money will buy almost anything but truth, and almost anyone but the truth-possessed poet."[1] The concept of a creative goddess was, he says, banned by Christian theologians almost two thousand years ago and by Jewish theologians long before that. It seems to Graves that it is just as unscientific to believe in a father or mother authorship of the universe. If the source of poetry's creative power is inspiration and not scientific intelligence then he can see no reason why we cannot attribute it to the Lunar muse. For him:

> True poetic practice implies a mind so miraculously attuned and illuminated that it can form words, by a CHAIN [my emphasis] of more-than-coincidences, into a LIVING ENTITY [my emphasis]--a poem that goes about on its own (for centuries after the author's death perhaps) affecting readers with its stored magic. 2

The links between literature and religion are evidenced in primitive song as C.M.Bowra illustrates when he examines the songs of primitive people.[2] As he says the story of man covers a million years but we have records only for the last five thousand years. Songs he says are one of the most elemental forms of poetry. Early man always had music of some kind for flutes and pipes have often been found, so we can presume that he also danced.

Bowra's study looks at some groups which are still living as the Stone Age peoples did. Their lives he finds indicate a common pattern evolving around hunting, nomadic habits, social groupings such as families etc. and usually living a very hard and exacting life. Change is very slow

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1. Robert Graves, <u>The White Goddess</u>, Faber and Faber Ltd., London, 1961,p.14.

2. C.M.Bowra,<u>Primitive Song</u>, Weidenfield and Nicholson, London,1962.

and custom is extremely important.

The words of the songs are only part of a complex unit we cannot take them at their surface meaning to us. "They take us into the consciousness of primitive man at its most excited or exalted or concentrated moments, and they throw a light, [that light metaphor yet again] which almost nothing else does, on the movements of his mind."[1]

Singing is usually a communal activity and words are traditional, passed down from one generation to another. They are spoken not written. An Eskimo, Orpingalik, said of songs :

> Songs are thoughts sung out, sung out with the breath when people are moved by great forces and ordinary speech no longer suffices...When the words we want to use shoot up of themselves--we get a new song.2

Sometimes there are formulas and ready-made phrases one is expected to use. Special occasions such as a burial may call for a sacred song.

> Sacred songs are in the first place, intended to establish a relation with supernatural powers and to influence them in a direction desired by the singers. They are composed against a background of accepted beliefs, and use its assumptions to make themselves felt. Primitive man is surrounded by forces which he cannot control or understand, and he hopes that by finding the right words he may gain some hold on them.3

One cannot help thinking that perhaps the primitive has an adavantage here over so-called civilised people who also cannot understand many of the forces ruling their lives. We seem to lack magic metaphors for this purpose.

Some sounds in primitive song have no known meaning says Bowra, and primitive language uses images without the least effort or premeditation.

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1. C.M.Bowra,Primitive Song, Weidenfield and Nicholson, London,1962. p.29.

2. Ibid.,p.36.

3. Ibid.,p.48.

They also fall easily into symbols, which are not the same. The powers of nature for instance are often described in human terms. For example, some lines from an Australian song of the Mudbara Tribe of Wave Hill in the Northern Territory celebrating the sun:

> The day breaks--the first rays of the rising Sun, stretching her arms.
> Daylight breaking, as the Sun rises to her feet....
>
> Wearing her waistband of human hair.
> She shines on the blossoming coolibah tree....1

The sun is portrayed as a kind of goddess in human form. Such songs says Bowra contribute to the general task of elucidating universal mysteries, enabling us to comprehend the incomprehensible. The use of symbols differs from that in civilized poetry says Bowra, where we use an image to give a new significance or cast a new light on something dulled by familiarity, to echo or revive a mystery rather than explain one. They are not as vital to modern poetry as they are to the primitive. He concludes"In their use of symbols primitive song and modern poetry differ not in kind but in degree."[2] They are used to express something ordinary words do not adequately deal with. With regard to nature "Primitive man is so deeply rooted in his setting that he does not treat it as a mere setting but forms some more intimate tie with it in the belief that it affects his life."[3]

> Bowra finds that dance has priority over song "Dance is one of man's earliest attempts to move in an imaginary world of his own creation, which none the less stands in a close relation to the actual world and fulfils some function in it, whether magical or religious or ceremonial or merely diverting.4

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1. C.M.Bowra,Primitive Song, Weidenfield and Nicholson, London,1962. p.252.

2. Ibid.,p.260.

3. Ibid.,p.151.

4. Ibid.,p.261.

The adaptation of words to songs must he thinks have been a very slow process but songs arose from dance. It is definitely not art for arts sake. When we speak now of the enchantment of words what is now a metaphor was once a reality. Primitive song is close to prayer where a sense of mystery pervades.

Elizabeth Cook considers the Mythological tradition in European art to be important. Her reason is that "these stories fit into the pattern of children's lives, and provide an answer to some modern problems in teaching."[1] They also have inherent poetic greatness for "The best stories are like extended lyrical images of unchanging human predicaments and strong, unchanging hopes and fears, loves and hatreds."[2]

Jung has told us that myths embody 'race memories' and there are many other theories. Cook believes none of them to be exclusively right but all of them collectively, for "The human experience brought to mind by myth and fairy tale extends beyond the situation described by psychologists and anthropologists."[3] Susanne Langer says that myths are essentially dream material:

> Its ultimate end is not wilful distortion of the world, but serious envisagement of its fundamental truths; moral orientation, not escape...Because it presents, however metaphorically, a word picture, an insight into life generally.4

Childhood reading contributes something irreplaceable Cook believes, to later literary experience. Like Frye who advocates a reading of the

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1. Elizabeth Cook, The Ordinary and the Fabulous, Cambridge University Press, 1969,p.vii.

2. Ibid.,p.2.

3. Ibid.,p.4.

4. Susanne K. Langer, Philosophy in a New Key, Harvard University Press, Cambridge, Masachusetts, 1942,p.171.

Bible as a story of human tribulation and hope she believes, that mythology conveys a sense of the mysterious of which we are all aware:

> Religio, in one Latin sense of the word, implies a sense of the strange, the numinous, the totally other, of what lies quite beyond human personality. This kind of 'religion' is an indestructible part of the experience of many human minds, even though the whole temper of a secular society does not encourage it, and the whole movement of modern theology runs counter to it."1

Provided they have access to myths children can experience "those queer prickings of delight, excitement and terror."[2] Magic, she says, is not the same as mysticism but it may lead towards it.

Fairy stories were not originally for children they were traditional folk tales which nurses often passed on to children. It was the nineteenth century she tells us that saw a natural affinity between the childhood of the race and the childhood of the individual human being.

In present day schools Cook sees that stories are often read to children which bear little relationship to the lives and experience of some of them who may come from different races, cultures and socio-economic classes. Thus "Children cannot be expected to share a JOKE about the lives of people very like some of them and very unlike others."[3] She could have said metaphor for joke because the same is true, but everyone can identify in some way with the situatioms and emotions in myths and fairy tales. They can grasp the patterns at least. Such stories also encourage active response as they lend themselves to interpretation in drama, music, song, dance and painting etc., that is they can be recreated in individual ways.

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1. Elizabeth Cook, <u>The Ordinary and the Fabulous</u>, Cambridge University Press, 1969,p.5.

2. Ibid.,p.5.

3. Ibid.,p.8.

According to Lionel Trilling "The piety which descends from religion is not the only possible piety" though that is likely he thinks to have the quality of transcendence we expect literature to have. He sees this quality missing in what he calls the present day liberal and democratic writing, which lacks to his mind "The sense of largeness, of cogency, of the transendence which largeness and cogency can give, the sense of being reached in our secret and primitive minds."[1] Perhaps this is something we can give to children with myths and folk tales to begin with, progressing later to the classics of literature. Trilling thinks that religion has in the past been an effective means of transmitting this and the current lack is not necessarily because liberal and democratic ideas are unworthy. It is he thinks because if:

> we conceive ideas to be pellets of intellection or crystallisations of thought, precise and completed and defined by their coherence and their procedural recommendations, then we shall have accounted for the kind of prose literature we have. But if we are drawn to revise our habit of conceiving ideas in this way and learn to think of IDEAS AS LIVING THINGS [my emphasis] inescapably connected with our wills and desires, as susceptible of growth and development by their very nature, as showing their life by their tendency to change, as being liable, by this very tendency, to deteriorate and become corrupt and work harm, then we shall stand in a relation to ideas which make an active literature possible.1

There are other voices speaking for the power of literature. Maud Bodkin examines Jung's hypothesis that the psychological significance of poetry is attributable to

> the stirring in the reader's mind, within or beneath his conscious response, of unconscious forces which he terms 'primordial images', or archetypes...'psychic' residua of numberless experiences of the same type, experiences which have happened not to the individual but to his ancestors, and of which the the results are inherited in

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1. Lionel Trilling, <u>The Liberal Imagination</u>, Mercury Books, London, 1950, p.301.

2. Ibid., p.302-3.

> the structure of the brain, A PRIORI determinants of individual experience."1

Bodkin examines this hypothesis. Gilbert Murray she finds also believes that many stories and situations are "deeply implanted in the memory of the race"[2] She uses the term archetypal patterns in her consideration of tragic poetry in particular and she assumes that:

> we may identify themes having a particular form or PATTERN [my emphasis] which persists amid variation from age to age, and which corresponds to a pattern or configuration of emotional tendencies in the minds of those who are stirred by the theme.3

Her difficulty lay in assessing the responses of those experiencing a play or poem which is exactly the difficulty teachers have in schools trying to assess the interest in, understanding of, and appreciation of literature.

Her own interpretation of the Ancient Mariner for instance leads her to conclude that it symbolizes for the reader the consciousness of lonely frustrations and personal mortality warring with an imperial vision of a vast inheritance and far-reaching destiny--that is its emotional meaning. The design of such a work is she believes determined by forces that do not lie open directly to thought. With the assistance of a psychologist and his analysis of works for their emotional symbolism she concluded that it represented a Rebirth archetype.

Bodkin perceives that a magic is communicated in such works that would not be in a dream where we find it hard to remember enough to, as it were, translate its symbolism.[4] The patterns or main theme of the Ancient

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1. Maud Bodkin,<u>Archetypal Patterns in Poetry</u>, Oxford University Press, 1963, p.1

2. Ibid.,p.2.

3. Ibid.,p.4.

4. Ibid.,p.64.

Mariner can be compared says Bodkin to the theme of the 'night journey' or rebirth in the Book of Jonah, and she states that Jung has noted how a state of introversion and regression precedes a kind of rebirth into a new way of life, has been recognized and organized by religions of all times.[1] Poetry uses what Bodkin calls the sensuous resources of language:

> Just as the undifferentiated beliefs of 'everyday' are intellectually ordered, extended and criticized, by the help of an exact terminology, till they become science, so they are emotionally ordered, extended and criticized, by help of the sensuous resources of language, till they become poetry.2

One might call this an expression of the distillation of human experience. In this sense, art, says Bodkin, has been said by T.S.Eliot to approach the conditions of science. It is observation from a distance--Jung used the term 'psychological reality'. Richards she says is afraid that if we coin terms for this experience we may be led into 'intellectual bondage'.[3] Middleton Murry describes it as a unity of mind and heart.

Nietzsche speaks of the essential nature of tragedy as that of a vision generated by a dance "Poet and spectator, he says, undergoing the Dioysian excitement are enabled to transform themselves and find expression through the bodies and souls of others--the actors upon the stage."[4]

Bradley speaks of Shakespeare creating "a mass of truth about life, which was brought to birth by the process of composition, but never preceded it in the shape of ideas, and probably never, even after

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1. Maud Bodkin, _Archetypal Patterns in Poetry_, Oxford University Press, 1963, p.73.

2. Ibid.,p.77

3. Ibid.,p.79.

4. Ibid.,p.83.

it, took that shape in the poet's mind."[1] Shelley thought that a poem's truth was recognized by successive readers and which maybe even the poet does not understand. When we view Hamlet or Lear perhaps Bodkin sugggests "that something is present corresponding to the emotional meaning that belonged to ancient rituals undertaken for the renewal of the life of the tribe."[2] Our tragic heroes may die but their stories live on. Which reminds one of what Robert Graves said in his poem 'To Juno at the Winter Solstice' "There is one story and one story only"[3]

Virginia Woolf noted this same sense of participation says Bodkin when she said "Let us trace the PATTERN [my emphasis], however disconnected and incoherent in appearance, which each sight and incident scores upon the consciousness."[4] Bodkin concludes that the function of poetry

> and in particular of poetry in which we feel the pattern we have called the Rebirth archetype, we may say that all poetry, laying hold of the individual through the sensuous resources of language, communicates in some measure the experience of an emotional but supra-personal life; and that poetry in which we relive,....affords us a means of increased awareness, and of fuller expression and control of our own lives in their secret and momentous obedience to universal rhythms.5

These archetypes which she discusses further in her work seem to characterize the flow, or texture of universal experience. The patterns do not arise casually and can illuminate that other source of great images, religion.

To critics who say that analysis destroys the very principle of

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1. Maud Bodkin,Archetypal Patterns in Poetry, Oxford University Press, 1963, p.84.

2. Ibid.,p.85.

3. Robert Graves, quoted by R.S.Crane in Languages of Criticism and the Structure of Poetry, University of Toronto Press, 1953,p.131.

4. Bodkin,p.86.

5. Ibid.,p.89.

poetry she replies that it need not be criticism of the hard destructive type but can treat the poem with the reverence it deserves. Mainly she finds that "The patterns here illustrated in detail from different kinds of poetic material seem to converge upon this relation of the individual to a life within and beyond him...a power present within the community."[1] This sense of community she finds present in our literary heritage and in religion where for instance the notion of 'communion' is an important one and where the writings embody the same archetypes as found in poetry and from whence many of the poets have drawn some of their inspiration.

We cannot escape metaphor because as Karsten Harries says "We do not have an unmediated understanding of anything real, not even of our own selves."[2] Heidegger she says has alerted us to the way metaphors, their origins effaced, continue to shape philosophical dscourse and his own metaphor of a clearing that lets in light joins "the distance and light metaphors that have long governed philosophical speculation, which has tended to take for granted that the model provided by vision is adequate to human understanding"[3] but this is about as useful as saying that metaphors give us pictures in our mind. As Harries says each philosophical text refers us back to others, to what Derrida has dismissed as white mythology. We cannot he says find a saying of unveiled presence "We cannot step outside language......What remains is play with words....we are imprisoned by language"[4] But even if there can never be a fully adequate description of what it is says Harries we can nevertheless distinguish between more or

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1. Maud Bodkin, Archetypal Patterns in Poetry, Oxford University Press, 1963, p.328.

2. and 3. Karsten Harries, Metaphor and Transcendence, On Metaphor, Sheldon Sacks, University of Chicago Press, 1978, p.83.

4. Ibid.,p.84.

less proper descriptions. As soon as we recognize a perspective as just that then we have transcended language and it is no longer a prison.

We are wrong to treat the poet as a godlike creature she thinks because his work is as much a gift of the earth as his own. We have to remain open, both the poet and the listener to what transcends us and will illuminate ."First we have to listen more attentively to the many voices of the earth."[1] Which is difficult when we are already caught up as she says in ways of looking, seeing and thinking. " We understand things without having made them our own. The adequacy of words is taken for granted, their origins forgotten.[2] It is only against the background of silence that the presence of things manifests itself.[3] Such words captured sometimes in poetry close the gap between language and reality. "Things speak to us" if we allow ourselves to hear. This view sees poetry not as an aesthetic self-sufficient unity but as "a more or less inadequate and fragmentary repetition of that speech in which nature, or perhaps God, addresses us."[4]

The current metaphor for the study of literature is an architectural one--structuralism, which according to Barthes is a descendant of Rhetoric Science is a structure already in existence which we describe and name in our attempts to understand and exploit it. Literature says Barthes has a "grand cosmogenic unity" and like science it is methodical:

> Like science, literature has its morality; a certain way of extracting its rules and procedure from the image it assumes of its being, and consequently of submitting its enterprises to a certain absolute spirit. 5

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1. and 2. Karsten Harries,Metaphor and Transcendence, _On Metaphor_, Sheldon Sacks, University of Chicago Press, 1978, p.87.

3. and 4. Ibid.,p.88.

5. Roland Barthes, _The Rustle of Language_,trans. by Richard Howard, Hill and Wang, New York, 1986,p.3.

One feature both unites and divides them; both are discourses. For science, language is an instrument made as neutral as possible whereas "language is the BEING of literature, its very world:.."[1]

It occurs to me that if I catch a fish already named and classified according to science, it will be labelled as such by myself or any onlookers even if we do not know the correct official Latinate or Greek name. If I catch a hitherto unknown species which I name myself, is my speech act literary or scientific? If I tell a story in writing about my catch it is literary. If on the other hand an account is written as a piece of research and my fish is officially named perhaps even with my name then this constitutes science. Explanations from the past which are not deemed scientific are of course referred to as myths. There does seem at times to be a very fine line between the mythological or the literary and the scientific.

Structuralism is a science created to explore and understand language, particularly literary language. Words are explored at different levels. A sentence has not only a literal or denoted meaning it is "crammed with supplementary significations"[2] It can be at the same time a cultural reference, a rhetorical model, a deliberate ambiguity of the speech act, or a simple unit of denotation. Barthes introduces his recurring notion of 'space':

> ...the "literary" word has the depth of a space, and this space is the field of structural analysis itself, whose project is much greater than that of the old stylistics, entirely based as it was on the erroneous idea of "expressivity.3

Literature retains what Barthes thinks science rejects, that is the sovereignty of language. He sees a change coming however:

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1. Roland Barthes, The Rustle of Language, trans. by Richard Howard, Hill and Wang, New York, 1986, p.4.

2. and 3. Ibid.,p.6

> ...science will become literature, insofar as literature--subject, moreover, to a growing collapse of traditional genres...--is already, has always been, science; for what the human sciences are discovering today, in whatever realm: sociological, psychological, psychiatric, linguistic etc.,literature has always known; the only difference is that literature has not SAID what it knows, it has WRITTEN it.1

In many areas of science scientists are almost lost for words to describe their findings and the truth of Barthes' statement becomes apparent if one looks for instance at the current writings on the brain and nervous system. Jeffrey Saver reviewing a work by Allan Hobson refers to this phenomenon. Hobson has presented an activation-synthesis model of the human capacity to dream; one which draws on introspection as well as techniques of neurophysiological inquiry, and built up a grammar of dreams. He and his colleagues have sought to make a science of dreams. Saver says of these findings: "Hobson's integrative, synthetic, interdisciplinary spirit is palpable on every page. His interpretations of neurophysiological findings yield an enriched view of mental function."[2] Similarly Bergland also speaking of the brain uses figurative terms which one would never normally expect from a scientist. He believes the brain is a gland and therefore has to work in harmony with the whole sytem:

> Those who discern the pattern of the tapestry will stand in awe, knowing that its [the brain's] static form cannot produce thought: molecules, some from the brain and others from the body, must caress each other --as the violinist's bow kisses the violin strings--to create the music of the mind.3

Which suggests that we HAVE reached a point in time where the poet has become a scientist and the scientist a poet. The traditional divisions

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1. Roland Barthes,_The Rustle of Language_, trans. by Richard Howard, Hill and Wang, New York, 1986, p.10.

2. Jeffrey Saver,reviewing _The Dreaming Brain_ by Allan Hobson, _London Review of Books_, August 4, 1988,p.11

3. Richard Bergland,_The Fabric of Mind_,Penguin Books,Australia, 1985, p.176.

between them were only imaginary.

Barthes believes we should change our attitude to literature reified as it has been in the division of subjects and the pursuit of the history of literature as an end in itself. We should now he thinks treat history backwards, beginning with the text and making ourselves the centre of this history, substituting TEXT for author, school and movement; treating it not as a sacred object but essentially as a space in language, the site of an infinite number of digressions, and trace the codes of knowledge invested in them. Like Ricoeur he advocates the polysemic reading of the text.

In Barthes' view the reader becomes the important factor not the writer. For too long he thinks we have concentrated on authors and been distracted from the reality of the text which is meaningless without the active involvement of the reader. "The most subjective reading imaginable is never anything but a game played according to certain rules."[1] these rules do not come from the author:

> ...these rules come from an age-old logic of narrative, from a symbolic form which constitutes us even before we are born--in a word, from that vast cultural space through which our person (whether author or reader) is only one passage.2

The game however is not a mere idleness but a piece of work involving the body and by which "we imprint a posture on the text."[3]

Where the author was previously considered to have fed or 'fathered' the book the modern SCRIPTOR is not the subject of which his book would be the predicate "there is no time other than that of the speech-act, and every text is written eternally HERE and NOW."[4] The text is "a fabric of

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1. Roland Barthes, The Rustle of Language, trans. by Richard Howard, Hill and Wang, New York, 1986, p.31.

2. and 3. Ibid.,p.31.

4. Ibid.,p.51.

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quotations, resulting from a thousand sources of culture."[1] So there can be no claim to ownership for "life merely imitates the book"[2] and once the author is distanced in this way any claim to decipher a text becomes futile, although this is what critics have traditionally done.

> ...by refusing to assign to the text, a "secret" i.e.an ultimate meaning, liberates an activity we may call countertheological, properly revolutionary, for to refuse to halt meaning is finally to refuse God and his hypostases, reason, science, the law.3

To Barthes this is illustrated in the Greek notion of tragedy where the listener realises the tragic double meanings of which the speakers are unaware. Likewise a text:

> ...consists of multiple writings, proceeding from several cultures and entering entering into dialogue, into parody, into contestation; but there is a site where this multiplicity is collected, and this site is not the author, as has hitherto been claimed, but the reader: the reader is the very space in which are inscribed, without any of them being lost, all the citations out of which the writing is made; the unity of the text is not in its origin but in its destination...4

The reader is a repository of all those same traces from which the writing itself is drawn so "the birth of the reader must be requited by the death of the author."[5] The metaphor Barthes uses to describe a Text is that of a network whereas the traditional text is seen as a developing organism like something one gives birth to.

Barthes' emphasis on the reader appeals to me because I believe the receiver of metaphors has likewise been neglected in theories of metaphor. No matter what the author of a metaphor literary or scientific intends,

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1. Roland Barthes, The Rustle of Language, trans. by Richard Howard, Hill and Wang, New York, 1986, p.52.

2. Ibid.,p.53.

3. and 4. Ibid.,p.54.

5. Ibid.,p.55.

in the metaphor, it has almost a literal meaning, as Davidson says, to the one who reads or hears it, it has one meaning, for that person even if other levels of meaning occur later or are hidden within it as in poetry where layers of meaning become apparent on further readings. The making of metaphors and the reasons for their use seem to have been the main preoccupation of writings on metaphor rather than their effect. The signification of a metaphor is entirely personal or idiosyncratic to the receiver whether or not that is appreciated or understood by the metaphor-maker.

Barthes has stressed the importance of a study of psychoanalysis (as well as psychology and linguistics) for students of language, particularly literary text. Robert Rogers does precisely this in his study of metaphor from a psychoanalytic view. He is concerned with "the dynamic processes involved in creating and responding to metaphor, with the ambiguity underlying these dynamics, and with the correlation between imagery and imagination."[1]

The most expressive artists rely on the resources of imagery, or metaphor which in Hawthorne's Scarlet Letter as Rogers explains is symbolized by the "tongue of flame" which Dimmesdale the preacher possesses to the annoyance and chagrin of his otherwise superior colleagues and to the delight of his worshipping congregation--an irony of course because he is a guilty man, but he has this magical ability to commune with people through the use of FAMILIAR words and figures.

> This kind of magical ability to transmit turbulent messages through unconscious channels accords well with a wide array of modern assumptions about the psychology of artistic communication. Communication of this kind can only involve the old, not the new, the known, not the unknown, the universal, not the arcane. It must be based on a

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1. Robert Rogers, Metaphor A Psychoanalytic View, University of California Press, 1978, p.4.

measure of shared life experience or else no significant communication of the kind Dimmesdale specializes in can take place. Psychoanalysis locates this shared life experience in man's epigenetic development.1

The "tongue of flame" is a metaphor and Metaphor is the Tongue of Flame" that is to say it is a source of power. The poet's use of such power is already well documented. Shelley has said that poetry is "vitally metaphorical"[2] Gaston Bachelard decided that "a poetic mind is purely and simply a syntax of metaphors."[3] Metaphor focusses both thought and emotion in a particularly intense, economical way, says Rogers, and one which has led critics and others to describe it as having verbal tension and verbal energy which is transferred from the poet to the reader.

> Having rejected the static conception of metaphor as an ornament derived from the Renaissance idea of style as a garment, modern writers almost always speak of metaphoric intensity in dynamic terms of some kind.4

Unfortunately it is true, as I.A. Richards has said of Max Easton's view of art arousing reaction and yet impeding it, that "We do not yet know enough about the central nervous system."[5] Trilling says that "the devices of art --the most extreme devices of poetry, for example--are not particular to the mind of the artist but are characteristic of mind itself."[6]

Rogers' answer to this dilemma is to explore psychoanalysis as a framework for the study of metaphor--not because psychoanalysts have had much to say about metaphor--but to formulate a model for the dynamics of

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1. Robert Rogers, <u>Metaphor A Psychoanalytic View</u>, University of California Press, 1978, p.3.

2. and 3. Ibid., p.6.

4. Ibid., p.8.

5. Ibid., p.9.

6. Lionel Trilling, <u>The Liberal Imagination</u>, Mercury Books, London, p.179.

response to significant metaphor. John Middleton Murry believed that exploring any primary data of consciousness could lead to the borderline of sanity for "it would be nothing less than an investigation of the genesis of thought itself."[1] [Interesting that he uses this word genesis for the book of Genesis opens with 'The Word'] Rogers' study therefore explains elemental types of mental functioning in order to better understand metaphors, even though, as he is aware, they are not simply something one finds fixed in a text but dispersed even among readers.

Lionel Trilling tells us that the mind, as Freud saw it "is in the greater part of of its tendency exactly a poetry-making organ."[2] even though he considered metaphor unreliable as a method of thought he was forced to use it himself, as in his metaphors of the topography of the mind, but, Trilling points out, that, as it is not a thing of space at all, his metaphors are inexact.

> In the eighteenth century Vico spoke of the metaphorical, imagistic languages of the early stages of culture; it was left to Freud to discover how, in a scientific age, we still feel and think in figurative formations, and to create, what psychoanalysis is, a science of tropes metaphor and its variants, synecdoche and metonomy.3

It has been said by people such as T.S.Eliot and Middleton Murry that artists do not begin with ideas but perception, intuition and emotional conviction. Coleridge also spoke of two distinct types of thought, one of which controlled the other. Rogers says that instead of accepting Murry's idea that artistic thought does not involve reason, it might be better to

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1. Robert Rogers, _Metaphor A Psychoanalytic View_, University of California Press,1978,p.10.

2. Lionel Trilling, _The Liberal Imagination_, Mercury Books,London, p.52.

3. Ibid.,p.53.

go along with Coleridge, supposing it to be dual in nature "combining a 'streaming', associative, pictorial kind of thought with a more rigorous and rational type."[1]

If there are two levels of thought, one "concrete, pictorial, perceptual, emotional, intuitive and more imaginative" the other, "abstract, conceptual, less emotional, analytical, more controlled, and less spontaneous"[2] then language will reflect this. Psychoanalysis seems to Rogers to have the descriptive terms we need. Freud called them "primary process" and "secondary process" mentation.[3] The first may be unconscious as in dreams--and take over during periods of reduced ego control--and sometimes in this state we express what is known as "omnipotence of thought."[4] This is seen in the mental activity of neurotics, schizophrenics and people under the influence of drugs, in highly emotional states, and in the inspirational phase of creative imagination. All of this suggests that it is somewhat chaotic.

> For the most part, primary-process mentation is concrete, usually pictorial, as in dreams. It employs symbolism in a crudely associative way....It can equate almost anything with anything else where even the most rudimentary similarity exists, such as an isomorphic one. According to the primary process the symbol equals reality.5

Language can reflect this primitivism. Thus we begin to see that metaphors somehow combine aspects of both of these processes, building associations that are dissimilar and similar and both creative or imaginative and rational or logical. In ordinary language the word as a symbol is not the object or

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1. Robert Rogers, Metaphor A Psychoanalytic View, University of California Press, 1978, p.14.

2. Ibid., p.14.

3. Ibid., p.15.

4. Ibid., p.16.

5. Ibid., p.17.

reality. Another characteristic of the primary process says Rogers is that there can be no negation, except indirectly.

> The primary process operates mainly in the service of the id as a mode of discharging free, mobile psychic energy. It employs a crude, analogical, associative form of symbolism in a magical, wishful fashion without regard for ordinary reality, time, space, and logical consistency. While the mentation itself may be conscious, its sources are apt to be dynamically repressed. The secondary process operates mainly in the service of the ego. The psychic energy at its disposal is bound, or neutralized, or sublimated energy. As a mode of expression it is rational, conceptual, analytical. It utilizes higher, more abstract forms of discourse such as conventional lexical language and standardized mathematical signs.[1]

Analog and digital communication have similar differences. The first compares categories, the second operates by substitutions. "Metaphor communicates both analogically and digitally."[2] It says something IS and also says it is LIKE.

In simple nursery rhymes and nonsense verse like Three Blind Mice and Jabberwocky "communication takes place in an astonishingly effective way but not at conscious levels. The primary process as a channel of communication is in many ways equal--and in some superior-- to that of the secondary process, but the messages are encoded in a different way."[3] Such messages also translate easily from one language to another. The reader therefore responds to fiction almost as a child responds. In the case of naive metaphors, they are " words with fairly concrete referents which appear to be literal but which attain a metaphoric dimension by effecting a symbolic transfer, usually an unconscious one."[4]

Rogers says that in the Ancient Mariner for instance we meet a

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1. Robert Rogers, _Metaphor A Psychoanalytic View_, University of California Press, 1978, p.18.

2. Ibid., p.19.

3. and 4. Ibid., p.23.

mixture of primary and secondary process material which is normal in literature but in Kubla Khan "which radiates emotion and floods us with associations"[1] we have what is closer to pure primary process. Some have attributed the latter to the belief that Coleridge was under the influence of opium when he wrote it. He himself apparently published it "rather as a psychological curiosity, than on the grounds of any supposed poetic merits."[2]

There is no such thing says Rogers, as a primary process word, so the division into primary and secondary is an artificial one, to indicate "that certain words in certain contexts have potential for mobilizing primary or secondary process mentation--as the case may be --in the reader."[3] It is rather like saying they are childish and adult but it is almost impossible to separate them in literary criticism, and "neither can the primary and secondary components of an image be distinguished with scientific rigor by some kind of fractional distillation."[4] For analytical purposes some useful presumptions are made "as to the type or degree of mentation a given word or phrase IN A PARTICULAR CONTEXT will express or generate."[5]

Rogers has developed a psychological theory of poetic language based on the tension model:

> Under certain contextual conditions language mobilizes primary and secondary process mentation in the reader in such a way that endo-psychic tension develops, a passage being felt as vital or powerful or imaginative in proportion to the amount of tension generated

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1. Robert Rogers, *Metaphor A Psychoanalytic View*, University of California Press, 1978, p.27.

2. Ibid., p.26.

3. Ibid., p.27.

4. and 5. Ibid., p.28.

between drive and defense structures--including memory structures and identity configurations.[1]

According to this theory and assuming the reader to be what he describes as a self-regulating homeostatic system, a metaphor promotes a homeostatic shift in the reader's cognitive and emotive equilibrium. Each metaphor is a puzzle [a shock to the system?] containing a variety of possible interpretations but at the time there is no expectation that it will conform with reality. Scientific models are similar but used with the full realisation that they are merely pragmatic devices which can be disposed of after use. Psychoanalysis however relies as Crews has said on the relative precision of the metaphors it uses, what he calls "their relative capacity for economically describing a vast range of evidence for which no other descriptive terms have been found."[2]

To Coleridge the ideal poet could bring "the whole soul of man into activity."[3] He also believed that poetry had "a logic of its own as severe as that of science."[4] Rogers is convinced that the more we know about the mind and how it works the more we can understand the movement of poetry. He says that Ella Freeman Sharpe was the first analyst to give explicit attenton to the role of metaphor in therapy--she said; "words both reveal and conceal thought and emotion...metaphor fuses sense experience and thought in language. The artist fuses them in a material medium or in sounds with or without words."[5] She also had a theory "that metaphors only evolve in language or in the arts when the body orifices become

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1. Robert Rogers,Metaphor A Psychoanalytic View, University of California Press,1978,p.28.

2. Ibid.,p.30.

3. and 4. Ibid.,p.36.

5. Ibid.,p.37.

controlled" and concluded that metaphor "is personal and individual even though the words and phrases used are not of the speaker's coinage."[1] The patterns of a writer's imagery may even be as individual as his fingerprints Rogers believes. Clinical interest in imagery is growing as patients metaphors are utilized to assist in communication at a suitable distance and in training patients to explore their own imagery as part of their treatment.

After examining some of Keats' poetry Rogers reiterates that it may be impossible to discern the amount of primary process and secondary process in any piece of poetry--likewise as Ray Schafer has said the same is true in clinical work, when trying to "assess the balance of the primary and secondary processes and shifting levels of organization in the patient."[2] This variation is particularly marked in schizophrenics, according to Harold Searles.

When Rogers speaks of regression to the primary process, he emphasises that this is not pejorative , "on the contrary, such regression operating synergistically with higher ego functions is a vital aspect of the creative process and the responses it evokes."[3] It is difficult however to demonstrate in any direct way "that the sensed vitality or beauty of a passage of poetry for a given reader at a given time is proportional to the amount of tension created."[4] For one thing, response may be unconscious.

Ernst Kris and Abraham Kaplan have, says Rogers, produced a classic psychoanalytic paper on the subject of aesthetic ambiguity, in which they concluded that:

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1. Robert Rogers,Metaphor A Psychoanalytic View, University of California Press,1978,p.37.

2. and 3. Ibid.,p.49.

4. Ibid.,p.50.

> The potential of a symbol contributes to a specifically aesthetic experience only if the interpretation of the symbol evokes the resources of the primary process.[1]

They speak of aesthetic DISTANCE and psychic LEVEL and draw attention to the way that an artist will criticise a work in progress. The intellectual component of the aesthetic process is in their consideration important.

Good metaphors, says Rogers, unlike dreams which are almost pure primary process--are characterized by a combination of primary and secondary process. "In poetry, emotion gets inCORPorated in language, especially in body imagery."[2] Bowlby has also noted the human dependency on attachment, which leads Rogers to comment that :

> People spend most of their lives clinging to one another, in one way or another--and of course sometimes at several removes, where the attachment is to pets, money, material goods, or rituals. Whatever forms they take, from an hierarchical point of view these attachments must necessarily hark back to an original clinging of one body to another. [3]

Psychosis can be viewed as a meeting place of mind and body "..integrity of the body self underlies the integrity of the behavioral self.....The intimate relationship of soma to psyche appears in its most dramatic manifestation through the distorting mirror of psychotic thought processes."[4] One can see this when viewing psychotic art which "reflects the serious impairment of the body ego"[5] and not to be confused with deliberately playful art. Rogers describes the poet Sylvia Plath as symptomatic of schizoid entanglement, a confusion of love and hate, which ended tragically in her self-destruction. " In psychotic art the primary process overwhelms

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1. Robert Rogers,<u>Metaphor A Psychoanalytic View</u>, University of California Press,1978,p.65.

2. Ibid.,p.94.

3. Ibid.,p.96.

4. and 5. Ibid.,p.98.

the ego."[1] In Plath "much of the power of her work to touch us to the quick lies in the way her body imagery generates an almost cancerous primary-process mentation in the reader."[2] Because she draws so much on "the wellsprings of her own primary process."[3]

People need psychological space for their imaginations to relieve the strain of relating inner and outer reality according to Winnicot and "Artspace is therefore the playspace of grownup children."[4] Metaphor serves to generate an expanded boundary or potential space in the mind of the reader. By creating what has been called void or absence the writer "creates the space of illusion where the reader can enter into literature's symbolic discourse."[5] He concludes that "everyone possesses a magical tongue of flame almost from birth except for those unfortunate emotional outcasts who become autistic and who often relapse into mutism."[6] The rest of us may lose some of this power but yet re-experience it through the work of the poets. This can only happen when children develop a love of literature, but this is something the community must also possess as they seem once to have had.

Beggren tells us that the comprehension of metaphorical construing requires a peculiar and rather sophisticated intellectual ability which W.Bedell Stanford called 'stereoscopic vision'. Black and Richards have given us the main theory of metaphor and the tension theory as described

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1. Robert Rogers, Metaphor A Psychoanalytic View, University of California Press, 1978, p.112.

2. and 3. Ibid., p.107.

4. Ibid., p.111.

5. Ibid., p.112.

6. Ibid., p.140.

by Berggren is that:

> any vital metaphor should be defined as a plurisignificative sign focus whose referents can be univocally conjoined or fused only at the expense of absurdity, but which implicitly involves a process of assimilative construing whose cognitive import cannot be entirely resolved into literal or non-tensional assertions.1

So metaphor can never more be considered a mere comparison or type of synonym. Poetic meaning and poetic truth he says must always be tensional in character. We have to conceive of metaphor says Robert Weimann no longer as a figure of speech but as "a process of language, and, what is more, we have to inquire into the historical forces underlying the tension and energy that inform this process."[2]

Poets says Wayne C. Booth have always given their vision of what stands for human happiness and "metaphor in this view is not a means to other ends, but one of the main ends of life; sharing metaphors becomes one of the experiences we live for."[3] We sometimes turn to literature and not religion he thinks because it contains claims to universal truths.

James Deese a psychologist claims that after a metaphor is said one is in fact a different person and "a good metaphor allows into the mind just those intersecting features between the literal and figurative concept that are the right ones--not the right ones in the objectivity of the world but the right ones in the subjectivity of human experience in that world."[4] He examines metaphors from the perspective of a theory used in linguistics

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1. Douglas Beggren, The Use and Abuse of Metaphor, *The Review of Metaphysics*, Vol.XVI, No.2, Issue No.62, p.244.

2. Robert Weimann, Shakespeare and the Study of Metaphor, *New Literary History*, Vol.6, No.1. Autumn 1974, p.166.

3. Wayne C. Booth, Metaphor as Rhetoric, in *On Metaphor*, ed. Sheldon Sacks, University of Chicago Press, Chicago, 1979, p.67.

4. James Deese, Mind and Metaphor: A Commentary, *The New Literary History*, Vol.VI, Autumn 1974, p.215.

that of marking. The marked term is derived, specialized and less commonly used. Deese concludes that value cannot be extricated from meaning or from the structure of the language as a whole:

> Any utterance reveals a total state of mind, our feelings and attitudes as well as the formal message we wish to convey...So much is true of the language of the grocer as that of the poet, of the scientific document as of the oration. There is no widespread or universal negation attached to the metaphor, as linking it with the theory of marking might suggest, but it is the case that each decision to use a word, metaphorically or not, carries the potential of revealing something; not only of our intellectual processes but those that are indissolubly linked with the intellectual, our emotional ones. And there is no escaping.1

F.T.C.Moore also reminds us that metaphor is not merely a semantic phenomenon that we do in a sense take metaphors literally by exploring relationships and meanings otherwise unobserved in ordinary language.[2] Jonathan Culler says no statement is metaphorical in itself, we make it so "by taming the strange" when reading poetry we "read the constructed detour as an index of wonder and poetic intensity."[3] But to make a kind of sport of identifying metaphors is to trivialize the process of interpretation. It is not for this reason that we read literature.

We all seem to need a deeper understanding of metaphor than is currently prevalent. As Richards said "A better understanding of metaphor is one of the aims which an improved curriculum of literary studies might well set before itself."[4]

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1. James Deese, Mind and Metaphor:A Commentary, The New Literary History, Vol.VI, Autumn 1974, p.217.

2. F.C.T.Moore, On Taking Metaphors Literally, in Metaphor:Problems and Perspectives, ed.David S.Miall, Harvester Press, 1982.

3. Jonathan Culler, Commentary, New Literary History, Vol.VI, No.1, Autumn 1974, p.225.

4. Warren Shibles, Metaphor an Annotated Bibliography and History, Whitewater, Wisconsin, 1971, p.XL.

CHAPTER III

METAPHOR IN RELIGION

> Every theology entails a metaphor for man's relation to God, and the great theologies are those that have survived after generations of criticisms.1

David Tracy has said that "the study of metaphor may well provide a clue to a better understanding of that elusive and perplexing phenomenon our culture calls religion"[2] for all major religions contain certain root metaphors. "These networks describe the enigma and promise of the human situation and prescribe certain remedies for that situation."[3] Western theology has paid little attention says Tracy to the links between the poetic and religious aspects of the human spirit which surprises him particularly because Western religions are based on books which codify root metaphors.

> The earliest Christian texts (the parables of Jesus), as recent scriptural scholarship has clarified through the use of modern literary-critical modes of analysis, achieve their parabolic status as conjunctions of a narrative genre and a metaphorical process.4

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1. Wayne C. Booth, in Sheldon Sacks On Metaphor, University of Chicago Press, 1978, p.66.

2. David Tracy,'Metaphor and Religion:The Test Case of Christian Texts', Sheldon Sacks,On Metaphor,University of Chicago Press,1978,p.104.

3. Ibid.,p.89.

4. Ibid.,p.90.

They have previously of course fallen victim to the fashion of considering metaphor as mere synonym or substitute and have been interpreted as literal paraphrases with ethical, conceptual, dogmatic or political meaning or been seen as mere ornament to dress the words.

Religious language within ordinary language has also been scrutinised says Tracy by people such as Tillich and Jaspers influenced by Kierkegard, and also by Gabriel Marcel, Ramsey, Frederick Ferre and Stephen Toulmin. Each analysis yields characteristics of a religious dimension which is limited by ordinary language. Such are recognized in what Tracy calls 'limit experiences' such as anxiety, or belief in man's worth.

The central concern of theologists is however with root metaphors says Tracy. In Judaism and Christianity God is referred to as father, lord, shepherd and king or as light, truth, love and wisdom. If these words are substitutions for real, literal, ideational meanings then as Tracy says we do not need to study them, but "if they function by means of some theory of tension or interaction (on the three levels of the word, the phrase and the text, then the move to replace these decorative images with concepts seems a precipitate one."[1]

To understand the Christian religion's metaphorical network one must, as Tracy acknowledges, study the major metaphorical expressions of the New Testament which Northrop Frye does in a work I will refer to later. Has metaphor a specific religious function Tracy wonders, and examines two examples for consideration, the parables of Jesus and the expression "God is Love."

Most parables begin says Tracy, with the words "God is like... and

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1. David Tracy,'Metaphor and Religion:The Test Case of Christian Texts,' Sheldon Sacks, <u>On Metaphor</u>,University of Chicago Press,1978,p.93.

modern New Testament scholars often employ a tensive or interaction theory of metaphor to interpret the narrative and metaphorical elements in the stories. Many follow the lead of Paul Ricoeur who also uses the theory of models developed by Max Black, and Mary Hesse who interprets heuristic models as heuristic fictions which serve to redescribe reality. Likewise the metaphor in parables may be so interpreted and redescribe human possibility. In Aristotelian language says Tracy the parable is a mythos (a heuristic fiction) which has the mimetic power of redescribing human existence. "The metaphorical PROCESS, therefore, is the epiphor or the diaphor which transfers the meaning of the story from fiction to redescribed reality."[1]

The extravagant actions in the parables such as the feast for the prodigal son disorient the reader, but in so doing:

> serve the function of reorienting the reader by disclosing a new religious possibility: a way of being in-the-world not based on the ethics of justice and merit but pure gift, pure graciousness, indeed in Wesley's famous phrase, of "pure unbounded love." 2

The opening phrase "God is like"... serves a similar function, by serving as a radical qualifier upon the whole model. The referents of the parables are therefore concerned with Christian love. The narrative is a heuristic model of extravagant actions set into a realistic narrative.

The statement "God is love" is set within John's letter. The focus in this metaphor is on the word "love." Nygren has clarified the central tensions between the two types of love in his study Agape and Eros. Agape is a higher, sacrificial, spontaneous, overflowing love conferring value on the loved object. The other is desirous, acquisitive, egocentric, human, recognizes value (e.g. beauty) and then loves. One cannot therefore

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1. David Tracy,'Metaphor and Religion:The Test Case of Christian Texts,' Sheldon Sacks,<u>On Metaphor</u>, University of Chicago Press,1978,p.98.

2. Ibid.,p.98.

substitute love in this statement by an Eros type of love. The tension in the statement can only be appreciated says Tracy if one is aware of the religious-as-limit language and the available interpretations of the metaphor in its Christian context. "The statement "God is love" does not say literally what God is but produces a metaphorical meaning for what God is like. In this redescriptive sense, the statement defines who, for the Christian, God is."[1] One would need the same care in interpreting the Buddhist idea of "compassion" or the Jewish understandings of "covenant" as the study of metaphor in these circumstances is not a luxury but a necessity and "moves to the very centre of contemporary theological studies."[2]

Hermann Hesse speaks of this same mysterious 'love' in the expression "Love thy neighbour as thyself" as one of the wisest sayings ever:

> ...the equilibrium of love, the ability to love without being at fault here and there, this love for oneself that is not stolen from anyone, this love for others that does not diminish one's own I or do violence to it! The secret of all happiness, all blessedness is this saying. And if one wishes, one can turn to its Hindu side and give it the meaning: Love your neighbour for he is yourself!...Ah, all wisdom is so simple, has been so precisely and unambiguously expressed and formulated for so long! 3

His conclusion was that all opposites merge into each other and:

> For me the highest utterances of mankind are those few sentences in which this duality has been expressed in magic signs, those few mysterious sayings and parables in which the great world antitheses are recognized simultaneously as necessaary and as illusion.4

The Chinese Lao-tse invented such sayings, says Hesse, and Jesus did this even more nobly, more simply even more intimately. The irony to him is

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1. David Tracy,'Metaphor and Religion:The Test Case of Christian Texts,' Sheldon Sacks, _On Metaphor_,University of Chicago Press,1978,p.103.

2. Ibid.,p.104.

3. Hermann Hesse, 'A Guest at the Spa',_Autobiographical Writings_, Jonathan Cape, London, p.162.

4. Ibid.,p.168.

that all this "most precious and dangerous wisdom" is offered free and it might be a good thing if it were not and we had to struggle to obtain it.

Northrop Frye developed, for teaching purposes, a course based on a literary critical study of the Christian Bible. He reminds us that it is not really one book but a collection of books beginning with the Creation and ending with the Apocalypse, in which there is also a body of concrete images: city, mountain, river, garden, tree, oil, fountain, bread, wine, bride, sheep and many others which recur so often that they clearly indicate some unifying principle. What Frye observes is a unified structure of narrative and imagery that Blake called the Great Code of Art.

To Frye, a teacher is one who attempts to recreate the subject for the student's mind by getting him to recognize what he potentially already knows. A study of the Bible is pertinent to us Frye believes because:

> Man lives, not directly or nakedly in nature like the animals, but within a mythological universe, a body of assumptions and beliefs developed from his existential concerns. Most of this is held unconsciously, which means that our imaginations may recognize elements of it, when presented in art or literature, without consciously understanding what it is that we recognize. Practically all that we can see of this body of concern is socially conditioned and culturally inherited. Below the cultural inheritance there must be a common psychological inheritance, otherwise forms of culture and imagination outside our own traditions would not be intelligible to us.1

Criticism can help, Frye believes, to make us more aware of our mythological conditioning. The Romantics were accused of confusing literature and religion but there is awareness he says of the relevance of Biblical criticism to secular literature. Many people are sensitive to such a study because it involves their personal belief system.

Frye is concerned then with the Bible as an imaginative influence on

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.xviii.

us. The first thing our attention is drawn to is the fact that we have received it in translation from Hebrew and Greek. Being in a poetic style also makes it more difficult to translate. According to Vico, we continually live through repeating cycles: a mythical age, or age of gods; a heroic age, or age of an aristocracy; and an age of the people. Each stage has its own distinctive language which he calls the poetic, the heroic or noble and the vulgar. Frye labels them the hieroglyphic, the hieratic and the demotic. If this is true the earlier languages were signs and often powerful and dynamic. He gives, as an example, the word mana as almost untranslatable. Words tended to be concrete e.g. a study of Homer's vocabulary shows how concepts such as mind, soul etc. are decribed with physical images. Consequently expressions we construe as metaphorical may not have been so to him. The central metaphoric expression is that of a god identified with nature. Nietzsche affirms this same idea says Paul Cantor:

> Ancient man did not have any notion of the spiritual as distinct from the material and hence did not make metaphoric leaps from one realm to the other. We misread ancient texts by trying to find a metaphoric depth beneath their surface meanings. For ancient man cleanliness is not next to godliness, or even symbolic of it, cleanliness is godliness.1

Aphorisms abound in many early works says Frye because of their didactic function. By the time of Plato an intellectual elite is established. Words become primarily the outward expression of inner thoughts or ideas. Subject and object also become further separated. Its best expressions are of thought in command of feeling:

> The basis of expression here is moving from the metaphorical, with its sense of identity of life or power or energy between man and nature("this is that"), to a relationship that is rather metynomic ("this is put for that.") Specifically words are "put for" thoughts

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1. Paul Cantor,'Friedrich Nietzsche: The Use and Abuse of Metaphor.'in <u>METAPHOR</u> <u>Problems</u> <u>and</u> <u>Perspectives</u> ed.David S.Miall, Harvester Press,Sussex,1982.p.73.

> and are the outward expression of an inner reality. But this reality is not merely "inside." Thoughts indicate the existence of a transcendent order "above," which only thinking can communicate with and which only words can express. Thus metonymic language is, or tends to become, analogical language, a verbal imitation of a reality beyond itself that can be conveyed most directly by words. 1

So the first phase of language was poetic, the second that of Plato is dialectical. Synonymous with this says Frye comes the development of continuous prose which does not have the loose associative rhythm of natural ordinary speech. He also believes that there was a movement in philosophy from metaphor towards what we now think of as science. The influence of Aristotle was that,

> He worked out the organon of a deductive logic based on a theory of multiple causation, and provided a technique for arranging words to make a conquering march across reality, subjects pursuing objects through all the obstacles of predicates... 2

In what Frye likens to the military style of the conquering Alexander.

In metaphorical language says Frye the central conception which unifies human thought and imagination is that of a plurality of gods which in metonymic language becomes a monotheistic "God" and as Christian theology developed thought became more deductive and followed from the perfection of God. Where inconsistencies arose they were smoothed out by allegory. This development of a continuous deductive prose style led, says Frye, to some confusion with older stories and also to a tendency to rigidity in thinking. "Analogical language thus came to be thought of as sacramental language, a verbal response to God's own revelation"[3] and retained its cultural ascendancy up to the time of Kant and Hegel.

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.7.

2. Ibid., p.9.

3. Ibid., p.11

Before this says Frye a new style was developing as in the work of Bacon and Locke "Continuous prose is still employed, but all deductive procedures are increasingly subordinated to a primary inductive and fact -gathering process"[1] and language is treated as primarily descriptive of an objective natural order. This phase fits into Vico's 'vulgar' cycle or Frye's 'demotic.' Meaning and truth become more abstract and in this inductive scientific era illusion and reality are a problem. As Frys says after Copernicus, expressions like 'sunrise' and 'sunset' became metaphors or illusory descriptions. Einstein likewise changed matter to an illusion of energy. Now the observer became observed also.

If we have completed the cycle says Frye, from Homer where word evokes thing to our own time where the thing evokes the word we seem once more to need metaphor. He observes that we are currently witnessing much interest in language and linguistics. Mark Johnson has also said that "We are in the midst of a metaphormania."[2]

'Metonymic' to Frye means:

1) a figure of speech in which an image is "put for" another image: this is really a species of metaphor.

2) a mode of analogical thinking and writing in which the verbal expression is "put for" something that by definition transcends adequate verbal expression

3) it is a mode of thought and speech in which the word is "put for" the object it describes (the descriptive phase)

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1. Northrop Frye, _The Great Code The Bible and Literature_, Harcourt Brace Jovanovich, New York, 1982, p.13.

2. Mark Johnson, _Philosophical Perspectives on Metaphor_, University of Minnesota Press, Minneapolis, 1981, p.ix.

The language of immanence is founded on metaphor and the language of transcendence on metonymy.

So in the first metaphorical phase of language the unifying verbal element is the "god" or personal nature-spirit. In the second a transcendent "God" is at the centre of the order of things and in the third phase the criterion of reality is the source of sense experience in the order of nature. In the latter there is no "God" and "gods" are no longer believed in. Mythological time and space become separated from scientific time and space and help to push the concept of God almost out of the third phase. Frye says we might come closer to an understanding of the word God if we understood it as a verb as in the early metaphoric phase but which in fact might also make sense in terms of modern physics. Words in the metaphoric phase were elements of power says Frye as in 'word' itself, for in Genesis 1:4,"God said ,Let there be light, and there was light." Hayawaka says that primitive people believed the name of a person to be part of that person and to know someone's name was to have power over him. Thus 'real' names were sometimes known only to parents. This belief is illustrated he says by the story of Rumpelstilskin.[1]

The language of the Homeric age has a vitality we can never repeat says Frye but "It has been recognized from earliest times that the primary social function of the poet is connected with something very ancient and primitive in society and society's use of words."[2] In the second phase metaphor is recognized as a figure of speech. It is surprising that Aristotle praises Homer's metaphors when he must have known that to him they were

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1. S.I.Hayawaka,Language in Thought and Action,George Allen and Unwin,London, 1966.p.88.

2. Northrop Frye,The Great Code The Bible and Literature,Harcourt Brace Jovanovich,New York, 1982,p.22.

not metaphors. By the third phase use of metaphor is conscious and deliberate and a tension arises says Frye between figurative and what is called 'literal' meaning and some writers will deliberately avoid metaphor as interference. Frye says it is difficult for some people to accept that poetry is genuinely primitive. I can sympathise with their view. If we have been conditioned to think of poetry for example as high on a hierarchic scale of literature it is likewise difficult to equate it with primitiveness even though primitive in the artistic sense means more pure and unadulterated than it means base or inferior. To be RADICALLY metaphorical is the only way, says Frye, that language can convey the presence of a numinous personality in the world.

It is poetry which keeps metaphorical language alive says Frye even though it has lost the magic power of original metaphor. When words were treated as magic they could not vary by a syllable . Now the poet is free to say what he likes but whether we believe what he says is for us to decide. 'Existential' writing as it is known is synonymous with the second period "that conveys the sense of anchoring an interest in the transcendental in the seabed of human concern."[1] Frye illustrates this development or evolution of language expression in the form of a diagram:[3]

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("Revelation") -> Metaphor -> Metonymy -> Descriptive   [Fourth Phase]
     :              :          :         Writing          ?
     :              :          :                         /  ^  ^
     :              :          :........."Existential"....../   ?  :
     :              :                    Writing            /    :
     :              :.......................Poetic or ........../    ?
     :                                                      /
     :..................................."Kerygma"............./
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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.25.

2. Ibid., p.26.

3. Ibid., p.26.

The Bible originates in the first stage but much of it is contemporary with the second, hence its metynomic "God". Rational argument is not a feature of its style. Oratorical rhetoric is a transitional stage between one and two for "oratory at its best is really a combination of metaphorical or poetic and 'existential' idioms: it uses all the figures of speech, but within a context of concern and direct address that poetry as such does not employ."[1] It is a powerful use of language for good or evil. Nowadays we rarely experience its use except in advertising and propaganda. Humanism rose in the third phase says Frye and clarity and lucidity of style became its main concern to distinguish reality from illusion.

The idiom of the Bible is essentially oratorical says Frye. In such figurative language the reality of subject and object becomes tenuous. It is thought to come from a time almost before time and to be the rhetoric of God spoken through his agents. It really therefore does not belong to one particular phase but has a style of its own which he calls 'kerygma' or proclamation, the vehicle of revelation, and as he says "The Bible is far too deeply rooted in all the resources of language for any simplistic approach to its language to be adequate."[2] This term 'kerygma, is usually associated says Frye with the theology of Bultmann who sees it as opposed to myth. Frye on the other hand believes that myth is the linguistic vehicle of kerygma.

Frye's definition of myth is "mythos, plot, narrative, or in general the sequential ordering of words."[3] To him all verbal structures are

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1. Northrop Frye, *The Great Code The Bible and Literature*, Harcourt Brace Jovanovich, New York, 1982, p.27.

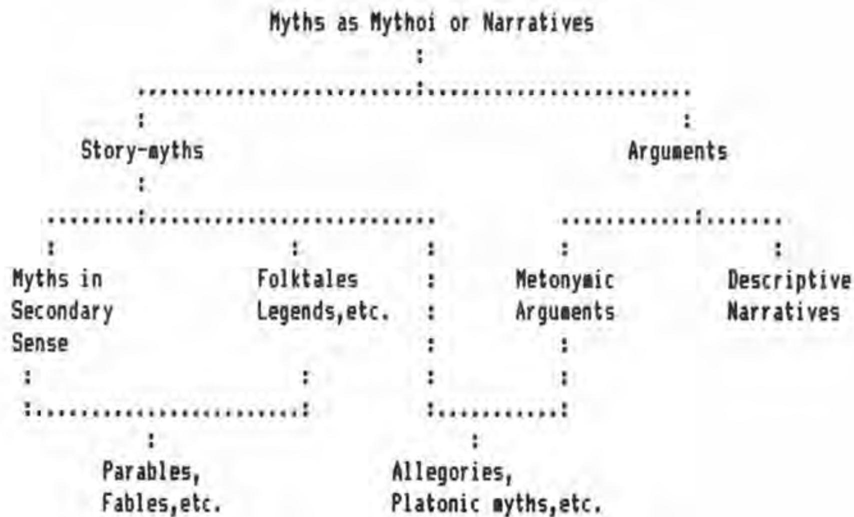
2. Ibid., p.29.

3. Ibid., p.31.

myths in this primary sense. In the metaphorical phase most verbal narratives take story form, where the propelling force is the link between personalities and events. In the metonymic stage this narrative is generally an argument.

The word myth has tended to become linked to story rather than history. Even works we have thought of as histories are mythical, and he cites Gibbon's Decline and Fall as an example, because it follows a narrative thread. So to Frye the Bible tells a story and is a myth.

Some stories however have special functions over time they are not for entertainment as folktales might be but to tell what is important for society to know, and become 'sacred'. They also interconnect in a mythology or canon and deal with specific aspects of a culture. Frye describes them in another diagram:[1]



Mythology is important because "rooted in a specific society [it] transmits a heritage of shared allusion and verbal experience in time, and so

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.34.

mythology helps to create a cultural history."[1]

Frye commends the work of the scholar Frazer because he treats myths "as interlocking story patterns like a literary critic."[2] He believes that "myth is not a direct response to the natural environment; it is part of the imaginative insulation that separates us from that environment."[3] As literature develops says Frye, mythology is absorbed into it and indeed inspires later authors. And as to the truth of myths he says that "A myth is designed not to describe a specific situation but to contain it in a way that does not restrict its significance to that one situation, Its truth is inside its structure, not outside."[4] Running throughout the Bible is a legal metaphor as if man were on trial and through myths he is shown what to do or what is possible. The central myth of the Bible is one of deliverance.

It is ironic says Frye that we use the expression 'gospel truth' to swear to the validity of something when in fact the Bible is full of figures of speech, many puns and much hyperbole. Metaphors of the type this-is-that or A is B abound, and yet they are profoundly illogical if not anti-logical. Jesus also refers to himself metaphorically, as in "I am the vine, ye are the branches." So prevalent are such expressions that we cannot consider them as merely incidental or ornamental.

Translators have had difficulty with many Biblical sayings especially the more metaphysical, but it is "a linguistic fact that many of

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.34.

2. Ibid., p.35.

3. Ibid., p.37

4. Ibid., p.46.

the central doctrines of traditional Christianity can be grammatically expressed only in the form of metaphor."[1] The doctrines may be "more" than metaphor, says Frye, but they can only be stated in metaphorical this-is-that form. For Biblical purposes metaphor is functional.

Explicit metaphor according to Frye, usually contains a predication in the word 'is', but other more implicit metaphors do not have this. He calls this metaphor by juxtaposition. The impact a word has may convey the dictionary or conventional meaning but also what he calls inward specific contextual meaning. As we read material it is unified syntactically as a Gestalt. This centripetal organizing effort of the mind is primary. The referents form a secondary layer of meaning which we can pursue if we wish. Nowadays we scan much written material of which there is increasing abundance, merely in this primary fashion e.g. newspapers, selecting from this first visual scan those parts we actually wish to read and assimilate.

Figures of speech, says Frye, become the focus of our attention in literary language because they emphasise the interrelatedness of words. The juxtaposition of words creates meaning so that a word changes meaning according to its position. Hermeneutics apparently began in the exegesis of the Bible where much attention is given to 'hidden' meanings based on word juxtaposition. Accuracy of description is not possible with words so:

> The events the Bible describes are what some scholars call "language events," brought to us only through words; and it is the words themselves that have the authority, not the events they describe. The Bible means literally just what it says, but it can mean it only without primary reference to a correspondence of what it says to something outside what it says... We could almost say that even the existence of God is an inference from the existence of the Bible:

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1. Northrop Frye, <u>The Great Code The Bible and Literature</u>, Harcourt Brace Jovanovich, New York, 1982, p.55.

in the BEGINNING was the Word.[1]

To Frye all verbal structures have a centripetal (literary) and a centrifugal aspect. The primary and literal meaning of the Bible is its centripetal or poetic meaning. "This primary meaning, which arises simply from the interconnection of the words, is the metaphorical meaning"[2] and there are secondary meanings subordinate to the metaphorical meaning. If we read the Bible sequentially, he says, we read it as a myth (all myths are narrative). As a complete unit it is a giant complex metaphor.

With the Bible we are involved in a more complex theory of meaning and truth than we are with other books. The sequential stage of reading any work is the pre-critical phase. "After the experience has been complete, we can move from experience to knowledge."[3] detail then becomes relevant and images are linked to fit into a structure or pattern.

It has been questioned why poets and myth-makers express themselves in such a complex way. The answer has been "They wrote this way to conceal their deeper meanings from the profane and vulgar, and reserve them for an initiated elite."[4] this was the metonymic or 'hieratic' answer, and one we may sympathise with for in past times it has been an elite such as priests who have had responsibility for establishing moral codes and for teaching. As this lore passes on it is obvious that those responsible must interpret it according to their own mental 'set' also. Perhaps it is in our own more 'demotic' era as Frye would call it, that individuals feel

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.60.

2. Ibid., p.61.

3. ibid., p.63.

4. Ibid., p.66.

more confident to take on this responsibility for themselves.

A similar situation exists in other religions. This is illustrated by Lufti Abas in his study of communication by means of poems with esoteric symbolic meanings. He gives as an example poetry from the work of Kemala (pen-name used by Ahmad Kamal bin Abdullah of Malaysia). It is claimed that only those of us who have shared the same mystical experiences as the writer can understand some of the words. Certain abbreviated letters "separate non-mystic and ordinary Muslims from mystic Muslims. The former are happy to believe that the abbreviated letters are known only to God himself, while the latter claim that, by God's grace, they know the meaning of the abbreviated letters."[1]

Apparently, when a mystic is enlightened about certain mysteries he cannot reveal the truth as he is under oath. It is believed that the truth will confuse ordinary non-mystic Muslims so it must be indicated to them symbolically. Another reason given is that "Truth is beyond language to explain."[2] For instance, a metaphor in Al-Quran Story XXIV refers to 'glass', and :

> ...the glass is regarded as the transparent medium through which the Light (symbol for Truth) passes. On the other hand, the glass protects the light from moths and other forms of low life (lower motives in man) and from gusts of wind (passions), and on the other hand, it transmits the light through a medium which is made up of and akin to the grosser substances of the earth (such as sand, soda, potash, etc.) so arranged as to admit the subtle to the gross by its transparency. So the spiritual truth has to be filtered through human language or human intelligence to make it intelligible to mankind. In other words, it is only a grosser Truth, a simplified Truth, an indication of Truth which is revealed to the non-mystics, and this is the only thing that a human language can do. 3

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1. Lufti Abas,'Symbols in Kemala's Poems:AStudy of Signs in Mystical Poems', in Semiotics Unfolding, Vol.II, Mouton, 1979,p.682.

2. Ibid.,p.682.

3. Ibid.,p.683.

Language is too constricting for a mystic to express his experience. Poetry is the one medium of communication open to him "which is filled with metaphors and similes whose meanings are to be understood only by other mystics..."[1] Some mystic poets throughout history have died, says Abas because their work was misinterpreted. Communication is therefore, among Islamic mystics, not a two-way but a one-way process and "there is no agreement between the emitter and the receiver explicitly or implicitly. The codebook is then just the similarity of the spiritual experience between the two."[2]

As Abas illustrates, communication is not always a reciprocal process. His description fits in quite well with what Frye explains about the Christian Bible as repository of a similarly mystical and sometimes obscure code.

Brunton says something similar in his work, to the effect that those who seek Divine enlightenment should not be over-eager to pass on the truths they know to those who may not be ready for them: "Do not make a spiritual or intellectual gift to a person who is not ready...as Jesus said 'cast not pearls before swine'."[3] This may seem harsh and elitist as I suggested previously but perhaps human spirituality develops or evolves to various stages or levels in each individual and enlightenment has to be sought for. As Brunton later says, Christ did not refuse help or teaching to any who desired it, regardless of their intelligence, wealth or status. If this is true then perhaps we should not force people to accept truths

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1. Lufti Abas,'Symbols in Kemala's Poems:AStudy of Signs in Mystical Poems', in Semiotics Unfolding, Vol.II, Mouton, 1979,p.683.

2.Ibid.,p.687.

3. Paul Brunton,The Inner Reality, Rider & Co.,London,1970,p.181.

they are not ready for or are not seeking.

Metaphor both obscures and enlightens which is why Paivio likened it to a solar eclipse.[1] What is mystifying is whether an understanding and appreciation of it is something we had and then lost or whether it is something we strive yet to fully understand and perfect. According to Jacques Derrida :

> Since the first motives which led man to speak were passions, his first expressions were tropes. Figurative language was the first to be born, and proper meaning was the last to be discovered.[2]

It is particularly in the East, especially the later literature of Mohammedan poetry, which makes use of the indirect or figurative modes of expression, says Derrida. He sums up what metaphor is to philosophers:

> ...provisional loss of meaning, a form of economy that does no irreparable damage to what is proper, an inevitable detour, no doubt, but the account is in view, and within the horizon of a circular reappropriation of the proper sense.[3]

Evaluation of it is therefore always ambiguous:

> ...the whole teleology of sense, which constructs the philosophical concept of metaphor, directs it to the manifestation of truth as an unveiled presence...[4]

Attempts to define truth are as many and as varied as those of metaphor.

The 'God' of the Bible and 'Christ' of the New Testament appear to be metaphorically one, says Frye. The two testaments mirror each other but are not a reflection of the world outside of them. There is for instance no evidence for a 'real' life of Jesus. This is generally explained in the expression 'In the Old Testament the New Testament is concealed, in the New

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1. Allan Paivio,'Psychological Processes in the Comprehension of Metaphor', in Metaphor and Thought,ed.Andrew Ortony,Cambridge University Press,New York, 1980,p.150.

2. Jacques Derrida,'White Mythology:Metaphor in the Text of Philosophy', New Literary History Vol.VI Autumn 1974 No.I,p.72.

3. and 4. Ibid.,p.73.

Testament the Old Testament is revealed'.

There is, says Frye, another form of identification other than the simple type of metaphor of the illogical A is B type, one that we do not think of as metaphorical but as the basis of all ordered thinking. That is when we identify not only WITH but AS, and A is identified as an individual of the class to which it belongs. "When we combine these two forms of identification, and identify an individual WITH its class, we get an extremely powerful and subtle type of metaphor."[1] He calls this the 'royal' metaphor because it symbolizes kingship, as a king symbolizes the unity of his subjects in their society. The same technique is used when one speaks of a person but identifies a whole country with the name. In earlier times as Frye says a ruler did physically appear to embody his country, he was assumed to have 'Divine' attributes and if his country suffered or flourished likewise so did he. We speak sometimes mockingly of the Royal 'WE' which I suppose represents what Frye is referring to, a head of state is in some sense the state. When Paul speaks of Christ living within him, this, says Frye is the same kind of royal metaphor, but inverted.

Instead of an individual finding his fulfillment within a social body, however sacrosanct, the metaphor is reversed from a metaphor of integration into a wholly decentralized one, in which the total body is complete within each individual [collective responsibility?]. The individual acquires the internal authority of the unity of the Logos, and it is this unity that makes him an individual."[2] Such metaphors are so forceful they can be difficult for us to accept, particularly those who

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.87.

2. Ibid., p.100.

seek an equivalent or alternative metaphor for society.

Frye questions what it is about the Bible that attracts poets and other creative artists especially of the Western world. To him each of the main phases of the Bible gives a broader perspective on the earlier parts. The Christian Creation myth speaks of a Father figure and life is SPOKEN into existence. "The Genesis myth starts with what Aristotle would call the TELOS, the developed form toward which all living things grow, and the cycle of birth and death follows after."[1]

The 'beginning' which is the central metaphor is not really birth, says Frye, but an awakening "a sudden coming into being of a world through articulate speech (another aspect of logos), conscious perception, light and stability."[2]

In the Genesis account the world of the Fall is symbolized by the serpent and "the assumption that the serpent was a disguise for Satan came much later."[3] It is with this Fall, says Frye that the persistent 'legal' metaphor begins "of human life as subject to trial and judgement, with prosecutors and defenders."[4] Jesus represents the counsel for the defence--Satan the accuser. An all-seeing, ever watchful, potentially hostile God is presupposed by the Creation myth.

Frye speaks of the recurring symbolism of light which is not the light of sun or moon. Jesus is described as a light shining in the darkness and after the catastrophe a new light, the original light of

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.106.

2. Ibid., p.108.

3. Ibid., p.108.

4. Ibid., p.110

creation, will enlighten the redeeemed. There is also the metaphor of creation as a designed unity, the work of a craftsman, which has been interpreted as our ability to create or recreate, "a transforming of the chaos within our ordinary experience of nature."[1]

Frye notes that in the second phase of the Bible the emphasis is on metaphors of the ear as compared to the eye and there is avoidance of any suggestion of the possibility of actually seeing God. As he expreeses it "History is a period of listening in the dark for guidance through the ear."[2] There is a great deal of visual imagery in the Bible which he believes has to be internalized and made the model of a transformed world.

The Bible seems to regard moral and natural order as controlled by the same divine will says Frye. Wisdom is initially interpretation of and comment on the law, with experience and tradition as a guide. Education is "the attaining of right forms of behaviour and the persistence in them, hence, like a horse, one has to be broken in to them."[3] [an unfortunate metaphor on which subsequent treatment of children has often been based] Secondly wisdom is prudence in facing the future, and advice is received from Proverbs, and Fables for the "lower ranks of society."[4] The proverb was cultivated, says Frye, throughout the Near East, often in the form of a father's advice to his son.

The central source of wisdom in the Bible itself is the Book of Ecclesiastes and the key word here is 'vanity'. "This word has a metaphorical

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.112.

2. Ibid., p.117.

3. Ibid., p.121

4. Ibid., p.122.

kernel of joy, mist or vapour, a metaphor that occurs in the New Testament (James 4;14)."[1] There is also the suggestion that God put something like OLAM into man's mind (3:11). "This word usually means something like "eternity," but in this context has rather the sense of mystery or obscurity."[2] Keats has said this teases us out of thought because we do not know what it means and makes us dissatisfied with simplistic solutions. The main idea seems to be that in life we are as in a fog searching for a way out--which is via wisdom.

The origin of the work ethic also springs from this source. We are behested to live joyfully (9:9). Frye prefers the Latin Vulgate translation from the Book of Proverbs LUDENS IN ORBE TERRARUM, playing all over the earth. Interesting that the notion of play which is to loom large in educational theory later is emphasised here.

Prophecy faded as a cult says Frye, and he notes that Milton thought that modern prophecies may come from the press. Prophets often make unpopular prophecies he says, much like modern creative artists or scientists do. One thinks immediately of 'ozone' predictions and the like, or the works of rebel writers. These people may be obeying the dictates of the laws within their own sphere even in the face of public opposition.

Many metaphors refer to 'level' as in the higher level of heaven compared to earth, but, "It seems clear that the real distinction between initiated and uninitiated is between those who think of achieving the spiritual kingdom as a way of life and those who understand it as

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.123.

2. Ibid., p.124.

merely doctrine."[1] This way of life is described in the Authorized version as METANOIA, translated as repentance, which really means "a change of outlook or spiritual metamorphosis, an enlarged vision of the dimensions of human life."[2] The word 'sin', says Frye, means nothing outside of a religious and individualized context. It does not mean illegal or anti-social behaviour but the 'deadly' or mortal sin which destroys the soul--pride, wrath, sloth, envy, avarice, gluttony, lechery. Sin is what blocks God's activity and curtails human freedom. The imagery of Hell is described as "an undying worm and an unquenched fire."[3]

Frye finds that "what distinguishes Christianity (and Judaism) from most Oriental religions...is this revolutionary and prophetic element of confrontation with society."[4] Thus the root of evil is not ignorance nor is the cure enlightenment. Jesus was not simply compassionate as was Buddha. Christ went through martyrdom and death which signifies to Frye that man has to fight his way out of history and that any society is incapable of completely absorbing the individual. The death of Socrates was an illustration of this fact.

The radical meaning of atonement, says Frye is 'unifying'--that of God and man. The metaphor is not one of an invisible objective power to whom we make conciliatory gestures--but of a power that can do anything through the man who is a channel of Divine energy.

> Theist and Atheist are one in regarding personality as the highest attribute known to experience. Whether it is possible for human

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.129.

2. Ibid., p.130.

3. Ibid., p.130.

4. Ibid., p.133.

> personality to be connected with and open to a divine one that is its own infinite extension may still be a question, but the more solid the metaphorical basis for each side, the more possibility there is of mutual understanding. 1

Truth was originally thought of as a kind of unveiling but in modern terms says Frye "perhaps what blocks truth and the emerging of revelation is not forgetting but repression." [2] The last book Revelations and Apocalypse is a mass of allusions to the Old Testament. There is transformation promised for those who persist in faith--but this is not a notice of things to happen externally--they are the inner form of what is happening now--what we call history.

> What is symbolized as the destruction of the order of nature is the destruction of the way of seeing that order that keeps man confined to the world of time and history as we know them. This destruction is what the Scripture is intended to achieve.3

At the first reading of this book of Revelations, Frye says we might consider it an insane rhapsody but it reflects nothing worse perhaps than the repressions in our own minds--nightmares of anxiety and triumph. As in The Tibetan Book of The Dead which the priest reads to a corpse, telling him that these visions are his own repressed mental forms now released by death. Perhaps this is similar to our dreams where we dream of things that we already know but in a chaotic, distorted form with no logical plot (narrative or mythos). Likewise the Old Testamant gives us 'dreams' or 'nightmares' based loosely on the kinds of experience we do know are possible or can at least imagine as possible but put into a larger than life scenario, as we might now view the film of a preposterous S.F.story.

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1. Northrop Frye, <u>The Great Code The Bible and Literature</u>, Harcourt Brace Jovanovich, New York, 1982, p.134.

2. Ibid., p.135.

3. Ibid., p.136.

The apocalyptic or ideal world is expressed in imagery of sheep and pasture, harvest and vintage, cities and temples and also oasis imagery of trees and water, the latter a strong and relevant image as Frye says, for desert people. The garden of Eden is just such an image.

Each apocalyptic or idealized image has a demonic counterpart, for example water as a blessing, or as a deluge. There is the tree of knowledge, and all mythologies have the tree of life as a symbol of a food provider or of life itself. "The Scandinavian Yggdrsail and the beanstalk of a famous nursery tale are relatives of this world tree, whose roots are in the lower world but whose branches rise into or beyond the sky."[1] Apparently Blake suggested that before his fall Adam would have been metaphorically himself a tree of life. The cross also has two significations, a demonic image (crucifixion) and one of of salvation.

Pastoral and agricultural imagery overlap with the oasis imagery of paradise. The demonic side of animal imagery is represented by birds of prey but the horse conveys a warrior aristocracy. The ass too has high symbolic value. In the Bible the dragon is a sinister symbol but in other mythologies it was a fertility symbol.

In the Gospels, harvest and vintage are often symbols of the apocalypse, and the eucharist a fusion of the vegetable world and the body of Christ. If we ask, says Frye, what is the apocalyptic or idealized image for human life itself we return to the royal metaphor. The relationship of God and man is symbolized by the bridegroom and and bride in their union as one. Thus all 'souls' are symbolically female and he is the only individual who can truly say "I am". Wedding imagery is

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.149.

frequently used in parables of Jesus about his kingdom. The demonic parody of the bride and groom is the Great Whore of Babylon, mistress of the Antichrist--who holds in her hands the cup containing the blood of saints and martyrs. Note, says Frye, the metaphorical identification of blood and wine and the sexual image of the cup--its apocalyptic counterpart the cup held by Jesus when he instituted the Eucharist, which becomes also the Holy Grail.

The myth of a Mother Goddess of Nature was widespread in ancient times. The sky was associated with male and the earth female. The Bible counteracts this and de-idolizes nature "to suggest that there is no numinous presence or personality in nature that responds to such gestures, except something evil and treacherous."[1]

As the Bible proceeds says Frye, the area of sacred space shrinks "The conception of a violation of the sacred space is a very ancient one."[2] It can be seen in the elaborate precautions taken for instance to protect royal tombs in Egypt.

There are many urban images of cities and highways, and above all this world is a place of spiritual beings or angels, metaphorically associated with the sky. Life is imaged as a fire which does not burn up "On metaphorical principles all the categories of apocalyptical existence can be thought of as burning in the fire of life."[3] The Holy Spirit is imaged as a bird. Devils are also associated with sky imagery. Satan falls from heaven. "No demonic God...can exist as such, but the chief of the

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1. Northrop Frye, _The Great Code The Bible and Literature_, Harcourt Brace Jovanovich, New York, 1982, p.152.

2. Ibid., p.159

3. Ibid., p.162.

devils may set himself up as God and be incarnated in various agents of Anti-christ.[1]

Saint Paul, says Frye, tends to think that the powers of nature are the most formidable enemies of God and man. " Whenever they are taken by man to be, not creatures Of God and therefore fellow creature of himself, but to be charged with numinous and mysterious power independent of man."[2] Then man becomes enslaved--mindlessy observing rituals out of superstition-- or customs out of habit. Demonic powers therefore are granted through human ignorance.

In the Apocalyptic vision the body of Christ is the metaphor holding all categories of being in identity. There is only one knower existing also within our consciousness. The eucharist is the enduring symbol of this, but, as Frye says, our awareness of this has tended to dwindle to the mere ritual of communion.

Frye says he pursues this study of the Bible not as an interest in doctrines of faith as such but in the expanding of vision through language. This is the very same rationale that we usually have for teaching literature in schools. His royal metaphors are interesting because on reflection they are fairly pervasive. As I write this there is a toffee tin turned tea caddy in front of me inscribed 'A Royal Assortment', the picture on the tin however is not one of royalty but of mediaeval peasants labouring industriously in field and cottage. They are symbolic presumably of a busy organized world, where the ruler has established order, and suggesting a

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1. Northrop Frye, _The Great Code The Bible and Literature_, Harcourt Brace Jovanovich, New York, 1982, p.164.
   The main images of Apocalyptic and Demonic imagery are given by Frye in summary table form on pages 166-7

2. Ibid., p.164.

state of peace where in Browning's words "God's in his heaven all's right with the world." Perhaps this is one of the most enduring themes in our literature. Man loves to work and play and he loves to worship. To do this requires stability and order and a sense of direction. The source of this direction has traditionally come from 'inspired' works such as the Bible but interpreted for us by those in power. This is the traditional source of metaphor, to help us understand our own metaphoric condition. We have a duality in our nature and an indefinability just as metaphor has. We are a puzzle we spend our life solving.

Frye suggests we turn the traditional metaphor inside out. "Instead of a metaphor of unity and integration we should have a metaphor of particularity, the kind of vision Blake expressed in the phrase 'minute particulars' and in such lines as 'To See a world in a grain of sand'."[1] We can all identify with this sense of our own minuteness and yet distinctive existence in the vastness of time and space. Frye says such thinking leads us to notions such as that of interpenetration in Buddhism, a type of visionary experience which has been described as "an infinite mutual fusion or penetration of all things, each with its individuality yet with something universal in it."[2] But he reminds us that "Metaphors of unity and integration take us only so far, because they are derived from the finiteness of the human mind."[3] We have to follow a way beyond this where we are both innocent and lost again, but in a newly lighted direction.

Frye sees the Bible narrative as a U shaped pattern similar to that

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.167.

2. Ibid., p.168.

3. Ibid., p.168.

in a comedy where a series of misfortunes brings the drama to a low point but which eventually reaches a happy conclusion. One can view the Bible in its entirety as a 'divine comedy'. All the high and low points relate metaphorically to one another. In a sense the exodus is mythically the only important event says Frye, it is " the definitive deliverance and type of all the rest."[1] The Resurrection of Christ in the New Testament is its anti-type. The Gospel writers synchronize the Crucifixion and the feast of the Passover and see the Passion as the anti-type of the Passover sacrifice.

Frye reminds us that mythological and typological thinking are not rational thinking and ordinary distinctions such as time are irrelevant. The 'hero' of the Bible, if we consider it a narrative, is the Messiah, whose name and identity are withheld, as so often happens in romances, until the end:

> he is the creator of Genesis, the secret presence in the Old Testament history, the rock that followed the Israelites with water, ...He enters the physical world at his Incarnation, achieves his conquest of death and hell in the lower world after his death on the cross...he reappears in the physical world at his Resurrection and goes back into the sky with Ascension. 2

One can see this Messianic quest as a cycle, paralleled by a demonic cycle. As a 'hero' all types of authority figures are represented by Christ--prophet, priest, king. Such prophets as Frye points out are often martyred. But the Bible is not concerned with the Greek idea of a hero, "the figure greater than ordinary human size, power, descent and articulateness, who so often seems to have a divine destiny almost within his grasp."[3]

In all great tragedy there is a suggestion of malice within the

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.171.

2. Ibid., p.175.

3. Ibid., p.181.

divine nature [keeping man down to size?]. The Romantic movement sympathised with those heroes who were its victims. The theme of the neglected heir or the passed-over firstborn son is common. It is a human characteristic says Frye, to wish for a clear line of descent. The choice of a younger son which occurs so often, represents a divine intervention in human affairs "that breaks its pattern."[1] Another seeming contradiction by human standards is the birth of sons to women late in life, another symbol of God's revolutionary activity. Israel represents the hero and one is reminded of the folktales where it is the younger son who succeeds after his brothers have failed in the quest.

Man's creative work is an expression of human energy. He struggles against natural human enemies and the chaos of nature. In human terms the hero is usually not the worker but the leader against the enemy. Nature is propitiated with sacrifices because its forces are a mystery. Israel represents the human condition. As in the structural pattern behind many stories , the hero has to enter a place of danger perhaps to rescue a heroine. The heroine of the Gospels says Frye, is the 'bride' Jerusalem "the total body of redeemed souls who are symbolically a single female."[2] In the Jonah story which represents the Passion of Jesus the sea, the monster and foreign lands which he experiences are symbols as is his redemption from the subterranean depths.

There have traditionally always been two monsters, says Frye, as in the book of Job, Behemoth and Leviathan, land and sea monster respectively. This is because our habitat can be thought of symbolically as subterranean

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.182.

2. Ibid., p191.

or submarine in comparison with the reality of the restored world of Israel. The strong tradition of associations with the sea persist in the fishing stories of the Gospels. The figure of the wise teacher or culture hero as a fish is an ancient one. If the monster that swallows us is metaphorically death then whoever delivers us has to be dead too. This happens in the tale of St. George and the Dragon where he dies and is revived by the doctor. The narrative of the Bible is a series of ups and downs, bondage and rescue.

Frye suggests that the Book of Job is the epitome of the narrative of the Bible and the Book of Revelations, of its imagery. "The Book of Job is usually classified among the tragedies, but it is technically a comedy, by virtue of its happy ending...he attains the flash of prophetic insight that breaks the chain of wisdom, and on to the final vision of presence and the knowledge that in the midst of death we are in life."[1]

The Bible is concerned with narrative or MYTHOS wheras the the Buddhist sutras employ little narrative and the Koran consists of revelations with no visible narrative sequence. In most scholarly fields there is a central body of data generally treated as established fact. In the sphere of Biblical studies he finds this is surprisingly small. Authorship has been the most researched aspect, unnecesarily so he thinks. He believes it is futile to try to establish what is 'original' in the Bible, because editing and translating have made this too difficult. A similar process went on trying to establish the authorship of the Iliad and the Odyssey until a metaphoric 'Homer' was established and the poems read as unities.

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.197.

The Bible displays a unity. "From one point of view the Bible is as unified and continuous as Dante...from another...it is as epiphanic and discontinuous as Rimbaud."[1] In its linguistic conventions Frye says it is close to the conventions of the spoken word and the oral tradition. Poetry developed before prose in the history of literature. The devices of poetry such as metre, rhyme, alliteration etc. "make verse the simplest and most direct way of conventionalizing words for communication."[2]
The parallelism of Biblical style has this advantage also. "It is an admirable rhythm for conveying the feeling of a dialogue initiated by God, which the reader completes simply by repetition."[3] He chooses Psalm 91:2-6 as an example. This antithetical rhythm of Hebrew verse persists also in the New Testament but the editorial process has probably obliterated many metrical patterns which existed. An authoritative voice tends to be impersonal says Frye which is another reason for less concern about authorship. The Bible's primary interest is in ethical action "its style...is of the battlefield rather than the cloister..."[4]

The rhythm of the Bible expands from what Frye calls 'kernels'[5] proverbs, aphorisms, oracles. commandments, pericope. In Paul's letters there are many business and commercial metaphors and a more continuous

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.197.

2. Ibid.,p.209.

3. Ibiid.,p.110.

4. Ibid.,p.214.

5. 'pericope' is described by Frye as a short discontinuous unit normally marked by a paragraph sign in the Authorized version. It is the crystalisation as it were of the parable or the climax to an event, the 'kernel' of a story or 'nugget' of truth.

prose but still exhortative in style. In the Bible the spoken word takes precedence over the written. Spoken verse says Frye, as in Beowulf, has much repitition. Shakespeare often summarised his plots and music repeats its themes for " In listening we demand that a certain rhythmical period be filled out, regardless of the repetition involved."[1] An illustration of such repetitive detail is seen in the instructions for the building of the ark of the covenant (Exodus 25ff). Detail is meant to impress but it is also oral literary convention:

> Traditionally, the Bible speaks with the voice of God and through the voice of man. Its rhetoric is thus polarized between the oracular and the authoritative, and the repetitive on the one hand, and the more immediate and familiar on the other. The more poetic, repetitive and metaphorical the texture, the more the sense of external authority surrounds it; the closer the texture comes to continuous prose, the greater the sense of the human and familiar. 2

The rhetorical style of the Bible is oratorical "it combines poetic with magical influence."[3]

In Shakespeare's youth says Frye, there was much more interest in extracting from literature, truths about the human condition and the work of art became part of one's own life and possesssions. This is one of the arguments for the study of literature in schools. Literature therefore has the same decentralizing element as the Bible, and vice versa. There is also a certain effectiveness in the Bible, created by some of its images, which have imposed themselves on our consciousness, such as can only be achieved by a unity of context, which Frye calls RESONANCE.

> The Bible includes an immense variety of material, and the unifying forces that hold it together cannot be the the rigid forces of

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.214.

2. Ibid.,p.214.

3. Ibid.,p.216.

> cultural stress, but the more flexible ones of imaginative unity, which is founded on metaphor. Metaphor...is an identity of various things, not the sham unity of uniformity in which all details are alike.1

This is an example of the kind of unity of detail one stands in awe of before a cathedral's architectural design. Likewise the Bible is a single creation put together by many people but inspired by one designer. Shakespeare's genius says Frye displays this same decentralising ability and is the result of exquisite care and craftsmanship in the unity of his design.

We need to return, says Frye, in our attempts to interpret the Bible, to the neglected theory of polysemous meaning. Ricoeur also refers to this need.[2] That is, we look for the layers of meaning to be gained from many readings--just as we do with poetry when each reading reveals more to us. "This 'something new' is not necessarily something we have overlooked before, but may come from a new context in our experience."[3] In Dante's Epistola X he explains such a schemata and says that polysemous meaning is a feature of all deeply serious writing for which the Bible is a model. Meaning therefore is relative "what is implied is a single process growing in subtlety and comprehensiveness, not different senses, but different intensities or wider contexts of continuous sense, unfolding like a plant out of a seed."[4]

Polysemous meaning, says Frye, is the development of a single dialectical process as in Hegel's Phenomenology. In Dante's schemata the literal level, hearing the word or seeing the text, is sense experience.

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.218.

2. Paul Ricoeur, The Rule of Metaphor, University of Tortonto, 1975, p.321

3. Frye, p.220.

4. Ibid., p.221. This idea utilised in notion of a spiral curriculum.

The allegorical level is that of contemplative reason which sees the world objectively. The third one is the moral level of faith "that transcends and yet also fulfills the reason, and the anagogic level is at the centre of the beatific vision that fulfills faith."[1] So, literally, the Bible is a gigantic myth:

> ... a narrative extending over the whole of time from creation to apocalypse, unified by a body of recurring imagery that 'freezes' into a single metaphor cluster, the metaphors all being identified with the body of the Messiah, the man who is all men, the totality of *LOGOI* who is one Logos, the grain of sand that is the world.[2]

So we start with the 'literal' Bible of myth and metaphor--the centripetal body of words or primary data. This gives us in Horace's phrase a 'speaking picture' (ut Pictura Poesis) a kind of verbal magic which distils the past into the present. Then there is the 'royal' metaphor--the sense of individuals forming one body and a sense of unity and identity. This represents a move from the level of knowledge and understanding to an existential level, from Dante's 'allegorical' to his 'tropological' and *Kierkegaard's 'either' and 'or'*. This is a movement from knowledge to action--from aesthetic pleasure to ethical freedom leading to 'faith'. Professed 'faith' is adherence to a body of belief for a specific community. [Patriotism seems like a form of this.] Professed belief is instinctively aggressive--it is limited too by man's finite capacities. Doubt is not an enemy of faith says Frye but its complement, it expresses the search for something more and beyond the community to one of vision. The only thing we know beyond life is death.

Paul speaks of enlightenment, says Frye, as where the ego dissolves

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.223.

2. Ibid., p.224.

and there is an uncertainty of whether one is 'in' or 'out' of one's body, and he speaks of an unintelligible and awful language which he is unable to translate or communicate. The language of the Bible, says Frye, is the language of love which is said to outlast all forms of communication. It may be that "only through the study of works of human imagination that we can make any real contact with the level of vision beyond faith."[1] Frye says man's fear of freedom may be symbolised by original sin. Milton said man did not naturally seek or want freedom, it is something given because God wishes him to have it. Man in fact prefers a master-slave duality and builds structures to preserve it. Our attitude to the Bible reflects therefore our own anxieties and prejudices and as Frye finally says "anxiety is very skillful at distorting languages."[2]

What Frye says is largely corroborated by Professor Phylis Trible Baldwin, Professor of Sacred Literature at New York's Union Theological Seminary when she was visiting New Zealand recently. She explained her theories about the Bible which is speaking to us in terms of our own time:

> Every culture lives by myths. By that I mean stories, not falsehoods. Stories that tell them about their origins, what they are and who they might become. For the Western world the major myth has been the biblical text.3

She believes that it has emotional and intellectual appeal whether one accepts its teachings or not. As a feminist biblical scholar her specialist interest is in researching the Bible from this perspective. Our culture is predominantly patriarchal she says, but even Israel had a counter-culture

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1. Northrop Frye, The Great Code The Bible and Literature, Harcourt Brace Jovanovich, New York, 1982, p.232.

2. Ibid., p.232.

3. Phyllis Trible, 'Feminism and Scripture', reported by Yvonne van Dongen, Auckland Star, New Zealand, 27th July 1986.

of women. Some of the Bible may well have been written by women; she cites the Song of Songs and the story of Ruth. In the Genesis story man and woman were both made in God's image. She also finds much female imagery in the Bible, for instance the metaphor for God using the Hebrew word for womb (its plural means compassion). There are also images of God the mother, God the midwife assisting with birth and God in labour pains. ("You forget the God who writhed in labour at birth" Deut 32:18) We need she believes, a feminist translation of the Bible. Already she has rewritten some of the stories from the viewpoint of women.[1]

As for the archetype hero of myth to which the story of Christ and a Redeemer belong, they occur in every generation. Says Jung "The hero figure is an archetype which has existed since time immemorial."[2] The term archetype to him means conscious representations that can take any form "they reproduce themselves in any time or in any part of the world--even where transmission by direct descent or 'cross-fertilisation' through migration can be ruled out."[3] The figure of the Cosmic Man appears in many myths and religious treachings according to von Franz. He appears as Adam to Christians, as the Persian Gayomart, and as the Hindu Purusha. This figure may even be described as the basic principle of the whole world as with the Chinese P'an Ku who created heaven and earth.[4] In the Jewish tradition Adam personifies the total oneness of all human existence.

Jung states that it is the role of religious symbols to give meaning

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1. Phyllis Trible, reported by Yvonne van Dongen,Auckland Star, New Zealand, 27th July 1986.

2. Carl Jung, Man and his Symbols,Picador, London, 1964,p.61.

3. Ibid.,p.58.

4. Ibid.,p.211.

to the life of man. We need, he says, to cultivate thoughts that cannot be proved and "Myths go back to the primitive storyteller and his dreams, to men moved by the stirring of their fantasies."[1] Jung tells us what happens to societies which lose their spiritual values:

> In earlier ages, as instinctive concepts welled up in the mind of man, his conscious mind could no doubt integrate them into a coherent psychic pattern. But the 'civilized' man is no longer able to do this. His 'advanced' consciousness has deprived itsef of the means by which the auxiliary contributions of the instincts and the unconscious can be assimilated. These organs of assimilation were numinous symbols, held holy by common consent.2

Today for instance when we talk of 'matter' it is merely a concept, there is no associated symbol to indicate the psychic significance this term may hold and no sense of emotional energy. The only source of this that is left to us says Jung is in our dreams and herein may be the answer for modern mechanized man "For God speaks chiefly through dreams and visions."[3]

Lloyd Geering speaks of myths as creating order from chaos and believes that we cannot live adequately without a complex series of myths. Myths possess organizing value . We recognize in myths not the truth but a truth. For instance the Last Judgment is no longer taken at face value. What it is saying is that everything you do in life has ultimate significance, there is judgment on you all the time. A myth can become the organizing principle in your life e.g. if you believe in flying saucers. With this new appreciation of myth the Christian sees other religions in a new light, for myths have an internal logic self-evident to the culture they belong to. To the Aboriginals of Australia for instance there is the myth of the Dreamtime. In collective consciousness we can share in basic symbols which

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1. Carl Jung, Man and his Symbols, Picador, London, 1964, p.78.

2. Ibid., p.84.

3. Ibid., p.92.

occur in all cultures irrespective of race.[1]

An interesting comment on cross-cultural communication was made by Father Tom Ryder of Auckland who believes that the Christian message has been communicated by the Catholic church in a style that is foreign to a Maori way of thinking. He believes that they are a profoundly religious people because of their tradition of mystery, magic and stories. He noticed in his work with them how well children responded to stories and that the language of the Bible was in a style they did not find unfamiliar. "They took it for granted that there was a message behind the stories...they would respond to images rather than matter-of-fact things like a European might do."[2] His findings have obvious implications for teaching. The language of mythology is not alien to these children and use could be made of it for their learning experiences, if this is not already being done. Biblical language is also familiar to many Polynesian immigrant children in New Zealand who hear the Bible read at church and at home, and evidence of its style is sometimes seen in their own writing.

Geering says there are those who believe we need to revise the religious symbols and doctrines inherited from the past. Such a one is Gordon Kaufman of Harvard Divinity School who says in his Theology for a Nuclear Age that our capacity to self-destruct makes it urgent for us to re-evaluate our religious stance and construct religious concepts and symbols that will enable us to respond to current human needs.

A cultivation of Eastern mysticism has enjoyed a vogue in the twentieth century Western World. The allure is often the deceptive simplicity of

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1. Lloyd Geering,Lecture at Dowse Art Gallery, New Zealand, on Myth the Ultimate Truth, 23rd April 1986.

2. Father Tom Ryder, quoted in the Auckland Herald, 29th June 1987.

Eastern faiths as opposed to the materialism of the West. Even a slight exploration of the literature in the field reveals many proverbs, aphorisms, and guides to living. The Enneagram for instance taught by Jesuits in South America, came from Afghanistan two thousand years ago where the oral tradition was known only to the Sufi masters. Once again the main symbol is that of a journey, of discovery of the self. It is a process of self-enlightenment. The basic step is to discover which of nine categories of human personality one most closely fits into. One then applies this knowledge to guiding precepts from the scriptures. Of interest to teachers is the analysis of the teachings of Jesus as used by those who follow the enneagram. They note his love of symbols and analogies and the way he simplified things, reducing the commandments for instance to two precepts, Love of God and of one's neighbour(i.e. anyone of human race). His forte as a teacher was speaking simply as he did in the parables and always being ready to repeat his explanations. The writers who extol this system of enlightenment tell us that the word religion comes from the word religare root word for 'rely'. The metaphor of the universal dance comes in here too. "Ones [i.e. one of the personality'types'] may become aware of a wonderful harmony of complementarity in creation as a sacred dance of opposites attracted to one another and then see themselves within that whole as drawn by the magnetism of an all- pervading love."[1]

The same symbols occur again and again in different belief systems and all are couched in similar language. Frye referred to the cycles of human development and Paramahansa Yogananda in his autobiography also speaks of cycles the yogis have described such as "The 3600 year period of

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1. Maria Beesing O.P.,Robert Noyosck C.S.C.,Patrick H.O.Leary S.J., <u>The Enneagram</u>, Dimension Books, New Jersey,1984,p.195.

Treta Yuga will start in A.D.4100; the age will be marked by common knowledge of telepathic communications and other time annihilators. During the 4800 years of Satya Yuga, final age in an Ascending Arc, the intelligence of man will be highly developed; he will work in harmony with the divine plan."[1] These cycles are the eternal rounds of MAYA. The Vedic scriptures declare that the physical world operates under one fundamental law of Maya, the principle of relativity and duality. God the sole life is Absolute Unity; to appear as the separate and diverse manifestations of a creation. He wears a false or unreal veil. That illusory or dualistic veil is Maya. Yogananda explains that Newton's law of motion is a law of Maya. To have a single force is impossible there must always be equal and opposite forces. Studies of electricity and the atom reveal similar opposites. Maya is therefore the very fabric and structure of creation a metaphor for the illusion of reality. To one who is aware of this says Yogananda "creation is only a vast motion picture."[2]

Because he depends on his senses man can never have proof of God says Yogananda whose own faith was inspired by the teachings of his guru who also explained the Christian mythology to him. He maintained that the great Yogis of India moulded their lives by the same ideals as Jesus. He explained to his student that "Genesis is deeply symbolic and cannot be grasped by a literal interpretation...Its 'tree of life' is the human body."[3] Yogis believe that the Lord is heard only in silence, hence their practice of deep concentration and meditation. The divine purpose of

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1. Paramahansa Yogananda, Autobiography of a Yogi, Self-Realization Fellowship, California,1979p.194.

2. Ibid.,p.320.

3. Ibid.,p.196.

creation is explained for them in the Vedas. The Rishis taught that all men are endowed with a facet of the Divine Individuality and are equally dear to God. "Distinctions by race or nation are meaningless in the realm of truth where the only qualification is spiritual fitness to receive...God is Love...Every saint who has penetrated to the core of reality has testified that a divine universal plan exists and that it is beautiful and full of joy."[1] One of the aims of Yoganandas devotees is to unite East and West and to unite science and religion through realization of the unity of their underlying principles. Much of his book is devoted to drawing analogies from scriptures and scientific discoveries which point to the same truths.

'Truth' is a debatable concept. Frye has said that truth has been defined as whatever doesn't disturb the pattern of what we already know. This hardly fits new knowledge in all cases. Just a few days ago a family driving across a central Australian plain claimed to have been followed and harassed by an unidentified flying object. The press is full of comment and speculation from eyewitnesses and 'experts'. The family is still convinced that it experienced contact with extra-terrestial beings, this is what they believe so for them that is the truth. Their experience has been enlarged by something they did not expect or presumably wish to undergo, they now have to internalise it into their own personal mythos. The rest of us can either dismiss it as an illusion or categorize it as a scientific phenomenon for which there will eventually be a rational explanation.

The writings of Kahlil Gibran the Arab mystic and poet are admired by many people. His words especially in The Prophet are very

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1. Paramahansa Yogananda, Autobiography of a Yogi, Self-Realization Fellowship. California,1979,p[.572.

appealing and soothing, but it is not easy to work out exactly what he is saying. His statements are full of wonderful metaphors but they are often enigmatic puzzles just as many of the biblical sayings are. The imperative voice is the most significant trait in such writings which I have found to be a dominant feature of writing that stirs the emotions.

One is reminded for instance of a New Zealand short story Tangi by Witi Ihimaera where the simple command "Do not look up" is repeated and has an amazing effect on the reader although it is supposed to be an admonition to the young boy in the story. One thinks also of lines such as "Do not go gentle into that good night"... equally as compulsive and moving in its effect. We seem to have a basic drive to obey an inner or higher voice or an innate desire for a guide, for a leader, someone who can tell us what to do, how to behave, how to succeed. This may be a factor we look for in our religions. To understand this use of imperative language would be a key I believe to understanding religious language. We all seek guidance, to know right from wrong, to find the ultimate Platonic Good and to understand our individual place in the temporal time sphere. If our unique asset, compared to the rest of creation, is language, it is not surprising that it is in language that we look for signs of understanding. Our nature reflects some remnant at least perhaps of its creator. Those with greatest power over language seem to have had greatest power over their fellow creatures. Even today those who control communications wield enormous power. Perhaps a better understanding of language, religious, scientific or literary, will help us all to share our planet and understand each other better and live more peacefully. If we all share a primitive metaphorical mythology it should be possible for us to identify those religious or spiritual dimensions to human life which are necessary or desirable for the race and for the individual. Adhering to our differences

has produced nothing but bigotry, bloodshed and misery. The idea suggested by Frye in his final analysis in his study of the Bible as literature was that the individual has to find his own personal meaning eventually. This fits in to the Eastern philosophies also and to Nietszche's idea of establishing personal authenticity by 'genealogical' enquiry, that is, establishing the basis of one's beliefs, values and attitudes.

What Urban says about religious language summarizes many of these findings so far. The philosopher he says, attempts to understand religion from a scientific or objective view. He wonders if this is possible or desirable for he believes that one must first have an understanding of one's own communal religion. If we wish to understand a poet it is necessary he thinks, to share some of the emotional attitudes which his beliefs generate even if we do not share his beliefs. And what is true of poetry is true also of religion. "In order to understand the essence of religion it is necessary to live it only on the plane of the developed religious consciousness, on that level on which the values which religion embodies and expresses tend to become universal."[1] He uses the analogy of a pyramid to describe at the base various levels of religion according to race, time and culture, but at the top he places the moral geniuses such as Jesus, Buddha and Confucius, where "We find a striking unanimity and, as it were, completeness of communication."[2]

Abelard tells us, says Urban that "What is said of God in bodily form is not to be understood as the laity commonly do, corporeally and

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1. Wilbur Marshall Urban, Humanity and Deity, George Allen and Unwin, London, 1951, p.19.

2. Ibid., p.19.

literally, but mystically and allegorically."[1] There are therefore says Urban, two kinds of truth, the human and the Divine. Reason leads us to truths of nature but "The truths of Grace need not themselves be rationalized in order to be accepted."[2]

In his examination of the language of religion Urban finds that there is a principle embodied by the theory of Croce, that intuition and expression are inseperable. One does not intuit and then find words--the two come together. Urban says that there is also no expression without the correlative understanding "Communicability is not an irrelevant ADDENDUM of expression--even in the aesthetic--it is the very heart of it."[3] The mystical experience has been explained as one of pure immediacy but to be expressed, it "can only be in the language and symbols of the native region of the mystic."[4]

The first characteristic of the language of religion then, is that it is poetic. It is therefore emotional in character. It is also intuitive and figurative, but it is not MERELY poetry, its 'aliveness' is heightened and deepened in a unique way."It is so to speak, poetry transposed to another scale, a scale so transcendent that to call it any longer poetry, in the ordinary sense of the word, is to stultify both poetry and religion."[5] This is the lyrical language of hymns, psalms and prayers--which cover the whole range of human emotions. There is also says Urban, a

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1. Wilbur Marshall Urban,Humanity and Deity, George Allen and Unwin, London,1951,p.21.

2. Ibid.,p.23.

3. Ibid.,p.54.

4. Ibid.,p.54.

5. Ibid.,p.56.

tonal quality, which has been described as 'holy'. This can be seen in songs of praise and of love divine.

Religious language is then evocative and invocative, it evokes feelings but it also invokes objects--spirits, saints, angels, even God himself. Religious language can also be dramatic, as in the way the 'actions' of the deity are described. "It is therefore primarily the language of 'MYTH' from which the original symbolism of all primitive religion is derived...a dramatic and anthropomorphic way of relating the events of nature and history in contrast to the physico-mathematical way of science'."[1]

The primary forms of the language of religion are the lyrical and the dramatic but there is also theological language. The latter is what is 'wrapped' as it were into the poetry "certain relations of the divine subject or objects to real life."[2] This is presumably the 'kernel' of which Frye spoke, the lesson or punch line hidden as in a parable.

Urban describes the poetry of religion as numinous--a term taken from Rudolf Otto, which refers to the sacred or mysterious element with which the language is charged. The words 'sacred' and 'holy' refer to it. This is its unique aspect. It is our recognition of the numinous which is at the heart of worship and of religion. Not even music with its range of expression can express 'holy', says Urban

He states that the language of the Bible is 'alive', it has not been devitalised for the purpose of science. It is man's humanity which makes him a poet and his poetry is not a special language or 'language of the

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1. Wilbur Marshall Urban, Humanity and Deity, George Allen and Unwin, London, 1951, p.57.

2. Ibid., p.58.

Gods'. "Numinous poetry is the supreme expression of a power shared by all forms of poetic language--to convey the sense of things which lie in the twilight zone between the finite and the infinite--a sense of things which the language of science cannot express."[1] Urban is speaking two decades ago and in this time as Yogananda says the theories of science, and of physics particularly, come nearer to religious language as in describing energy or light which is almost indescribable. Urban says that the Russian theologian Nicolai Berdyaev has said that "behind myths are concealed the greatest realities, the original phenomena of the spiritual life."[2]

The symbolic form of poetry, according to Urban, is anthropomorphic and its opposite is mechanomorphic, a form developed not for understanding but for control, according to Bergson. "It might almost be said that in order to control one must renounce real understanding of man, and in order to understand one must cease to control."[3] Poets and artists believe what they say and in order to understand them we must believe also.

There are clearly no explicit propositions in painting or music he says, but linguistic art contains both explicit and implicit assertions about its objects. What poets say "is potentially propositional and must be taken up into discursive knowledge."[4] Poets and artists have a philosophy and what they tell us about man and human life is more representative and more revealing than science which has no interest in persons, as such. Only the poet can 'objectify' the meanings and values that make him human.

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1. Wilbur Marshall Urban, Humanity and Deity, George Allen and Unwin, London, 1951, p.64.

2. Ibid., p.83.

3. Ibid., p.399.

4. Ibid., p.402.

Scientific psychology, says Urban, is always psychology without a soul. Poetry always speaks of 'souls' even when, as in naturalistic poetry, it denies their existence. "The tension between what is and what ought to be, whether the 'is' be a law of society or a law of nature, is man's deepest character and to have this character is to be a'soul'. The language of science therefore destroys poetry.

What poetry does always say is that man is unique, free and self-determining. This is said implicitly in the dramatic way of presenting life, especially in tragedy. "A naturalistic view of man--cannot rise to tragedy."[2] The death of a man is tragic as that of a tree or a dog cannot be. There are some who would disagree with this. Urban says this is the basis of a dilemma in modern drama.

All art says Bergson is "une metaphysique figuree" and to Coleridge a "covert metaphysic".[3] This metaphysic may be little more than vague pantheism says Urban, but can rise to a full and rich theism in which "even a common dandelion has a quality and a glory which takes the thoughtful man beyond nature; the important point is, that, whatever its form, it is always a metaphysic in which nature is a symbol of the divine."[3]

The implicit pronouncements of poetry are similar to those of religion --which suggests a close relation between the humanities and religion. Urban tells us that this has given rise to a Humanism, in which what is human can only be understood when related to the Divine and negates pure Naturalism. "that same presupposition of the MORE THAN HUMAN is necessary

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1. Wilbur Marshall Urban,Humanity and Deity, George Allen and Unwin, London,1951,p.404.

2. Ibid.,p.404.

3. Ibid.,p.407.

to the very existence and meaning of the human, is rather widely felt..[1] Urban is not accepting of new scientific theories of God. To him when we speak of God we always have in mind the idea of a perfect being, in knowledge, power, goodness, holiness and beauty--this is the only adequate idea of God, he thinks. "To take the notion of the superhuman seriously is also to imply the notion of the supernatural."[2] Humanity and Deity are the two fundamental issues of the philosophy of religion, says Urban.

Mystic experiences, Urban says, are difficult to explain with language yet everyone experiences moments of insight and realization, usually at a time of concentration or stress. We should therefore have some appreciation of what mystics are trying to do when they tell us of their experiences of God. "Even mystic experiences of God cannot be wholly unmediated."[3] They have to be expressed in language. Mysticism appears to be a characteristic of human consciousness--an essential element in religion, theology and philosophy. It was this element in Plato for instance which gave us says Urban the explicit mystics of Plotinus and similar elements are seen in Aristotle. If God is simply an idea, says Urban, then the life of religion is an illusion and the life of reason also. It has to be more than this he thinks. The fusion of which Plato speaks, can only be realized in experiences that trench on the mystical."[4] Temporal forms of expression are therefore symbolic and with them is the underlying assumption that a Being must exist to whom nothing may attach

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1. Wilbur Marshall Urban, Humanity and Deity, George Allen and Unwin, London, 1951, p.414.

2. Ibid., p.422.

3. Ibid., p.447.

4. Ibid., p.432.

which could present itself to thought as an imperfection; only a most perfect Being can, for religious thought--and ultimately for religious feeling also--be called God."[1] Men constantly talk as though they have had experience and knowledge of the timeless:

> With respect to the highest poetry, there is a language in which 'time,place and number are not,' and this is one of the chief characters of the language of mysticism--that language which, as we have seen, has as one of its major characters the power to 'sting to life' those absolute qualities and essences which are timeless and to make of them the medium of communication of the intense and eternal life which is hid with God.[2]

Space and time are linked with matter and if we speak of God as temporal we reduce him to bodily form. The Christian mystics witnessed a God who transcends time and space. Yogis such as Yogananda quoted earlier speak of a transcendental state where travel through time and space is part of their spiritual power. We have the capacity to understand these things says Urban, just as we have the capacity to become 'lost' in a piece of music, at one with it, and yet this experience would be hard to describe and define. Of those whom we deem mystics their dominant attitude has been one of acceptance and transcendence and this he believes we must respect. Their humanity also is their endearing quality.

We cannot escape the 'snares of metaphor' says Urban, and anthropomorphism is inevitable. The mystics rescue us he thinks from the delusions of the literal mind. Religions of mere Humanity and Deity have no place for the mystic. For the Humanist the infinite is human. For the others they think the mystics are deluded in thinking they can see God. It is only a recognition of the natural mysticism in every soul that makes

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1. Wilbur Marshall Urban, Humanity and Deity, George Allen and Unwin, London, 1951, p.454.

2. Ibid., p.458.

possible a real understanding of the Mysticism of Grace according to Urban, and it is only in our hearts that we can know this is true for our faith is based on reciprocal love between God and man.

When we examine the language of religion Urban says we see that it is unique, and that while the words are human and the emotions they express, they are transposed on a scale which renders them revelatory of the object towards which they are directed. This is the numinous quality which makes human language that of God. A quality of Deity in the words makes them no longer human but Divine and if we examine the words of the Song of Songs he says we will witness how what can appear a highly erotic poem becomes the medium of the most exalted experience of man's relations to the Divine. There is a quality in religious language which makes it speak for all time.

Frye has said that the Bible is a complex metaphor and the anthropologist Fernandez conceives of religious experience as the actualizing of metaphor "Religious metaphors recast the inchoate (and ineffable) whole of primary experience into various manageable perspectives."[1] He comes to this conclusion after examining the religious rituals of various tribes such as the Fang reformative cult of Bwiti a polymorphous one combining ancestor worship of various tribes and some elements of Christianity. His proposition is that metaphors provide organising images which ritual action puts into effect. In their ceremonial religious rituals "in acting as well as in speaking persons have an image of the pattern to be completed and make plans according."[2] This was observed by Frake (1964) but Fernandez believes that these images

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1. James. W. Fernandez,'The Performances of Ritual Metaphors,' from The Social Use of Metaphor ed. J.D.Sapir & J.C.Crocker. University of Pennsylvania Press,1977,p.126.

2. Ibid.,p.109.

are contained in metaphors. In their weekly all-night ceremonies he identifies four key metaphors for as he says "metaphor is an organising element in all of these cult movements."[1] These metaphors are:

> bi ne esamba--We are a trading team (in file through the forest).
> bi ne ayong da--We are one of a clan.
> me ne (e ne) emvan mot--I am(he is) the son of man (man child).
> bi ne nlem mvore--We are one heart.

These metaphors emerge in the liturgical commentary says Fernandez but they also run through cult life and provide a periodic familiarizing reinforcement or leitmotif. [One cannot help but think of similar metaphors arising at professional and trade conferences or in many other Western institutions which deliberately try to create group solidarity.]

"The fitness of ritual," says Fernandez, "lies in the aptness of metaphor."[1] The metaphor of one-heartedness is affirmed in their ceremonies by the candle-lighting, filing out into the forest and back into the chapel, spiralling more and more closely until as 'one' they raise their candles to form one flame. Their liturgy is also laden with symbols such as the cult harp.

Fernandez questions what role metaphors play in such rituals. His analysis was based on a model which suggested that a metaphor is not only an image but also a plan for behaviour. If we imagine a cult member hypothetically, as isolated, alienated or whatever, it is not difficult to see that he emerges from the ceremonial "incorporated, empowered, activated and euphoric." [From a more sophisticated society one can also emerge in

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1. James. W. Fernandez,'The Performances of Ritual Metaphors,' from The Social Use of Metaphor ed. J.D.Sapir & J.C.Crocker. University of Pennsylvania Press,1977,p.107.

2. Ibid.,p.109

3. Ibid.,p.115.

these states--I envisage gregarious drinkers, or fanatics exiting from a concert or sports arena.] In a religious cult, such as Fernandez describes people escape their corporeality. His observations lead him to deduce that metaphors provide a sufficient base for the understanding of ritual as change in motion:

> ...one must suppose that at some point in the history of the cult these metaphors were ejaculated out of the inchoate I, we, they etc. by the visionaries who gave and continue to give prophetic impetus to this religion. Metaphoric innovation like innovation of any kind rests with the few and not with the many. [1]

Those who are attracted by these visions, says Fernandez, need only entertain social consensus rather than cultural consensus, but over time they inductively come to an understanding of the metaphor that controls it. The power of a leader operationalizes a metaphor, and dispute, when it arises is often over the aptness of a metaphor. We can see that this same principle fits our own social world even in metaphors of education which are accepted then ultimately questioned and new ones take their place. As Fernandez says, each participant has different levels of participation and focus may be heightened by new metaphors or other aids as in this case the use of narcotics in initiation.

According to Fernandez as 'time-binders' we need to fill the inchoate present with activity, and religious movements, as a particular paradigm of metaphors, do this. Metaphor becomes metonymy or as Levi-Strauss says "the transformation of metaphor is achieved in metonymy."[1] This is illustrated for him by Mr Wemmick of Great Expectations whose lifestyle is transformed into ritual actions by "the paradigmatic relations

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1. James. W. Fernandez,'The Performances of Ritual Metaphors,' from *The Social Use of Metaphor* ed. J.D.Sapir & J.C.Crocker. University of Pennsylvania Press,1977,p.115.

2. Ibid.,p.119.

between two equally unreal syntagmatic chains. That of the castle which has never existed and that of the village which has been sacrificed."[1]

Fernandez says most metaphorical images potentially imply action:

> The utterance of metaphor itself as well as the actions undertaken to realize it is attended by a set of associations which "belong" to it by reason of contigiuties in previous experience. The assertion of metaphor thus provokes a metonymous chain of elements or experiences associated with it as part to whole, cause to effect, or other contiguity in time or space. 2

A Metaphor does not simply excite associations says Fernandez but imposes a schema on them. It is a hypothesis which makes other things in the world relevant or irrelevant, that is, the associations are conceptually mediated by the metaphor. Apt metaphors in religious experience "combine in themselves some satisfactory representation of both social experience as well as primary experience...a fundamental transformation is thus accomplished by metaphor..."[3] Victor Turner has argued he says, that the apt metaphor is the fundamental capacity of dominant religious symbols and the ritual dramas in which these symbols are manipulated create an exchange between physiological and social experiences, ennobling the former and investing the latter with emotional significance. Religion, particularly Christian, aims to do more than this, says Fernandez, it aims to transcend the physiological and the social. What is difficult to understand he says is how chains of association appear in relation to each metaphor and how metaphors are associated within paradigms, even how they first appear. It is thought that most associations rest on culture-bound analogies. He

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1. James. W. Fernandez,'The Performances of Ritual Metaphors,' from The Social Use of Metaphor ed. J.D.Sapir & J.C.Crocker. University of Pennsylvania Press,1977,p.119.

2. Ibid.,p.126.

3. Ibid.,p.127.

gives an example of how 'snake' for instance is linked with well-being by association with honey, itself intrinsically attractive, and which is associated with the season of fine weather. The mind, he thinks, is bound to realize the unity of its experiences at some level of abstraction... [and] " To a sufficiently religious mentality practically everything in the world can be brought into association as manifestation of spirit."[1] He suggests that the latent principle by which religious associations are brought into being is the inchoate itself. It is "metaphors [which] start up the syntactic machinery focusing our intentions by their predication"[2] but their origin is still a mystery. Fernandez concludes that for social structural experience we need metaphors for--ideas of adequacy, inadequacy and exaltation. These are social and corporeal needs, which are mediated as the cult under his observation showed, by religious celebration.

Metaphors will differ according to the needs or frames of the group involved. Everything he has witnessed among the Banzie supports the idea that "...the primordial self can first be incoroporated into some body social and these together can be surpassed to the quite insubstantial spiritual. "[3] His evidence seems to be a microcosmic view of what Frye and others have surmised from their study of the Bible particularly. The religious metaphors are the glue which welds the primitive society together. They are expounded in myths and acted out in rituals. It is not difficult to see analogies between the way such metaphors occur and permeate religious history and the 'metaphors we live by' of Lakoff and Johnson.

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1. James. W. Fernandez,'The Performances of Ritual Metaphors,' from <u>The Social Use of Metaphor</u> ed. J.D.Sapir & J.C.Crocker. University of Pennsylvania Press,1977,p.129.

2 Ibid.,p.130.

3. Ibid.,p.131.

The emphasis in this chapter has been on Western and Christian religion because this is more familiar to me, but there is evidence that all religions share common symbols and forms of revelation. They all have their special people to interpret truth for them, and this truth is often in the form of myth. The symbolism of a father figure or source of enlightenment is endemic. The language which expresses religion is in all instance poetic and sometimes mysterious. Myth, symbol, metaphor and poetry are natural methods of teaching us about human nature and human values. We neglect this rich source of knowledge in our schools, particularly where they are secular and where the emphasis in curriculum has fallen on the practical career-oriented training as in Communications English in place of Literature. Our literary heritage includes the Bible as Frye demonstrates and is a source of inspiration to other races and cultures also. In his opinion "It should be taught so early and so thoroughly that it sinks straight to the bottom of the mind, where everything that comes along later can settle on it."[1] When people refer to the importance of 'basics' this is not the kind they usually have in mind. If, as Hoggart has said "Education must aim to introduce us not just to intellectual values but to human values and to the massive contemporary challenges to those values ..."[2] we may find that classical mythology has much to offer us which we have neglected to our cost.

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1. Northrop Frye, The Educated Imagination, Indiana University Press, 1964, p.110.

2. Richard Hoggart, An English Temper, Chatto and Windus, London, 1982, p.40.

Other areas of human behaviour besides religious beliefs are also prescribed by metaphor as Crocker points out and he refers to sexual mores and eating rituals as examples. Rhetoric, he says "does more than just encompass these dimensions: it creates them."[1] Anthropologists have demonstrated the social impact of certain analogic systems and "The social utility of the analogic capacity derives, implicitly, from its ability to handle a virtually unbounded range of recurrent issues within a single paradigmatic formula."[2] It is language he concludes which dictates action. Lloyd Geering tells us that worship as the etymology of the word reminds us is, any form of activity in which we are "celebrating or manifesting the values, hopes and goals, which are the greatest worth to us."[3] And it is in this sense that life itself can be an act of worship, an idea which is probably rarely explained to young people.

Theories about the nature of religious practices and beliefs are supported by what Emile Durkheim has said about the nature of religion, that it is eminently social and that religious rites are social affairs, the product of collective thought. We inherit what he calls intellectual capital. Furthermore "Religion has not confined itself to enriching the human intellect, formed beforehand with a certain number of ideas; it has contributed to forming the intellect itself."[4]

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1. J. Christopher Crocker, The Social Functions of Rhetorical Forms, in <u>The Social Use of Metaphor</u> eds.J.D.Sapir and J.C. Crocker University of Pennsylvania Press, 1977, p.46.

2. Ibid.,p.55.

3. Lloyd Geering, Acts of Worship,<u>Listener</u>, New Zealand, April 2 1988, p.77.

4. Emile Durkheim, Elementary Forms of Religious Life,in <u>School and Society</u>,Routledge and Kegan Paul in assoc. with Open University, 1971,p.206.

We owe much of our knowledge and the form which knowledge has taken, to religion. The basic essential ideas which dominate all of our intellectual life, says Durkheim, what have been called by philosophers since Aristotle, categories of the understanding such as notions of time. space, class, number, cause, substance, personality,etc., correspond to the most universal properties of things. "When primitive religious beliefs are systematically analyzed, the principal categories are naturally found. They are born in religion and of religion; they are the product of religious thought."[1] The eternal debate over knowledge is whether it is innate or constructed by the individual. Durkheim states that if we recognize their social origin we can accept a new attitude accepting that there are individual and social levels of meaning.

> Collective representations are the result of an immense co-operation, which stretches out not only into space but time as well; to make them a multitude of minds have associated, united and combined their ideas and sentiments; for them, long generations have accumulated their experience and their knowledge. A special intellectual activity is therefore concentrated in them which is infinitely richer and complexer than that of the individual.2

Man is double says Durkheim, there are two beings in him, the individual, and a social being "which represents the highest reality in the intellectual and moral order that we can know by observation--the individual transcends himself both when he thinks and when he acts."[3] So much so that there is an inner authority which he must obey, and which is why men do not feel completely free. This is presumably what Korzybski refers to when he says that "healthy well-balanced people are naturally

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1. Emile Durkheim, Elementary Forms of Religious Life,in School and Society,Routledge and Kegan Paul in assoc. with Open University, 1971,p.206.

2. and 3. Ibid.,.209.

'moral' and 'ethical', unless their educations have twisted their types of evaluations."[1]

Bergland also speaks of this capacity to pass on information from one generation to the next, using the term 'memes' developed by R. Dawkins in *The Selfish Gene*.[2] The idea is that genes pass on physical characteristics which enter a common pool but culture is passed on by memes which spread like an infectious virus.

One might still ask what is the place for religion in education even if convinced that literature and particularly mythology are a source of spiritual nourishment for mankind. Professor Jeffreys answers this question from a Christian viewpoint for he is concerned that we have lost important personal values in the modern world. As he says "there is no magic in democracy that makes it self-supporting and self-perpetuating"[3] and our educational systems have encouraged an individualism which in the end is self-destructive. Education he believes must be seen in relation to the ultimate problems of life. It can never be a mere matter of adaptation because culture is in a state of tension with civilisation and education cannot be discussed in general terms only for "If the general aim alone is stated, we find ourselves presented with indubitable but useless truths."[4] So we need to state both general and special aims for education.

Tension exists also says Jeffreys betwen the individual's needs and

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1. Alfred Korzybski, *Science and Sanity*, The International Non-Aristotelian Library, Lancaster, Pensylvannia, 1941, p.xi.

2. Richard Bergland, *The Fabric of Mind*, Penguin Books, Australia, 1985, p.7.

3. M.V.C.Jeffreys, *The Aims of Education*, Pitman Publishing, London, 1972, p.xv. (First published as Glaucon 1950)

4. Ibid., p.9.

those of the community. All the wisest sayings so far point to the fact that not love of oneself but love itself is the secret of a successful life. We need freedom but "We begin to approach true freedom in proportion as we lose ourselves in something greater than ourselves."[1] The greatest artists have known this experience. Not every kind of service is liberating. This love he speaks of is that which is personal.

> Love might in fact be defined as the relationship that treats people as persons--i.e. treats them as sacred. It is love that CONSTITUTES the personal: it is through loving and being loved that persons grow as persons. 2

In human life it is found only imperfectly. Some institutions says Jeffreys are more compatible with the principle of love than others.

Man transcends the time process because he is able to think about it and relate events across time, so he /she is both immanent and transcendent. Korzybski speaks of our time-binding capacity.[3] Collective man appears to be under the same constraints as individual man, as history shows us, but man has the power of making reasoned choices.

> It is by virtue of the power to transcend the stream of events that the self can act as a coherent whole, in relation to a situation as a whole, summoning all resources of knowledge and imagination, making the action his own, taking full responsibility for it--acting that is to say, as a person.4

This power of choice needs to be educated says Jeffreys. "Freedom ensues, therefore in proportion as the self transcends the stream of events, acting as a whole in relation to the situation as a whole."[5] From a

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1. M.V.C.Jeffreys,The Aims of Education, Pitman Publishing, London, 1972,p.17. (First published as Glaucon 1950)

2. Ibid.,p.18.

3. Alfred Korzybski,Science and Sanity,The International Non-Aristotelian Library,Lancaster, Pensylvannia,1941,p.39.

4. and 5. Jeffreys, p.37.

behaviourist point of view this would be seen as merely stimulus and response. The historian might view it all mainly as series of causes and effects. But both views only see humans from the outside not within. The work of art or the truth of philosophy however has to be understood in terms of entering within it "to enter the transcendent inwardness of personal experience."[1] The work of art is a personal creation "it is the personal quality of the activity that makes it art. When we say colloquially that an artist put his whole soul into his work we are saying something quite literally true."[2] The same is true says Jeffreys of all activity intellectual or moral which has this quality of identification between the activity and the person. "The same is true of the prophet and his message. The man is his vision and the vision is the man."[3]

In Jeffreys' view it is only in proportion as a person approximates to full personal stature that one can expect to be master of oneself and history. In a world with a deterministic view there is less personal responsibility and more mass activity "In such a society the masses would be more or less blindly immersed in, and therefore subject to, the process of cause and effect, while the ruling group would be living on the advantage that the process happened to bring to them."[4] This comment seems particularly apposite in our own times. What we can see says Jeffreys is increasing tension in modern Western civilisation between technological devlopment on the one hand and human bewilderment on the other. So in his estimation "It is clear that the supreme need of the modern world is for

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1. M.V.C.Jeffreys,_The Aims of Education_, Pitman Publishing, London, 1972,p.40. (First published as Glaucon 1950)

2. and 3. Ibid.,p.40.

5. Ibid.,p.45.

the maintenance of personal values and the creation of personal living. Any attempt to achieve the truly personal level in living and thinking must also be an attempt to create true freedom and true community."[1] Which latter are two sides of the same thing, true freedom found in the service of community "in which persons are treated as ends and not means."[2] Therefore for Jeffreys the true aim of education is the creation of personal freedom in the community. No one style of education is good for all times and places Jeffreys thinks, and the charateristic of our times is the increased tension in the microscosm and the macrocosm. One might say that we are in fact stretched on a rack of nuclear tension.

For many centuries in England at least says Jeffreys common knowledge of the Bible was a factor in creating a sense of community. No other source gives so much access he thinks to the meaning of life. To create unity among people and classes of people he thinks as Berdaev saying:

> Only religion is capable of making such a combination neither philosophy nor science nor enlightenment, neither art nor literature can do this. Deprived of religious basis, any high and qualitative culture inevitably becomes separated from popular life and an isolated cultural elite is produced, which keenly feels its uselessness to the people.3

Tension increases as the self-interest of the successful are continually forced to make concessions to the have-nots. So there is tension between the classes and between the individual and the state.

It appears that we lack a bonding agent. Fernandez said it was religion which acted as this glue. "The failure of modern individualized

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1. M.V.C.Jeffreys,<u>The Aims of Education</u>, Pitman Publishing, London, 1972,p.45. (First published as Glaucon 1950)

2. Ibid.,p.46.

3. Ibid.,p.49.(The Fate of Man in the Modern World p/114.)

man to create community accounts for his loneliness and his bewilderment"[1] for taken to its limits individualism means the negation of community.

Education therefore in Jeffreys eyes has to be the agent of redemption. We need he says a faith by which to live. For him this means the "indoctrination" of people for he believes that "The cult of the open mind is a way of camouflaging the poverty of an education which has no view of life to communicate."[2] To him indoctrination, the very idea of which many of us would find repulsive, is not a crime but as necessary as learning table manners. The challenge as he sees it is to present it in such a way that the recipient comes to terms with it on his own responsibility. We need he thinks a way to understand our world and our place in it, and to recover a sense of vocation. This cannot always come through work except for those fortunate enough to work at what they love.

This idea of the importance of work is confirmed by writers like Willis Harman who says that "Work is placed at the heart of humane living--not a compulsive Protestant work ethic, nor work for economic gain, but the joy of vital and creative work."[3] This is a challenge which will never be easy to meet. Jeffreys thinks we can gain much insight from the voluntary work done in communties and the joy and love with which people are prepared to offer their services. This was illustrated in a recent report[4] on ambulance officers who often take a drop in salary from previous

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1. M.V.C.Jeffreys,The Aims of Education, Pitman Publishing, London, 1972,p.52. (First published as Glaucon 1950)

2. Ibid.,p.56.

3. Willis Harman,The Coming Transformation,The Futurist, April, 1977,p.110.

4. Iona McNaughton, Life at the sharp end of an emergency, Dominion Sunday Times,New Zealand, October23, 1988, p.19.

jobs to do this work, for the satisfaction it gives them. Perhaps we need to give more people opportunities for this kind of fulfilment. Both Jeffreys and Harman see hope in the growing decentralisation of power and in increasing voluntary social community effort.

Jeffreys thinks that we also need to recover the meaning and importance of the family. He actually acknowledges the value of housewifery "The most important thing of all, perhaps is to get society at large to take the housewife's job seriously as one that calls for much specialized knowledge in varied fields, much skill, and great persoanl qualities."[1] Wherever the state seeks omnipotence he sees the family unit as weakened.

The most serious weakness in education to Jeffreys is its lack of aims. This metaphor is discusssed by Peters.[2] We can appreciate what Jeffreys means, for as he says, and it is borne out by those ubiquitous researches into excellence, "the most vital systems of education have envisaged their objectives quite concretely, in terms of personal qualities and social situations."[3] This is not to say that he necessarily accepts their aims, but finds that, by contrast, in liberal democracies the aims often seem fairly nebulous. Even a glance at our own recent policy documents on education such as the Curriculum Review and the Picot report make very generalized statements and lack a clear philosophical stance as to what their conception of education is or is for. Jeffreys quotes a Harvard Report which said that:

The ideal of free inquiry is a precious heritage of western culture;

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1. M.V.C.Jeffreys,<u>The Aims of Education</u>, Pitman Publishing, London, 1972,p.59. (First published as Glaucon 1950)

2. R.S.Peters,<u>Athority, Responsibility and Education</u>,George Allen and Unwin,London, 1973,p.87.

3. Jeffreys,p.61.

> yet a measure of firm belief is surely part of the good life. A free society means toleration, which in turn comes from openness of mind. But freedom also presupposes conviction; a free choice--unless it be wholly arbitrary (and then it would not be free)--comes from belief and ultimately from principle. A free society then cherishes both toleration and conviction.1

And therein lies our problem. Jeffreys says there is only one possible solution of the contradiction between individual freedom and a common faith in which personal freedom is central, and the human soul of infinite value. Education has to enable people to reach deep and strong convictions about the nature and destiny of man. The Renaissance he thinks freed man from the old authorities but now man has to synthesize individual and societal liberty. If we fail to achieve community it means a choice between anarchy or depersonalized collectivism. "That is why depersonalization is the great and disconcerting fact about modern civilization, and why the redemption of the personal is the supreme task of education."[2]

Jeffreys believes that the curriculum has drifted away from real needs. A prime need is to understand the world in which we live. The curriculum needs to be both remote and contemporary for we can learn from the past and the present. Secondly he thinks we need direct experience of community living. We also need to reveal what has been called the "Vision of Greatness" by a knowledge of our heritage in history and literature. From this vision we may hope that faith will grow for it is something we cannot manufacture. Through knowing of great persons Jeffreys believes that we can come to learn the meaning of the personal in human life. "The true aristocrat in any age and in any country is he whose behaviour is most

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1. M.V.C.Jeffreys, The Aims of Education, Pitman Publishing, London, 1972,p.61. (First published as Glaucon 1950)

2. Ibid.,p.66.

fully personal."[1] His views do not seem far-removed, at this point, from those of Nietzsche and his pursuit of autonomy, moreover Jeffreys is convinced that right thinking is connected with right feeling and the Vision of Greatness can release intellectual as well as emotional forces, promoting behaviour more noble and more intelligent which is more the measure of a person than is I.Q.

School itself does not have to be an image of the world says Jeffreys but has to connect with it at as many points as possible. He reiterates that the real measure of a society is how much it values personal values. For those who consider that producing good citizens is its highest aim he argues for a liberal education for "The highest purpose of education is to produce good men, and the production of good tradesmen and even of good citizens, is an inferior operation which must not be allowed to interfere with the other."[2]

Jeffreys tells us that the modern world originates with Christianity "and its keynote is the affirmation of the divinity of man."[3] Our civilisation and the value of the individual springs form this. This idea and the spirit of experimental science can be traced back says Jeffreys to roots in Hebrew culture. Science and reason appeared to be a path to perfecting our world, a faith which has been badly shaken but by this time he says we had less religion to fall back on. That this kind of humanism has failed us leads us to despair says Jeffreys. The answer may be to seek a synthesis of humanism with Christianity which respects human dignity

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1. M.V.C.Jeffreys,The Aims of Education, Pitman Publishing, London, 1972,p.72. (First published as Glaucon 1950)

2. Ibid.,p.87.

3. Ibid.,p.129.

without worshipping man. The only alternatives seem to be those which set up the mass, the class or the party as god.[1] Then in his view love, pity and mercy lose their claim. The irony of our situation, in his view, is that it was Christianity which gave human personality value, so that people fight for such things as equality who are anti-Christian yet this is a Christian concept. So "the Antichrist arises out of the failure of Christians."[2]

The real struggle as he sees it is not between classes but between good and evil. Any system can provide the context of the perfect community with enough goodwill, but no systen can guarantee such. Christian goals therefore can never fully equate with political goals. The churches themselves have shortcomings says Jeffreys but Christianity always meant reception into a community. Modern psychology has not shown us new truths but shed light on old truths, about childhood for instance.

> The central revelation of modern child study is the oldest truth of all about education-- that the first and last principle of education is love, that is to say that we must respect the personality of the child and treat him as an end in himself and secure his PRESENT needs.3

What has been termed original sin represents to Jeffreys the essential conflit within man himself not with his environment. For Jeffreys the task of the teacher is to lead others to the same conviction that he has that Christianity is a faith of redemption. This will meet with resistance because "The language of religion has become not only metaphor but dead metaphor" yet to his mind religious experience is not:

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1. M.V.C.Jeffreys,The Aims of Education, Pitman Publishing, London, 1972,p.135. (First published as Glaucon 1950)

2. Ibid.,p.137.

3. Ibid.,p.155.

> a strange and uncanny sort of experience but is normal experience understood at full depth. If we can help people to discern the religious truth implicit in everyday experience which they take for granted--the painfulness of creation, the warfare of love against its rejection, the power of love to redeem where other forces have failed--we shall have done a great deal to break down the barrier which the *modern mind has erected against the light.*[1]

That impenetrable and apparently inescapable metaphor of light again.

Jeffreys concludes that we need to be reeducated which is difficult as we have become ignorant in his view of the Bible particularly. To have a right to an opinion should necessitate understanding which presumes study which requires discipline. A panic return to religion would not achieve what is necessary nor can one plead a rational 'case' for this return. "Conviction cannot come by intellectual processes alone"[2] one needs to study not only the books of religion but the world also. He even speaks of the need for an army of missionaries. At the heart of the school's teaching would be the Christian gospel "and this Gospel must spread its light out through all the other subjects of study."[3] and "At the heart of the school life must be worship."[4] Above all its supreme concern will be with persons.

What Jeffreys says does not shed any more light [!] on the nature of metaphor but it does explain why those aspects of the curriculum most involved with metaphor and metaphor-making and understanding are absolutely vital to the young. Much of what he says affirms the findings of Northrop Frye and reemphasises the importance of the development of a strong and individual *personality which many* others also stress, but unless one is of

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1. M.V.C.Jeffreys, The Aims of Education, Pitman Publishing, London, 1972,p.158. (First published as Glaucon 1950)

2. Ibid.,p.159.

3. and 4. Ibid.,p.162.

Christian faith or inclination then his conclusions lose their force because they lack universal application.

Peters has pondered on similar problems and comes to the conclusion that schools CAN set guidelines for moral behaviour or a rational form of morality " For science and a more rational, universalistic type of morality gradually emerged precisely because social change, economic expansion and conquest led to a clash of codes and conflict between competing views of the world."[1] Certain underlying principles as he calls them gradually emerge. Rather than supplying a code they sensitize us to ways of thinking of people for example. This is not to circumscribe individuality but to give parameters within which the individual can make choices with knowledge of likely consequences. The content of science is, he says no more uniformly acceptable than the content of morality, and like science the principles or theory can be taught but the actual practice is left to the person "The content of morality, therefore, can be taught ; but its form develops."[2] This idea comes mainly from Piaget and from Kohlberg's study of the development of morality. He apparently is opposed to a "bag of virtues" conception of morality but as Peters says without adequate experience one may stay at a very base level of moral conviction. The difficulty as Peters sees it is to inculcate a sense of honesty for example without coercion or rewards or simply relying on good models of behaviour to have sufficient influence. Indoctrination he says is getting people to adopt a fixed body of rules and where a person has no critical or autonomous attitude towards them. In the past it was embedded by contrivances such as the shaming techniques described

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1. R.S.Peters, _authority, responsibility and education_, George Allen and Unwin, London, 1973, p.143.

2. Ibid., p.150.

in the following chapter and is often a method to develop strong loyalty to a group. Peters concludes that these are the problems teachers and parents need to address.

One wonders if it will ever be possible for the spiritual values of diverse religions such as are embodied both in mythology and in religious writings to be combined so that we can find some measure of harmony for us all to share in a reeducation, if not for the faith Jeffreys wishes for us, then at least a faith in our own ability to learn from our mistakes and to heed the wisdom gathered for us in the past. Perhaps when we no longer educate for work only will we discover what other aims there may be for education and then the unemployed will in fact be the richest.

If religion is primarily social and natural and necessary as these authors all seem to suggest; and it has a purpose, to help the individual come to terms with him/herself in the forming of relationships with others and society at large, then we can hardly afford to ignore it. It has its own language and literature and if Oakeshott is correct one way into the language of any form of activity is through its literature.[1] There is a vast treasury of religious literature--not only that in the Christian Bible--which many children and probably some teachers are not familiar with. If we were able to explore this, without preconceived ideas of meaning or truth, then we might profit from the richness of its many metaphors. The most powerful metaphors have a mystery and magic that might only be appreciated with enlightenment, whatever that really means. Perhaps it comes eventually to those who bother to look for it. Religion is said to be social but what one learns from this participation may be uniquely personal as a mystic Arabic poet Kahlil Gibran suggests in The Prophet:

> And even as each one of you stands alone in God's knowledge, so must each one of you be alone in his knowledge of God and in his understanding of the earth.

CHAPTER IV

OUR PERCEPTION OF CHILDHOOD

> The literary historians, mistaking books for life, construct a fictional picture of childhood; as though one could know what really happened in the nineteenth century American home by reading Tom Sawyer. 1

In this chapter I am not concerned to document in detail the rigours of childhood such as have been portrayed by historians nor to catalogue the children in literature but to extract from both the view each century has of children, what status they have as a group, and in a subsequent chapter how this has influenced their education. This overview will examine particularly the language used to describe children, the epithets and metaphors which reveal attitudes towards them, of parents, churchmen, reformers, teachers; and wherever possible to supplement this with memories of childhood recorded for us in diaries, letters, journals and biographies. Metaphors of childhood and parenting emerge which are distinctive at different periods and in different countries but in evolutionary terms possess a discernible overall pattern. It is quite a long journey from the child as mere animal to Erikson's notion of a partnership of equals and one which

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1. Lloyd de Mause, The History of Childhood, Souvenir Press, London, 1976, p.4.

many people are still travelling.[1]

Readers of literature over the past three hundred years could be deceived into thinking that the children portrayed there are realistic. According to Pattison they are merely figurative. It is religious and intellectual debate which gives rise he believes to the child figure we observe in literature which is a symbol of two fundamental approaches, one, that the child is inherently evil, the other that it is innocent and good. These attitudes obviously affect child care in the home and family.

Classical literature apparently almost ignored children. The only instance Pattison could find of an affectionate scene between parents and children was that between Hector and his wife and son Astyanax.[2] The reason for this neglect was the prevalent attitude to children in early times. Greeks and Romans considered them almost as lower order animals. Plato says of them:

> Of all the animals, the boy is the most unmanageable; inasmuch as he has the fountain of reason in him not regulated, he is an insidious and sharp-witted animal and the most insubordinate of them all.'3

His ideal Republic is an attempt to correct this bestial condition.

Aristotle says: "Both children and the lower animals share in voluntary action, but not in choice, and acts done on the spur of the moment we describe as voluntary, but not as chosen."[3] Aristotle refers also in his 'sermon' on self-indulgence in adults, to childish appetite "children in fact live at the beck and call of appetite...and as the child should live

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1. Erik H.Erikson,<u>Childhood</u> <u>and</u> <u>Society</u>,Penguin Books, London,1950.

2. Robert Pattison <u>The</u> <u>Child</u> <u>Figure</u> <u>in</u> <u>English</u> <u>Literature</u>, University of Georgia Press, Athens,1978,p.1.

3. Ibid.,p.3.

3. Ibid.,p.2.

according to the direction of his tutor, so the appetitive element should live according to rational principle."[1]

To the classicist the child was not important because it was unformed, unreasonable, reflecting primal chaos. Its charms were rarely recorded in literature. Boas says "The only child in classical literature who is presented to us at length, as far as I know, Ion in Euripides tragedy of that name."[2] Democritus said that if children were allowed to do as they pleased they would not learn music and letters or understand virtue. He even went so far as to recommend adopting a child rather than begetting one for then you could choose what you wanted.[3] No doubt he would have approved of some of the latest medical technology which gets nearer to ordering the type of child one wants. Socrates in The Laws speaks of children as creatures whose first sensations are pleasure or pain and this is how vice and virtue enter their soul for they are incapable of reason. He bemoans the fact that some never develop beyond enjoying children's puppet shows and comedies. Such complaints are still familiar to us.

Boas reminds us however that it is impossible from such scant information to state what "Greek opinion as a whole was on anything or even if there was a Greek or Roman opinion as a whole."[4] He is surprised that one phrase which occurs in Cicero several times did not receive more attention. It was when he described beasts and children as SPECULA NATURAE, mirrors

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1. Aristotle(384-322)Nicomachean EthicsBook 3111btrans.by W.D.Ross.Great Books of the Western World ,Chicago:William Benton,1952,p.356.

2. George Boas,The Cult of Childhood,London:The Warburg Institute, University of London,1966,p.13.

3. Ibid.,p.14.

4. Ibid..

or reflections of nature.[1] But to Stoics and Epicureans alike they were dark mirrors.

Education was seen as a means to bring order to the chaos. Without education Plato thought they would turn into the wildest creatures on earth. The child was important for his potential only. What was really prized was maturity. The Stoics thought the age of reason was fourteen. Therefore no peculiar interest was shown in children or childhood or in personal biographical details such as form a large part of popular literature nowadays. Modern interest in psychoanalysis has also helped to develop this genre.

Plato's contribution to education and the formation of a concept of childhood lay in his belief that the seeds of human knowledge exist in every soul "the teacher's task is to help the soul in its movement towards the light, a movement which is entirely natural"[2] and will help the learner to discover the truth for himself. He recognized some of the stages of growth and development in children. He had little influence Castle thinks on the ordinary Greek citizen. They had no views on child care. They gave toys to infant children, employed nurses (often Spartans) for their care and limited family size by exposing infants at the father's discretion. Parents appeared to be reasonably tolerant and look upon childhood as a time of waiting. "The purpose behind Greek education was to make good adults, particularly good men, and they did not believe that infancy had much to do with the process."[3]

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.14.

2. Elizabeth Lawrence, The Origins and Growth of Modern Education, Penguin Books, England, 1970, p.26.

3. E.B.Castle, Ancient Education and Today, Penguin, London, 1961, p.63.

Aristotle realized the importance of feelings and the need for their education, for, "*a right disposition of the feelings seems to be the principle that leads to virtue rather than the reason.*"[1] For the Greeks self-realization and development from within, was the means and aim of education. It was a process of evolution of the soul. The theory of INNATE IDEAS in the Phaedo makes the infant the repository of IDEAS in their purest form, since the child comes directly from that world of Ideas.

As Boas states, "though there are hints of the cult of childhood in classical antiquity, it does not seem to have had much popularity."[2] Lyman found the same. Some words of Juvenal suggested a tender nature toward children "You owe the utmost reverence to a child" he said and also spoke out against abortion and infanticide from exposure.[3] Killing of children by this method was rampant and persisted for centuries. Girls particularly were more likely to be the victims as were illegitimate children. So-called Barbarians, says Lyman were sometims less brutal to children than the Romans, but where there was interest, concerns seemed mainly to centre around fertility, paternal power and education. He also perceives signs of some positive contributions from them towards a perception of childhood as a time of slow growth, and enjoyment of children as an integral part of family life.

It was Quintilian who said "boys commonly show promise of many accomplishments, and when such promise dies away as they grow up this is

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1. Elizabeth Lawrence, The Origins and Growth of Modern Education, Penguin Books, England, 1970,p.31.

2. George Boas,The Cult of Childhood,London:The Warburg Institute, University of London,1966,p.12.

3. Richard B.Lyman,Jr.,'Barbarism and Religion:Late Roman and Early Medieval Chidhood',inThe History of Childhood ed.de Mause, Souvenir Press, London, 1976,p.82.

plainly due not to the failure of natural gifts but to lack of requisite attention."[1] He recognized the importance of the early years and the fact that a child should enjoy learning. For his reason he approved of learning through play, considered corporal punishment undesirable and saw the need to cater for the individual learner and his level of abilities. He advised on the need for a good relationship between teacher and pupil and was also aware of the needs of disadvantaged children. The soil metaphors, as Carol Clark notes, are favourite metaphors of Quintilian which he uses sensitively and with variety, it is later in the sixteenth century that she finds them falling into rigid categories.[2] Erasmus observed in 1512 that Quintilian had already told us all we needed to know about education.[3] From this stage of thinking says Lyman it is but a short step to the notion that each child has a soul to be saved. In spite of some signs favourable to children much ambivalence towards them carries over from the Pagan to the Christian era for "the conservation of old customs and belief systems is a powerful, tenacious and resourceful force."[4]

To the early Romans, says Lawrence self-control, modesty and obedience were more important than intellectual achievement. " Children and youths learned by watching and imitating, at home, on the farms, in the army and in the forum."[5] Under Greek influence this changed to the point where

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1. Richard B.Lyman,Jr.,'Barbarism and Religion:Late Roman and Early Medieval Childhood',in<u>The History of Childhood</u> ed.de Mause, Souvenir Press, London, 1976,p.83.

2. Carol Clark,<u>The Web of Metaphor</u>, French Forum Pubs.,1978.

3. Elizabeth Lawrence, <u>The Origins and Growth of Modern Education</u>, Penguin Books, England, 1970,p.44.

4. Lyman,p.84.

5. Lawrence,p.35.

education became overorganised and as Pattison notes the treatment of children in Roman schools in the first century of the empire became mechanistic, unreasoning, students given "assignments the modern world reserves for lunatics--repetitious measuring, counting and reciting."[1] To produce eloquent orators was the new ideal, but the basis was laid for the narrow curriculum of future schooling.

There were people who spoke out in defence of children in every age. Plutarch said "Childhood is a tender thing and most easily wrought into any shape. The very spring and root of honesty lies in the felicity of lighting on good education."[2] In his treatise on the education of children he uses a farming metaphor for he saw education as a growth process:

> For lyke as in tillage fyrste it behoveth that the moulde...be good. Secondarily that the husband or ploughman be experte in sowinge. Thirdely that the sede be clene and wothout faute. So (in bringinge up of youre children) ye shall applie and resemble to the moulde your childrens nature, to the ploughman, their instructour or maister, to the sede, instruction of lernynge and precepts...If a grounde fertile of nature be yll housbandried for lacke of good tillage it appereth foule and yl favored. 3

Moreover he believed that a child's mind is not "a vessel to be filled", but "a fire to be kindled" and that "children of gentle nature take more profite by praise or lyghte rebuke, than by stripes."[4] He did not believe either in overtaxing children with work for they needed recreation also, one must seek balance just as the Greeks had believed.

The Christian concept of original sin, according to Pattison reversed all of this. The child, says Boas, becomes a microcosm or metaphor of fallen man ,

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1. Robert Pattison, The Child Figure in English Literature, University of Georgia Press, Athens, 1978, p.2.

2. Elizabeth Lawrence, The Origins and Growth of Modern Education, Penguin Books, England, 1970, p.39.

3. and 4. Ibid., pp.40-41.

man doomed for everlasting hell. What we can see developing alongside the new consciousness of the nature of children is an inevitable concern with methods of education.

According to Lawrence the Talmudic writers also came to recognize children no longer as possessions but as personalities in their own right. Early education came from within the family and was mainly concerned with spiritual matters although from the time of Ezra a book became the centre of Jewish religion and necessitated the teaching of reading.

Some spoke on behalf of the child, but now in the Christian era there is a notion of sin and shame revealed perhaps by an obsession in the writings, which Lyman notes; with mothers, fathers, flowing breasts, semen and birth pangs predominating. Tertullian for example referred to "The man that is hardened in the womb of uncleanness and comes forth through the parts of shame."[1] Mothers were expected, until quite recently to attend a church purification ceremony after giving birth and known as 'churching'. *Jerome praises matrimony because it produces virgins* , but at the same time this reduces the married woman to a lower status than a nun. The pinnacle of human desire has to be not human birth but a rebirth in the faith. There is also the mystery of the virgin birth for people to accept.

One early figure stands out speaking favourably of the child--Pelagius, a Briton who defended his faith in the innocence of children, was opposed by Augustine, a proponent of original sin, whose views became doctrine and thus was bred a new and what Boas considers a perverted interest in childhood and children though this took aeons to fully develop. Quintillian spoke of children as "vessels with narrow mouths, empty creatures into whom the soul

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1. Richard B.Lyman,Jr.,'Barbarism and Religion:Late Roman and Early Medieval Childhood',in<u>The History of Childhood</u> ed.de Mause, Souvenir Press, London, 1976,p.85.

of grammar and oratory is to be poured once they break out of the shell of childhood."[1] This 'empty vessel' metaphor persists to the present and has more recently been dubbed the 'banking' method. A more idealistic view was enshrined in the theory of innate ideas in Plato's Phaedo for there the child in essence has the potential for human perfectibility. Pelagius eight hundred years later believed this too but the doctrine of original sin negated this:

> In this inclusive, religious view of the original nature of man, in which the accent has been shifted from reason to will as the primary object and vehicle of human melioration, the child rose to a station of great importance.2

Pelagius believed in the perfectability of man without God's grace. This was of course heresy to the Church which propagated belief that even the infant bore the burden of Original sin. This was to be expiated by baptism initially. All are considered sinners living in a perpetually flawed state to be absolved only by the redemption.

Pattison researching the child in English Literature perceives this to be the most marked influence on attitudes to children since classical times. He says that "if a concept of Original sin did exist in the classical mind, it was not powerful enough to stimulate the elaborate mechanisms of expiation which come with the Christian notion of universal Fall and personal responsibility."[3]

So far from early times we have had the metaphor of the child as a rejected unwanted object to be killed , sacrificed or exposed, as an animal or wild creature, but also as a tender plant, as a wax tablet and an empty

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1. Robert Pattison, The Child Figure in English Literature, Athens: University of Georgia Press, 1978, p.2.

2. Ibid., p.4.

3. Ibid..

vessel or as a fire to be kindled and childhood itself a shell to be broken out of. The more positive ones are still current but all were to be modified by Christianity from which a new metaphor arises, the child as the 'fruit of sin'. The earlier metaphors suggest something wild or subhuman which has to be refined and domesticated like an animal, the religious one presupposes a tendency to evil which must be curtailed. Both views are to give a strong basis to notions of correction, obedience and discipline as a necessary force to be applied to children. As a result, in both eras, corporal punishment was practised with justification in spite of the minority who perceived it as less than human behaviour towards other albeit undeveloped human beings.

To Christians the child seemed a replica of Adam before the Fall, unspoiled by knowledge and civilisation. The problem of innate wisdom versus acquired knowledge was not new. Boas says it was mooted by Theognis and Pindar that "If there is such a thing as congenital wisdom and other virtues, then it ought to appear in childhood."[1], and he makes a similar comment to Pattison that in general the Ancients had a low opinion of children if they appraised them at all. Their nature is described and their education discussed but no-one wishes to emulate them for they are in general irrational, disorderly, and according to Aristotle 'dwarflike'. Cicero described children as 'specula naturae' but this idea was never taken up even during the Renaissance or age of Enlightenment. It was Christianity which developed new ideas about children. One wonders what influence the concept of an infant saviour had on attitudes to children but the paradox of the wise child as saviour Boas downplays because he believes that an

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1. George Boas, The Cult of Childhood, The Warburg Institute, University of London, 1966, p.11.

incident such as the child Jesus preaching in the temple refers to a particular precocious child and is described as such even in Milton's Paradise Regained. Oft-quoted references such as "suffer little children" likewise have no particular significance for: "The early Christian Fathers and ecclesiastical writers made little use of these New Testament verses which might induce them into an adoration of the child as such."[1] There is one positive element in this earlier concept, that, in Pattison's words "the chaotic state of childhood contains in it the possibility of human, rational perfection, and the attainment of this goal is entirely within the reach of human effort."[2] From now on we see an evergrowing effort to educate children and perpetual controversy over whose responsibility it is, what its aims should be and the ways and means of providing this. This study will show the church taking on much of the responsibility at first and its control gradually being encroached upon by the state.

By the end of the Fourth century John Chrysoston in Antioch 388 advises parents: "If good precepts are impressed on the soul while it is yet tender no man will be able to destroy them when they have set firm, even as does a waxen seal."[3] He is remarkably humane concerning discipline which he thinks should be by stern looks and reproachful words or with gentleness and promises, so that the child fears blows but does not receive them. Christian writers did not have the same distaste for children as earlier ones says Pattison but it was some time before they did write about

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1. George Boas, The Cult of Childhood, The Warburg Institute, University of London, 1966, p.18.

2. Robert Pattison, The Child Figure in English Literature, Athens: University of Georgia Press, 1978, p.4.

3. Richard B.Lyman, Jr., 'Barbarism and Religion: Late Roman and Early Medieval Childhood', in The History of Childhood ed. de Mause, Souvenir Press, London, 1976, p.87.

them. Augustine (d.430) was to have the greatest influence. he stressed that one's place in a family is physical but each of us belongs to a spiritual family far more important, for 'our real selves are not our bodies.'[1] *Nevertheless he advocates discontinuing some of the old child-*rearing practices based on custom--such as hitting innocent children. He considers children to have unreliable judgments for they would value a pet's life above that of a man but they are educable, and relatively guileless. Infant deaths vex him for all creatures have a place in God's plan:

> In view of the encompassing network of the Universe and the whole creation--a network that is perfectly ordered in time and place, where not even one leaf of a tree is superfluous--it is not possible to create a superfluous man. 2

Although it is not part of this study to examine human treatment of animals one wonders how this might parallel the attitudes to children and whether the Christian view improved their lot as well as that of the human infant, to a certain extent. Distress caused to parents by the ailments of their children Augustine sees as a moral lesson for them to pursue more virtuous lives-- it is a warning. One might refer to this as the Christian 'martyr' metaphor. He sees that children are not truly innocent at birth for they are self-centred and grasping but have had no time to sin. Church councils frequently inveigled against infanticide which was still endemic. By 500 A.D. progress was made says Lyman but empathy was still not part of the psychological equipment of parents.

Pelagius' theory of the pefectible soul met Augustine's firm opposition. At the Council of Carthage in 416 most of Augustine's thought

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1. Richard B.Lyman,Jr.,'Barbarism and Religion:Late Roman and Early Medieval Childhood',in*The History of Childhood* ed.de Mause, Souvenir Press, London, 1976,p.88.

2. Ibid..

passed into Christian doctrine "making infant baptism a central feature of dogma opened a whole new role for the child."[1] Now he/she was the centre of attention which had once been an object of neglect. The child is now a creature of will, a sinner from the moment of conception. "This stress on corruption of the will, even in childhood, removed reason from the supreme position it had held in the mainstream of Greek and Roman thought."[2] As Pattison expresses it Autobiography and Original Sin enter the world together and the author of them both is Saint Augustine. Interestingly this doctrine gave us the beginnings of the child as a literary image "He had made the infant an adult of sorts" where Pelagius had argued for primary innocence. The only concession was the notion of Limbo "a void spot for the innocent but unbaptised child."[3]

These new doctrines did not implant themselves immediately, they took a long time to be absorbed into general belief. As Lyman says "the influence of ideas on daily lives is informal, slow and hard to pin down."[4] The evidence is found in the literature and art of each period as well as in the scant evidence we have of household management and of the organisation of the provision of education for children. There is some confusion caused by the fact that the term 'child' is used to refer to anyone depending on context and literary convention, from infancy to old age. But from now on the child emerges as "a literary figure around whom ideas of our original

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1. Robert Pattison, The Child Figure in English Literature, Athens: University of Georgia Press, 1978, p.17.

2. Ibid., p.19.

3. Ibid., p.18.

4. Richard B. Lyman, Jr., 'Barbarism and Religion: Late Roman and Early Medieval Childhood', in The History of Childhood ed. de Mause, Souvenir Press, London, 1976, p.76.

nature, our fallen condition, and our hope for salvation cluster."[1] This view persists down to our own century. Arthur Adrian finds that discipline of children was especially stern in Dissenting and Evangelical families of the nineteenth century. Murdstone in David Copperfield refers to all children for example as " a swarm of little vipers". Discipline was based on belief in original sin. They were," considered innately depraved, for they had been conceived in sin."[2] Sensitive children therefore suffered guilt and shame.

Erikson makes interesting comments on the nature of shame which show what effect it has on a developing child:

> Shame...is essentially rage turned against the self. He who is ashamed would like to force the world not to look at him, not to notice his exposure. He would like to destroy the eyes of the world. instead he must wish for his own invisibility. This potentiality is abundantly used in the educational method of 'shaming' used so exclusively by some primitive peoples. Visual shame precedes auditory guilt, which is a sense of badness to be had all by oneself when nobody watches and when every thing is quiet--except the voice of the superego. Such shaming exploits an increasing sense of being small, which can develop only as the child stands up and as his awareness permits him to note the relative measures of size and power. Too much shaming does not lead to genuine propriety but to a secret determination to try to get away with things, unseen--if, indeed it does not result in defiant shamelessness. 3

Parents of earlier times obviously had little idea of the psychological effects of their beliefs, attitudes and practices but by the seventeenth century and even later we will see this shaming method being used quite extensively in schools.

Poetry of earlier periods also has some references to children which

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1. Robert Pattison, The Child Figure in English Literature, Athens: University of Georgia Press, 1978, p.20.

2. Arthur A.Adrian, Dickens and the Parent-Child relationship, Ohio University press, 1984, p.2.

3. Erik H.Erikson, Childhood and Society, Penguin, London, 1950, p.244.

give a hint of concerns at the time. 'The Rape of Proserpine' by Claudian written probably towards the end of the fourth century highlights the distress of a mother who finds that her daughter who was sent away to be brought up elsewhere, has in fact been kept a prisoner. The mother's guilt says Lyman probably found expression in many of those who read it.

Situations could be reversed however and he gives an example of schoolboys who murdered their teacher with their writing instruments. The story indicates he thinks the amount of repression and buried hostility in these children. Basic patterns become established says Lyman. Infanticide, for instance, public consciousness is gradually turning against it. It still occurs as do abortions but they are disapproved of particularly by the church. Children are seen as needing 'strengthening' in order to be moral, those who show any tendency to become religious are idealized and parental love is by now recognised as a normal thing.

Another record of child rearing practices is found in Einhard's Life of Charlemagne who was educated as a boy in a monastery. His own sons were brought up to ride, fight and hunt, but girls were taught household skills "rather than fritter away their time in sheer idleness."[1] So beautiful were his daughters and so protective of them was he that they never married but did produce some illegitimate children which he describes as "a number of unfortunate experiences." A child's level of skill development was probably the threshold thinks Lyman between childhood and adulthood.

One thing becomes patently clear, that throughout our history the attitude towards children is a reflection of the society within which they live and is particularly influenced by the selfconcepts parents have.

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1. Richard B.Lyman,Jr.,'Barbarism and Religion:Late Roman and Early Medieval Childhood',in<u>The History of Childhood</u> ed.de Mause, Souvenir Press, London, 1976,p.95.

Aries studies the art of a period to see how it reflects the concept of the child and family from the tenth century on particularly in France.[1] Major influences appear to be the gregarious nature of family living which in a large household often comprised many people including relatives, servants, apprentices from other families and visitors including professional people who in those days visited their clients. Recreational activities were shared by young and old in the house or at public festivities. The street was the meeting place for the large society. Work dominated life to a degree reflected in their art and definite notions of behaviour proper to each 'age' or part of the life cycle. Children were viewed as miniature adults and subservient generally to the lord of the household. Education was largely in the form of observation and participation in the seasonal or household activities unless in the more privileged instances there was tutoring in music, use of arms and dancing--the courtly arts which were prized as a sign of a gentleman. The effect was a paradox in that childhood was not seen as special, children were petted, played with, given amusements but no-one took them seriously or gave them special attention. The death of an infant was scarcely mourned when not unexpected and large families made up for the losses. Nursing was often the duty of a surrogate mother or wet-nurse till the child was weaned. Schooling as a formal institution was the prerogative only of clerics. The break from childhood to manhood came with the independence of starting work or joining the army in which many of the soldiers were in their teens.

Aries sees the inception of organized schooling as the product mainly of a small group of influential pedagogues concerned with protecting the innocence of childhood from the coarse attitudes and manners of the

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1. Philippe Aries, Centuries of Childhood, Penguin, London,1973.

servant class particularly. Among these influences were the Jesuits and the founders of Port-Royal. The fashion of boarding sons out with neighbours friends and relatives was seen as barbarous by visitors from some countries. The division between childhood and adulthood was fairly abrupt, for women it usually came with marriage for which they had been trained in household duties and management of servants all their young lives. The duties of the head of household reflected strong moral duties also for he was responsible for everyone within it.

Major influences came from the primitive belief in the cycle or ages of man, a lack of awareness of child psychology or biological development, and church influence on morals and its attitude to marriage which was seen as inferior to a vocation. The nature of the home itself varied from extremes of large, busy and productive households to inadequate hovels which barely sustained any notion, if they had one, of convivial conjugal family life. Society tended to be made up of interdependencies, so individuality and private space were not a consideration. Ambition was esteemed a virtue and good manners were the gloss on a successful life. Politics of course played their part but often sheer pressure of public usage established new custom as in the case of the gradual extinction of the rule of primogeniture.

Those who advocated formal institutionalised schooling began a movement which Aries thinks they could hardly have anticipated. Its success was immediate. No longer did children have to live away from home for long periods. Rich and poor mixed together in classes which were too large and a curriculum developed which later became divided between two types of school. This re-affirmed class status, for only the rich could afford the extended classical education. Others had to be content with a more practical or technical curriculum which prepared them for the workplace.

Modern educationists such as Bowles and Gintis with their reproduction

theory would no doubt see this as a prime example of a power group in society ensuring its own survival through the education system, by reproducing its own kind in limited numbers.[1] So far from establishing an egalitarian society with the passing of primogeniture the country established a new privileged social class group by reason of its education system. Girls and younger sons did however benefit to some degree. It is easy to see how the schools gradually took over many of the moral and socialising duties of the family. At the same time with new interest in education the parents focussed more attention on their children's health, hygiene and academic progress, and discipline became a major concern.

Aries observes that in the tenth century artists were unable to depict a child except as a man on a smaller scale. The mediaeval concept of the 'ages' of the cycle of life was a scientific categorisation and one of the commonplace ways of understanding human biology, in accord with the universal system of correspondences (symbolism, of numbers, patterns). The first age recognised is childhood to age seven, then pueritia till fourteen; the third adolescence at twenty-one, which can last to thirty-five. After follows youth to forty-five and then senectitude followed by old age. By the fourteenth century this was symbolised in much of the art, the first an age of toys, the second the age of school, the third the age of love or courtly and knightly sports, followed by the ages of war and chivalry. The sedentary final age is depicted by men of law, science and learning.

All ages were typified by their social roles. He says that "It will be noticed that since youth signifies the prime of life, there is no room for adolescence" as we know it for until the eighteenth century it

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1. S.Bowles and H.Gintis,<u>Schooling in Capitalist America</u>, Routledge and Kegan Paul, London,1976.

was confused with childhood.[1] In school Latin the words puer and adolescens were interchangeable.

Mary McLaughlin, in her study of childhood in earlier Western society[2] explores the more intimate world of feeling and relationship and says that when people say there was no place for children in the mediaeval world they mean no specially designated place for children only, such as nurseries and schools, but they were everywhere in society. She examines records of the life of Peter Damian of the eleventh century who became a leading spiritual reformer of his time in Italy. He was born into a large poor family to a mother worn with child-bearing, whose elder son criticized her for bringing another child into the world. The mother's distraught reaction was to reject her baby. Fortunately a woman moved by compassion for the child upbraided the mother to such effect that she thereafter lavished care and affection on this son. He was orphaned while still young and left to the untender mercies of the older brother and a harsh wife. After being a swineherd for some time he eventually by age twelve was with another kinder brother who provided care, and gave him an education which eventually led to his priesthood. So far his life mirrors many of the common problems of his era as detailed by other writers also. First the dejection of a mother in such circumstances often led to rejection, exposure, infanticide or 'accidental' death such as overlaying, that is where the infant smothers in the adult bed. To lose a parent very early was common because of war, disease, plague or childbirth maladies. To be then sent to another family was as common as it was to have one or more step-

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1. Philipe Aries, Centuries of Chidhood, Penguin Books, England, 1973, p.23.

2. Mary Martin McLaughlin, 'Survivors and Surrogates: Children and Parents from the Ninth to the Thirteenth Centuries', in The History of Childhood, ed. de Mause, Souvenir Press, London, 1976. p.101

parents especially step-mothers. Mothers themselves were often very young.

Half a century later Guibert of Nogent born to a noble family entered a monastery at age twelve, but wrote his own story, a precedent for the time. The main theme of this work is a passionate attachment to his mother. At birth he was not expected to survive. By eight months his father was dead. Henceforth the mother expended all her care on this child. She was a naturally religious even ascetic woman who resisted pressure to remarry and remained a widow, a state she preferred. She employed a strict tutor for the boy and he was excluded from the company of other children. The tutor's excessive discipline of the boy distressed the mother but he refused the chance to become a knight and wished to be a clerk. He seems to have been extremely aware of what this unnatural life was doing to him for he records that "while others of my age wandered everywhere at will and were unchecked in the indulgence of such inclinations as were natural at their age, I hedged in by constant restraints and dressed in my clerical garb, would sit and look at the troops of players like a beast awaiting sacrifice."[1] This was said in retrospect as an adult. One wonders if his father had been a knight to lose his life so soon and this may have influenced the boy' choice.

It is typical of the time to put so young a child into the service of the church. McLaughlin wonders if the mother's reclusive life style made the boy feel rejected and guilty creating in him a jealously possessive and dependent child. It is probably truer to say that the word 'sacrifice' which he himself used was indicative of perhaps the mother's wish, by offering him to the church, to expunge her own distaste for marriage--who knows--we

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1. Mary Martin McLaughlin,'Survivors and Surrogates: Children and Parents from the Ninth to the Thirteenth Centuries',in _The History of Childhood_,ed.de Mause ,Souvenir Press,London,1976.p.108

cannot easily analyse historical figures in the light of modern psychological thinking but his story does give a human dimension to a child's history which was probably fairly typical of one section of the society.

As Mc Laughlin says it is rarely parents who speak of their role it is others who comment on it. She says something which appears to contradict other writers, that about the twelfth century "For all classes the mother who nursed her own children reflected the image of the ideal maternal image."[1] Bartholomew of England praised natural feeding for the bond it produced between the mother and infant but the practice of wet-nursing still multiplied. There always seem to have been a minority of women who fed their own children but from most authors one gets the impression that it was more often among the poor and then it was done from necessity rather than from choice. From the Twelfth century on McLaughlin notes a new tenderness and concern for babies. This is seen in the exhortations not to take children into parental beds and by this time infanticide was a crime. The father's role she describes as ambiguous for in a military and expansionist society he was often away from home and rarely do we get a father and son relationship portrayed sympathetically. The practice of 'oblation', of sending sons into monasteries she sees as one way of providing for one of the family, which would be a consideration when the estate had to go to one son. Another stress factor of such life for young people was the constant supervision and discipline. Guibert refers to the "omnipresence of the Devil and his minions, the lurid visions and nightmares"[2] which he experienced.

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1. Mary Martin McLaughlin,'Survivors and Surrogates: Children and Parents from the Ninth to the Thirteenth Centuries',in The History of Childhood,ed.de Mause,Souvenir Press,London,1976.p.115.

2. Ibid.,p.128.

One consolation for boys of poorer families was that even if they worked hard they were less likely to be separated from their parents. Not all were tyrannical towards children. Anselm was certain that continual beating was unnecessary for it made them in turn suspicious and jealous and he urged his superiors to feel some empathy for children. Ailred of Riveaulx was understanding and considerate. A new piety and devotion to veneration of Mary and her Son also engendered a mood of emotional tenderness. Signs of this can be seen in painting, sculpture and in liturgy and drama:

> The dramatic enactment of the gospel story in art and liturgy, was in fact, among the novel experiences of the the late eleventh and twelfth centuries, and here a growing stress on the Infancy of Christ and especially on the Nativity and the Adoration of the Magi, gave the images of Mother and Child a much greater prominence and often an appealing humanity.1

As time went on the 'poses'of the Madonna became more affectionate and there was a new image of maternal tenderness expressed in works such as The Massacre of the Innocents. Gospel stories being told in the vernacular must also have had some influence. Poetry also often has separation of sons from mothers as its theme and the mothers become idealized distant persons.

It appeared to Aries, judging by its art, that there was no place for childhood in the Mediaeval world. Pictures of children when they do appear are simply miniature adults. Not until the thirteenth century do they appear more realistic to our eyes and "the touching idea of childhood remained limited to the Infant Jesus until the fourteenth century, when... Italian art was to help spread and develop it."[2] Gradually other children

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1. Mary Martin McLaughlin,'Survivors and Surrogates: Children and Parents from the Ninth to the Thirteenth Centuries',in The History of Childhood,ed.de Mause,Souvenir Press,London,1976.p.133.

2. Philippe Aries,Centuries of childhood,Penguin Books,London,1973, p.33.

were added to holy pictures and later by the fifteenth and sixteenth centuries children were frequently included in paintings.

Ross believes that the children in many paintings are idealized images rather than real. He finds it difficult to explain the apparent obsession with children in Florentine art. The children portrayed are well-fed, naked and happy, the antithesis of reality where a baby was swaddled and put in the care of a wet-nurse or balia. He believes such paintings may represent a secular fantasy of unknown maternal intimacy, perhaps to blot out painful childhood memories, and that:

> Pictorial recognition of the small child as a distinct individual emerges in the fifteenth and sixteenth centuries and reaches its culmination in the work of Titian in the 1540's, most notably in the portrait of a little girl, age two, full length, alone except for her dog.("Clarice Strozzi",Berlin State museum) 1

In Italy merchant fathers were often away from home for periods up to several years. Sometimes wills specified that a widow should not remarry; this was to preserve the inheritance for the children. Advice from one Dominican Giovanni Dominici was for mothers not to pet or embrace their sons between the ages of three and twenty-five and in this period they should be separated from the girls and become used to harsh conditions. Boy babies were more welcome than girls because of dowry problems. Parents are warned to keep girls busy and away from doors and windows where they might be seen acting frivolously.

There is no doubt that some parents enjoyed their children and dressed them up. If fathers were not always present they were troubled by their children's illnesses. Italian physicians were pioneers in writing about the diseases of children, most of their information however came from

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1. James Bruce Ross,'The Middle-Class Child in Urban Italy, Fourteenth to Early Sixteenth Century', in<u>The History of Childhood</u>, ed. de Mause, Souvenir Press, London, 1976, p. 224.

classical treatises rather than clinical observation. Plague was a real threat and one from which only the rich could afford to flee. In the fourteenth century a father was considered responsible for his son's education, if this was not possible he employed a tutor. Middle class children at about seven entered 'commune' or common schools which were viewed as dens of iniquity by Dominici who recommended small bribes and inducements to encourage children to learn. The normal stages of learning for a merchant's son were, learning reading and accounting, and apprenticeship in a bank or shop. Teachers and tutors were changed as often as the balia which the children had been subjected to earlier.

Petrarch commented on the horrors of the classroom, the dust, noise, screams, prayers and tears under the rod. A painting which encapsulates the trauma of going to school in these times is that of Saint Augustine's first day at school, as painted by Benozzo Goggoli (1420-1497):

> At the left stand the parents, the sad-eyed Monica lightly resting her left hand on the boy's head, the stern father raising his hands as if to project the child into the eager hands of the black-clad master who is about to seize the boy by the neck. The child whose head is thus between three sets of hands stands proudly, arms crossed, but fixes an uneasy eye, not on the master but on one of the big boys to the right, who holds a small bare-backed boy on his own back to receive the blows of a rod held aloft by another master, accompanied by a good little boy reading a book. Within the arcaded, crowded schoolroom in the background, confusion reigns; some little faces look out curiously at the newcomer. 1

As Ross says all the elements of the schoolroom are depicted here with special emphasis on the rod which would be approved of by the traditiinal moralists but challenged by humanist educators. One such was Guarino of Verona (1435-1460) who thought it inflicted moral and intellectual injury.

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1. James Bruce Ross,'The Middle-Class Child in Urban Italy, Fourteenth to Early Sixteenth Century', in The History of Childhood, ed. de Mause, Souvenir Press, London, 1976, p. 224.

There were some parents such as Paulo of Certaldo who also saw the value of gentle and cautious correction.

A child's life was marked by severe physical and emotional adjustments, separated from his mother to be nursed by a stranger, returning home to be reestablished with his family, at seven being thrust into the classroom, and eventually the shop. For a girl the choice was a nunnery or marriage. All this combined with risks of natural disasters or a loss of a parent and remarriage. One positive reform is in the indictment of infanticide though the punishment is horrific. An example is recorded of one Francesca of Pistoria, found guilty of infanticide, who was "led through the steets with her dead child tied to her neck and burned to death" in 1407.[1] Ross is bemused by the paradox that the comparatively neglected infants of these times developed the vigour and creativity to herald the Renaissance. We may understand this better he believes by using the methods of inquiry of psychology and psychoanalysis.

By the thirteenth century there are increasing numbers of didactic works displaying some sense of the different stages of child development and needs. They are popular and there is a growing number of people able to read them. One of the earliest and most influential was by Bartholomew of England which conveys "a now more articulate sense of early childhood as a carefree and playful stage of life."[2] Such ideas were beginning to gain hold in learned circles. Philip of Navare as one such recommended affection towards children but with restraint. He still believed in beating

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1. James Bruce Ross,'The Middle-Class Child in Urban Italy, Fourteenth to Early Sixteenth Century', in The History of Childhood, ed. de Mause, Souvenir Press, London, 1976, p. 220.

2. Mary Martin McLaughlin,'Survivors and Surrogates: Children and Parents from the Ninth to the Thirteenth Centuries',in The History of Childhood,ed.de Mause,Souvenir Press,London,1976.p.136.

and imprisonment for boys who must be prepared for the noble profession of 'clergie' or 'chevalrie'. As for girls:

> ...they were to be indoctrinated from the beginning in the one virtue that was sufficient for them, obedience; for the Lord wished women to remain always in subjection.[1]

Only those who were to be nuns needed to learn how to read and write and careful custody of a girl's chastity was to be the prime concern of parents, an idea most of his contemporaries shared.

The first work of vernacular literature in which a child is the central figure throughout is Hartmann von Aue's Der arme Heinrich.[2] This book gives the impression that the children of prosperous parents were treated more indulgently and gently than the children of noble birth and such works says McLaughlin lead us to the image of the evolving conjugal family. Bad child rearing practices still exist and opposition to them is growing over time, but "The idea of the child as the possession and property of its parents continued to dominate parental attitudes and actions in these, as in earlier and later centuries."[3] She sums up her own findings:

> Tenderness, compassion, the capacity to comprehend the needs and emotions of others; these are fragile and late-maturing plants of feeling and they flowered slowly in the hard and sometimes violent lives of parents who were themselves often literally as well as emotionally, little more than children. 4

Other writers confirm that girls often wed at twelve and boys at fourteen. One cannot help thinking of Shakespeare's Romeo and Juliet as typifying many of these findings. The fact that Juliet is fourteen, the only surviving child of her parents, dominated by a tyrannical father and neglected by a

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1. Mary Martin McLaughlin,'Survivors and Surrogates: Children and Parents from the Ninth to the Thirteenth Centuries',in The History of Childhood,ed.de Mause,Souvenir Press,London,1976.p.137.

2. Ibid.,p.139.

3. and 4. Ibid.,p.140.

mother submissive to him, she turns for help to the nurse who mothered her as an infant, and who mentions using wormwood to wean the child. Her father threatens that she will "hang, beg, starve, die in the streets"[1] if she dares to disobey him.

In France especially among the nobility marriage was at a very young age and a bride of twenty was considered undesirable. At the start of the eighteenth century the legal power of a father over his household was virtually absolute, literally power over life or death "A 1611 review of the criminal code enumerates the conditions under which a father has the right to kill an adult son or daughter."[2]

In the fourteenth century Chaucer used a child, the young martyr, as a weapon against the sentimentality of the prioress but it was the Pearl poet who invested the infant with its full Augustan solemnity to give English literature its first true child figure, according to Pattison. One of the functions of the poem is to correct the Pelagian complaint made by the dreamer of the poem. The young girl in the poem who died in infancy, is at once a child, a pearl and a maiden, three aspects of one phenomenon, an innocence possible to all Christians. The dreamer strives towards this state of 'adult' perfection achieved by the child.[3] The premiss of Pattison's work is that children are figurative, at least as they appear over the the past three hundred years. Readers are tempted to believe in the child figure "The fact that the child is not regarded as a figure gives

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1. William Shakespeare, Romeo and Juliet, Act III Scene V Line 194.

2. Elizabeth Wirth Marvick, 'Nature Versus nurture:Patterns and trends in Seventeenth-Century French Child-Rearing', in The History of Childhood, de Mause ed., Souvenir press, London, 1976, p282.

3. Robert Pattison, The Child Figure in English Literature, University of Georgia Press Athens, 1978, p.22.

it added potency, for the truth is that this particular depiction of reality is relatively new to English literature."[1] The Ancient world was little interested in the child as we have seen. It first becomes prominent in the early church's debate over original Sin, and:

> ...religious doctrine requires a substantial incubation period before it can translate itself into symbolism and imagery...a thousand years were required before this idea was felt as part of the unconscious view of life from which literature draws its figures and symbols."2

So we observe the gradual evolution of the child figure as it begins to embody certain themes such as the question of free will, innocence and the means of salvation, which says Pattison had previously been expressed mythically, allegorically, and through other conventional imagery.

Gradually by the sixteenth century says Aries the iconography included significantly the family as a subject and one which became increasingly popular. Even the calendars depicted the months and ages of men as family members. Most of the iconography of the Middle Ages depicted the outdoors or public places. Before the fifteenth century interior scenes are rare. But now pictures become not only ornaments for public or sacred places but more frequently for homes too and family portraits become popular. In many of these newer paintings the action is centred on a child, in the cradle, at the breast, even having head lice removed. Aries believes that the concept of the family, which was unknown in the Middle Ages emerges in the sixteenth and seventeenth centuries, and is inseparable from the concept of childhood.

A child's nature was considered to come from his basic constitution (complexion), any one of four types--aqueous, melancholic, choleric or

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1. Robert Pattison,The Child Figure in English Literature,University of Georgia Press Athens,1978,p.44.

2. Ibid.,p.45.

sanguine. Heroard the Dauphin's physician for instance pronounced him to be basically sanguine but on the choleric side. He left us intimate detailed records of his small charge but mainly the practices are "governed by unwritten tradition"[1] which is why it is difficult for us to know precisely what went on. From birth to age six or seven the child's world was one of face-to-face contacts and the spoken word. Aries may see attention to children in plastic art says Marvick but "The classical Renaissance in French imaginative literature ignored the infant and small child."[2] Common to all French views of infancy she finds that the survival in the first few months depended absolutely on the formation of a satisfactory nursing relationship with a woman "the nursing relationship was seen as more profoundly influential on the developng nature of the child than the pre-natal experience."[3] To suppress the milk was equivalent to abortion. Doctor's believed that mother's milk was menstrual blood diverted, and that with this milk a child absorbed the nurse's characteristics. Children who failed to thrive were sometimes considered to have been conceived from insemination by the devil. Children often developed a close and loving relationship with their nurse rather than their mother. A good nurse therefore became 'a jewel beyond price'.

Swaddling was still practised ostensibly to encourage good posture and Parisian children had their heads bound to such an extent that their shape became recognizable. The use of enemas and purgatives was widespread and children were held down to have them forced upon them. The seventeenth

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1. Elizabeth Wirth Marvick,'Nature Versus nurture:Patterns and trends in Seventeenth-Century French Child-Rearing',in The History of Childhood,de Mause ed.,Souvenir press,London,1976,p260.

2. Ibid.,p.261.

3. Ibid.,p.264.

century was unaware says Marvick, of stages of natural development. To encourage walking 'leading strings' were attached to clothes for children, and 'walking' stools were in common use as well as cane baskets to keep babies upright. These helped to keep them off the floor, which was often earthen, but did not prevent persistent skin complaints from which even aristocratic babies suffered. Washing was not considered good nor was soap on the Continent, but in England, water, often icy cold was considered healthy and bracing. Children tended also to be overdressed. Robertson says that German babies were also swaddled to six months of age and only changed twice a day.[1] In Russia the practice was to swaddle for nine months and persisted to the twentieth century:

> While the custom of swaddling newborn infants is widespread, the ancient Russian extreme insists that the the baby be swaddled up to the neck, tightly enough to make a handy 'log of wood' out of the whole bundle, and that swaddling be continued for nine months , for the greater part of the day and throughout the night. Such procedure does not result in any lasting locomotor deficiency, although the swaddled infant apparently has to be taught to crawl.2

What interests Erikson is whether this has psychological effects on the child and he believes it is a symptom of the image of the whole culture, and may partly account for the nature of characters in Russian literature. Dunn's study of Russian childhood found that in the eighteenth century it was an ordeal, a precarious existence. Only about half survived to adulthood because of poor diet, climate, inadequate medical care and tradition as compared to Norway with only one third loss in similar climatic conditions.

Parents in Russia considered children and childrearing unimportant;

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1. Priscilla Robertson,'Home as a nest: Middle Class Chidhood in Nineteenth Century Europe',in The History of Childhood, ed.de Mause,Souvenir press,London,1976.

2. Erik H.Erikson,Childhood and society,Penguin,London,1950,p.378.

> children had to be cared for, but underlying that care was parental neglect, even hostility towards the children. The convenience of the parents had priority over the wellbeing of the child.1

No-one hitherto has spelled out the basis of child neglect as being parental selfishness before. This must be an important factor especially to explain the abandonment of babies through the centuries and the practice of farming children out for nursing particularly. We know little about the relationship for instance between husbands and wives and whether they felt that a child interfered with their work or their lifestyle. Were husbands jealous of children and were parents as some writers seem to suggest rather infantile themselves in their needs and expectations. These are areas of history we can only guess at. Lack of understanding of child needs and the harsh times people existed in are problems we can have some idea of but how much people were influenced in their attitude by such things as inability to plan children and personal inadequacies we do not know. We have swung as Boas says to a cult of the child in which it is sentimentalized and commercially exploited but the reality is that a newborn child requires a commitment to its care for nearly quarter of a century and at inevitable cost both financial and emotional to the parents. A realistic view of childhood cannot ignore these factors.

Once the seventeenth century French child was weaned it was considered eligible for corporal punishment. The traditional method was for one child to bear the other on its back. Henry IV recommended whippings for his son and administered some himself. His wife disapproved and believed that it betrayed failure of those in charge. A leading educator Jeanne Freyot said that children could respond to kindness just as well as to harshness.

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1. Patrick P.Dunn,'"That Enemy is the Baby":Childhood in Imperial Russia',in<u>The History of childhood</u>,ed.de Mause,Souvenir Press, London,1976,p.385.

"Manipulation rather than domination was the key to a newly popular strategy: more flies could be caught with honey than with vinegar."[1] Fear of bogeymen was still used and of castration. Shame is appealed to in order to get compliance. Even at Port Royal a girls' convent school the 'lazy', the 'negligent' or the 'liar' might have to wear labels designating them as such. The aim was to substitute inner motivation for good behaviour as soon as possible. Religious asceticism was enjoying a revival and had its influence "The new tactics were designed to heighten guilt rather than induce shame."[2] In schools such as Port Royal every activity was designed to encourage this and children were watched over at all times. Jacqueline Pascal admitted that it was easier to control such a regime in her institution than it would be with an individual at home.

Before the Catholic reform movement the old style of frightening children was with fear of the devil, hellfire and possession, which haunted them. "In contrast with this imagery of extreme dangers, the 'new style' of fantasy showed the effects of an aim to reform conscience and character WITHIN the child rather than to achieve mere formal compliance with adult demands...the new model was the inward-looking self-abnegating man or woman. Aggression was to be turned against the self."[3] Everything was to be offered up for God's greater glory even forbidden desires and incestuous wishes. Dedication to Christ as in becoming a nun is the 'ideal' for a woman.

Marvick reminds us that children still witnessed brutal animal

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1. Elizabeth Wirth Marvick,'Nature Versus nurture:Patterns and trends in Seventeenth-Century French Child-Rearing',in _The History of Childhood_,de Mause ed.,Souvenir press,London,1976,p277.

2. Ibid.,p.278.

3. Ibid.,p.279.

killings and public executions which probably also haunted their minds. The religious revival preached the virtues of a large family and advised that one should not wish only for sons. Bourdaloue a popular preacher at the end of the century admonished parents who dragged their daughters off to convents "feet and hands tied, not daring to complain for fear of unleashing the rage of her father and the obstinacy of the mother."[1] The world cared little about the souls of females said one reform leader. Orphanages which had been for boys only now accommodated girls also. The fate of discarded children was often ghastly, and they were sometimes sold or maimed in order to beg alms. Vincent de Paul worked to save such children. Maternal affection towards children was not taken for granted says Marvick. The mother's role was prescribed as was the father's. When a mother died another was quickly put in her place.

The seventeenth century in France was one of reasonable stability. Aries thought the high infant death rate made tenderness towards them taboo says Marvick who believes it was merely suppressed. When children did survive some of the rituals associated were propitiatory acts such as promising to offer the child to the church. [symbolic of earlier blood sacrifices?] Some catholic reformers protested at too much maternal tenderness, even affection they thought should be diverted to Divine service.

> It could be suggested that PROPITIATION was the traditional mode of coping with anxieties and longings that concerned children; sublimation was required by the new morality. But in neither case was there a denial of the tender feelings felt for children in spite of the cultural overlay that half-disguised them.292 M

Marvick believes that parental sentiments are universal and increase once a

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1. Elizabeth Wirth Marvick,'Nature Versus nurture:Patterns and trends in Seventeenth-Century French Child-Rearing',in <u>The History of Childhood</u>,de Mause ed.,Souvenir press,London,1976,p285.

2. Ibid.,p.292.

bond is forged by the child's development even when it may appear lacking at birth.

Illick finds evidence of much the same attitude to children in seventeenth century England and America. In England life expectancy declined and the fertility rate, perhaps due to contraception. The midwife had been ecclesiastically licensed since the sixteenth century and physicians still did not attend births. "She engendered both respect and fear, as did the act of childbirth over which she presided."[1] The first treatise on childhood diseases was Thomas Phaer's Boke of Children. He recommended that mothers nourish their babies and also looked on wet-nursing practices as tantamount to abortion. Some even called it a form of infanticide. Laws concerning bastardy usually showed no concern for the child involved excepting the Act of 1623 "to prevent the Murthering of Bastard Children" but it was not always executed.

Teething was always a worrying time for children and parents and Robert Pemell physician first suggested the lancing of gums. It has been claimed says Illick that the middle period of the century witnessed the awakening of medicine from its sleep of nearly two thousand years. Generally speaking "It seems probable that the child care manuals were reaching more people in the late seventeenth century, and that children were receiving more attention."[2] An earlier fascination with magic still persisted but a concern with religion could be noted as also a new analytical spirit. Lady Warwick for example on the loss of her father and two children is said to have tried not to grieve too much for she felt 'some inward persuasion that

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1. Joseph E.Illick,'Child-Rearing in Seventeenth-Century England and America',in The History of Childhood, ed. de Mause, Souvenir press,London,1976,p.306.

2. Ibid.,p.313.

God would, in some way or other, punish me for my doing so."[1] Resignation to the will of God was paramount and girls were taught to sublimate anger or aggression through religion, thus "repression and religion were complimentary."[2]

Education was seen by the more puritanical as mainly necessary to protect a child against his own self destruction [much like the arguments for swaddling]. "The attitude to be fostered in a child would have to be one of constantly questioning himself, making himself feel inadequate, engendering self-doubt."[3] others considered the child to be totally innocent. This was the view of John Earle (1628):" A child is a man in a small letter, yet the best copy of adam before he tasted of Eve or the apple...His soul is yet a white paper unscribbled with the observations of the world...he knows no evil."[4] The tabula rasa metaphor once more. Education would fight the world's corrupt influences. It was religion which taught a child about his own mortality and there was in the seventeenth century says Illick a child's literature which emerged concerned with impending death. Jane Janeway's _A Token for Children_ (1671) was full of stories of children converted just before death, and admonishing parents not to grieve but to rejoice in their deaths.

The aristocratic ideal of the Seventeenth century was moderation which hinged on self-control. John Locke is a symbol of this and he believed that "little or almost insensible impressions of our tender infancies, have very important or lasting consequences."[5] He stood between the two poles of infant innocence and depravity. He is one of the first to

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1. and 2. Joseph E.Illick,'Child-Rearing in Seventeenth-Century England and America',in _The History of Childhood_, ed. de Mause, Souvenir press,London,1976,p.315.

3. and 4. Ibid.,p.317.

5. Ibid.,p.318.

mention toilet training and is against corporal punishment "The rod should be avoided as well as rewards. Shame should be the instrument used to motivate children."[1] But he did appreciate the importance of play and of dancing and " took an honest (and refreshingly realistic) view of educational approaches to children."[2] He recommended that early reading be entertaining, as in Aesop's fables, and commended learning the Lord's prayer, Creed and Ten Commandments--also learning of a foreign language. Surprisingly he considered the benefit of studying grammar as of negligible use, a fact still not recognized generally. He believed each parent should make his own decisions on child-rearing.

Encouragement for education came from several sources, those who wished to imitate the gentry--humanists who saw schooling as the road to a universal improvement which would eliminate the need for special protection of the innocent--and puritans who viewed ignorance as the root of all evil. One can perceive as Illick does that a separate world for children was gradually emerging and is reflected in the art, costume, leisure activities and literature of the period. Parents were tending to keep children home longer by the middle of the century. Grammar schools now proliferated in England--only two counties did not have one. Parents may have had many reasons for sending children to school says Illick. One may have been to keep them away from the servants or out of the way of step-parents for they were not uncommon. One wonders if this is the reason for their preponderance in children's literature.

The typical seventeenth century father was apt to be secularist

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1. Joseph E.Illick,'Child-Rearing in Seventeenth-Century England and America',in The History of Childhood, ed. de Mause, Souvenir press,London,1976,p.319.

2. Ibid.,p.320.

while his wife was inclined to religiosity and inculcated these values in her children. The latter may have been a symptom of oppression rather than a question of free-thinking. Discipline in the schools was harsh and the regimen followed strict principles in keeping with its missionary spirit.

> God having ordained schools of learning to be a principall means to reduce a barbarous people to civilite..." and Christianity. The challenge was to gain "the verie savage amongst them unto Jesus Christ, whether Irish or Indian..." or Brinsley might have added 'child'.[1]

Apprentices were equally beleagured by rules and prohibitions against "dance dice cards mum or any musick" amongst other things such as extravagant dress and long hair. They could also be fined or imprisoned for "toying with the maids, teaching children bawdy words" or even wearing "a foul shirt on Sunday."[2] Autonomous development was not considered or allowed for. As Erikson says this sense of autonomy is vital to the preservation in economic and political life of a sense of justice.[3]

Those who emigrated to America often felt like children leaving a mother. The novelty of their situation says Illick was even revealed in the names they gave their children such as Oceanus, Mercy, Reform etc. At one time in history siblings often shared the same name but as time goes on one's name becomes more important and distinctive. In the new country even the practic of taking one's parent's forename declined. There is no evidence of children being swaddled and they appear to have been breast-fed. John Cotton (1646) taught his charges to recite "I was conceived in sin and born in iniquity...Adam's sin imputed to me and a corrupt nature dwells in me."[4] So even in the new country the same beliefs in inherent

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1. and 2. Joseph E.Illick,'Child-Rearing in Seventeenth-Century England and America',in The History of Childhood, ed. de Mause, Souvenir press,London,1976,p.323.

2. Erik H.Erikson,Childhood and Society,Penguin,1950,p.246.

evil and propensity to wickedness were carried with them over the seas. We can judge the affection felt for the young however by the considerable time and care devoted to making christening gowns, coverlets, children's furniture and so forth. Infanticide was the fate of bastards only. Parents were still exhorted to oppose self-assertion or wilfulness in their children so that "The child would doubt his own abilities, repress his strivings and look to a higher authority",[1] initially the parent. In some places it was a crime for a child of more than sixteen to strike his parent. The rod was still applied unless other means were used such as emotional blackmail which Cotton used, telling his daughter he was about to die and therefore she must not dishonour him. Most education took place in the home and at six children began to dress as adults. Practices in the United States more nearly matched the ideas of John Locke says Illick. Parents were being led away from the concept of 'calling' as a summons to the priesthood ---the newer method was "the use of the gifts of God", which meant sublimation of sexuality and a caring concern for community through one's work and relations in the family. These seem like rather convenient and practical precepts for beginners in a new country.

A historial change in attitudes to primogeniture in Europe had also had far-reaching effects on the development of the family as a social unit and on attitudes to children other than firstborn sons. Historians distinguish say Aries between the blood line fom a single ancestor and the family or mesnie with all its relatives and with a tendency to joint possessions, which gave rise to nineteenth century theories on the patriarchal family: "The modern conjugal family is thus considered to be the consequence of an

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1. Joseph E.Illick,'Child-Rearing in Seventeenth-Century England and America',in The History of Chidhood, ed. de Mause, Souvenir press,London,1976,p.327.

evolution which, at the end of the Middle Ages, is supposed to have weakened the line and the tendency to joint possession."[1] Aries offers Duby's findings that lineal solidarity and joint possession developed as a result of the dissolution of the State which led to the knights, after the year 1000, seeking refuge in lineal solidarity. In the tenth century a husband and wife managed their own property. By the eleventh and twelfth joint ownership was established protecting lineal right over an estate. The village community became to the peasant what the blood line was to the nobles a source of strong support and shared possessions. By the thirteenth century because of political and economic changes joint ownership tended to be abandoned but the father still retained the authority he had established over the joint estate. In the thirteenth century the law of primogeniture spread among the families of the nobility in the Macon country.

> The substitution of the law of primogeniture for joint ownership and the joint estate of husband and wife can be seen as a sign of the recognition of the importance of paternal authority and of the place assumed in everyday life by the group of the father and children.[2]

The blood line always aroused more feeling says Aries and this no doubt explains its pre-eminence in literary themes: "In the domain of feeling, the family did not count as much as the line. One might say that the concept of the line was the only concept of a family character known to the Middle Ages."[3] The wife's position slowly eroded until the "husband is finally established as a sort of domestic monarch."[4] Thus a value was attributed eventually to the family which had previously gone to the blood line.

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.341.

2. and 3. Ibid., p.343.

4. Ibid., p.344.

The attitude of the church did not glorify marriage, it was a legitimate contract but also a concession to the weakness of the flesh. It was not until the end of the sixteenth century that "the church recognized the possibility of sanctification outside the religious vocation, in the practice of one's profession."[1] One sign of a new development was the donating of stained glass windows portraying families, to the church. Sometimes in the sixteenth century a patron saint is included with the family and "the cult of the patron saint becomes a family cult.'[2] Weddings had previously been portrayed as taking place outside the church, now the ceremony moves to the interior. The great collective festivals also give way to more intimate scenes of family celebrations such as Christmas with its emphasis on gifts to children. Stein's picture of the feast of Saint Nicholas shows "the same modern feeling for childhood and the family, for childhood in the family"[3] that we experience in Western countries now.

The saying of grace at the end of meals becomes the task of the youngest child as described in manuals of etiquette in the sixteenth century, another indication of growing focus on the child, "Grace had become the model for the family prayer."[4] Artists liked to portray such scenes because they evoke three emotional forces, piety, the concept of childhood and the concept of the family. The Holy Family was considered a model and was portrayed frequently , an obvious link with the concepts of childhood and family. The family always existed in the Middle Ages but never aroused such sentiment to inspire artists for it held little value. Erasmus held the modern idea that children unite a family and one of the reasons is

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1. Philippe Aries,Centuries of Childhood,Penguin,London,1973,p.345.

2. and 3. Ibid.,p.347.

4. Ibid.,p.349

the habit of looking for family likenesses. "What counted most of all was the emotion aroused by the child, the living image of his parents."[1]

An Italian writing in the fifteenth century criticized the English for putting their sons out to service in other people's homes at age seven: The alleged aim was to enrich their manners: "It was by means of domestic service that the master transmitted to a child, and not his child but another man's, the knowledge, practical experience, and human worth which he was supposed to possess."[2] Parents often complain nowadays that children are prone to listen to anyone's advice but that of their own parents, so perhaps our forefathers understood more of child psychology than we give them credit for. As Aries notes many times in his study children's education really came from participating in adult life and this rich source is often now denied to them. There was no existential attitude existing between children and parents says Aries, they were valued for the real contribution they made. The family was a moral and social rather than a sentimental reality, especially among the poor who identified with a village or farm rather than their own home, if they had one.

The most enduring influence on the changing nature of the family was the provision of education:

> Starting in the fifteenth century, the reality and idea of the family were to change: a slow and profound revolution, scarcely distinguished either by contemporary observers or later historians, and quite difficult to recognize. And yet the essential event is quite obvious: the extension of school education. 3

Apprenticeship in another's house was the first type of education. We have international exchanges for secondary school students nowadays which are in

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.352.

2. Ibid., p.354.

3. Ibid., p.357.

some ways a modern version of this idea. Early schools were confined to clerics but eventually they became "the normal instrument of social initiation, of progress from childhood to manhood"[1] due to the influence of the pedagogues who wished to protect the child from adult temptations and the desire of families to have their offspring supervised more closely. Apprenticeship persisted at both social class poles but the origin of the modern family arises alongside the growing habit of educating children at school.

Schools were to grow in number and in influence and to considerably extend school life. Aries believes that once a person's loyalties were removed from the street or community or workplace they were replaced by a new concept of family consciousness. The art of succeeding had always previously been based on "the art of being agreeable in society".[2] As Cassio bemoaned in Othello 'reputation' was everything. Friendship bonds were also important as were good manners and sociability and apprenticeship had been the school for these. Writing had never been very important. In the schools there were new priorities and not everyone was happy about them. Debate about the value of private tuition versus public began to be waged. Some were appalled that what had once been the exclusive right of a few should now be made available to many. Some things did not change :"The great development of the school did nothing to diminish the contempt felt for the schoolmaster."[3] People began to question the traditional celibacy of the teaching profession. One might assume that the increasing number of married teachers had beneficial influences as did the family men in the

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1. Philippe Aries,Centuries of Childhood, Penguin, London,1973,p.357.

2. Ibid.,p.363.

3. ibid.,p.365.

clergy. No-one actually refers to this.

At the same time as schools were making their impact the changing nature of family loyalties were also having some effect:

> Primogeniture which had favoured one child in the family had declined by the eighteenth century "this [new] respect for equality among the children of a family bears witness to the gradual move from the family viewed as a 'house' to the modern sentimental view of the family. People tended to attribute a new value to the affection between parents and children.1

Some thought school discipline was too strict and many opposed the passing of practical apprenticeship, others did not approve the new emphasis on learning from books. As one seventeenth century critic said "The world is a great book [and]...habitual conversation with two or three wits can be more useful to us than all the university pedants in the world..."[2] In defence of education Coustel said that it provided regular hours of study and children did not run the risk of being spoiled. They were also removed from the company of lewd persons and talk, particularly of servants. Apparently this latter argument found much favour. Furthermore said Coustel in colleges friendships are formed and they enjoy the benefits of emulation. They also gain confidence on speaking in public. All of these points concern social or civil behaviour says Aries rather than tuition.

Classes however were too big, sometimes a hundred, and the children were unruly. "As soon as young children set a foot in this sort of place" said Cordier" they start losing that innocence, that simplicity and that modesty which hitherto made them so pleasing to God and men alike."[3] Erasmus favoured small groups with one tutor in a private house. In spite

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.359.

2. Ibid., p.366.

3. Ibid., p.367.

of such criticisms the demand for college places increased. Handbooks of etiquette had flourished because of the importance of ambition and reputation. They now said it was unseemly for a child to be dressed like a man. Ambition was considered a virtue, one should better oneself but what was valued was not intellectual or technical competence but the admiration of one's peers, which required dedication to the heroic ideal and persisted as a way of thinking to the middle of the seventeenth century. This Renaissance ideal which looked to the nobility as endowed with Divine attributes which everyone should seek was gradually replaced says Aries by the concept not of a courtier ideal but a new one of the 'honnete homme' and now the court influence was replaced by society. There was a search for the happy mean "a distinguished mediocrity." Good manners were still important but less elevated as a moral virtues. Manuals of etiquette now included how to behave in school "This was a consequence of the development of the school and of the growing awareness of the special nature of childhood."[1] One such manual Le Civilite Nouvelle of 1671 recommended chastisement of the child by the parent for minor offences and birching for any acts verging on crime. Practical treatises telling parents their duties and responsibilities proliferated influenced especially by Port-Royal.

The 'little schools' of seventeenth century France are the origin of the primary school system. Their curriculum comprised reading and singing, etiquette, arithmetic and writing which was studied as a craft rather than a form of self expression. Pupils were between the ages of seven and twelve. An inspector of 1833 recorded "Children cannot be sent to school before the age of seven or eight...at the age of eleven or twelve they are

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1. Philippe Aries, <u>Centuries of Childhood</u>, Penguin, London, 1973, p.376.

sent to work."[1] These schools replaced the lower college classes of former times and private pensions. One influence says Aries was the development of a new piety towards the poor in England and a movement to cater for their needs:

> In those circles most affected by the new piety in France and England it was felt that the children in question should be given the religious instruction hitherto reserved in practice for the choirboys of the Latin school, and at the same time taught reading and writing, which were now regarded as necessary for the exercise of any trade, even a manual job. In this way it was hoped to make pious, serious workers out of what had been depraved adventurers. 2

Thus we see the beginnings of the social notion of organised training, discipline and deployment of children who will develop into'human resources'. Classical humanities were not the concern of these schools but a 'modern' curriculum to stamp out poverty and immorality. Such charitable Christian schools proliferated in France, evidence of what Aries calls pious humanism. The schools flourished and attracted not only the poor but the better off even though they were often segregated within the school:

> The segregation of rich and poor at school offends our modern sensibility. But the spatial proximity which it implies and the familiarity inevitable withn the same room if not on the same benches are also repugnant to us. And here we have the great difference between the two societies, that of the seventeenth century and that of the twentieth or at least the nineteenth century: the difference between a society in which people were carefully ranked but were mixed up in a common space, and a society which is egalitarian but in which the classes are kept apart in separate spaces.3

Their growth bears witness to an increased interest in younger schoolchildren. However a new spirit of social conservatism in the eighteenth century denied access to secondary education for lower class children. It was to be confined to the rich otherwise there would be a shortage of manual

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1. Philippe Aries,Centuries of Childhood, Penguin, London,1973,p.288.

2. Ibid.,p.291.

3. Ibid.,p.294.

labour. Ideas about educating people for their future roles in life began to surface. The development of the boarding-school system which only the rich could afford and the disappearance of the country colleges both kept the lower classes out.

> These pupils could not hope to go to the big colleges in the great urban areas, where life was more expensive, where the mediaeval tradition of lodging students had disappeared and where the school authorities no longer tolerated day boys who were free from both parental control and academic supervision. Having rid itself of it lower class pupils, the college would become exclusively middle-class.1

The rise of public schools in England was a parallel movement. "The result was that what had been a virtually unrestricted secondary education became a class monopoly, the symbol of a social stratum and the means of its selection."[2] The little schools remained for the lower classes who were debarred from the secondary schools. Aries sees in these developments clear indications of a trend towards distinguishing and separating children from their parents and rich from poor "a tendency not unconnected with the Cartesian revolution of clear ideas."[3]

As Aries sees it "a minority wedded to ideas of order, clarity and authority tried to introduce into society by means of education a new way of life opposed to the anarchical impulsiveness of the old manners."[4] This minority was to influence childhood particularly.

Changes in the style of homes are also significant. In the fifteenth century they were at two extremes, large and filled with dependants and servants or so small they hardly fit our idea of a house. The 'chaos' of

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1. Philippe Aries, Centuries of Childhood, Penguin, London,1973,p.299.

2. Ibid.,p.300.

3. Ibid.,p.301

4. Ibid.,p.302.

the large house was one reason why the pedagogues recommended schools, but they were social centres with many comings and goings. The children were part of the scene and the servants were often young. 'The idea of service had not yet been degraded. One nearly always 'belonged' to somebody...society still appeared as a network of 'dependencies'"[1] Where good relations obtained between masters and their servants strong bonding occurred. The head of the household was recommended 'to control his wife, bring up his children and govern his servants'[2] Servants were not paid but rewarded for " a master's relationship with his servant was not based on justice but on patronage and pity, the same feeling that people had for children."[3] Scarcely anyone lived alone, not even the king "until the end of the seventeenth century, nobody was ever left alone. The density of life made isolation virtually impossible...", and those who sought solitude were considered odd.[4] This highly social nature of everyday life hindered the formation of the concept of the family as we perceive it now. It is probably true to describe the earlier families as microcosms of the entire society. As time went on rooms in houses became more specialised in use and more private, for example beds confined to bedrooms rather than all over a house. This change satisfied a new desire for isolation. Servants began to be called by bells from their own quarters rather than being part of the general melee. The newer code of manners respected privacy. Practices such as the use of visiting cards indicated this. Meals became briefer and less formal and "The rearrangement of the house and the reform of manners left more room for private life; and this was taken up by a family reduced

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1. and 2. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.299.

3. Ibid., p.384.

4. Ibid., p.385.

to parents and children."[1] The formal address of women changed from Madame to Maman, which even a husband used. Children were given nicknames. Correspondence between a husband and wife often was concerned with children's health, behaviour and hygiene. Health and education were becoming the chief preoccupations of parents and rather than being accepted stoically the death of an infant was a tragedy. The correspondence of Montaigne reflects this new attitude. From the end of the sixteenth century all of the children of a family were supposed to be treated equally and Aries believes this was the result of the influence of manners and custom rather than any legislation or the revolution. The greatest change was that the child was no longer put out to strangers. "This return of the children to the home was a great event: it gave the seventeenth century family its principal characteristic, which distinguished it from the mediaeval family."[2]

By the end of the Middle Ages the word enfant extensively referred to small children and adolescents. In the seventeenth century it was applied to a boy of fourteen who was teaching younger children. By this time the word child became more restricted among the middle class to its modern meaning. Childhood was always synonymous with dependence rather than biological development. The term 'little boy' might refer to a young servant. Furetiere's dictionary of the eighteenth century explained that "'Child' is also a term of friendship used to greet or flatter someone or to induce him to do something."[3]

Lack of words for children hampered expression in seventeenth century French and English where 'baby' was still applied to big children. Schools

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.387.

2. Ibid., p.390.

3. Ibid., p.24.

such as Port Royal inspired new terminology. Jacqueline Pascal's pupils were 'little ones', 'middle ones' and 'big ones'. She said that "with regard to the little children, they even more than all the others must be taught and fed if possible like little doves."[1] People began to refer to 'little souls' and 'little angels'. So even though the seventeenth century seemed to scorn children it brought into usage expressions says Aries which we still have today. Diminutives gradually became more common but people had no idea of what we call adolescence. The first typical adolescent of modern times says Aries was Wagner's Siegfried :

> The music of Siegfried expressed for the first time that combination of provisional purity, physical strength, naturism, spontaneity and joie de vivre which was to make the adolescent the hero of our twentieth century, the century of adolescence. 2

By 1900 Youth had become a literary theme and a subject of concern for moralists and politicians. In France writers such as Massis and Henriot explored the youthful mind. Society passed says Aries from a period ignorant of adolesence to one in which it is the favourite age. "We now want to come to it early and linger in it as long as possible."[3] He thinks that the technological idea of preservation is replacing the biological and moral idea of old age. The findings of Boas are similar. It seems to Aries that each century has a corresponding privileged age. Military youth is the privileged age of the seventeenth century, childhood of the nineteenth and adolescence of the twentieth.

At one time records and pictures of children were rarely kept. To lose children early in life was such a commonplace event people seemed to

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.25.

2. Ibid., p.27.

3. Ibid., p.28.

become almost indifferent and not so far removed from the callousness of Roman or Chinese societies. "Nobody thought, as we ordinarily think today, that every child already contained a man's personality."[1] By the sixteenth century the appearance of the portrait of the dead child marked a development in attitudes towards children. One of the first to record her sentiments about young children was Madame De Sevigne but to Aries she represents what he calls a 'coddling' attitude to children, amused by their antics but not with the new intense concern which focussed on children. Marvick tells us that everyone in France wished for 'un beau fils' and girls were unwanted. Madame de Sevigne rejected her daughter at birth. She was cared for by a grandmother and incarcerated in a convent at nine "a burnt offering to the future of her brother" who when he was born was doted on.[2]

By the seventeenth century children's clothes no longer imitated those of their parents. There was, up to the nineteenth century, little to distinguish boys from girls by their clothes. School uniforms were inspired by military dress and rapidly adopted by the middle classes. Trousers and the ubiquitous sailor-suit also became popular because of military influence.

> The idea of childhood profited the boys first of all, while the girls persisted much longer in the traditional way of life which confused them with the adults: we shall have cause to notice more than once this delay on the part of women in adopting the visible forms of the essentially masculine civilization of modern times.3

Lower class children for much longer were undifferentiated in their dress from the adults.

The childhood of Louis XIII was recorded in detail by the court

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.37.

2. Elizabeth Wirth Marvick, 'Nature Versus Nurture: Patterns and Trends in Seventeenth Century French Child-Rearing', in History of Childhood, ed. de Mause, Souvenir Press, London, 1976, p.283.

3. Aries, p.59.

doctor Heroard, so we know that he was for instance introduced to music and dancing at a very early age and this custom is the reason for so many infant prodigies Aries thinks. We have little appreciation he says of just how important music, singing and dancing was in ordinary everyday life. Even monks and nuns danced on occasion as the style of dancing did not evoke the sexual overtones of its modern expression. By four Louis was being taught to read and write. Whilst still playing with toys and dolls he practised archery, played cards, chess and many adult games for there seemed little division between adult and child games. He was in fact well socialised by the royal family and the court and participated in seasonal festivities. By age seven he was in the charge of a master and still occasionally received a whipping. At age fourteen he was married.

Games were generally enjoyed without discrimination except by a powerful and rigid minority of rigid moralists who also frowned on games of chance which enjoyed tremendous popularity. Children are often portrayed playing many of these games. As late as 1830 there was gambling and heavy betting in English public schools. Attitudes changed later when people attempted to protect young people's morals more assiduously. The Mediaeval church frowned on games especially among student scholars but according to Aries the Jesuits restored them to favour in the seventeenth century and even included some form of them in their curriculum. The need for physical exercise was recognized and by the eighteenth century exploited for war training.

Listening to story telling was also a popular pastime up to the time of popular printings of stories and newspapers and it was not confined to children. As Aries says most of the games and pastimes of the past were enjoyed by young and old and all classes which we now see mainly as the province of the young.

One of the oldest taboos is that of referring to sexual matters in the presence of children. In the records of Louis's upbringing the freedom of expression concerning sexual matters amongst the courtiers, servants and children would seem shocking to us today, but by the age of seven which Aries calls the 'fateful' age the child was expected to suddenly become more reserved "The boy of ten was forced to behave with a modesty which nobody had thought of expecting of the boy of five. Education scarcely began before the age of seven. One historian wrote: "The respect due to children was (in the sixteenth century) completely unknown. Everything was permitted in their presence: coarse language, scabrous actions and situations; they had heard everything and seen everything."[1] It is interesting that the same charge is laid now against the media particularly television for its albeit vicarious exposition of the best and worst of human nature to children. But scenes such as those depicted by Heroard are still played out in the twentieth century says Aries relating an incident in the novel The Statue of Salt by Albert Memmi, where a small boy in the care of his father is publicly accosted much to his discomfort and the merriment of the onlookers. It is a well known fact that children in many parts of the world are still bought and sold and exploited in ways that more fortunate parts of the world are shocked and sickened by. Amnesty International can bear witness to this, but even in New Zealand there is ample evidence of current child sexual abuse and incest and there is little legislation to protect the rights of children.

Aries says there was a reason for the attitude which allowed children to witness public festivals such as circumcision:

In the first place the child under the age of puberty was believed

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.101.

> to be unaware of or indifferent to sex. Thus gestures and allusions had no meaning for him; they became purely gratuitous and lost their sexual significance. Secondly the idea did not yet exist that references to sexual matters, even when virtually devoid of dubious meanings, could soil childish innocence, either in fact or in the opinion people had of it; nobody thought that this innocence really existed.1

Gerson's studies of 1706 showed an understanding of childhood sexuality which was to influence childrearing. He advised that one should speak decently to children and avoid promiscuous situations for them. His theories were put into practice in the school of Notre-Dame-de-Paris and influenced the Jesuits, Port Royal and the Christian brothers.

By the seventeenth century says Aries a great movement which recognised the innocence of childhood was under way, evidenced in a rich moral and pedagogic literature, in devotional practices and a new religious iconography. It is illustrated by the caption to an engraving by F.Guerard:

> This is the age of innocence, to which we must all return in order to enjoy the happiness to come which is our hope on earth; the age when one can forgive anything, the age when hatred is unknown, when nothing can cause distress; the golden age of human life, the age which defies Hell, the age when life is easy and death holds no terrors, the age to which the heavens are open. Let tender and gentle respect be shown to these young plants of the Church. Heaven is full of anger for whosoever scandalizes them. 2

The plant metaphor is one which will occur often in the writings about child care and education. This new movement which led to a proliferation of educational institutions being set up also advocated more supervision for children and laid greater emphasis on discipline.

As Aries says we in the twentieth century can see a contradiction in this idea of childish innocence, which protects the young but also develops youthful character and reason, for on the one hand childhood is preserved

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.103.

2. Ibid., p.108.

[and extended] and on the other hand it is made older than its years.

Changes in attitudes to discipline also marked new attitudes to childhood. Aries recounts the brutality often suffered by wandering mediaeval scholars and the tortures of initiation into male societies which nevertheless bred loyalty and comradeship. Aries says references to corporal punishment before the end of the fourteenth century are rare because it was accepted as a norm. "From the fifteenth century on, the whip takes on a degrading, brutal character, and becomes increasingly common."[1] By the sixteenth century "Corporal punishment had become the 'scholastic punishment' par excellence."[2] Montaigne testifies to the brutality of school punishment as does Watson who refers to school as 'a place of execution'. The degrading character of such punishments nevertheless did not deter parents from inflicting the same on their children. The birch, was used on pupils of all ages:

> ...confined at first to the youngest children, it was extended after the sixteenth century to the whole school population, which often approached and sometimes passed the age of twenty. There was therefore a tendency to diminish the distinctions between childhood and adolescence, to push adolescence back towards childhood by subjecting it to an identical discipline. Inside the school world,the adolescent was separated from the adult and confused with the child, with whom he shared the humiliaton of corporal punishment, the chastisement handed out to villeins.3

Humiliation was therefore a method of control. It was usually the Church authorities especially the Jesuits who brought more order and discipline into education. Parallel with this was the developing notion says Aries of the weakness of childhood and the concept of the moral responsibility of the master. By the sixteenth and seventeenth centuries it became one of

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1. Philippe Aries,Centuries of Childhood, Penguin, London,1973,p.247.

2. Ibid.,p.248.

3. Ibid.,p.261.

the essential principles of education. By the eigtheenth century more people were opposing the harshness of corporal punishment. St. Jean Baptiste de la Salle for example did not ban the birch but did not recommend it.

This development did not necessarily reflect the progress of liberal ideas says Aries, for harsh discipline still existed in the army. The explanation lies in "a new orientation of the concept of childhood, which was no longer associated with the idea of the weakness of childhood and no longer recognized the need for its humiliation."[1] Now it was a question of awakening in the child an adult sense of responsibility and dignity, and this was to be a gradual process. "This was the new concept of education which would triumph in the nineteenth century"[2] the idea of awakening the man in the child. In France no-one would revive the former harsh disciplines but under Napoleon his penchant for order and discipline permeated from the forces into education where the use of the whistle, moving about in squares, lining up in columns, and sometimes solitary confinement became practices not unfamiliar even in schools today. Military ideas appear in parallel with rising liberalism says Aries and arise in the second half of the eighteenth century. Previously schools had been ecclesiastic, even monastic but as the Jesuits became suppressed their style was supplanted by that of the military in French schools. The mediaeval schools did not distinguish between the child and the adult. Colleges merged adolescence and childhood and combined militarism. The consequence was that uniform and discipline became part of the mystique of education. The concept of adolescence had emerged says Aries and a new value was put on toughness and virility.

Boarding schools of the English type never flourished in France

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1. and 2. Philippe Aries, Century of Childhood, Penguin, London, 1973, p.253

until the late eighteenth and early nineteenth century and caused Taine to write " In order to receive a secondary education, more than half the boys in France have to endure seclusion in ecclesiastical or lay boarding schools, seclusion under military or monastic discipline."[1] In earlier times boys were sent to college and boarded in private dwellings. Later, because more discipline was required they were often under the supervision of college staff but still boarded out.

> The development of the boarding school system after the end of the eigtheenth century bears witness to a different concept of childhood and its place in society. Henceforth there would be an attempt to separate childhood from the other ages of society: it would be considered important-at least in the middle class- to shut childhood off in a world apart, the world of the boarding school. The school was substituted for society in which all the ages were mingled together; it was called upon to mould children on the pattern of an ideal human type.2

By the end of the nineteenth century Aries notes that day boys proliferated but still there persisted this tendency to set children apart. Now however it was the family which was the dominant moral influence. "The central concern of the individual family was its own children."[3] Which according to him represented the triumph of demographic Malthusianism. If family control eases then he sees childhood and youth regaining some of the freedom they enjoyed as far back as the eighteenth century. Childhood he believes has now lost some of its special characteristics in favour of adolescence.

Children once went to school armed with weapons which they had to hand over for safe keeping. Riots and rebellions of young students were not unknown. Sometimes they even turned the tables on those who had inflicted corporal punishment on them. Violence flared in England too especially in the late eighteenth and early nineteenth centuries. Students of the Middle

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.271.

2. and 3. Ibid., p.273.

Ages had been fairly lawless and often feared by the populace.

In the sixteenth and early seventeenth centuries public opinion regarded the student as a libertine and the terror of fathers and husbands, a sort of adventurer after the fashion of Villon, with all the risks that that implied. The Jesuits exhorted stricy morality in their colleges and "this was the beginning of the sexual claustration which would henceforth characterize college life."[1] Women were either exalted or ridiculed depending on their status "woman was the intruder, ridiculed by a masculine community which desired her and excluded her at the same time."[2] Schoolboys who lived away from home often lived by their wits if gifts from home were insufficient. Begging by children was accepted practice in the sixteenth century Germany. Attendance at school was also often lax. The day school system and the practice of living in lodgings made this easier than when the boarding schools operated or children schooled from home. Students were variously described at the time as 'vermin' and 'free men' and a version of our modern word truant which meant vagabond. The concept of the well-bred child scarcely existed in the sixteenth century says Aries a new moral concept in the seventeenth set him apart "it was the product of the reforming opinions of an elite of thinkers and moralist who occupied high positions in Church or State"[3] and was to protect the little bourgeois and little English gentleman from the roughness and immorality of the lower classes and effectively protect a threatened aristocracy from the progress of democracy. The hooligan we now despise is in Aries' view the last vestige of Mediaeval unruliness.

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1. Philippe Aries, Centuries of Childhood, Penguin, London, 1973, p.309.

2. Ibid., p.310.

3. Ibid., p.315.

Aries overview of childhood in historical terms sees two different views of children emerging. One of creatures to be coddled, that is in infancy only, and a second which was aware of the weakness and innocence of childhood and the adult's duty to protect and safeguard it. The latter attitude being mainly restricted to a small minority of lawyers priests and moralists. Childhood was always brief in the lower classes.

These men of influence on childhood and who extended its duration were:

> The moralists and pedagogues of the seventeenth century, heirs of a tradition going back to Gerson, to the fifteenth century reformers of the University of Paris, to the founders of the colleges in the late Middle Ages...1

Age groups in society tend to be organised by institutions. Thus adolesecence, never defined or recognized under the ancien regime, was distinguished in late eighteenth and early nineteenth century by conscription and later by military service. Schools were indifferent to age differences for a long time because education was not their chief aim. The mediaeval school was not designed for children but as a technical school for clerics. To describe someone as being of school age had little significance unless it indicated that person's limited learning ability. Education was confused with culture says Aries both by the humanists of the Renaissance and the pedagogues of the Middle Ages "without giving a special value to childhood or youth"[2] The real innovators were the scholastic reformers of the fifteenth century, Cardinal d'Estouteville, Gerson, the organisers of the colleges and pedagogicas, and particularly the Jesuits, the Oratorians and the Jansenists of the seventeenth century. With them we see the appearance of an awareness

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1. Phillipe Aries, Centuries of Childhood ,Penguin,London,1973,p.316.

2. Ibid.,p.317.

of the special nature of childhood, knowledge of child psychology, and the desire to devise a method suited to that psychology."[1]

Women of the seventeenth century were excluded from education so they changed little from the Middle Ages in that their childhood was brief, most of their early life spent in the household preparing for when they would have one of their own which might be at a very young age. A few schools for girls were set up but they were not catered for generally for another two centuries.

The youths who attended the colleges were subjected says Aries to a discipline grounded in ecclesiastical or religious discipline and concerned with moral behaviour and spiritual improvement. Authority over the young gradually devolved therefore from the family to the schools, and parents began to observe and respect the school cycle. One effect of this deprivation of liberty and enforced years of discipline was to extend the length of childhood. Up to the eighteenth century there was in France virtually one education system and generally of no distinguishable class. Some youths escaped it to join the army and girls were excluded. The dual educational system which came later was based not on age group but on class, the lycee or the college for the middle class (secondary education) and the school for the lower class (primary education). As Aries points out the longer the education cycle the less likely some students are to wish to profit by it or to be able to do so.

Those who helped to establish the education system were sometimes appalled by their success for they began to see the problems which could arise from an overabundance of intellectuals and a shortage of manual labour. They were unable to halt what they had started says Aries but not

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1. Philippe Aries,*Centuries of Childhood*,Penguin,London,1973,p.318.

everyone remained faithful to the principle of universal education. Those members of the Enlightenment who wished to call a halt tried to do so by limiting access to a long classical education to a privileged class and condemned the lower classes to an inferior, exclusively practical type of instruction. The concept of childhood "found its most modern expression in these same circles of enlightened bourgeois who admired Greuze and Read Emile and Pamela."[1] The demand for child labour in the nineteenth century probably he thinks created a retrogression and some aspects of the old ways of life remained in the lower classes "Child labour retained this characteristic of mediaeval society: the precocity of entry into adult life."[2]

De Mause has criticised Aries for implying that children were happier in former times because their lives were more social, they took more part life of the community. He does suggest I think that the modern youth has lost a sense of affinity with the community and the workforce particularly. This is a modern problem, how the two can beneficially overlap. Perhaps the modern street kid or vagabond is also trying to capture this lost freedom which has come about through enforced schooling. Rousseau saw that childhood had lost its essential joie de vivre as did the Romantic poets. De Mause is critical of what he calls Aries' etymological view ,and approaches the study of childhood from another viewpoint, his psychogenic theory. Although he does not define the term it appears to him that society evolves. There have been references for instance to the 'childishness' of parents in former times but with the acquired wisdom of the ages the human psyche matures and over time we see evidence of this in changing attitudes to children.

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1. and 2. Philippe Aries,<u>Centuries of Childhood</u>,Penguin,London,1973, p.323.

One effect of the French Revolution and the Napoleonic Wars had been to make public life insecure and many of the religious educational institutions had been closed. Families were driven into their homes and parents particularly middle-class took more interest in their children. Robertson quotes C.W. Cunningham as placing the changeover from physical to mental punishment at about 1840, though in the British schools caning never ceased to be used and we still have it to this day in New Zealand. Corporal punishment for girls was hotly discussed in the pages of the Englishwoman's Domestic magazine from 1867-1869. Its adherents supported it strongly, whilst others abhorred it but it was more prevalent in England than in France. Foreign observers often considered French children rather spoiled. They in turn were astonished at the precocity and discipline of German children. Deprivation of food was always a common punishment and often children did not dine with their parents but ate simple food in their nursery.

Masturbation was believed to lead to insanity so children sometimes had their hands tied in bed. One of the first to speak out against this was Dr Albert Moll in his Sexual life of the Child early in the twentieth century. Other writers passed on Rousseau's ideas. Maria Edgworth in Practical Education concluded that "we should not prejudice either by our wisdom, or by our folly, children's assertion of their own values."[1] But Hannah More in 1820 had the opposite view that children are naturally bad. A cheap French paperback handbook the Livre de Famille, later in the century "described the child as cruelty and egoism personified-- an angel only when he sleeps. Waking, he had to be brought into absolute submission."[2]

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1. Priscilla Robertson, 'Home as a nest: Middle Class Childhood in Nineteenth-Century Europe', in The History of Childhood, ed. de Mause, Souvenir press, London, 1976, p.420.

2. Ibid., p.422.

Nevertheless children had become interesting and a serious concern, and people became divided says Robertson into those who liked them and those who did not, and still believed in their need for a harsh regime. It was at this time that Ellen Key predicted that the twentieth century would become the century of the child.

Those who believed in the newer ideas set out to prove them and many began to think that a happy home life was indeed the best preparation for life. Eleanor Farjeon recounts how her father told stories on their walks, an art Robertson believes is being lost. Visitors to Paris often commented on the happiness of the families visiting the Tuileries or the Luxembourg Gardens. Families were often smaller. The new concept of a People's State may have inspired more paternal feeling thinks Robertson and the new laws of equal inheritance gave value to each child but boys were still preferred because the army needed them.

Society in the nineteenth century was itself becoming more paternal. State-run orphanages were set up in France and at this time the first Factory Acts were going through in England. Only later was the state to consider that it might be responsible for education generally:

> It is clear that the Government interest was not exclusively humanitarian, for it became apparent to economists and especially military strategists that the prosperity and safety of the State depended on having a class of healthy citizens.[1]

This was something they could have learned from Plato but now Rousseau was interpreted as "giving citizens to the country, while he appeared only to think of giving mothers to their children."[2] Thus we see that those in power were not slow to capitalize on the new wave of childrearing

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1. and 2. Priscilla Robertson, 'Home as a nest: Middle Class Childhood in Nineteenth-Century Europe', in <u>The History of Childhood</u>, ed. de Mause, Souvenir press, London, 1976, p.427.

philosophy. In 1895 The society for the Prevention of Cruelty to Children received its Royal Charter, a humane move but nevertheless an indictment of a society that needed it and unfortunately still does. Robertson said that the "The chief enemies of children were poverty and ignorance"[1] but to this one might also add superstition. In general says Robertson:

> The nineteenth century was the time when public bodies began to think of children as children, with special needs because of their helplessness and vulnerability, rather than as small adults with the right to hire themselves out for sixteen hours a day, or as the chattels of their parents.2

This change affected not only children but society itself.

Walzer who looks at attitudes in eighteenth century America is surprised at the ambivalence people had towards children, that they could in fact be both desired and unwanted and "Quite normal parents harboured unconscious wishes of such an extreme nature that they could not be admitted to the conscious mind."[3] One might imagine that in a new country the need for people would swing the balance. Certainly in America babies were rarely abandoned as they had been so often in the home country. Infanticide also was practically unknown though chidren often faced risk from accidents and carelessness and they were still put out to nurse where possible, put into schools and sent to relatives. "The situation might be said to have been closer to that which exists in a primitive tribe where the child is seen as a child of the tribe as much as a child of a particular couple."[4] Walzer does not develop this idea but is obviously interested in the strange [to us] psychological make-up of these early

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1. and 2. Priscilla Robertson,'Home as a nest: Middle Class Childhood in Nineteenth-Century Europe',in The History of Childhood,ed. de Mause, Souvenir press,London,1976,p.428.

3. Ibid.,p.352.

4. Ibid.,p.353.

emigrants mainly from Europe. Children of Puritans were constantly described as 'seed' which were to give rise to a new generation to serve God. Parents obtained a sense of duty from their children to the extent he thinks that they seemed to have more care for parents than they for them. This is a paradox several authors have commented on. "The child held on to properly, becomes the parent, and the aging parent can return to the comfortable encapsulation of chidish dependency."[1] Perhaps this goes back to those calendars of the cycles where the aged are seen as feeble and childish or in what we more recently have labelled second-childhood, a state that modern society is fighting to postpone as Boas says but which might have concerned earlier families in different ways.

We can learn far more about the cultivation of flax than we can about their child-rearing practices says Walzer. The 'book' however symbolized civilized refinement and children were constantly nagged to be busy with their books. A few parents could afford a tutor. Putting them out to school Walzer sees as a form of abandonment and "What children in school were protected from was a world which offered too much freedom."[2] The rod and whip were still used for punishment and for wetting the bed one father made his son 'drink a pint of piss '[3] yet the same man remonstrated with his wife who had her maid burned for some small misdemeanour. Painful forms of medication were also often administered as well as bleedings and suchlike and the subtler forms of shaming which have been referred to earlier were used as was the practice of shutting children in dark closets and threatening them with death. One increasingly has the

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1. John F.Walzer,'A Period of Ambivalence: Eighteenth Century American Childhood',in The History of Childhood ed. de Mause, Souvenir Press,London,1976,p.363

2. and 3. Ibid.,p.368.

feeling that parents in fact were afraid of children.

Gradually the voices pleading for milder treatment of children were beginning to be heard and by the second half of the eighteenth century books for children were coming from the American presses. Instruction for children was now more often in language suited to them, but as Walzer says "A heavy dose of sugar sweetness was no substitute for real empathy."[1] The same ambivalence is seen in children as in parents for they want to be both dependent and independent. This desire for independence becomes a stronger force:

> Both are clearly related to two of the most central developments of modern Western history:the growth in the importance of the individual as an increasingly independent and responsible entity who was no longer primarily a member of a corporate body and the replacement of hierachical relationship by egalitarian relationships as an ideal.2

These people who travelled across the world have moved not only physically but psychologically away from the traditional interdependencies of the 'families' of mediaeval and even later periods in Europe. He wonders if we have in fact evolved psychologically as well as biologically even if slowly. Melanie Klein he says once thought that in pre-Hellenic times there may have been no super-ego. Our attitudes to children now are both possessive and desirous for their independence. This may change "to a new state characterized by interdependence, or the recognition of the mature dependence of equal and fully developed individuals on one another"[3] which is similar to Erikson's idea of equal partnership. Whatever the outcome Walzer believes that attitude is shaped by a linear sense of time and history.

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1. John F.Walzer,'A Period of Ambivalence: Eighteenth Century American Childhood',in The History of Childhood ed. de Mause, Souvenir Press,London,1976,p.372.

2. and 3. Ibid., p. 374.

In the history of Russia biographers apparently give some consideration to childhood but there is little attention to it in other literature. Russians were influenced by Western writings of the 1760's but what particularly appalled them when they did study the situation was the incredibly high rate of infant deaths. Half of five hundred thousand infants died before they reached three. The persistence of swaddling has already been mentioned. The bath house public or private was often the delivery room. Babies were also subjected to great extremes of temperature to harden them and the early baptism meant they had to endure immersion in icy cold water. Homes for foundlings admitted thirty seven thousand between 1766 to 1786 and thirty thousand of these were lost.

In a traditional agricultural society new mouths meant more demand on food supplies rather than more production. Knowledge of birth control methods were lacking. In Russia also the emphasis was not on the individual and the position one achieved but on the family and the position ascribed to one by virtue of birth into that family. 'The good of the family superseded that of any of its members.'[1] The authority structure was patriarchal, either the father or eldest male reigned.

> Russian parents in general in the eighteenth and nineteenth century can be described as detached rather than involved with their children, hostile rather than warm in their interaction with them, and restrictive rather than permissive in handling the spontaneous behaviour of the child. Life for the child was dominated by a detached, hostile, sometimes violent father who determined the course of the child's life, and by the lack of a warm relationship with the mother.2

The latter is indicated by the use of wet-nurses and the use of servants as supervisors and playmates. When the mother of Sergei Aksakov

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1. Patrick P. Dunn,'"That Enemy Is The Baby":Childhood in Imperial Russia, in The History of Childhood,ed. de Mause, Souvenir Press,London,1976,p.391.

2. Ibid.,p.391.

personally put her infant daughter to the breast of the nurse and rocked her child to sleep she was told "Such exaggerated love was a crime against God, and he would surely punish it."[1] this was reinforced by the child's subsequent death and turned the mother's heart against later children. One wonders how much jealousy arose between mothers and nurses and what the attitudes of most mothers was in any country to these surrogate 'mothers', whether they treated them merely as a convenience or as a partner in the process of child-caring--little is said on this aspect.

The Domostroi a guide for parents penned by churchmen warned fathers not to be soft with their sons "Do not smile at him, do not play with him, for having been weak in little things, you will suffer in great ones."[2] The Eighteenth century nobility lived by this guide says Dunn, and Gogol recommended it. One Novikov warned them in 1783 that such severity would eventually cause their children to treat their parents with contempt. Alexander Herzen remembers his childhood in the first quarter of the nineteenth century

> Mockery, irony, cold, caustic; utter contempt, were the tools which he [his father] wielded like an artist; he employed them equally against us and against the servants.3

Baron Wrangel believed that such harshness reflected a society where it had become a moral principle with them that to show benevolence was to be weak, to be cruel was to be strong. Dunn comments that 'Power assertive discipline, like the disinclination to care for one's own children, correlates highly with parental hostility toward their offspring."[4]

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1. Patrick P. Dunn,'"That Enemy Is The Baby":Childhood in Imperial Russia, in The History of Childhood,ed. de Mause, Souvenir Press,London,1976,p.392.

2. and 3. Ibid.,p.292.

4. Ibid.,p.393.

Parents seemed to have little understanding of chidren's needs and they looked elsewhere for company and affection. "Parents especially fathers, conceived of children as 'objects, to be nourished and directed but not understood."[1] This extended to careers and marriage where the parents did the choosing. What Erikson calls the battle for autonomy prevailed throughout childhood. Parents continually blocked their childrens' delineation of autonomy and "personal autonomy was not traditionally valued in Russian society, and it was in the family that the personal autonomy of future citizens was repressed,"[2] obedience was obligatory. Father even sent their newly married sons away to work and appropriated the bride. Even married people were still under the jurisdiction of the head of the household which ended only with his death. The Tsar was the model . Dunn believes that one cannot blame the State for the family situation for blind tyrannical power over their children might represent blocked autonomy in their own early lives. In 1767 the Aristocrats demanded from Catherine even more power over their sons, to send the more shiftless off to poor houses. Not all sons became tyrannical fathers themselves. Dunn says that the key to change appears to be when some external force allows the individual to begin to delineate autonomy outside of the family,as "repressed drives can surface if social conditions allow their expression."[3] Which means presumably that a concept of autonomy has to first be formed through experience. Individual Russians through circumstantial change and government action found themselves in new situations. Dunn believes one has to experience

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1. Patrick P. Dunn,'"That Enemy Is The Baby":Childhood in Imperial Russia, in The History of Childhood,ed. de Mause, Souvenir Press,London,1976,p.393.

2. Ibid.,p.396.

3. Ibid.,p.399.

autonomy oneself in order to be able to grant it to someone else.

Catherine II saw that traditional Russian family patterns were holding her people back and she favoured education to begin at age five. Those who did eventually by force of circumstance and opportunity acquire new ideas faced considerable conflict with their families. We call this the generation gap, for even now parents and grandparents look sometimes with disfavour on 'new' ideas concerning child care. An intelligentia, says Dunn beginning in the eighteenth and extending into the nineteenth century stressed personal values over traditional values and brought up their own sons and daughters with more warmth and understanding than the previous generation.

De Mause who has been a leader in this recent research on the history of childhood found that it is a subject neglected by historians as if not worthy of consideration. The further back he goes in this history the worse he finds the treatment of children. His study of the history of the attitudes and practices of parents towards their children concludes that there has been a general improvement in child care over the ages.

His evolutionary 'psychogenic theory of history' attempts to prove that the central force for change in history, in this case, is "neither technology nor economics, but the 'psychogenic' changes in personality occurring because of successive generations of parent-child interactions."[1] what he describes is something like a mirror-effect. The parent sees his former self in the child, the child sees a model of his future self in the parent; throughout their relationship this reflective effect is like a mirror reflecting another mirror so that the original

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1. Lloyd de Mause, 'The evolution of Childhood'. in The History of Childhood, ed. de Mause, Souvenir Press, London, 1976, p.3.

becomes distorted and hard to distinguish. De Mause likens it to the experience of regression in psychoanalysis. He is interested then in the psychological influences and effects whereas Aries puts the emphasis on societal influences.

From both angles we get clear glimpses of what it was like to be a child or parent in former times. De Mause is critical of Aries believing that he perceived childhood in earlier ages to have been a happier experience. Aries did see that personal freedom and social experience (particularly mixing with all ages and classes) had diminished through enforced institutionalised and extended education, implying that we have both gained and lost something over time in the development of the concept of childhood, we have more care for and interest in children and their education but more public control over individual lives. It is true, for a child can no longer 'run away to sea' or wherever, his/her life is more regulated and documented than ever before. Tom Sawyer would probably find it intolerable but the modern schoolboy even if he goes unwillingly to school is compelled to go either by law or in the later stages by necessity, for entry into the workforce or for further education and training.

Even though they view their field differently both writers are concerned with the raised consciousness in the public and private minds about what it means to be a child and the corollary of this is what a complex and perhaps daunting task it is to be a parent. It is after all one occupation for which there is little or no training and almost unlimited access. Works such as these whatever their particular academic bias must surely help us to assess what we have done in the past that is worthwhile in child-rearing practices and influence our thinking and planning for future generations. Leavis puts a perspective on this in the preface to Coveney speaking of Blake's thought that "...lives can't be aggregated,

generalized or dealt with quantitatively in any way" such studies like massive detective work can only give us parts of any pattern or general outlines. De Mause does recommend the works of George Payne, G.Rattray Taylor, David Hunt and J.Louise Despert for their insights into this area.

De Mause's interest in childhood then is to discover what goes on between parent and child which will influence the psyche of the next generation. According to his findings adults have three major reactions to children:

1. The adult uses the child as a vehicle for projection of the contents of his own unconscious (projective reaction).
2. He can use the child as a substitute for an adult figure important in his own childhood (reversal reaction).
3. He can empathize with the child's needs and act to satisfy them (empathetic reaction).

An example of the first would be people towards psychiatrists, the second 'battering' parents and the third similar to free-flowing attention or what Theodore Reik calls listening with the 'third ear'. According to De Mause "projectives and reversal reactions often occurred simultaneously in parents in the past producing an effect...where the child was seen as both full of the adults' projected desires, hostilities and sexual thoughts, and at the same moment as a mother or father figure."[1] The child is thus both bad and loving. This could account says De Mause for some of the more bizarre treatments of children in the past. When a child is cruelly beaten it is justified for instance with remarks such as that of a father horse-whipping his four year old for not being able to read something " I felt all the

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1. Lloyd de Mause,'The evolution of Childhood'.in<u>The History of Childhood</u>, ed. de Mause, Souvenir Press,London,1976,p.7.

force of Divine authority and express command...it made me almost sick to whip him "[1] but he feels morally justified and proceeds remorselessly. Adults often believed too that accidents which befell their children were some portion of blame for their own past misdeeds. This notion of the child as a "toilet" for adult sin is synonymous with the concept of original sin, says De Mause. There was also the belief in demons and changelings which provided themes for literature also. One thinks of Heathcliff the foundling in Wuthering Heights referred to as though he were some demonic changeling. There was also no reason for swaddling children so tightly even though it might be asserted as it still is in some places that it protects the child from self-injury.

The frightening of small children with stories of ghosts was common practice. Like religion, based on fear of Hell and the Devil, this was to create fear of wrongdoing. No doubt it also gives some people a thrill of sadistic power to wield such power even over children, though De Mause claims that "Even contemporary child-beaters are not sadists."[1] Perhaps each age has its 'baddies' to haunt childrens' dreams and games. For modern children perhaps they are alien monsters or for older ones the nuclear threat is a constant shadow over their thoughts as evidenced in a recent international report on children's writing.[3] "God sees you everywhere" the God Boy[4] was told and he believed it even though he had the courage to to swear at this omnipotent foe.

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1. Lloyd de Mause,'The evolution of Childhood'.in*The History of Childhood*, ed. de Mause, souvenir Press,London,1976,p.8.

2. Ibid.,p.17.

3. Hilary F.Lamb,*Writing Performance in New Zealand Schools*, an I.E.A. Study, Dept. of Education, Wellington, 1987.

4. Ian Cross,*The God Boy*, Whitcombe and Tombs,New Zealand, 1974.

Punitive figures were personified says De Mause and adults even dressed up as these characters or used masks to frighten children. Sometimes adults subjected children to gory sights and corpses with what De Mause calls 'projective care" rather than "empathetic care" which is distinguished from the other by being either inappropriate or insufficient to the child's actual needs. The case of a father letting his daughter see a mass grave and encouraging her to overcome her fear by touching a corpse is an example he gives of "projective care." Others he cites are mothers who comfort children on demand or give to a child-related task more time and care than [he thinks] it merits.

It is very easy for a writer in this century to criticise such child-rearing habits which were used in good faith and which we now view with deeper insight into the human psyche and which have been replaced in some instances by practices which later generations will probably find no less abbhorent. I find it hard to accept his theory that parents lacked empathy rather I believe they were bound by tradition and custom, the folk wisdom of their elders and those who spoke with authority just as they were later to embrace Spock or Freud. It was probably more difficult to change people's ideas in days when education was limited as were the means of communicating and propagating new ideas.

Nowadays we have services to give exactly what earlier mothers may have been grateful for had it been provided, that is informed information on the effects of childrearing practices. We have only to witness the current failures in this area to appreciate that it is hard to change a person's faith and that is what their attitudes amounted to, a faith in past practices just as we depend on past law cases to judge new ones.

A new mother involved for the first time in the mystique of birth is

prey to all the accumulated traditional wisdom of the past and needs a great deal of faith in her own instincts and intuitions to oppose those who seem to be wise and offer her advice. This is a type of peer pressure which has perhaps not been sufficiently explored. It is not unlike that experienced in the macho rituals of initiation experienced by male groups which Aries describes and in which little thought is given to their propriety or otherwise, to their good or bad effects, they are traditional and inevitable until a strong enough personality or pressure group outlaws them. They still go on as evidenced in a recent newspaper report.[1] One survives as a 'blood' brother and in the same way a new mother survives her experience of childbirth subjected to customs and practices which are not always understood by her. Most of our major life rituals, birth, marriage and death are redolent with such mystique.

If as De Mause suggests modern parents are an evolved species so that some knowledge is genetically passed on for that is what his theory presupposes, it is surprising that we still have plenty of examples of three of his types. Also when he says that parents lacked empathy he is saying they lacked imagination. If we are more empathetic now than formerly it is strange that we lack the empathy to be free of such blights as racial prejudice. We can of course suppress this empathy as Jones has said in another context, that of the classroom teaching situation:

> ...we often choose to be unimaginative in order to be effectively conventional, and we do so by remaining aloof from the collateral and emotional references which orbit preconsciously around our conscious lines of thought. This is obviously all to the good; nothing less than civilisation depends upon it.2

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1. Sharon Crosbie,'The Drinking Games People Play', Dominion Sunday Times, New Zealand,13th March 1988,p.16.

2. Richard M.Jones,Fantasy and feeling in Education,Penguin, London,1972,p.149.

It is a human failing to go along with the majority and not 'rock the boat' to be different or unconventional singles one out and invites public criticism or derision. We have examples such as the parent who recently waged a personal 'war' on his son's school rather than let the boy wear school uniform. There must be many parents who see no benefit in uniform but go along with the idea because it is a convention.

It seems doubtful that as De Mause says parents are really that much different to those of former times. They think and feel in the same ways but within different social and intellectual as well as moral and religious paradigms. Childrearing practices are passed on there is no doubt and as parents often admit one learns by one's mistakes but there are no fixed immutable laws on these matters in any one period, it is the ideas and habits that evolve more than the people, who adapt to each new generation in their own new ways, for it is one of the distinctive aspects of humanity that each of us is distinctly unique for his or her moment in time. I favour the conceptual development which Aries describes even though in his sometimes confusing flitting from century to century he does not always trace it clearly, but as with most paradigm shifts there is no one moment in time that can be precisely pinpointed as the moment of change. A psychological change such as De Mause describes is a reflection of this rather than a cause of it. There must have always been good parents and bad ones judged by the standards of any period.

One example of an empathetic awareness of childhood is described by De Mause from Richard Steele where he recounts what it is like to be a newly born infant from the child's point of view.[1] In the Bible he finds

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1. Lloyd de Mause, 'The evolution of Chidhood'. in The History of Childhood, ed. de Mause, Souvenir Press, London, 1976, p.16.

a decided lack of images of childhood which are not about sacrifices, stonings, beatings and suchlike. What parents of the past lacked says De Mause is not love for their children but "rather the emotional maturity needed to see the child as a person separate from himself."[1] Aries also said that we would probably find the general populace childlike by our own standards for adults and children participated in a wealth of games and played with toys.

Even nowadays families like to establish which parent or grandparent a baby looks like but in earlier times people sometimes believed that an ancestor was reborn in the new child. One even receives the impression says De Mause that the perfect child would be the one that mothers its own parent. Perhaps this is linked to the idea in some cultures that one should have children to provide for one's old age. Children have always been involved in caring for parents as in the apprentices serving at table. One curious fact which De Mause notes is that in the majority of Madonna and child paintings it is the infant who fondles or caresses the mother rather than vice versa. He also finds Heroard's diary of Louis XIII's childhood days a rich source of information but believes that in many of the comments the writer is projecting his own image rather than the truth about the child for he finds some of the 'facts' incredible. The rite of circumcision he also finds to be an example of 'double image', where the glans represents the nipple for sucking.

Infanticidal thoughts of mothers are well documented says De Mause and he believes that the further back into history one goes the more evidence there is of wish becoming action.

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1. Lloyd de Mause, 'The Evolution of Childhood', in <u>The History of Childhood</u>, ed. de Mause, Souvenir Press, London, 1976, p.17.

> ...enough is known to establish that, contrary to the usual assumption that it is an Eastern rather than a Western problem, infanticide of both legitimate and illegitimate children was a regular practice of antiquity, that the killing of legitimate children was only slowly reduced during the Middle Ages, and that illegitimate children continued regularly to be killed right up into the nineteenth century. 1

This practice was justified by such as Aristippus " do we not cast away from us our spittle, lice and such like, as things unprofitable, which nevertheless are engendered and bred out of our own selves."[2]

The images here reveal the concept of a child as a mere 'thing' spawned, a parasite, to be got rid of, if not of any value. The ratio of boys to girls in population figures also proves that girls were particularly prone to this fate. Until the fourth century A.D. infanticide was not illegal in Greece and Rome and the most common method was to put the child out into the wilderness to die of exposure. Sacrificing of children was also practised by "the Irish Celts, the Gauls,the Scandinavians, the Egyptians, the Phoenicians, the Moabites, the Ammonites, and in certain periods, the Israelites."[3]

Dateo of Milan in 442 A.D. founded the first asylum for abandoned infants and throughout Europe they proliferated up to the eighteenth century to cope with the flood of unwanted children. Even by 1890 says De Mause the sight of a dead baby was not an uncommon sight in a London street. One writer Adamic records hearing a wet nurse speaking to a baby she was about to kill "...fruit of sin through no fault of your own but sinless in yourself..." 30. This latter metaphor is probably the most

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1. Lloyd de Mause,'The Evolution of Childhood',in<u>The History of Childhood</u>, ed. de Mause, Souvenir Press,London,1976,p.25.

2. Ibid.,p.26.

3. Ibid.,p.27.

pervasive one throughout the history so far. In spite of a minority always having faith in the child's potential for good from Classical times onwards this religious belief has given rise to what amounts almost to a fear of children that they will develop into some kind of monster that will perhaps overpower the parents, much as in science fiction a recurring theme is that of animals which take over or man made robots which do the same.

Much credit has gone to Rousseau for changing many of the assumptions about children's nature but even before him there were people intelligent and observant enough to observe where parents were failing. Liselotte a Lutheran-raised German princess for instance in the seventeenth century found child-rearing patterns at the French court old-fashioned and unsympathetic and wrote that she preferred children a little willful, because it shows that they are intelligent. As Marvick says she foreshadows the Enlightenment yet to come and which we realise has still to permeate right through society for as Boas tells us even the new and good ideas get distorted in actual practices.

Seeing childhood through the eyes of historians gives us an idea of how children fitted in to the general scheme of society. We are dependent as both Aries and De Mause show on written records, art and artefacts. We never really know exactly what it was to be a child in earlier years, only more recently have writers kept records of their own memories of childhood and the autobiography is a fairly recent literary genre.

Robert Pattison and Peter Coveney both study the images of childhhod as represented in literature to find as Coveney expresses it the general literary sensibility towards children.[1]

1.Peter Coveney,The Image of Childhood, Penguin Books,England, 1967, p.12.

Attitudes to children in former times depended seemingly on belief as to whether the child was inherently evil or good. The first school of thought is led by the religious concept of the Fall of Man and Original Sin represented mainly by Augustine and his followers to whom "the child is a sinner at one day old."[1] The second are the adherents of Pelagius who inspired Rousseau and Wordsworth particularly. Robert Pattison in examining the child figure in English Literature finds clear evidence of these two fundamental approaches to children, and attitudes which affect child care in the home and formal education. Overall it is this religious debate which gives rise to the child figure we observe in literature. This child becomes symbolic of all the fears, hopes, guilt, repressions and mortality of those who write about it.

He finds for instance that Traherne and Vaughan chose to bleach out the realistic aspects of childhood and dwell exclusively on its symbolic value, and Marvell presents his child figures with realism and a sense of humour akin to Lewis Carroll's Alice. In Hopkin's 'Spring and Fall: To a Young Child' the child is identified with fallen nature, and "Increasingly children become the realistic counter-part of the mythic Eden couple."[2] In general, in their imagery says Pattison the Augustinians tried to combine the mythic and the matter of fact. Gray's Ode on a Distant Prospect of Eton College (1742) demonstrates the way in which they developed the actual and mythic apects of the child in a single image "which, in form if not substance, was bequeathed to the Romantics, the Victorians and our own era."[3] Throughout

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1. Robert Pattison, _The Child Figure in English Literature_, The University of Georgia Press, Athens, 1978, p.111.

2. Ibid., p.29

3. Ibid., p.30.

the Eton ode adulthood is used as a metaphor of the 'baleful' fallen condition of civilization, it is a doomed state. Childhood on the other hand becomes a vehicle for investigating the original condition of society and questioning man's role in it. Gray uses the child figure to point out that the rational state of adulthood is not the highest form of evolution of the human species as Locke asserts but one in which man is aware of his fallen nature. Children then are "little victims " who cannot understand because they are undeveloped and like Aristotle's children cannot participate fully in the benefits of civilization. At the same time the child is unaware of its own state and that of the world. The child is caught in a painful paradox says Pattison, to be a man, he must accept this painful knowledge, but to remain a child is to fail to reach one's human potential. Those who are aware of this, experience a "fearful joy" (lines 31-40 of the Ode). Gray throughout the Ode is therefore suspended between an exuberant romanticism, and a careful, melancholy empiricism deriving from Locke. Gray, as Locke does, rejects the innate ideas theory. The Etonians are thoughtless; their minds tabulae rasae awaiting the imprint of understanding which the poet already possessses. Not all innate ideas are rejected for this would be to reject the concept of Original Sin on which says Pattison so much Christian and especially Protestant dogma rests. "The child figure in Gray represents the human happiness possible before the understanding develops, bringing with it the unhappy organization of humanity with civilization."[1]

In Sterne's Tristam Shandy eighteen years later, he tells us that life begins in misunderstanding, disfigurement, confusion, pain, quarrels,

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1. Robert Pattison, <u>The Child Figure in English Literature</u>, The University of Georgia Press, Athens, 1978, p.37.

and separation of each creature from every other and the child-figure ever-present is a continual reminder that the absurdity and pain of childbirth is an omnipresent condition of life itself. Reason, rather than solving our problems, compounds them. Sterne, says Pattison, is a believer in Grace and in Tristram Shandy this Grace is laughter. In Fielding's Tom Jones the bastard child represents a triumph over Original Sin, and the child's early years are glossed over. Pattison considers Fielding to be a mixture of Pelagius and Calvin.

Shakespeare's children are "drawn with a flourish of sentiment" more like the Victorians. Both Shakespeare and More are "not concerned with childhood itself as with the sentiment inherent in the representation of childhood, the one using this sentiment for partisan history, the other for melodramatic effect."[1] Often the children are murder victims or otherwise helpless innocents as in Macbeth. "Shakespeare's brand of sentiment elicits an emotional response by demonstrating that the innocence of childhood is a short-lived phenomenon in an otherwise blighted world."[2]

In all of the writers Pattison has described so far they see a Golden Age from which we have moved further away. Some believe that "total dissolution [is] necessary for the apocalyptic restoration of the primal golden state."[3] This view often evolves round the death of a child as in Richard III or in Dickens "who was master of this kind of sentimentality."[4] God's Grace is seen as necessary to restore the individual and the Cosmos as a whole.

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1. Robert Pattison, <u>The Child Figure in English Literature</u>, The University of Georgia Press, Athens, 1978, p.48.

2. and 3. Ibid, p.49.

4. Ibid., p.50.

In Wordsworth and Rousseau the children are different, they grow, says Pattison, from Augustinian theology. This is the same change he thinks that one can see in the educational system which became more humanist rather than scholastic. If, he says, Rousseau is reacting against Locke when he says in Emile (1762) "of all man's faults Reason, which is a combination of the rest, is developed last and with great difficulty" then Locke is reacting against Milton's theory that "the end... of learning is to repair the ruins of our first parents regaining to know God aright, and out of that knowledge to love him."[1] Milton in turn ridiculed the university curriculum in which he had been trained. Whatever their separate views there remains an overall increasing sympathy for children in which Pattison sees Rousseau as the foremost proponent of the Pelagian position, for as he says in Emile:

> ...the first promptings of nature are always right. There is no original corruption in the human heart...The only passion natural to man is self-love or egoism...a child should do nothing that implies a relation to others, but only what is required by nature: he will then do nothing wrong." 2

The fundamental theses of Rousseau's philosophy match the two cardinal tenets of Pelagian heresy which Augustine said were:

i) New born infants are in the same condition as Adam before the fall, and

ii) A man can be without sin if he chooses.

Rousseau differs from the original Pelagians says Pattison, in the emphasis he gives to childhood, which has potential, is progressive and looks FORWARD to a Golden Age that is not mythic but palpable. Even Wordsworth he thinks cannot render the whole of this vision of childhood.

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1. Robert Pattison, The Child Figure in English Literature, The University of Georgia Press, Athens, 1978, p.50.

2. Ibid., p.51.

Thomas Day took Rousseau's ideas into literature but in Pattison's view his fable Sandford and Merton has the more traditional view of nature and childhood "which seems to inhere in English Literature."[1] It was Wordsworth who in his opinion transformed the essentially French sentiments of Emile and the Confessions, from which Day and others merely borrowed. Each stage of Wordsworth's writing varies however. He imitates Rousseau at first and is closest to him at the centre of his career. In the earlier works there is an emphasis on solitary and pathetic children. The first two books of The Prelude best express his vision of childhood, the child is "a naked savage" like Rousseau's "noble savage."

> The child of The Prelude is as mystical as the child of Church dogma who is saved in baptism by prevenient grace. Here, however, the mysticism lies in the child's physical being, and the grace of which he is a model resides not beyond the material world but at its core--in the "grandeur in the beatings of the heart.2

For Wordsworth childhood is not a state man passes through on his way to adulthood but a state which is lost too soon. As in Marvell and Gray childhood is "a lost realm somewhere in the past of our lives and the past of our culture"[3] which only poets remember. The Ode is closer to Rousseau, looking not back to Eden but forward to the "year that brings the philosophic mind."[4] In The Excursion he bemoans the inhumanity of the Industrial revolution and increasing value is attached to education. As Pattison says he reverts back to an orthodox position but his later work demonstrates the resilience of the Augustinian child figure in English Literature and which is seen throughout the nineteenth century.

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1. Robert Pattison, The Child Figure in English Literature, The University of Georgia Press, Athens, 1978, p.55.

2. and 3. Ibid., p.57

4. Ibid., p.59.

Blake saw this heresy in the Ode says Pattison and saw love of nature as the work of the devil . He sees that innocence is partly ignorance. His work according to Pattison is basd on Orthodox Church preachings "the Augustinian belief in the originally sinful nature of man and the world he has corrupted is one of these beliefs."[1] Man's journey on earth is a desperate one and children are inevitably corrupted. Blake is therefore in the main tradition of English literature "using the child to connote both the lost Eden and the coming Apocalypse."[2]

By the nineteenth century the child is established in Literature as a medium to discuss the pros and cons of Original sin, and its consequences, and for the Church the child is an object of philosophic and dogmatic dispute. Wordsworth and Blake "both employ the child figure not to make their readers understand a truth, but to make them feel it."[3] It has become an object of sentiment in the nineteenthh century. The social legislation of the time, containing the Factory Acts (designed to help children, not the working man), the ragged schools, abolition, suppression of the opium trade, and establishment of Sunday schools, is also indicative of the mood of the century, and was largely the work of Anthony Ashley Cooper Seventh Earl of Shaftesbury. The second Coming was a recurring theme in his diaries. He saw his work as a battle against irresistible, evil forces. Pattison calls this the politics of sentiment which is Augustinian to the core. Many had written of horrors such as those endured by the chimney sweeps and Shaftesbury got massive support because of a bond of sentiment

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1. Robert Pattison,The Child Figure in English Literature, The University of Georgia Press, Athens,1978,p.67.

2. Ibid.,p.68.

3. Ibid.,p.69.

and sympathy. Victorian child figures says Pattison are nearly all indebted to the Augustinian image of childhood "The joyous, transcendent immediacy of Rousseau's and the early Wordsworth's children has attracted many admirers and few imitators."[1] One cannot help but consider some of the sentimental methods still used to alleviate social ills such as poverty and child neglect world-wide through charitable organisations rather than rational cooperative international planning.

Dickens in Little Nell used this sentiment to full advantage. "Her innocence, like the innocence and beauty of nature, is somehow fatal and critics who have found the character of Little Nell deadly, come closer to the mark than they know."[2] Innocent children says Pattison always have a certain morbid quality. Major Christian images in Dickens work are partly due to his devotion to the New Testament and to the work of Bunyan. Another standard figure in Literature is that of the 'old man' and in Dickens he appears often with his counterpart 'the child'. Fagin has Oliver, Scrooge Tiny Tim and Riah his Jenny Wren. In each of these the 'veteres homines' are partially redeemed by their connection with the child figure. The child becomes a type of "regenerate man..[for these children are ultimately the precursors of new life, but a kind of new life which in Dicken's version of Christian imagery is a product of death."[3] We see that in The Old Curiosity Shop for instance death is rhapsodised. These old men and child figures are not the same as those of allegory, they do not equate with concepts but generate ideas such as whether goodness is

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1. Robert Pattison,The Child Figure in English Literature, The University of Georgia Press, Athens,1978,p.74.

2. Ibid.,p.80.

3. Ibid.,p.83.

possible in a corrupted world. The child figure does not always die but often only survives when the forces of the Old Dispensation frequently represented by the old man, are either regenerated or destroyed. One thinks not only of Silas Marner but also of more recent fiction such as Simon in the Bone People[1] which continue this literary tradition. George Eliot makes her old man a Calvinist and Eppie's baptism is the means by which Silas is returned to the community. It is both a history and a parable says Pattison. The child leads us to the Apocalypse and to Paradise. In The Mill on the Floss she approaches nearer to Wordsworth's conception of childhood. Eliot even prefaced Silas Marner with lines from Wordsworth's Michael but is in fact more like Dickens. Childhood had a fascination for rationalists such as Eliot for they believed that by observation they would see and understand cause and effect. It is this he says which vitiates their similarity to Wordsworth. He believed in the perfection of the present moment, not the perfectibility of the future.

Interest in childhood was further stimulated by observational studies. Pestalozzi (1740-1827) recorded three weeks of his young son's activities and Wilhelm T.Preyer(1841-1897) recounted the first four year's of his son's life which is a classic in psychology.[2] Charles Darwin (1809-1882) wrote a biographical sketch about his first-born infant son in 1840 and George Henry Lewes in his 'Consciousness and Unconsciousness' of 1877 looked at an area Freud was later to explain. The British accepted Freud's theory when it came, says Pattison, because it appeared to be nothing more than a quasi-scientific rendition of Augustine's original sin argument.

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1. Keri Hulme, The Bone People, Spiral, New Zealand, 1983.

2. Donald B. Helms and Jeffrey Turner, Exploring Child Behaviour, W.B.Saunders, Philadelphia, 1976, p.13.

The religious and intellectual debates which gave rise to the child figure in literature also stimulated introspective and confessional attitudes which took the form of autobiographies and first-person narratives. There is a belief common in autobiography according to Pattison from Augustine onwards that the importance of the individual is a function of the role he, as a fallen man, plays in a fallen world. Such a view naturally implies the idea of confession. The individual is now recognized as important in and of himself but admits to the imperfections within him/herself. One work which Pattison recommends and which traverses two epochs is Father and Son by Philip Gosse. Trollope's autobiography shocked his generation by its frank admissions of monetary gain and businesslike artistry. The child in literature reveals these same aspects of the real world through the corruption of his own will or as in Dickens is an innocent foil to human depravity. In each case it is adults who corrupt the child.

Freud's analysis of his own childhood led him to assert that children are born with sexual urges and their first sexual objects are their parents. He felt, says Pattison that he had discovered the riddle of the Sphinx. The child had been seen as closer to sin and nearer to truth than an adult "a position developed and reinforced by Freud."[1] The child's view of the world seems absurd to us and as depicted by Gosse. Such absurdity, says Pattison, would seem fully logical and realistic to the perfect man. David Copperfield's world is also absurd. He rejects adulthood and is an eternal juvenile. This is the most convincing and realistic view of things as they really are Pattison believes, and because of this it is Dicken's best and most convincing work, whose vitality comes

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1. Robert Pattison, The Child Figure in English Literature, The University of Georgia Press, Athens, 1978, p.118.

from Dicken's personal involvement "like a fairy-tale, almost beyond criticism--so much so that the title almost becomes synonymous with literature itself."[1] He looks at the world of adults as an absurd spectacle as children are accustomed to see it in nursery rhymes but even when he grows up he still sees as a child.

The child's view was also a rich source for Victorian pornography It differs from literature where the narrator allows us to see through a child's eyes :

> ...the narrator who allows himself to be the medium through which the child's amoral vision passes, operates like the Freudian ego, softening and refining the wilful messages of the id before transmitting them to the strict and aspiring superego; the child's perspective is that of the id; the reader is asked to play the role of superego; and the mature narrator must mollify what might prove to be a vicious correspondence.2

In pornography this guidance is withdrawn and we see directly out of the child's eyes an unmitigated vision which either titillates or repels. In What Maisie Knew James uses this device. He gives us an account of marriage ,sex, and society seen directly through Maisie's eyes. She remains innocent with no moral sense and this is essential to the novel's structure. What Dickens accomplishes by sentiment Henry James does by ambiguity says Pattison.

James Janeway's writings for children are among the first of their kind with their moralizing tales for "Every Mother's child of you are by nature Children of Wrath."[3] They presuppose that children are capable of understanding and correcting their fallen condition. He established a

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1. Robert Pattison,The Child Figure in English Literature, The University of Georgia Press, Athens,1978,p.125.

2. Ibid.,p.127.

3. Ibid.,p.136.

model for children's literature. Many stories, such as those of Mary Martha Brett Sherwood, were used to convey religious dogma and sold througout the nineteenth century, giving terrifying accounts of Hell and damnation which attend the evil actions of children as in _The History of the Fairchild Family_ (1818)she says "All children are by nature evil, and while they have none but the natural evil principle to guide them, pious and prudent parents must check their naughty passions in any way that they have in their power."[1] More pleasant books for children, such as _Robinson Crusoe_ and _Gulliver's Travels_, were often satires of adult life. The excessiveness of the earlier stories gradually diminished says Pattison with the Anglicanization of children's literature for these writers were more secure and less overly concerned with their dogma.

Lewis Carroll, Charles Kingsley are among the new breed. Christina Rossetti also produced temperate and pleasant works for the young whilst still maintaining a highly orthodox view of the relationship between the child and original Sin. The Goblin Market poem for instance is similar to Milton's Comus and has a morbid concept of nature where Laura must choose between abstinence and excess for "nature is a raw, sensual power which must either be met on its own terms or must not be met at all."[2] In this poem nature is not satisfied until it has violated childhood innocence and "The God who lies behind these images and whose sacrifice is figured in them is hardly the same God who presides over Wordsworth's nature."[3] Here nature has become the devil's realm. Children's literature as a species of

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1. Robert Pattison,_The Child Figure in English Literature_, The University of Georgia Press, Athens,1978,p.137.

2. Ibid.,p.143.

3. Ibid.,p.145.

compressed adult reading "naturally lends itself to Augustine's notion that the child is only a littler replica of his sinful, mature parents."[1] Janeway's type of work is concerned to overcome the vanity of the world, whereas more neutral nursery rhymes and Lear's verses merely observe it for they "arrive at a self-contained world of nonsense which becomes the basis for a broad view of the world"[2] which sees it as perfectly absurd. Fairy tales do likewise but they also have a strong sense of justice. Lewis Carroll brings both together, belonging to the Anglican writers still with a concept of original sin. The world into which Alice falls is not unlike the goblin market, a fallen universe, which is condemned but contains essential truths. Carroll seems to Pattison a Semi-Pelagian who cannot bear to see children as part of the world of sin.

Peter Coveney's interest is in adult literature of mainly the eighteenth and nineteenth centuries and only those works through whom the development of sensibility towards the child may be said to have moved. Before this time children occasionally appear in poetry but otherwise they are mainly in the background of the adult world in drama and novels. He might have added that they are rarely mentioned in history either. Leavis in the introduction to this work reminds us that lives cannot be aggregated, generalized or dealt with quantitatively in any way. The period Coveney examines is largely that known as the Romantic period which has a distinctive sense of responsibility towards life. Dickens for instance can feel with intensity that the world begins again with every child.

Children really appear in literature says Coveney with Blake and

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1. Robert Pattison, The Child Figure in English Literature, The University of Georgia Press, Athens, 1978, p.147.

2. Ibid., p.150.

Wordsworth "the appearance of the modern literary child was closely related to the revolution in sensibility which we call 'romantic revival'"[1] This child is then a romantic fabrication. The artist can identify with the child he says for their chief source of difficulty and pain often lies in adjustment and accommodation to environment: "In childhhod lay the perfect image of insecurity and isolation, of fear and bewilderment, of vulnerability and potential violation."[2] As he points out if neurosis is the result of a fixation of the personality at an infantile stage of emotional development, there would often seem a neurotic connexion between some modern authors and their exclusive preoccupation with children, but only a few of them can be charged with this.

For Blake, Wordsworth, Dickens and Mark Twain the child becomes a symbol of the greatest significance for the subjective investigation of the Self, and an expression of their romantic protest against their experience of society. Their basic tenet is belief in the original innocence of the child, a notion coming particularly from Rousseau and in contradiction of the Christian tradition of Original sin. The mood of the later eighteenth century changed from an emphasis on Reason to Feeling. One can trace this influence back as Coveney does through Newton, Locke, Addison, Shaftesbury, Mill, Hartley, Priestley, Godwin and Bentham. The last four of whom, Rousseau, Blake and Coleridge reacted against. A long history of Hebrew and Christian literature had also postulated the uncorrupted nature of the child which is evident in Vaughan and Traherne. The perfect pre-existent state was also an idea common to the Cambridge Platonists Shaftesbury and Hutcheson. All of these came before Emile captured the imagination of the general populace:

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1. Peter Coveney, <u>The Image of Childhood</u>, Penguin, London, 1967, p29.

2. Ibid., p.31.

> Rousseau's great contribution was to give authoritative expression to the new sensibility, and to direct its interests towards childhood as the period of life when man most closely approximated to the state of nature.1

For Blake children were a symbol of innocence and to him, says Coveney, Bacon, Newton and Locke were a malignant brood; Bacon for his experimental method, Newton's materialist physics and Locke's sensationalism. They represented to him the baneful influence of Reason, the power of the abstract Intellect as a force against Life. He saw evidence of the denial of Man's individuality and of his 'Imaginative Vision', for men were enslaved by 'systems'. He also deplored organised religious creeds for "As a man is, so he sees."[2] He was essentially a humanist and believed that through 'vision' man might perceive the divinity in himself. For him love was the absolute expression of human life and its rejection that of life itself. To deny its physical expression was to deny the power of life against death. Love was the state of grace into which the child should continually grow; an extension of the universal compassion which the child enjoys in his innocence and which can be wrecked by possessive love and society. He therefore attacks the inhumanity of society, especially to children.

Wordsworth, Coveney see as more orthodox, sentimental and influenced by Hartley. His concern with his own childhood became his means of establishing general truths about childhood and about the nature of man:

> Until the Ode on Intimations of Immortality, where, for poetic purposes, he made use of the Platonic myth of the child's immortal nature, Wordsworth adhered strictly to the Hartleian concept of the child as a tabula rasa, impressed, and only impressed by the informing, 'intertwining' influences of Nature.3

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1. Peter Coveney, The Image of Childhood, Penguin, London, 1967, p.42.

2. Ibid., p.52.

3. Ibid., p.75.

Virtue to Wordsworth was therefore not innate in the sense that Rousseau saw it. The Prelude is in a sense an educational treatise, says Coveney.

Coleridge likewise wished to formulate a philosophy of man's consciousness, a philosophy of the total Self. He dismissed Hartley and said deep thinking is attainable only by a man of deep feeling and that all truth is a species of revelation. He also saw the modern mind as having been contaminated by mechanic philosophy and believed it was the poet's task to fuse the perceptions of everyday life into a new organic whole. He believed in the intuitive soul.

> This intuitive, imaginative quality of the soul he saw in the child...this power could only survive if the discontinuity between childhood and maturity were avoided; if indeed the development of the self-consciousness were continuous, organic; if there were wholeness. The 'feelings' of childhood should be carried into the powers of manhood--feelings of freshness, wonder and spontaneous joy in existence.1

The genius and the child both shared this ability in his view. He did not approve of the negative education ideas of Rousseau for it was the integrity of the child that he most wished to enforce and preserve.

> Two things we may learn from little children...that it is a characteristic, an instinct of our human nature to pass out of self....And not to suffer any one form to pass into me and become a usurping self.2

Maintenance of integrity in the child should therefore be the chief aim of education. No doubt he would have approved of Nietzsche's demand for Authenticity above all things.

By the nineteenth century Coveney finds that the romantic child was established mainly as a poetic symbol. From then on the novel became the major literary genre and closely concerned with society. Dickens is the

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1. Peter Coveney, The Image of Childhood, Penguin, London, 1967, p.82.

2. Ibid., p.87.

central figure now for transferring the romantic child into the Victorian novel. He failed in Coveney's opinion,and many agree with him, to avoid too closely identifying his own miseries of childhood and those of children in general. He did however in his opinion express a moral and symbolic reality only previously achieved in poetry and Oliver Twist is the first novel in the language with its true centre of focus on a child."[1] He may be sentimental but he is always sincere and powerful and is able to see the world with children's eyes. George Eliot also sentimentalizes children in her novels in Coveney's view. Mark Twain's Huckleberry Finn he sees as a literary rarity, a significant novel of a boy's escape from society. Tom Sawyer is in fact Mark Twain's hymn to 'the child of nature', born for Blake's 'Joy'. A less well known English writer, Jeffries, in Wood Magic tells a fable of a child abroad in Nature and in his 'Bevis' vividly evokes his Yorshire boyhood "he [too] saw childhood constricted by the disciplines of learning, destroyed by the death of cities and civilisation."[2] J.M. Barrie presents what Coveney considers a sickly glorification of motherhood. Hugh Walpole tells us of his emotionally deprived childhood and the horrors of boarding school life in The Crystal Box. Farrer and Reid were obsessed he thinks with the distress of boyhood turning into man.

The nineteenth century turned says Coveney from the assumption of original innocence to the scientific investigation of the infant and child consciousness. The influence of Freud was to redirect, clarify, sometimes enrich an already existing interest. In Coveney's opinion which differs from that of Boas :

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1. Peter Coveney,The Image of Childhood,Penguin, London,1967,p.127.

2. Ibid.,p.239.

> Innocence for Blake had been a symbol of rich definition, containing within it Blake's own positive assertion of 'life'. By the middle century, however, innocence had become closely asociated with pathos; and once the symbol had necome pathetic, it became the convenient vehicle for the expression of regret and withdrawal.1

In talking of childhood then the great Romantics were really talking of the whole condition of Man. For Blake , Wordsworth and sometimes Dickens the child was an active image, an expression of human potency in the face of human experience. Innocence was valuable for what it might become, if it could survive corrupting experiences. Therefore "We can see how, in its origin, the symbol of romantic innocence was very much a symbol of secular humanist religion. And this is the distinction to be made between the original romantic and the debased-romantic, Victorian concepts of innocence."[2] At its worst we have examples such as the saccharin Little Lord Fauntelroy. The only way to resolve the conflict between innocence and experience was thought to be death. In this way the Victorians in Coveney's estimation negated the power of the romantic image of childhood:

> It is as if so many placed on the image the weight of their own disquiet and dissatisfaction, their impulse to withdrawal, and , in the extremity, their own wish for death...It is a remarkable phenomenon, surely, when a society takes the child (with all its potential significance as a symbol of fertility and growth) and creates of it a literary image, not only of frailty, but of life extinguished, of life that is better extinguished, of life, so to say, rejected, negated at its very root.3

If the justification of secular art is the responsibility it bears for the enrichment of human awareness and for the extension of the readers consciousness then the cult of the child in certain author's works at the end of the nineteenth century constitutes a denial of this responsibility in Coveney's view.

If the romantic tradition was right says Coveney, seeing the dissociation

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1. 2. and 3. Peter Coveney,The Image of Childhood,Penguin, London, 1967,p.192.

of Man and nature as an urgent problem of modern civilisation it found expression particularly in the boyhood novels of Mark Twain, and in the novels of D.H.Lawrence. Regret for childhood sometimes takes on the same obsessive emotional quality as the exile's nostalgia for home.

One curious thing is that "From its origin, the romantic child was always seen in the context of a falsifyingly benign 'Nature'"[1] as if there is in the artist a perpetual search for an Elysium. One cannot detect any sense of 'divine homesickness' however in Shakespeare. "It is a denial of the artist's final responsibility, involvement."[2] In Samuel Butler's The Way of All Flesh we have what Coveney sees as an indictment of a whole poch of English behaviour towards children.

What nearly every novel raises is the question of the adjustment of individual liberty and one's relation with the larger society. Freud's essay on infantile sexuality looks at this problem. He hoped that psycho-analysis would help to solve this .

> The whole plea of psychoanalysis was that the individual's adjustment to society should not be imposed so harshly during childhood as to prevent his development towards a stable, self-fulfilling relation between his instinctive satisfactions and the demands of social necessity in adulthood.3

He is therefore fundamentally in sympathy with the original romantic assertion of chidhood's importance and its vulnerability. He is particularly aware of the damage that parents and teachers can do to a child's development especially concerning his innocent sexuality which to the nineteenth century was a taboo subject.

> In the psychology of sexual repression and its ever attendant guilt we may indeed find part of the explanation of the popularity of the myth of innocent childhood and the savagery towards children

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1. and 2. Peter Coveney,The Image of Childhood,Penguin, London,1967,p.272.

3. Ibid.,p.297.

> in practice, which seems to have existed so astonishingly--otherwise--side by side. 1

This myth of childhood's innocence may be a way says Coveney of coming to terms with the guilt created by a widely imposed repressive sexual morality, and as an escape from a widespread immaturity towards it. The Romantic image of the child started he thinks with Blake's free acceptance of its innocent sexuality and it is therefore:

> ...ironic indeed that a literary image initiated in this way should have become one of the most powerful obstacles to the acceptance of the sexual character of the child a century later.2

Freud's theories matched the dissatisfaction experienced by many literary minds of his time. Virginia Woolf noted the precise time of the change as December 1910. Freud started a dialectic which is still going on in our own time. He said himself that writers had discovered the unconscious before he did, and that he merely articulated what was already in many minds. From then on reality became more truthfully depicted and Joyce's Portrait of the Artist as a Young Man is an example of the new approach to the child. The stream of consciousness technique was influenced by psychology. Virginia Woolf also attempted to convey the inner sensibilities of a child and Mrs Ramsay in To the Lighthouse has a childlike capacity for enjoyment of life. Lawrence particularly shows intense psychological insight especially the relationship between child and parent, mother and son, husband and wife. 'The intensity and vitality of his children represent important qualities he intended to express through them.'[3]

For all the writers Coveney examines the child is a symbol of their concern for Man and especially concerning his relations with other men

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1. and 2. Peter Coveney, The Image of Childhood, Penguin, London, 1967, p.302.

3. Ibid., p.323.

and the society in which he finds himself. Particularly they are concerned says Coveney with the sensitive individual child or man in an insensitive society and his experiences of alienation:

> For them--the child was a creative symbol; a focal point of contact between the growing human consciousness and the 'experience' of an alien world, about which they could concentrate their disquiet, and, importantly, their hopes for human salvation.1

For writers then the child is a prop onto which they can put all their hopes, fears and visions. Many of them had the sensitivity and compassion to be aware of the special difficulties of childhood not only from their own often well-remembered experiences but from what they witnessed about them and often they could see where society was wrong and they had the courage to point this out. Sometimes they too were deluded by long-held religious beliefs and traditions but they helped to develop a thinking concern for children that was gradually to improve the lot of generations to come. Certain people stand out because they appear to have had revolutionary ideas, Rousseau for example, but as we look backwards we can see that sometimes they merely crystallised the gradual evolution of thinking and feeling that had been going on for some time. Literature tells only part of the story that history scarce as it is also tells us. Children were used and abused according to dictates even their parents did not understand and in the rare instances where they were treated with humanity and sometimes a kind of reverence they still had to grow up into a world that was less than kind.

Most people think of Dickens as being a champion of children and one who has portrayed the harshness of Victorian life for the children of the poor particularly. Literary critics slate him for his sentimentality as we

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1. Peter Coveney, <u>The Image of Childhood</u>, Penguin, London, 1967, p.339.

have seen , for his too subjective view and personal emotional involvement. Nevertheless he does give us insight not only into the feelings of small children but draws a picture of family life and schools which we can hardly ignore. It is probably true that many of his characters with their apt names are often no more than caricatures of real people but they are based on what he a sensitive and clever person observed around him.

Arthur Adrian has made a study of the parent-child relationships portrayed by Dickens and realises that "Identifying his own early suffering with theirs he lashed out against a harsh society that victimised defenceless youngsters."[1] Victorian parents denied children individuality and rights and as we have already seen their ideas about discipline were based mainly on this persistent idea of ingrained sinfulness. Obedience to parents was in fact synonymous with obedience to God. In The Way of All Flesh Samuel Butler said that no duty was more important than to teach a child obedience to his parents. In Dombey and Son Susan Nipper says "that childhood like money, must be shaken and rattled and jostled about a good deal to keep it bright."[2] Even in prosperous homes says Adrian life for children was fairly Spartan, consequently only the fit survived. Augustus Here in The Years with Mother describes his Aunt's callous treatment when he had chilblains and in the Sherwood's History of the Fairchild Family the children endure endless sermonizing and meditate in dark closets as punishment for their transgressions. The lower classes had little concern for their offspring and often they were left to the untender mercies of the workhouse. Rousseau himself left all his offspring in public care. Abandoned vagrants

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1. Arthur A. Adrian, Dickens and the Parent-Child Relationship, Ohio University Press, 1984, p.2.

2. Ibid., p.4.

wandered the streets of London, filthy, hungry and forced to beg or steal. The State treated miscreants brutally with flogging and even capital punishment or deportation. In one of his last works The Haunted Man Dickens describes such a 'fiend':

> A baby savage, a young monster, a child who had never been a child, a creature who might live to take the outward form of a man, but who, within, would live and perish a mere beast.[1]

The child chimney sweeps and those working in the mines were condemned to stay there by an apathetic public and exploitative owners until the Factory Acts began to take effect.

Dickens followed a tradition says Adrian, directly opposed to the Puritan and Wesleyan view of the child as inherently depraved. "He upheld the cult of innocence, which stressed primeval goodness and natural piety."[2] Inspired by Rousseau, as were Blake and Wordsworth, he saw as they did that children were seers and spiritually wiser than adults. He hated the fire and brimstone oratory he had been subjected to in his boyhood and the terrifying bed-time stories. His own story tells us much about the attitudes towards children of his time. His parents were feckless and kept him from school. Even his bed was pawned and his books. He was put to work in a blacking-house whilst his family lived in prison. His mother apparently did not wish him to return to school when the opportunity arose and this may, says Adrian, account for his rather jaundiced view of mothers in his novels. "He saw himself as a victim of a ruthless money ethic that ignored the sufferings of the poor. Gradually he enlarged his self-pity to embrace all those children whom an indifferent society

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1. Arthur A. Adrian, Dickens and the Parent-Child Relationship, Ohio University Press, 1984, p.7.

2. Ibid., p.13.

condemned to lives of hunger, disease and crime."[1] This then is the basis of all the child characters in his novels. Others also wrote of the prevalent callous treatment of the young. Bulwer-Lytton 1830 published Paul Clifford the story of a boy condemned to death by a judge who turns out to be his own father. Frances Trollope 1840 wrote Armstrong The Factory Boy about the abuse inflicted upon an orphan indentured to a cruel mill-owner. Charlotte Elizabeth told of another orphan, a girl who goes to work at sixteen in a textile mill and eventually dies because of the unhealthy working conditions there.

Dickens took up the cause of the lonely and alienated child says Adrian and one can observe persistent patterns in his work.:

i) orphans left to mercy of surrogate parents

ii) unwanted or slighted children who must cope with hard or insensitive parents

iii) misguided or corrupted children who are the products of pernicious parental influences

iv) exploited children.

All of the above match well with the findings of the historians previously quoted. By the nineteenth century the lot of children in general and particularly those in poorer circumstances had not improved a great deal. They were still a trouble to their parents and to the authorities. Dickens like Blake realised that innocence is destroyed by sinister forces in society. He used irony as one effective means of assault. In Dombey and Son the father views his son merely as a business asset and rushes him through the stages that should come naturally. For his daughter he has

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1. Arthur A. Adrian, Dickens and the Parent-Child Relationship, Ohio University Press, 1984, p.29.

nothing but cold indifference. This novel says Adrian " is the most clearly analogous to nineteenth century England in its treatment of materialistic parents."[1] The union of father and daughter is symbolic for Dombey represents Society and Florence the Heart and Soul. Their union becomes a symbolic rebirth. This domestic situation is a microcosm of a national one and Dickens implies that a society dominated by greed, insular pride, and ruthless competition can be regenerated through dedicated love. Thus the story as Adrian sees it becomes a fable for its time. Dickens was convinced that parents were responsible for the way their chidren developed. Hard Times attacks nineteenth century philosophical radicalism, pointing out the absurdity of a utilitarian system that ignores human values and demonstrates that a parent reaps as he sows.

Gradgrind is notorious for the way he dehumanizes life "as he moulds his children by an impoverished curriculum that inhibits imagination, stultifies independent thought and devalues the arts... In the Gradgrind system there is no room for fancy, no time for wonder; all must give way to hard facts and gloomy statistics."[2] This diet impoverishes the spirit of all children including his own.

In his observation of human behaviour "Dickens anticipated theories of the human psyche that were not to be articulated until after his time."[3] Although he was able to see as a child as others have said he did not condone adult irresponsibility. The muddle of society as he saw it is portrayed in Bleak House and is symbolised by the fog metaphor in the

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1. Arthur A. Adrian, Dickens and the Parent-Child Relationship, Ohio University Press, 1984, p.107.

2. Ibid., p.114.

3. Ibid., p.123.

opening chapter. Bleak House says Adrian is one of Dickens most persuasive arguments that abnormal family relationships invariably abound in a degenerate society. In Little Dorrit England is viewed as one vast prison. It is in Our Mutual Friend that he presents his darkest vision of the warped family and the warped society. In this work, two unscrupulous and degraded men are unfit to be the fathers of the daughters who defend and care for them. This theme is common in his work but:

> These inversions [of parent and child] function as unifying metaphors to carry his total vision of English society, just as family after family is portrayed with the natural guardian assuming no control, so Victorian England is to be viewed as one vast family with indifferent and incompetent leadership."[1]

Aries also pointed out this trait in children to act as parents to their own parents. Most of Dickens' heroes are fatherless and where one exists good communication is usually absent. Most of Dickens good parents are in fact foster-parents. He believed that rather than suffer rigour and cruelty in childhood children should be allowed to dream and wonder, to experience the full play of fancy and develop creative imagination. He supported Rousseau's idea that "nature wants children to be children before they are men." He believed that if we deliberately prevent this development we get "premature fruits which are neither ripe nor well-flavoured, and which soon decay..."[2]

If a child is allowed to mature normally Dickens thought he would become adult rather than merely a grown-up juvenile. He thought they nmust be treated as individuals and not things for "nothing so robs a human being of dignity as to depersonalise him."[3] The family was seen as the

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1. Arthur A. Adrian, Dickens and the Parent-Child Relationship, Ohio University Press, 1984, p.131.

2. and 3. Ibid., p.139.

important basis of human life and the parent-child relationship of the utmost importance. The recurring patterns in his work demonstrate this philosophy. His work as Adrian sees it is a fusion of art and social criticism which functions metaphorically to anatomize nineteenth century England. Unfortunately as he says "Selfish parents, alienated and lonely children, indifferent and calloused officials --are still with us."[1] Parental permissiveness is an easy alternative to disciplined training says Adrian. As a result many young people have developed a nomadic sub-culture. This is true in our own society now where we have the problem of 'street kids'. The only remedy says Adrian is the one Carlyle advocated "Love is the remedy...without love men cannot endure to be together."[2] Numerous other writers and thinkers on the subject of education echo the same sentiments right up to our present time, the personality must be cherished above all things and that love extended first to the infant and then in the family to the immediate social circle can then permeate throughout society but when this vital ingredient is missing the result is a warped and repressed personality which takes its anger out on those nearest to it.

Many of the authors mentioned have dwelt on the suffering imposed by parents and society on the children in their care but in a work by Boas we see another side to this picture of childhood for it is his contention that we have in fact gone to an extreme in the twentieth century where childhood has become something of an obsession. Far from neglecting the child, he believes that we sometimes take too much interest in it and what is worse we emulate the things of childhhood in order to prolong our own youthfulness.

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1. and 2. Arthur A. Adrian, Dickens and the Parent-Child Relationship, Ohio University Press, 1984, p.144.

George Boas traces the development of a peculiar adult interest in childhood as evidenced by thinkers, writers and artists over many decades; leading to what he believes is a cult i.e. worship or idolatrous attitude towards children, reaching its zenith in the modern pursuit of eternal youth, imitation of things childish such as dress, games etc. and in the current liberal attitudes to young people.

He considers this part of an anti-intellectual movement going back to the sixteenth century and parallel to the advancement of the natural sciences. One expression of this anti-intellectualism is a marked interest in Primitivism. Several cults have arisen from this and he cites The Woman, The Child, Folk(rural), The Irrational or Neurotic, The Collective Unconscious. Each of these was considered to have some attributes of the Noble Savage: intuitive wisdom, appreciation of natural beauty, sensitivity and moral values. Boas says that Primitivism was one way of coping with the degenerative aspect of the Creation. Presumably he means a way of accepting the doctrine of original sin.

It is the cult of childhood which interests Boas particularly. He says "If there is such a thing as congenital wisdom and other virtues, then it ought to appear in childhood."[1] His evidence of this cult relates to my search for the metaphors of childhood, particularly as they relate to education. He explains some of our present day behaviour in the light of his study: "If adults are urged to retain their youth ,to 'think young', to act and dress like youngsters, it is because the Child has been held up to them as a paradigm of the ideal man."[2] It is not difficult to see his

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.11.

2. Ibid., p.9.

point if one reflects on the zealous interest many have nowadays in health and beauty regimes, jogging, aerobics etc. wearing the regulation blue jeans, sweat shirts and sneakers, passionately pursuing games of all kinds and worshipping the preserved 'youthfuls' in the media hype. Boas notes also the relaxed discipline in the schools, pursuit of self-expression and the lack of any techniques being taught in the Arts as all symptomatic of the idealisation of youthfulness.

Sylvia Ashton Warner would concur I believe with Boas on his implied criticism of modern liberated youth. In her book Teacher in America she gives a vivid picture of what Boas was hinting at. She is newly arrived in the States to set up and organise, but without any hierarchical authority structure, a new 'open' school, in the 'organic 'style.[1]

> Authority turns out to be a very dirty multi-letter word indeed ,though all very sweetly implied in the kindliest and sincerest voices and which I learn at once. Direct, please, but don't direct. "What about picking up your blocks,Henry?"
> "I dowanna."
> "You used them. Come on, I'll help you." Kneel and start.
> "I said I dowanna and I don have to."
> Where do you go from here? "Well who else is to pick them up?" Long legs planted firmly apart, he looks me contemptuously in the eye :"Not me you dum-dum!" and sticks out his tongue for emphasis So he wins for we are equal. Equality on board [for she has likened the school to a ship] appears to mean inverted authority. There's authority here but not from me. 2

To my mind this scene encapsulates the ultimate end of the cult Boas describes. She is aware too of "having committed carelessly the indefensible offense of aging"[3] and realises that at this point in time "children are the lords of creation whose desires and whims are law."[4]

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1. The term 'organic refers to her system of teaching vocabulary and reading,as described in her book Teacher.

2. and 3. Sylvia Ashton Warner,Teacher in America,London:Cassell & Co.,1974,p.9.

4. Ibid.,p.23.

Where did it originate this cult of the child? Boas believes its historical roots come from Europe, its religious roots from the New Testament. Montaigne and Agrippa von Nettesheim were influences and a Swedish seer who prophesied the twentieth century would be the 'Century of the Child'. Eighteenth century France was where the uniqueness and individuality of the child received most recognition. Thus began what Boas terms 'paidolatry.'

In mediaeval Latin literature there are poems referring to children but the child as a model for adults never occurs. He finds the real beginnings of the cult of childhood in the scepticism of the sixteenth century when scientific advances made men fearful of the new rational world. "There emerges almost step by step with the growth of natural Science a fear of reason. We turn now to the cult of childhood in the Scepticism of the sixteenth century."[1] Authority was weakened in that century by many factors, including the recovery of ancient texts, explorations, new astronomy and physics, inventions, Protestant Reformation, consolidation of new nations, and the rise of vernacular literature. All combined he thinks to destroy the notion that everything worth knowing was already known. He lists some of those with influence: Agrippa von Nettesheim (1487-1535), Rabelais, Montaigne, Vanini, Sanchez, Charron, Vayer, Sorbiere, Glanvill and Bayle. They questioned authority, tradition and scientific principles. Agrippa questioned the value of knowledge, believing learning to be evil and turning men from faith and divine truths. Animals in their ignorance (equated with innocence) were deemed superior to thinking men. Another precursor of the cult of the simple. Montaigne does not maintain that goodness is the criterion of truth, simply that truth which does not support goodness is

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1. George Boas, *The Cult of Childhood*, London: The Warburg Institute, University of London, 1966, p.21.

not worth possessing but he believes in instruction for children without punishment or force. This idea may have gone some way thinks Boas to mitigating the generally harsh,punitive discipline of children in schools. Rousseau's truism that the child is not a man was a novel idea then, but he did not ask men to be children. His metaphor was "The child is to the man, as Spring is to Autumn."[2] Two of his followers who had much influence were Bernadin de St. Pierre and Pestalozzi who came nearer to the cult of childhood "The child in his opinion requires training, just as every one does. But there are certainly highly desirable traits of childhood which are innate. One of these is belief in God."[3] This is not the consequence of training and education "it is the consciousness of the pure and simple, who with innocent ear listen to Nature's voice and know that God is their Father."[4] This echoes, says Boas the seventeenth century doctrine of innate ideas subscribed to by the English Platonists and Descartes but they never said that these ideas were clear to babies. Therefore in Pestalozzi's terms "To instruct men is nothing more than to help human nature."[5]

The cult of childhood was reinforced by belles lettres and theology and the seventeenth and eighteenth century poets absorbed these ideas. In Racine's Athalie for instance there is a precociously religious child Joas but "there is enough similarity between him and an ordinary child in his very sincerity and lack of pride to make him a prefiguration of the twentieth century child, all innocence and innate wisdom."[6] Seventeenth century

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1. and 2. George Boas,The Cult of Childhood,London:The Warburg Institute, University of London,1966,p.21.

3. and 4. Ibid.,p.36.

5. Ibid.,p.37.

6. Ibid.,p.42.

France was not enthusiastic about children says Boas but by the time of Rousseau the idea that childhood was more natural than maturity even permeated into the writings of Diderot. He thought children were closer than adults to "la poesie naturelle" but he did not advocate that adults imitate them. Most writers however chose to write about the sorrows of the child rather than happiness.

One of the earliest expressions of the cult of childhood is John Earle's Microcosmographie (1628) which opens with a sketch called The child:

> ...is the best copy of Adam before he tasted of Eve or the apple... He is nature's fesh picture, newly drawn in oil, which time and much handling dims and defaces. His soul is yet a white paper unscribbled with observations of the world....at length it becomes a blurred notebook. He is purely happy because he knows no evil... He is the Christian's example, and the old man's relapse; the one imitates his pureness, and the other falls into his simplicity....1

What Earle says reflects the thinking of his time, that new born babies go straight to Heaven if baptized, to Limbo otherwise but they have inherited the sin of Adam. John Hersey of New England said it is necessary to break the child's will at whatever cost. This as we have already witnesed in the records from history is the Augustinian view as opposed to the Pelagian.

The cult of childhood flourished more in Protestant communities than Catholic Boas thinks. Thomas Traherene wrote of a happy childhhood and said he "knew by intuition those things since my Apostasy, I collected again by the highest reason." [2] " Is it not strange [he said] that an infant should be heir to the whole world, and see those mysteries which the books of the learned never unfold." What is certain says Boas, is that as the child grows he does lose some of those instinctive truths just as the

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.43.

2. Ibid., p.45.

fruit of the Tree of Knowledge lost the only knowledge that was of importance. The Swedish seer Swedenborg dwelt also on the innocence of childhood because children do not know the difference between good and evil. Children are not the highest form of life but the highest form this side of Paradise. Sir Aubrey de Vere (1788-1846) said:

> All holy influences dwell within
> The breast of childhood:instinct fresh from God
> Inspire it, ere the heart beneath the rod
> Of Grief hath bled, or caught the plague of sin.[1]

Blake is not the next step in this cult says Boas. Except for the distinction made by him between innocence and experience "there is very little that he contributed to the development of the cult of childhood"[2] To Boas, Blake's vision of childhood resembles a nightmare with his preoccupation with the sorrows of childhood. Wordsworth has more influence, though as others have already said his attitude varied. He did however express the delight that most people feel in the sight of children, but "one cannot construct a consistent philosophy out of the works of William Wordsworth."[3] His well-known lines on the child being father to the man had already been said by Milton, Dryden, Chatterton and even Pope. Wordsworth's contemporary Emerson was subjected to the same Platonistic post-Kantian influences but Boas does not seem impressed by his work. In it there is a hint he says of what was to become a popular belief that children represent the first stages of civilization in their sincerity and spontaneity.

In nineteenth century France the best example of a poet's adoration of childhood is in Victor Hugo's L'Art d'Etre Grandpere. In one of his

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1. George Boas, The Cult of Childhood, London:The Warburg Institute, University of London, 1966, p.47.

2. Ibid., p.49.

3. Ibid., p.51.

poems the innocence of a child overcomes the ferocity of a beast. In another work Le Syllabus when he listens to the ame pure of a child, he seems to penetrate into heaven. He even goes so far says Boas as to say that in the gurgling of babies there is a profound sense which he cannot articulate and he is contemptuous of the dogma of original sin. To Boas one of the most interesting poems on childhood is Les Griffanages de L'Ecolier where a boy scribbles on the margins of his book and is punished. This poem as far as he can discover is the only one which deals with the artistic genius of the child. Historians he says see in these scribblings an anticipation of what was to be the art of the unconscious in a later century. One is reminded in this of the more recent story of My Name is Asher Lev by Chaim Potok where an artistic Jewish boy is punished for doing the same thing. In another poet's work Carles Peguy "there is a plea for recognizing that in the supposed innocence of childhood there is a direct and intimate communication with God."[1]

Of Swinburne Boas says that his ecstatic enthusiasm in his poems on childhood and babies become simply ludicrous. It was George Eliot he believes who did most to spread the idea that the presence of a child was a beneficent influence " perhaps the first novel written by a serious author in which the child becomes a redeemer simply because of its childlike nature,"[2] speaking naturally of Silas Marner. Dickens he describes as the inventor of that angelic boy David Copperfield and other saintly children. From his time there has been a procession of authors writing about children and not all of them good children, some recent ones, he is referring

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.57.

2. Ibid., p.58.

particularly to Golding's Lord of the Flies, downright wicked, which is a new trend. The climax to all of these is to be found in Ellen Key who made one of the few prophecies about cultural history which Boas believes have come true, in her work The Century of the Child(1909). Her conclusions, dealt with in more detail later, are based on The Law of Recapitulation. From the time of Augustine mediaeval writers conceived of human history under the metaphor of Ages, which have been referred to earlier in this chapter and can be viewed as a model of history

> This metaphor gave thinkers of later dates a background against which they could, if so disposed, appraise each age, seeing history either as a growth and decline ending in death, or as an undulatory process swinging from good to bad and back again. To see history as if it were the biography of a single individual becomes commonplace.[1]

The Law of Recapitulation has two forms one the biological and second the sociological or psychogenetic. In the first ontogeny recapitulates phylogeny that is the evolution and development of the individual reflects general evolution, an idea which goes back to the eighteenth century and is utilised by Darwin as partial evidence of his theory of the evolution of organic species. The second asserts a parallelism between the child and primitive man which is psychological not physiological. The savage was considered to think like a child and many of the characteristics of children's art and beliefs were held to be like that of savages. Anthropologists did not agree with the idea that some people are chronologically at a standstill or at a point where the civilised imagine they might have been in the past. "We speak of primitive religion, primitive art, primitive society as if we were talking about observable phenomena and not about conceptual constructs."[2]

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.61.

2. Ibid., p.62.

Vico in his outline of history put emphasis on growth and development from worse to better as if humanity were moving in a definite direction. History is seen to begin with the age of gods, proceed to an age of heroes and end with the age of humanity, Each age has features which are common to its customs, laws forms of government, language and culture. The first, the religious, was the most poetic. All things were supposed to be animated by spirits or gods. Vico does not consider these primordial ancestors as in any way inferior even though not so rational we are. The heroic age was more pugnacious in character and aristocratic in government. The humane age is supposed to be intelligent, modest, benign, and reasonable, following the laws of conscience, reason and duty. It believes in the equality of intelligent citizens, and governs by means of argument not force.

Boas says that similarity between the development of a nation and that of an individual is obvious. Because children enjoyed fables and rhymes and suchlike they were considered pre-rational and adolescents who enjoy rough and tumble seem more like the heroic. Vico himself did not emphasize these analogies but Boas thinks they lie behind his thinking as a basic metaphor and Herder seemed to think likewise. Anyone biased in favour of the poetic therefore especially if they have a primitive bent would all too easily in Boas' opinion idealize the stage of collective childhood, whereas the rationalist and anti-primitive would be unlikely to do this. In general the tendency of the eighteenth and nineteenth century philosophy of history was to be optimistic and look forward, expecting that the future would improve on the past. It was Auguste Comte "who did most to create the belief that the child represented the childhood of the race as a whole."[1]

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.64.

He agreed with Vico that the way to interpret history was on the basis of how men think. His law had three stages. Vestiges of earlier modes of thought can be found in any period later than when they first occurred, Comte thought that there is a tendency to believe that change is produced by some agency conceived in anthropomorphic terms and this is the way the child thinks. According to his thinking the life of an individual reproduced in miniature the life of the race, beginning with the theological stage and passing through the metaphysical and on to the psychological. "The social and psychological applications of this law belong on the whole to the twentieth century."[1]

As late as 1911 Boas says we find in an Encyclopaedia of Religion and Ethics the following statement;

> 'The childhood of the race', originally a metaphor, has become an almost technical term, through the establishment of the law of recapitulation...2

It explains that this law connects the development of the individual with the evolution of the race, that is not that the child will be first a savage, then a barbarian etc. but that it will indicate what kind of interest will prevail in each period of growth. This whole thesis Boas see as being fortified by Freud for in his writings the psychology of the child is frequently utilised as a substitute for that of primitive or ancient man and the adult is said to retain infantile desires and aggression. He may, thinks Boas, have been influenced by Schopenhauer who saw in the child something akin to genius. His idea of a genius was of someone who could not be objective about himself. He also considered the brain to be developed by the age of seven. He speaks of "childhood is the time of innocence and

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1. and 2.George Boas,The Cult of Childhood,London:The Warburg Institute, University of London,1966,p.65.

happiness, the paradise of life, the lost Eden on which we look longingly back through the remaining course of our life."[1] Children have in his opinion the naivete and sublime simplicity which is characteristic of true genius. Freud's theory of infantile sexuality contradicts Schopenhauer. Norman O' Brown an exponent of Freud sees a similarity between the life of the artist and that of the child. Art is he says a form of play which recovers childhood. Schiller equates the child with nature and naturalness. To Kant the child represents a 'holy object'. He thinks we are nostalgic for childhood and in the work of artists and poets he looks for the quality of naivete or the childlike.

Ellen Key thought that the development of the child mirrored the development of mankind as a whole for children combined realism and idealism as epic national poetry does. Boas believes she is influenced by Heder and the popular notion that all people were once able to write ballads and epics. She says that chidren are not drawn to abstract things and have a realistic conception of heaven which is the gift of the poetic imagination. Children in her view also have invulnerable logic. They are clear-sighted in their view and cannot reconcile what they are taught with what their teachers acually do. When they question us they are given religious answers. She also believed that the child was a natural aesthete and appreciated art, he is therefore an ideal being and superior to most adults. Some, like Rilke found this too idealised a concept of childhood. What happens to spoil this ideal child asks Boas. Rousseau, Pestalozzi and Froebel would blame education, for all these admirable qualities with which they come to school are gone by the end of it.

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1. and 2.George Boas,The Cult of Childhood,London:The Warburg Institute, University of London,1966,p.65.

As art became less constricted in style with the advent of Dadaism so art became praised for its natural, childlike qualities. The nineteenth century saw the rise of psychological studies of childhood and the beginnings of scientific anthropology. Childrens drawings were now studied as evidence of their mental functioning and people became interested in the aesthetics of children's art and creative work. Toepfler's work combined both says Boas and he said that beauty was to be found in works of art as sign of an ideal beauty, which idea when pursued to the ultimate is a sense of God himself. Hegel defined beauty as a a sensuous manifestation of the Absolute. We can all conceive of beauty but some are more capable of creating signs of this and this is the reason why he examines the art of children. By loooking also at graffiti in Pompei and the sculptures at Easter Island he fused ideas of the immature, the uneducated and the savage. Attention to reality and detail was not art to him and stone images were only gross if considered to be representations. Their beauty lay in their conception. This power which children once had, they lost through schooling.

One of the first psychological studies of childhood was by James Sully in 1895 and because the fusion of child art and the savage was such a well established concept by now he did not question it. To him the child's drawings were pre-artistic, the first attempts aimless and chaotic but they were not destitute of artistic qualities. His acceptance of the status quo did in fact strengthen the ideas of the cultural primitivists. Others after him accepted it as incontrovertible truth. By 1922 Hartlaub saw the art of simple folk and children as based on anthropomorphic materialism"

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1. George Boas, The Cult of Childhood, London: The Warburg Institute, University of London, 1966, p.87.

and he has little faith in Freud's thery of infantile sexuality.

There is ample evidence as Boas sees it of a nostalgia for childhood. Sylvia Ashton Warner in 1963 considered that we should encourage the child to express "inner vision" and we should avoid forcing our ideas and emotions onto them for "The expansion of the child's mind was to be a beautiful growth." [1]. Boas can accept this but wonders whether this prepares the child for a life in which disequilibrium, discord and movement will be the rule. I believe that her comments in her last book quoted earlier would find more accord with him.

The theory of pedagogy in the United States is in opposition says Boas to the long tradition springing from the New England Calvinism "For if we are all born in sin and elected by God regardless of merit, then there is no likelihood of setting up the child as an ideal" [2] Education was organised to prevent badness escaping. As adults are the ones accused of introducing evil into the world of the child and these adults were themselves children can we ever solve the question of where the evil originally comes from. Marion Richardson had no illusions about the inner vision of children, she believed that the importance of a child's art is what it does for the child in feeling his imagination and many of the comments about children's art are loose statements which should not be taken too seriously. Kleee who was quite frank about a desire to return to childhood reffered to Herder's simile of art as a tree. The artist is the trunk in this figure of speech and his work of art the crown. but though the crown has its origin in the roots, it does not resemble them. There is says Boas a mysterious something in the conception of all works of art just as there is

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1. and 2.George Boas,*The Cult of Childhood*,London:The Warburg Institute, University of London,1966,p.90.

in the formation of scientific hypotheses.

Klee believes that the spectator has no right to demand anything of the artist. A painting says Spulages is a metaphor made by an artist who lives suspended between two worlds that of his mind and the external world. Even when painters do not claim the status of children critics often give it to them. The adjective most often used in praise of the child is 'innocent':

> Just what aesthetic innocence consists in is more difficult, if indeed possible, to define, the question boils down to whether the incapability of commiting an act should be called innocence or simply incapability....One must revert to Rousseau and declare flatly that the child is a special variety of the species HOMO SAPIENS, with standards of his own to be understood in his own terms.1

This being the case we cannot judge adult art by principles only relevant to the child. Likewise one should not judge a child by adult standards.

The fact that children because of the law of recapitulaton were confused with primitives "led to the vogue of innocence, naivete, freshness, and kindred qualities"[2] The tradition of writers thinking childhood to be specially blessed merged with the identification of the child with primitive man and led to a cult which became reflected in everyday lives and led to :

> ...an emphasis upon the necessity of looking young, feeling young, thinking young, acting young, that in some cases was grotesque....it became general to deny the reality of death as well as of old age, and all the evasions of the American funeral rites seem to have resulted from this denial...The ultimate in the cult of childhood ...in ...the opinion of Dr Norman O. Brown [is that] life will conquer death only when we accept the excremental vision of the child as final.3

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1. George Boas, _The Cult of Childhood_, London:The Warburg Institute, University of London, 1966, p.100.
2. Ibid., p.101.
3. Ibid., p.102.

Jeffreys in the previous chapter thought the only hope for society was to become Christianized. Ellen Key of Sweden, lauded in her time but now apparently almost forgotten, sees our salvation as lying in a different direction. She believes that we need to transform human nature itself, and this will happen not when the whole of humanity becomes Christian, but when the whole of humanity awakens to the consciousness of the "holiness of generation."[1] The central work of society will then become the new race, its origin, its management, and its education, for she sees the training of youth as the highest function of a nation.

It is her belief that we must in fact abandon the Christian view because it has given us the wrong attitude to marriage, to our bodies, to the begetting of children and their education. Instead of seeing man as 'fallen' we will see a new man come into existence for she thinks that we can transform to a higher type than known so far, by use of the human will. It will take the scientific view of man to restore what the ancient world saw as the significance of the body which after Plato and Socrates was looked down on. The Renaissance she thinks tried to restore this view but did not go far enough . Goethe in her opinion saw that this task must be faced with some seriousness, and we are only just beginning to understand the reciprocal relationship of soul and body and to be aware of "a second higher innocence in relation to the holiness and rights of the body."[2]

The greatest obstacle to our development, is she thinks the Christian way of looking at the origin and nature of man, which sees everything concerning the continuation of the race as impure, as "For Christianity,

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, p.2.

2. Ibid.,p.6.

eternal life, not life in the world, is ever the significant factor."[1] She would prefer that we treat all the questions children have with complete honesty so that they develop personal responsibility, thus we would achieve "a higher type of sex with a higher type of morality."[2] School she thought was not the place to give this kind of information, but literature was important "As erotic idealism can awaken enthusiasm for chastity--as found in stories, histories and belles lettres."[3] She is convinced that we need to revive antique love for bodily strength and beauty. One wonders what she would think of the modern cult of the body decried by Boas, perhaps she would see it for what it might be, a step on the road to her ideal. Likewise the intense international pursuit of sport might be part of this evolution towards a greater respect for the human body even though at the moment it seems sometimes almost to be to be an anology for traditional warfare.

Ellen Key is interested in genius and how it comes about and what she appears to believe is that we can do much to encourage the production of superior children and that this in fact should be our aim in life, almost to a degree that we might find repulsive, for there are almost faint odours of Nazism, in her statement that we have been amiss in the past in encouraging the weak to multiply. She cites the Middle Ages for instance as a period when the human race deteriorated because the best 'stock' fled to the monasteries and the worst reproduced.

Nietzsche, says Key, considered man as a bridge between the animal and

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, p.8.

2. Ibid.,p.10.

3. Ibid.,p.11.

superman, speaking she thinks with poetic and prophetic voice rather than with scientific proof, and she believes his ideas are a consequence of Darwinism which he did not foresee. She also makes an interesting comment that exceptionally gifted men have mostly inherited their characteristics from their mothers and daughters from their fathers. The emerging view however is that we develop through adaptability to our surroundings, so we need to look at the best conditions which do not over-exert us. It is a time she thinks when "man's spirit is resting on the waters; gradually a new creation will be called forth from them."[1]

She does not seem averse to the idea of euthenasia for she makes the comment that heathen society used to expose weak or crippled children whereas Christian society prolongs life to make it a torment yet condones war and the death penalty. She might also have added corporal punishment. However she feels that only "When death is inflicted through compassion, will the humanity of the future show itself in such a way, that the doctor under control and responsibility can painlessy [but not to him one presumes] extinguish such suffering."[2] She certainly touches on issues which are still contentious and I draw attention to this feature in her writing because it may seem at odds with her regard for the 'holiness' of the child, however this reverence for childhood is not the sentimental or the possessive attitude perceived by Boas in the cult of childhood, it is a recognition of a kind of holy duty that one generation should have for the next, always caring for the future.

Her attitude to marriage is not conventional either for she believes

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1. Ellen Key, *The Century of the Child*, G.P.Putnam and Sons, New York and London, 1909, p.32.

2. Ibid.,p.33.

it should be a bond of mutual respect and fidelity, not a religious or civil contract; a notion which drew criticism in her day. The Christian concept of legitimate and illegitimate children she believes has obstructed a real ethical conception of the duties of parents:

> Every child has the same rights in respect of both father and mother. Both parents have just the same obligation to every child. Until this is recognized there will be no basis for the future morality of the common life between man and woman. 1

Perfect fidelity between couples could only be possible in her estimation by perfect freedom which alone creates complete unity. Whereas the type of fidelity proposed by the church has developed a sense of possesssion. To her "Voluntary fidelity is a sign of great nobility."[2] Society tries to mould and pressure us into a sphere of duty imposed upon us, but marriage must be free. Above all the child must not be born into a discordant marriage and love must not be debased as simple sensuousness. She believes that antiquated legal conception started our training in morality but must give way to a higher morality so that "The time will come in which the child will be looked upon as holy..."[3]

From the earliest age she would like to see people taught about their future duties as parents :

> Children must be taught from their earliest years about their existence and their future duties as men and women. So mothers and fathers together can impress on the conscience of the children not any abstract conception of purity, but the concrete commandment of chastity in letters of fire. So they will keep their health, their atractiveness, their guilelessness, for the being they are to love; for the children who from this love will receive their life.3

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, p.32.

2. Ibid.,p.36.

3.Ibid.,p.44.

4. Ibid.,p.51.

What we lack in Ellen Key's estimation is aesthetic feeling and religious reverence for the mystery of existence and that "In this mystery there are still hidden fields only penetrated by the intuition."[1] She consider that Nietzsche who in her opinion knew little about women nevertheless spoke more profoundly on the subject of parenthood than any contemporary writer.

> He saw what impurity, what poverty are concealed under the name of marriage. He saw how meretricious, how ignorant education is. In his writings are to be found prophetical and poetical words describing the end aimed at in parenthood, and showing what true parenthood should be. "Living memorials shalt thou build for thy victory, and for thy emancipation2

To Ellen Key Nature has decided the role of women and she cannot or should not go beyond these bounds for to do so is to interfere with the rights of the child. This is not to say that every woman should be a mother, but for those who do desire it she believes that they need to be protected.

> It does not occur to the dogmatic advocates of women's rights that their talk about individual freedom of the woman to control her own career, their contention that no limitation should restrict woman's power of deciding her own vocation, because they are married or are mothers, mean the most crying injury, not only to children, but to women themselves. For the demand of equality, where nature has made inequality, brings about the injury of the weaker factor. Equality is not justice. Often it is just the opposite, the most absolute injustice.3

She believes that Ruskin's judgment on modern industrialism which kills the real humanity in man holds good for both men and women. We are so taken up with the improvement and use of nature we neglect the improvement and refinement of our own souls. By competing with men in the work force she claims that men's work is reduced and women's bodies are worn out by work making them unfit to be mothers. In the future she sees a time when it

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1. Ellen Key, The Century of the Child, G.P.Putnam and Sons, New York and London, 1909, p.56.

2. Ibid.,p.61.

3. Ibid.,p.76.

will be a crime for a woman to neglect her body in this way, or by use of stimulants etc.

> The mother is the most precious possession of the nation...so precious that society advances its own highest well-being when it protects the function of the mother.1

She foresees a time when the cost of maintenance of children will not fall solely on the parent but on the state because this work will be valued. In this respect she and Jeffreys are in agreement. Like him she wishes to see family life strengthened.

In her view individualism leads to conflict, class against class, sex against sex, unmarried against married, young against old, therefore we need a different transformed society, one where women are not forced into competitive struggle, for occupation does not equal emancipation for them. Moreover every social regulation should be tested to see if it brings us nearer to a society where all work moderately under healthy conditions for an adequate wage.

Women have begun to treat love as a game she finds but they are not solely sexual beings dependent on man, the home, and the family and must have free choice to fulfil their destiny as mothers. The transformation necessary to society will begin she thinks with the unborn child

> This requires an entirely new conception of the vocation of mother, a tremendous effort of will, continuous inspiration....The long continued habit of alternately caressing and striking one's children is not education, It needs tremendous power to do one's duty to a single child.2

This means that one's soul has to be filled entirely by the child just as the scientist or artist is is consumed by his work, for the child

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, pp.84-85.

2. Ibid.,p.101.

must be always in one's thoughts. At present no-one is trained for motherhood or fatherhood but this she thinks must change so that together they can bring up a new generation.

Ellen Key is impressed by the words of Madame de Stael who said that only people who can play with children are able to educate them for one must become a child oneself, be absorbed in his or her life and treat the child as an equal, with confidence; not to influence the child to be what we wish, nor to deceive but to treat with seriousness and sincerity. The greatest evil we perpetrate in our relations with children is not leaving them in peace. To understand them the deepest characteristic of love must be present but we are over tender, ever vigilant, zealous, interfering, advising, helping the child "to become a complete example in a model series."[1]

The art of natural education she believes is to ignore the faults of children nine times out of ten. The ideal is to be a companion which requires that one also develops under the constant influence of the best things in one's own time. The child's chief work is to think over those things with which he comes into contact. and "even mild pressure towards conformity can make the whole of childhood in torment."[2] The ways of injuring a child are infinite she says and the ways of helping him are few. We need also to preserve the individuality which interference destroys.

Because people do not realise how new types are formed the old ones constantly repeat themselves and the old fashioned crude training produced characters of what she calls a fixed type. Our crude methods of education

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1. Ellen Key, The Century of the Child, G.P.Putnam and Sons, New York and London, 1909, pp.111.

2. Ibid.,p.116.

will change and must change for "A grown man would become insane if joking Titans treated him for a single day as a child is treated for a year."[1] Her prediction for the future is that as "as the evolution of man's soul advances to undreamed of possibilities, of capacity, of profundity; as the spiritual life of the generation becomes more manifold in its combinations and in its distinctions...."[2] Children she thinks will be restored to the home which will become a home for the souls and not bodies alone. We already see in our own time a distinct movement away from formal schooling institutions by a growing number of people who are dissatisfied with the effects of formal educational institutions. Key says we create artificial environments for children who no longer work alongside us, but they need real occupations. Mothers she thinks do too much for them and train them to be always receptive rather than giving. We encourage acquisitive impulses and "The worst feature of our system are the playthings which imitate the luxury of grown people." Anyone who has recently toured a toy store would probably agree with her on this point. To play with children in the right way she says is a great art.

> We must realise that every pebble by which one breaks into the glossy depths of the child's soul will extend its influence through centuries in ever widening circles...we can in a certain measure, as free beings, determine the future destiny of the human race...by seeing the whole process in the light of the religion of development.3

This will happen when we learn how to treat children and we will thereby become more like them ourselves for getting old is not a necessity she says but a bad habit. Of the true artists in education she includes, Socrates,

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1. Ellen Key, The Century of the Child, G.P.Putnam and Sons, New York and London, 1909, pp.130.

2. Ibid.,p.162.

3. Ibid.,p.183.

Jesus, Comenius, Montaigne, Basedow, Pestalozzi,Salzmann, Froebel,Herbert, Lesing,Herder, Goethe, Kant, Locke and Spenser.

Ellen Key is convinced of the theory which says that the history of the species is repeated in the history of the individual. Of the school curriculum she says that it "files down man's brain."[1] and she refers to "soul murder" in the schools for what she thinks they have destroyed is the desire for knowledge, the capacity for acting for oneself, and the gift of observation. She criticises the pursuit of individualism but nevertheless advocates the training of the individual as the basis of schooling developing towards advanced independent study. Some free time must be given and only the study of literature for homework is what she recommends. Class sizes should be no more than twelve in number. She is also aware of the need to give a holistic view of a subject or period as in history and thinks that no more than two subjects should be studied at one time, for: "The imagination of children requires full, deep impressions, as material for their energies that are incessantly creating and reconstructing."[2]

High schools and colleges she considered absolutely destructive of personality. Examinations she would obliterate from the face of the earth. "Our age cries for personality"[3] she says and this is the very thing that we suppress. She blames parents for accepting the system as it is and the incapacity of teachers to critically evaluate it. Schools she says are everlastingly talking about the child but harmony cannot be worked up from pedagogical formulas. Nothing less than a revolution would satisfy her for

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, pp.189.

2. Ibid.,p.223.

3. Ibid.,p.232.

the school she thinks has only one great end, that is to make itself unnecessary.

At the time of her writing Ellen Key considered that schools "moulded" children, a metaphor we have seen in use for some centuries. In her school for the future there would be no reports, rewards, examinations.
Each scholar would keep his/her own records and observations. The 'reader' would disappear and the school library would be the largest and most attractive room. The school would be set in attractive gardens. One recommendation which may surprise modern readers is that kindergarten and primary schools would be replaced by instruction at home, for these places are mere substitutes in her eyes for the quality education that can go on at home.

> One of the tasks of the future is the creation of a generation of trained mothers, who among other things will emancipate children from the kindergarten system.[1]

Her reason is that she believes that unrestrained play deepens the soul, increases the capacity for invention and stimulates the imagination a hundredfold. She is convinced that "The kindergarten system is ...one of the most effective means to produce the weak dilettante and the self-satisfied average man."[2] Children need freedom as animals do and mothers need to be acute observers learning to know their children. "The kindergarten is only a factory"[3] The esprit de corps breeds passivity and lack of public conscience she thinks rather we should be aiming to produce people not masses. Schools encourage only superficial relations but in the home which is a natural community, emotional elements can be

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, pp.235.

2. Ibid.,p.236.

3. Ibid.,p.240.

deepened and tenderness can be developed. In schools we attain only a standard of stupidity. Some of our most successful people as she says had little formal schooling. Goethe as an example learnt the Bible at his mother's work-table, French from a theatrical company, English from a language master in company with his father, Italian from hearing his sister being taught, Maths from a household friend, he corresponded with relatives around the world in different languages, studied geography from books of travel, accompanied his father frequently on travels, observed different kinds of handwork and tried experiments of his own skill.

Ellen Key has little good to say about schools for she believes that they destroy memory, stifle the emotions and generally belittle life. She sees the values of legends as suitable for children's minds before they come to great literature. Her idea that all study should be voluntary has great personal appeal. She has great faith in the ability of children to recognize and choose the best. Speaking of teachers she recommends that they have improved conditions of work and a shortened work life so that they can only give of their best.

Key makes am interesting observation on the teaching of religion in schools to the effect that it shows how deeply religious we are by nature when religious instruction has so far not managed to destroy religion. Like Frye and Jeffreys she sees value in letting children read the Bible but without formal instruction. She considers that it has been a grave mistake to teach the Old Testament as if it were binding truth. Rather she would let people come to their own conclusions about truth and morality. She sees people abandoning formal religion because it is unnecessarily authoritative yet religion is a natural element in our nature. For children the most important consideration is to always tell them the truth and not offer them piety and hypocrisy. She abhors the concept of man as sin-laden

because this in her eyes has kept him where he is. Rather she thinks:

> We must bow down before the infinities of our earthly existence and of the world beyond. We must distinguish between and select real ethical values; we must be conscious of the solidarity of mankind, of man's individual duty, to construct for the benefit of the whole race a rich and strong personality. We must look to the great models. We must reverence the Divine and the regular in the course of the world, in the processes of the development of man's mind. These are the new lines of meditation, the new religious feeling of reverence and love that will make the children of the new century strong, sound, and beautiful. 1

Patriotism she sees as a godlessness nourished by egoism and both militarism and clericalism representing authority opposed to individual standards of right. We will continue to be burdened by military preparations:

> until mothers implant in the souls of their children the feeling for humanity before the feeling for their country; until they strive to embrace all living things, plants, animals and men; until they teach them to see, that sympathy involves not only suffering with others but rejoicing with others, and that the individual increases his own emotional capacity, when he learns to feel with other individuals and with other peoples.2

The word soldier would eventually become ennobled when patriotism died and come to mean one who protected sacred human and civil rights. Children will understand that evil not resisted becomes power over others so they will learn self defence as a personal and natural duty.

Considering the fact that Ellen Key wrote this nearly a century ago it is remarkable how many of her ideas are very much in vogue now and how sensitive she was to the problems both of child care in the family and formal education. What she says of children is true as we have seen from both history and art but the scientific theory she claims to start from is not very convincingly explained. As always the nature of the relationship

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1. Ellen Key, The Century of the Child, G.P. Putnam and Sons, New York and London, 1909, pp.308.

2. Ibid.,p.311.

between the body and any notion of a soul are difficult to justify. Her perception of the need for freer discussion of sex has been realised to some extent since her time. The idea that an appreciation of chastity could come from simply reading literature is possible but once more hard to prove. It is true as she says that religious and scientific instruction do not always educate in such matters satisfactorily. It is noticeable that she puts the main burden of education on the mother a factor which would be resisted by many in the women's movement at present and also the responsibility for developing the idea of peaceful coexistence. Her ideal schooling reflects many ideas already explored but the concept of voluntariness, and home schooling for the youngest children have yet to be realised. She gives a warning that Sylvia Ashton Warner would doubtless concur with, and Boas, that there is a tendency with many parents to make the child the centre of their universe and to do too much for them, even sometimes treating them as equal to adults.[1] This is not what she means by reverence for the child, for the parent needs a personality and life too and the richer this is the better parent they will make. As a realist she knows that "My school will not come into existence while governments make their greatest sacrifices for militarism."[2].

It is noticeable how often the same values are cherished by the recent writers, the importance of personality, family and community but there is still no universal consensus on the true nature of children, their ideal nurture and education. They remain in the power of often misguided adults.

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1. Ellen Key, The Century of the Child, G.P.Putnam and Sons, New York and London, 1909, pp.195-6.

2. Ibid.,p.283.

From the evidence surveyed so far we see that in earlier times the human child was sometimes seen merely as human excrement, something to be destroyed when spawned, of no practical use to the parent but an object to be exposed to perish in the wilderness or when older to be sold into slavery or prostitution or bartered as a political hostage or sacrificed to an offended God or Gods.

For centuries those infants which did survive and were not smothered or over-layed in bed, were swaddled like a parcel which was left in any convenient place and thrown about for a joke. A baby was rarely breast-fed by its own mother up to the eighteenth century but put out to nurses where conditions for child-rearing were often abysmal or where alternatively the infant formed an affectionate bond with his surrogate mother from whom he was eventually suddenly separated to return home at his natural parent's convenience.

From this point it was chastised harshly and suffered agonies of abuse in the form of enemas, purgatives and poor diet. It was often left in the company of servants if noble-born or mixed up in the general melee of street, farm or workplace in the lower classes. At the hands of servants with whom it sometimes slept it might also suffer sexual abuse.

Having survived this far the child dressed like a miniature adult but treated often more like a domestic animal and at the beck and call of his elders, might not only experience frightening dreams due to the earlier traumatic events in his life but also be scared by stories of ghosts, devils and demons and be forced to witness horrific events such as executions and circumcisions.

For centuries children of wealthier parents were farmed out to other homes to be trained in social mores. Where formal schooling did exist they were still the victims of harsh corporal punishment and a

restricted style of teaching which suppressed their natural curiosity, ebullience and need for physical activity. They lived in constant fear not only of punishment from parents and teachers but of an all-seeing God who might strike them dead. They were also riddled with guilt because they carried the stigma of original sin and were consequently ashamed of their own bodies and feelings. All of the above was compounded for female children because initially they were not as desirable as boys, who carried on the family blood line, and like their mothers before them were expected to stay at home and without benefit of education prepare to raise the next generation of children by being a household drudge.

Parents of the past were obviously in a quandary as to how to treat this 'object', often regarded as a product of sinfulness. It was therefore a receptacle of guilt which they tried to purge by acts of purification and atonement which included sacrifice in earlier days, circumcision and other barbaric practices and beating the evil out of children the moment they appeared to do wrong. In each age there have been some who recognized the value of children and their potential for growth both intellectual and spiritual and the basic need for a loving care. Whatever they said the more perverse habits seem to have survived for we are still left with many of these primal patterns of child care.

There appear to be only two alternative views, either to look back like some of the classicists, the Pelagians and the Romantics to a time of innocence, joy and beauty, the primal garden of Eden metaphor where the infant is innocent and pure and sullied only by human baseness; or to the Christian concept to whom life is a process of searching for renewal. redemption and grace, that is looking to an after life for the highest level of being, in imitation of Christ. One thing is clear, to construct

any kind of philosophy about childhood we cannot ignore our past any more than we can be sure of our future. Our only hope seems to be to learn from our past mistakes and select those practices which produce the kind of people we would wish our children to be, but there's the rub, for we none of us agree apparently on this basis premiss. We have an advantage over our ancestors because we have their experiences to draw on as well as the benefits of scientific knowledge. Perhaps Ellen Key[1] is right, if we began with the child's needs for the future and let every other concern flow on from this. If she is right then women have made the wrong choice to compete with men on their terms for men made the same error says Robert Graves[1] when they turned from worship of women and the Moon Goddess and idolized themselves and their own thoughts. If they are both right then we may simply replace the patriarchal heritage with a matriarchal one and we fall into the same trap. Our metaphors of childhhood will reveal our stance.

We cannot escape having a state of childhood for each generation is succeeded by another. Attitudes to childhood can change and be reflected by each new decade possibly reversing everything a previous one believed. We still live with vestiges of former beliefs for example the adage that children should be seen and not heard, that one spares the rod and spoils the child. Innumerable people still believe in corporal punishment. In yesterday's news in this country a judge publicly exonerated a father for

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1. Ellen Key, The Century of the Child, G.P.Putnam and Sons, New York and London, 1909.

2. Roberts Graves, The White Goddess, Faber and Faber, London, 1975, p.11.

beating his two young sons. The following day I read of a healthy baby a few weeks old killed by its parents, and there are still numerous abortions performed [7,130 in N.Z. 1986] and occasional cases of infanticide. In Thailand scientists are overjoyed to find that they have discovered a method which almost guarantees the chances of a woman bearing a son, at least 3:1. In general it is observed by social scientists that families tend to repeat the patterns of child rearing that they themselves have experienced. Thus we find that child-beaters produce child-abusers and so forth. Feminist Germaine Greer has said that the Western world had become a child-hating society and the current accounts of child abuse corroborate this.[1]

It is obvious that parenting is a traumatic experience especially for young inexperienced couples or parents coping with social problems such as poor housing, marital breakdowns, sickness etc. This role of a parent requires fairly complex and sophisticated skills in human relationship such as redeployment of power and responsibility, physical and emotional adjustment. It is also circumscribed by status, income, and social milieu, subject to the influences of family, advice from medical experts and more mysteriously a heritage of folk wisdom which is a mixture of archaic superstitions as well as much common sense. In the normal or average situation however it is also obvious that knowledge of worthwhile parenting practices could be taught to people. The fact that society virtually ignores this need in its citizens is surprising. We tend to assume that parenting is instinctive like the procreative act itself. It is obvious from even a quick glance back at history that its path might have been different if people had more

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1. Germaine Greer, quoted in the Editorial, _The Evening Post_, Wellington, New Zealand, March 16, 1988.

idea of what effect their child rearing patterns can have and understood the rationale (when there is one) behind some of them. There seems to be no excuse nowadays for neglecting this vital area of human knowledge. It is not only teachers who need a basic knowledge of child development and psychology.

Our current situation is probably a reflection also of a tendency in the past for the young child's care to be principally the mother's domain and as she has not been educated to the same extent as male children her learning of these skills has been passed on in informal ways within the family. Now that both parents acknowledge more and more their dual responsibility for a child and as women achieve a more equal status perhaps this need for parent education will be acknowleged and catered for. We know enough about children now to help parents avoid major errors in their childrearing even if we know that every child is unique and every parent-child situation to some degree.

There are common patterns which a study of the evolving concept of childhood shows. It is true that even an interest in children has not always been healthy but we have developed beyond that self-conscious stage of seeing ourselves too much in our children and sacrificing them for our own ends or of seeing children as a distinctly separate category from us. The empathy we need, to share our lives with them as partners, is not something we are magically endowed with at the moment our children are born, it is accumulated from our own upbringing and our formal education minimal though this may be at present.

In every age there have been people with the insight and understanding necessary to improve the lot not only of children but consequently of parents also, but their ideas have to be known and passed on re-examined and adapted to effect ongoing change and inprove the quality of a child's

life experiences.

Erikson came to the conclusion that:

> in our time man must decide whether he can afford to continue the exploitation of childhood as an arsenal of irrational fears, or whether the relationship of adult and child, like other inequalities, can be raised to a position of partnership in a more reasonable order of things.1

Whatever we decide children always have to accept, for they are dependent on us. It is unlikely that there will be a perfect childhood for all children for many decades yet and we are of course haunted by the fact that there may be no world for them to be born into. At present with our fairly rigid system of compulsory schooling which tends to become longer they are virtual PRISONERS serving a sentence filling nearly a sixth of the average lifespan. If we do not improve our record of child care they are also likely to be, like so many children in the past, helpless VICTIMS.

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1. Erik H.Erikson,Childhood and Society, Penguin Books, England, 1967,p.42.

CHAPTER V

METAPHOR IN EDUCATION

> The metaphors and images of schooling and teaching that we acquire have profound consequences for our educational values and for our views of how schooling should occur.[1]

Many people with a particular interest in education have come to recognize the insights that can be gained from a study of metaphor, even though it has been accused, as David Aspin says of "one of the cardinal errors of logic--that of fallacy of analogy."[2] Educational discourse is nevertheless replete with metaphors, beginning with Plato's Myth of the Sun and Cave in Book VII of the Republic down to a more modern example in the Plowden report which informed us that "At the heart of every educational processs lies the child."[3] A more recent example closer to home occurs in the the Treasury brief to the incoming government in New Zealand in 1987 which speaks of institutionalized education as a 'service': "Education can be analysed in a similar way to any other service in terms of

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1. E.W.Eisner, The Educational Imagination, Macmillan, New York, 1979, p.261.

2. David Aspin,' Metaphor and Meaning in Educational Discourse' in Metaphors of Education,ed. W.Taylor, Heinemann, London, 1984.p.21.

3. Ibid.,p.22.

interaction and exchange in the face of uncertainty, information costs, scarcity, interdependence and opportunism." Aware, that these terms which to them are "analytically robust," might seem harsh to educationists, they camouflaged them slightly in the chapter of the report entitled 'The Nature of Education', as, 'functions' of education: fulfilment, integration, economic, custodial; and the government's role was described as 'intervention'.[1]

Metaphors of and in education are not meant to be taken literally. They serve as tools for describing, for analysing, for guiding teaching theory and practice. Many of them have become outdated. In this chapter I refer to some of the more common or persistent ones and their origins and how these have influenced educational philosophy and teaching practice, for each new metaphor becomes a label for a new school of thought and influence, although, as R.F.Dearden warned, they function "as a symbolic image, pregnant with meaning, and rich in emotional appeal"[2]-- which is in itself a statement filled with metaphor. Slogans become diffuse in their meaning and open to various interpretations. Worse still these 'catchphrases' often stand in place of true theory, and give rise to a belief that metaphor ought to be eradicated from education altogether. Tim Linzey finds that metaphors in educational discourse have "putatively pernicious effects" and much metaphor is "merely aphoristic reference," although he is willing to use them as heuristic aids once they are reduced to similes or models.[3] Aspin disagrees: "It is arguable that our educational theories would become sharper instruments, less liable to fallacy, if we would dispense with

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1. Government Management, Brief to the Incoming Government, Vol.II, Education Issues, published by The Treasury, Wellington, New Zealand, 1987.pp.6,24,25,41.

3. T.J.Linzey, University of Otago,'How to Kill a Metaphor,'a paper presented to the P.E.S.A. Conference Melbourne, August 1987.pp.28-9.

metaphor altogether."[1]

Aspin says that Stebbing also considers metaphor as simply confusing and emotional use of language whereas Science is seen as a model of logic, truth and reality; a belief modern philosophers and some scientists question [see chapter on Science]; and positivists, by eradicating metaphor, would also rule out much of our language, especially in the areas of religion and literature. This is one reason why metaphor has become once more the concern of philosophers.

The use of metaphor, depends, in Aspin's opinion, on what we believe about the nature of language and the function of metaphor within it. He concludes that "there is a theory of meaning that gets over the problems that have to be faced by verificationist, mentalist, causal and other accounts of linguistic meaning."[2] It requires us to look at how language is USED; whether with common agreement and definitivity, as in common usage of words like 'table' 'desk' and 'chair,' or in the more 'open-textured' use of words. In this theory, context and manner of word use is of importance and by "a process of interpretation or negotiation, we can establish our own agreements as to meaning and significance for the purposes we have in mind and in the particular institutional contexts in which we operate."[3]

That metaphors lose their novelty and become part of standard usage is part of the normal development of language:

> Metaphors such as 'core curriculum' gain currency in proportion as they encapsulate and present particular conceptions of which the participants in educational discourse had previously an ill-informed awareness only, in a form of such innovation and attractiveness that

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1. David Aspin,' Metaphor and Meaning in Educational Discourse' in <u>Metaphors of Education</u>,ed. W.Taylor, Heinemann, London, 1984.p.23.

2. and 3. Ibid.,p.27.

their appropriateness is immediately judged by all to be beyond question.1

Aspin's 'by all' may be a slight case of hyperbole but we can appreciate his meaning. What he does not mention is that it is generally one person or a group such as a research team who crystallise this process or development of thought by coming up with an idea, phrase or word to act as a catalyst. In this way we get expressions such as 'team-teaching' with its sporting connotation or 'programmed-learning' in the era of computers and suggesting a quasi-logical operation.

Taylor believes that in trying to make education comprehensible we pile one metaphor on top of another "Ordering and classifying for our own purposes phenomena we have already metaphorised, and often in the process destroying the meaning that these phenomena have acquired for those closest to them."[2] An example of what he describes is the widely prevalent use of the term 'vocational' which originally meant a 'calling' and was used to describe a life of work in a religious institution and was often applied to medicine and teaching. Now it is used to describe any educational course designed to lead to employment.

It is important therefore in Taylor's view to have a reflective awareness of metaphors and how we use them for they can be " seductively reductionist"[3] and we need to be aware that "The metaphors of education represent the claims made by groups to impose their own sets of meanings on

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1. David Aspin,' Metaphor and Meaning in Educational Discourse' in Metaphors of Education, ed. W.Taylor, Heinemann, London, 1984.p.28.

2. William Taylor,'Metaphors of Educational Discourse,' in Metaphors of Education, ed. W.Taylor, Heinemann, London, 1984.p.23.

3. Ibid.,p.11.

experience."[1] Educational metaphors comprise what he calls "a shared referential library"[2] to those who participate in educational discourse and they are also drawn from many disciplines.

There is another interesting factor which Taylor points out, that we have metaphors such as Weber's 'world images', Popper's 'world hypotheses', Black's 'archetypes' and Macrae's 'root metaphors,' all referring to ideas and principles which may in fact never influence classroom practice, and that educational discourse can be far removed from the task of teaching. Many current reports on education reflect this problem. Taylor himself uses an architectural metaphor to suggest the necessity of marrying [another common metaphor!] theory and practice. What is said, thought and written about education, even when presented in scientific form, is, as he says, intended to persuade or to convince. One might almost say that there are no right answers and only strong argument and opinion prevails. When backed by research it is all the more convincing, so it finally comes down to rhetoric and the power to convince and persuade, an ancient art as we have already seen and one moreover in which only a minority are highly skilled and can therefore wield considerable power. All of which leads him to conclude that educational discourse is for the most part "a trop(e)ical jungle."[3]

As Eisner sees it we have been drawn too often into the trap of emulating scientific, military and industrial language to describe education, and often this results in simplistic, mechanical solutions being sought. Control and standardized outcomes have been a preoccupation. He

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1. and 2. William Taylor,'Metaphors of Educational Discourse,' in <u>Metaphors of Education</u>,ed. W.Taylor, Heinemann, London, 1984.p.17.

3. Ibid.,p20.

sees that we need models that are heuristic and useful and that teaching needs to be recognized as an art. It is ironic as he says that education usually comes under the umbrella of the arts, yet the conceptual tools for studying and criticizing the arts are rarely used. For him the culture of the school functions as an organic entity that is ever changing yet seeks stability. This fits in with more current paradigms of education and other disciplines also.

Eisner sees that because language derives from a set of images which are often visual, when we consider what education is and what should be taught "Language seems to reinforce and legitimize these images."[1] A new word CAN create a new world. For this reason he agrees that we ought to be critically aware of this factor:

> The dominant image of schooling in America has been the factory and the dominant image of teaching and learning the assembly line. These images underestimate the complexities of teaching and neglect the differences between education and training. 2

The use of such metaphors implies technical acumen, suggesting systemization and rationality; an illusion of control is created. What should concern us is that: "Eventually the use of such language changes the aims of the enterprise...Education becomes converted from a process into a commodity, something one gets then sells."[3] The lay public is reassured by such metaphors for ;

> Rationality has been conceived as scientific in nature, and cognition has been reduced to knowing in words, as a result, alternative views of knowledge and mind have been omitted in the preparation of teachers, administrators and educational researchers.4

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1. and 2. Elliot W.Eisner, The Educational Imagination, Macmillan, New York, 1979, p.262.

3. Ibid.,p.263.

4. Ibid.,p.264.

In this kind of atmosphere the intelligence needed to create poetry, music, or the visual arts simply does not count but only that which is measurable as in the form of scholastic achievement tests, for our view of learning is shaped by what we measure, the tacit ideal being as he says that of the hard sciences. Eisner believes that: "The model of natural science on which much educational research is based is probably inappropriate for most of the problems and aims of teaching, learning and curriculum development."[1] Hence there is little in research that guides practice.

> Knowing, like teaching, requires the organism to be active and to construct meaningful PATTERNS (my emphasis) out of experience. At base such patterns are artistic constructions. a means through which the human creates a concept of reality...Pattern is an inescapable quality of the organization of thought.2

The human organism is structure-seeking and pattern-forming in his view, and to make such patterns requires an environment supportive of exploratory thought, but because the factors that influence schooling often have their origin far from the school such an environment rarely exists. Like others he see the dangers in mere slogans for they replace real thought and enable school practitioners to avoid dealing with persistent problems of practice. We talk about excellence in teaching says Eisner as if it were a single set of qualities and evaluate teaching with a single image of pedagogical merit.

Taylor believes that an unreflective use of metaphors is dangerous and Aspin says they can also stop thought and development of ideas if we cling to them, he gives examples: 'child-centred','education for citizenship', 'teacher-accountability.' If these are never questioned they become not

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1. and 2. Elliot W.Eisner, The Educational Imagination, Macmillan, New York, 1979, p.265.

2. Ibid.,p.271.

agents for change but ends in themselves in the narrow perspective of one metaphor. It has been said so often that the medium is the message and can massage us into lethargy.

There is no doubt that "metaphors help us the better to strive towards grasping the visions and truths of their artificers and attempting however imperfectly to share in them"[1] However they can mislead us and make us believe that we have arrived at a 'truth' or 'law' or a conclusive answer of some kind when in fact they may be only another step in our search for such. 'Truth' is an elusive concept and perhaps truism is a more apt word in many cases. As Aspin says "The creative imagination works in and through metaphor and presents us with an increased awareness of alternative possible worlds."[2] Goodman, he says has expressed this perfectly ..." a metaphor is an affair betwen a predicate with a past and an object that yields while protesting."[3] To extend his analogy, the liaison can be fruitful and give birth to new insights and new direction in teaching practice and to research in education. On the other hand such products can be weak, or flawed. They can also die or outlive their usefulness. Aspin agrees with Davidson's statement that :

> Metaphor is the dreamwork of language, and like all dreamwork its interpretation reflects as much on the interpreter as on the originator. The interpretation of dreams requires collaboration between a dreamer and a waker, even if they be the same person; and the act of interpretation is itself a work of the imagination. So, too, understanding a metaphor is as much a creative endeavour as making a metaphor, and as little guided by rules.4

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1. David Aspin,' Metaphor and Meaning in Educational Discourse' in <u>Metaphors of Education</u>,ed. W.Taylor, Heinemann, London, 1984,p.34.

2. Ibid.,p.34.

3. Ibid.,p.35.

4. Ibid.,p.36

It is interesting to trace where some of the more dominant metaphors of education have come from. For a history of metaphor one has to turn back to Aristotle and for one of the earliest images of education we also go to the Greeks as mentioned in the opening of this chapter. The first metaphor and model comes originally from Socrates and his approach to the slave boy "It is a view of knowledge as a mode of vision or insight which must be stimulated by a teacher and what a teacher does in encounters with a student."[1] In the Republic "the metaphor for this kind of self-initiated activity (in the section dealing with the myth of the cave) is an emergence out of the darkness into the light."[2] Aristotle spoke of self-realization as the attainment of happines or eudaimonia. The teacher's task was to encourage the habits of good disposition and moral behaviour and to instruct the development of the intellect, two separate areas of concern.

> The dominant metaphor in Aristotle's thinking was a hierarchy, a kind of pyramid arising out of inchoateness, culminating in the abstraction of pure form. we might think of Dante's later representation of it in the INFERNO, describing the continual climbing in order "to glimpse those things whose beauty nothing mars....."[3]

In his SYMPOSIUM Plato describes the phases of his own intitiation into wisdom through the use of myth and metaphor to illustrate the power of the principles of good and beauty and their importance in one's life:

> Philsophers today rarely think in terms of a metaphor of ascent; nor do they think of knowledge as a representation of nature or of ideal abstractions or "forms." But there remains the image of the teacher struggling to move others to become norm governed, to choose to aspire and live according to principles, to create orders in experience by means of concepts and forms. Moreover, at least for some, there

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1. Maxine Greene, Philosophy and Teaching, Handbook of Research on Teaching,ed. M.C.Wittrock, Macmillan New York,1986, p.482.

2. Ibid.p.482.

3. Ibid.,p.483.

> remains the society, with its cacophonous voices and points of view; and there seems to be a desperate need to provoke individuals somehow to overcome self-interest, to achieve some ultimate agreement, to transcend towards the "real." The SYMPOSIUM offers a metaphorical paradigm--perhaps of what education should be. 1

Greene notes that we continually turn back to these early ideas and she cites the current preoccupation with excellence "primarily cognitive excellence" as an example.

Scheffler analyzed three dominant early models of education the IMPRESSION, the INSIGHT and the RULE models derived respectively from the writings of Plato, Saint Augustine, Locke and Kant. Each of these began with a metaphor used to describe how the writer perceived education.

The impression model is the simplest and probably the most widespread. It basically considers knowledge as input fed into the learner who in this case was seen as a TABULA RASA by Locke. In this model says Scheffler the mind is seen as blank or empty at birth and increasing in growth as information is deposited onto or into it. But as he perceives it, this:

> Implicit conception of the growth of knowledge is false. Knowledge is not a standardized processing of sensory particulars--knowledge is, first and foremost, embodied in language, and involves a conceptual apparatus not derivable from the sensory data but imposed upon them.2

The mind alone does not cope with information, there is also what he calls guesswork and invention as well as culture and custom. Moreover knowledge involves theory, it is a creative and individualistic enterprise. Experience tests our theories but does not generate them. Many facets of this process

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1. Maxine Greene, Philosophy and Teaching, Handbook of Research on Teaching,ed. M.C.Wittrock, Macmillan New York,1986, p.482.

2. Israel Scheffler,'Philosophical Models of Teaching,'Philosophical Foundations of Education,ed. S.M.Cahn, Harper and Row 1970,p.387. From Harvard Educational Review; Vol.35, Spring 1965.

of learning have to be considered and they are inextricably linked. Context is important as many other writers also say. Scheffler argues that "We need to feed in not only sensory data but the correlated verbal PATTERNINGS [my emphasis] of such data, that is, the statements about such data that we ourselves accept."[1]

To store all accepted theories, Scheffler says is not the same as being able to use them properly in context, so all versions of the impression model finally have this defect: "They fail to make adequate room for radical INNOVATION by the learner... There is a fundamental gap which teaching cannot bridge simply by expansion or reorganisation of the curriculum input."[2] It is interesting that he uses the metaphor of a bridge here for the word itself has this intrinsic literal meaning.

The storage model still persists and came under attack fairly recently by Profesor Marshall Gregory who describes it as one of the governing metaphors we rely on. He likens the storage model to the young bride's 'hope chest' into which she stuffs commodities for her dreams of the future. In the same way young people are encouraged to store information as useful and "Memory is in fact the primary mechanism of modern education."[3] Students believe that only factual material is true and important and they avoid problem-solving and discussion because it wastes time. Liberal education suffers as a result. Yet in real life as Gregory says most important decisions are made in situations where facts are distinctly

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1. Israel Scheffler,'Philosophical Models of Teaching,'Philosophical Foundations of Education,ed. S.M.Cahn, Harper and Row 1970,p.388. From Harvard Educational Review; Vol.35, Spring 1965.

2. Ibid.,p.388.

3. Marshall Gregory,'If Education Is a Feast, Why Do We Restrict The Menu? A critique of pedagogical metaphors,College Teaching, Vol.35,Part 3, 1987,p.102.

lacking. Students are led to "think of all knowledge as consisting of right and wrong answers."[1] The effect of this is that they must feel that the knowledge they acquire does not really belong to them.

> Learning is storage produces three corollary metaphors, all of them equally damaging to liberal education; TEACHERS ARE EXPERTS, STUDENTS ARE CLIENTS, and EXPERTS ARE MORALLY NEUTRAL CONDUITS OF INFORMATION. To accomplish this delicate procedure with efficiency and tact, it is necessary that they should shut up, avoid wiggling, and above all avoid interrupting. Our pedagogy often tells them that they should behave in our classes the way many lawyers and doctors expect us to behave in their offices. The relationship thus produced is not one of cooperative learning, but one of professional distance.2

His words ring very true in the light of the recent revelations about the paternalism in medical treatment of women in New Zealand.[3] If teachers pursue this kind of professionalism there is a danger that they become, thinks Gregory, experts who do not really live by their knowledge, that is do not practise what they preach, but transmit it dispassionately in professional settings; such teachers are not fellow learners with their pupils.

One concern he has is that under this model we simply teach too much and give little time to thoughtful reflection. This is a far cry he says from the model Socrates deployed even though we could hardly imitate him as a model in our times. Like Eisner he is dismayed by the information-factory model he sees being pursued when we "should be helping our students to evaluate information...teaching them how to separate trivial from important information, by using critical judgments, ethical standards, and logic."[4]

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1. Marshall Gregory,'If Education Is a Feast, Why Do We Restrict The Menu? A critique of pedagogical metaphors,<u>College Teaching</u>, Vol.35,Part 3, 1987,p.103.

2. Ibid.,p.103.

3. Sandra Coney,<u>The Unfortunate Experiment</u>,Penguin,New Zealand,1988.

4. Gregory, p.104.

The storage metaphor is stultifyingly utilitarian and deceives young people into thinking that we are giving them information vital for their survival in the adult world. This he considers coercive and hypocritical on the part of teachers. Gregory blames those who have been made disheartened and cynical by the large and powerful forces working against liberal education. "All education is based on values and forms values as surely as sunlit trees cast a shadow."[1] A lovely image he leaves us with for he believes that "the liberal arts are too valuable to be abandoned."[2]

In the INSIGHT model as explained by Scheffler knowledge is conceived of as VISION. This idea derives from Plato and is found in the writings of Augustine who said that words alone are mere noises and through them nothing is conveyed for "language must have a function wholly distinct from that of the signification of realities; it is used to prompt people in certain ways."[3] Simply believing what one is told is not to know it. " For knowledge, in short, requires the individual himself to have a grasp of the realities lying behind the words."[4]

Scheffler however believes that we can understand statements before becoming acquainted with their signified realities for the syntax of a sentence is meaningful to us. He considers that Augustine confuses the meaning of WORDS with that of SENTENCES. Word meanings we do have to know in order to understand. To be informed however, he agrees, is no guarantee of knowing, for, "new INFORMATION, in short, can be intelligibly conveyed by

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1. Marshall Gregory,'If Education Is a Feast, Why Do We Restrict The Menu? A critique of pedagogical metaphors,<u>College Teaching</u>, Vol.35,Part 3, 1987,p.106.

2. Ibid.,p106.

3. and 4.Israel Scheffler,'Philosophical Models of Teaching, <u>Philosophical Foundations of Education</u>,ed. S.M.Cahn, Harper and Row 1970,p.389. From Harvard Educational Review; Vol.35, Spring 1965.

statements; new Knowledge cannot."[1] This notion of an "interior light" is one I will return to later for it seems to me as pervasive as the growth metaphor but fails to attract as much attention and may in fact be more worthy of interest.

Where Augustine's ideas vary slightly to Plato's is in his concept of will and this has led Hannah Arendt to call him "the first philosopher of the Will"[2] This indicates a rejection of cyclical views of time and history and according to Greene "It opened the possibility of imagining what it might mean to move persons voluntarily to choose to learn."[3]

The insight and impression models come from two opposing views but both are cognitive models. Scheffler says that the impression model preserves heritage and culture, but has little to do with actual teaching and learning. He thinks that the concept of a vision of reality in the insight model is impossibly simple for it does not "make adequate room for principled deliberation in the characterisation of knowing."[4]

According to Scheffler Kant is linked with the RULE model where the emphasis is on reason and reason is always a matter of abiding by general rules and principles. Where the impression and insight model are peculiarly and narrowly cognitive in relevance, Sheffler sees the rule model as embracing conduct also. In this model "teaching should be geared not simply to the transfer of information nor even the development of insight; but to the inculcation of principled judgment and conduct, the building of

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1. Israel Scheffler, Philosophical Models of teaching, in Philosophical Foundations of Education, Harper and Row, New York.p.390.

2. Maxine Greene, Philosophy and Teaching, Handbook of Research on Teaching,ed. M.C.Wittrock, Macmillan New York,1986, p.484.

3. Ibid.,p.484.

4. Scheffler,p.392.

autonomous and rational character which underlies the enterprises of science, morality and culture."[1]

Scheffler sees much value in the rule model yet finds it somewhat formal and abstract. As he says the rules of science are not fixed, they evolve and grow with the advance of knowledge and they too form a tradition.

For Kant, concepts and understanding are defined in terms of universals that serve as rules; and this view continues to have an effect on many ways of doing philosophy with respect to teaching today:

> Kant's view of conceptual ordering of experience continues to exert the greatest influence as more and more theorists of teaching call attention to the importance of introducing students, not simply to specific modes of inquiring, but to what Paul Hirst calls "networks of related concepts".2

We are now aware says Greene that Kant's universals are not so, and that as cultures differ so do the models, but it is thought that his notion of structures has permeated Piaget's distinctive structuralism.

Jerome Bruner also believes that "a principal task of intellect is the construction of explanatory models for the ordering of experience."[3] With this view the teacher's problem is to invent modes of access to the empowering skills or techniques in the culture. This emphasis on form and structure Greene finds dominant at present and can be traced back to Kant, its consequence is a cognitivist emphasis in teaching which relates in part to the focus of this study:

> Definiteness in cognition, it has been said IS structure; what is involved is an organisation of materials around focal ideas and relationships. Many teachers, therefore, are asked to focus upon

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1. Israel Scheffler, Philosophical Models of teaching, in _Philosophical Foundations of Education_, Harper and Row, New York.p.394.

2. Maxine Greene, Philosophy and Teaching, _Handbook of research on Teaching_,ed. M.C.Wittrock, Macmillan New York,1986, p.487.

3. Ibid.,p.488.

> systems of notation and general ideas, or on the "forms of knowledge" we have already mentioned, the "symbol systems" or the languages by means of which we construct our worlds or, rather, "world versions", since (according to Nelson Goodman,1978) there is no world underlying our versions of it..."knowing is as much remaking as reporting....." Discovering laws involves drafting them. Recognizing patterns is very much a matter of inventing and imposing them.1

Greene comments that " teaching very likely, will be more and more oriented to the stimulation of rule-governed reasoning; computational analogies may be taken more and more seriously by students of thinking."[2]

We must pass on these multiple live traditions thinks Scheffler for teaching is not simply as in behaviourist terms "a matter of the teacher's shaping the student's behaviour or of controlling his mind. It is a matter of passing on those traditions of principled thought and action which define the rational life for teacher as well as student."[3] These form what Peters has called standards, and he is quoted:

> To liken education to therapy, to conceive of it as imposing pattern on another person or as fixing the environment so that he "grows" fails to do justice to the shared impersonality both of the content that is handed on and of the criteria by reference to which it is criticized and revised. The teacher is not a detached operator who is bringing about some kind of result in another person which is external to him. His task is to try to get others on the inside of a public form of life that he shares and considers to be worthwhile.4

Peters' own model is generally referred to as INITIATION, and here he does make it sound rather like getting inducted into a social club.

In his overview of these models it is noticeable that the language Scheffler himself uses comes from very recent educational terminology for

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1. Maxine Greene, Philosophy and Teaching, Handbook of Research on Teaching,ed. M.C.Wittrock, Macmillan New York,1986, p.488.

2. Ibid.,p.488

3. Israel Scheffler, Philosophical Models of teaching, in Philosophical Foundations of Education, Harper and Row, New York.p.396.

4. Ibid.,p.396.

example: input, data and processing; all metaphors from computing. For himself the model of education he favours is that of INVITATION "we do not impose our wills on the student, but introduce him to the many mansions of the heritage in which we ourselves strive to live, and to the improvement of which we ourselves are dedicated."[1] His own metaphor is that of the host who invites one to share what he has to offer and it reminds one of the words from St. John's gospel "In my father's house are many mansions."

Quintilian may have been the most influential educational thinker of Ancient Rome but he saw chidren as "vessels with narrow mouths" into which the teacher was to pour oratory and grammar whilst Plutarch saw that "Childhood is a tender thing and easily wrought into any shape."[1] He certainly did not see the child as an empty pitcher but rather as "a fire to be kindled"[3] and that childcare and education resembled good husbandry.

It is obvious that the metaphors of each decade will reflect the pursuits and interests current at that time and it is no surprise that teaching is seen to be analogous with training animals, tilling the soil or skilfully moulding or shaping clay wood or metal. It is only in our own times of course that people have been likened to computers and automatons. Quaint as some of the earlier images now seem to be they are still prevalent. Each writer on education is influenced by the language of the world he or she lives in. Montaigne is a typical example drawing as he does from images of horse training, farming and even nutrition and digestion.

As Carol Clark points out in her study of his Essais these are not

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1. Israel Scheffler, Philosophical Models of teaching, in Philosophical Foundations of Education, Harper and Row, New York.p.396.

2. Elizabeth Lawrence, The Origins and Growth of Modern Education, Penguin, England ,1970,p.39

3. Ibid.,p.41

novel but stock images and most critics have seen in the striking imagery of these essays a reflection of his original approach to educational questions, an approach which they have characterised as being practical and concrete, in contrast to the sterile dogmatism of his predecessors. In Clark's opinion 'concrete' imagery had been a mainstay of argument on educational topics from ancient times onwards. They were a stock-in-trade of rhetoric, to convince and persuade where logic might fail.

One of Montaigne's most frequently used images is that of nutrition and digestion as a model of the educative process and had been similarly used earlier by Seneca and Erasmus.[1] Where we in the twentieth century turn to scientific language to explain e.g. the workings of the mind, the sixteenth century saw "the relation of the teacher to the minds of his pupils invariably as one of agent to patient."[2] Teachers were often likened to craftsmen: "the dyer [used also by Plato], the potter, seal maker, and most importantly farmer---and his pupil with the raw material of the craft--wool, clay, wax, earth or tender plant."'[3] All images one notes are of things vulnerable to making or breaking.

Montaigne, according to Clark only uses such images once, and then in a Latin quotation, for he did not see the child's mind as a 'tabula rasa' but in a less passive role. The image of 'the empty vessel' is likewise not used by him; "but he does show considerable interest in the image of the mind as a clay vessel, partly permeable by its contents, but in turn reacting on them by imparting the flavour of things it has previously

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1. Carol Clark, The Web of Metaphor, French Forum Publishers, Kentucky, 1978, p.54.

2. Ibid.,p.55.

3. Ibid.,p.55.

contained."[1] Rather than being moulded the student is absorbent. In 111-12-1015 this theme is reiterated in more complexity but the most consistent and strongest image used is the agricultural one. Clark says that "metaphors drawn from agricultural practice are found in works on all of the arts (they are common in writings on style and language)...,but they are commonest in writings on education."... "The picture is always the same--the ever-vigilant master extirpating the weeds, sowing the good seed, his pruning knife always at the ready to eliminate any signs of unregenerate nature appearing in his charges."[2] Small wonder then that in "De L'institution des enfans" Montaigne begins with a comparison from agriculture but this is not extended. The only other similar reference is when he describes the care his own father took of his education and regrets that : "il n'a recueilly aucuns fruits repondans a une si exquise culture." And suggests that one reason was the "champ sterile et incommode "of his own temperament.[3]

As Clark points out Montaigne does not see the pupil as 'a sprig of fallen nature' which needs pruning (this phrase is from Saliat). His more unconventional image is one likening the pupil to a colt being broken in by its master. This might seem a harsh image to us but as she explains elsewhere, the relationship between a horse and his master is one of respect and control. Montaigne does use agricultural images because they are a literary convention, but as he believed in being inventive with language he uses stock images in unconventional ways. "The idea of soil as medium,

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1. Carol Clark, The Web of Metaphor, French Forum Publishers, Kentucky, 1978, p.57.

2. Ibid.,p.60.

3. Ibid.,p.60.

determining the character of what is grown in it, is extended in 1,51 from its normal application to the mind and its productions, to society and its productions in the form of art."[1]

If one wonders why agricultural and horticultural metaphors are so common in education, it is presumably because children are so vulnerable, so dependent on adults for so long. This very vulnerability means that the adults have the power to choose their role and attitude towards them. Even now chidren are still maimed, neglected, tortured, bullied, sold and exploited as cheap labour or used as military fodder. Legislation has been used to try to stamp out inhuman practices and the more institutionalized ones such as slavery, mining, chimney sweeping have been prohibited but society cannot merely by laws prevent the abuse and neglect of children. When Montaigne used conventional education imagery it was usually "to stigmatize the practice as he saw it."[2] As a writer of the pre-scientific period he uses imagery to convince rather than to prove, "the relative role of nature and nurture in the formation of human behaviour or of literary style."[3] Writers of a later scientific age however still use imagery and metaphors to explain educational imponderables.

By the time of Rousseau "The paradigm of the TABULA RASA has given way to a paradigm of the growing flower or plant, impelled to ripeness by its own ELAN VITAL."[4] It is the growth metaphor which is the most persistent. Peters according to Greene prefers Plato's image of education

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1. Carol Clark, The Web of Metaphor, French Forum Publishers, Kentucky, 1978, p.62.

2. Ibid.,p.63.

3. Ibid.,p.64.

4. Maxine Greene,Philosophy and teaching,Handbook of Research on Teaching, Macmillan, London,1986,p.486.

as a "turning towards the light" to that of GROWTH for he believes that a concern about growth and self-determination " pay too little heed to the transmission of worthwhile content."[1] He also said that the growth metaphor is "dressing up our value judgments in semi-scientific clothes."[2] and he and Hirst hold that the biological metaphor presents a moral escape from educational issues, social issues, and that behind the growth metaphor is the value of autonomy, and behind autonomy lie the social values of toleration, respect for persons, and fairness, to name a few."[3]

Nevertheless:

> Throughout the years the growth metaphor has served educators and at least one poet in several ways: the student has been the soil, knowledge the seed, and the teacher the tiller and sower; students have been the plants, community the soil, the teacher the gardener or forester; students have been the fruit, experience the tree, the teacher the grafter; and of course students have been weeds in the garden of life off and on forever. It is correct to notice also that opinion is not all in harmony as to whether or how much "natural growth" is to be valued, nor is it unanimous as to how the growth metaphor should be used in defense of an educational theory.4

Dearden says that one searches in vain for an adequate definition of this growth concept, rather "it functions as a symbolic image, pregnant with meaning and rich in emotional appeal."[5] Such notions are found he says in Holmes ("Our business is to grow") in Rousseau's Emile (1762), in Froebel's Education of Man (1826), in Holmes What is and What Might Be (1911), in Dewey's Democracy and Education (1916) and Experience and Education

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1. Maxine Greene,Philosophy and teaching,<u>Handbook of Research on Teaching</u>, Macmillan, London,1986,p.480.

2. David Nyberg,Pruning the Growth metaphor, <u>The Educational Forum</u>, November, 1975,p.27.

3. Ibid.,p.27.

4. Ibid.,p.26.

5. R.F.Dearden,<u>The Philosophy of Primary Education</u>, Routledge and Kegan Paul, London, 1968,p.25.

(1938) and volumes on child development.

Children in the elementary tradition aged but did not grow in this sense, in fact everything designed for education fitted more into the concept of moulding rather than encouraging any natural growth. Growth implies biological development and maturation, and child development is seen as a process of continuing readiness for new activities such as walking, talking etc. Observation of such stages is well documented even though there will be individual variations and the exact moment of change is almost imperceptible. As Dearden says this leads to child development concepts being normative, based on the theoretical construction of an ideal development pattern. This is where the teacher as gardener metaphor arises and the teacher is expected to be ever alert for the right moment of readiness to apply the correct kind of educational fertiliser. Dearden quotes Priestman:

> [Teachers] must regard themselves as gardeners watching development, ready to feed the growth to the best he may be; not worried to make all the plants the same, but trying to bring about that they shall grow, so that the whole garden shall be a harmony.1

It is the vagueness of these admonitions which perplexes us says Dearden for how does one know these signs of growth and readiness and how does one feed or stimulate growth. It is assumed for instance that there is a point in time when one is ready for maths just as there is a stage in babyhood when one is able to develop bladder control. The growth metaphor is biological but without reference points that are biologically visible in the educational field [another physical metaphor]. This concept of readiness also creates situations where children are deprived of access to certain things e.g. books, because it is assumed that they will not be ready for

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1. R.F.Dearden, The Philosophy of Primary Education, Routledge and Kegan Paul, London, 1968, p.29.

them but need merely to play.[1]

The Froebelian doctrine of growth expounded also by Gessell and Stanley Hall presupposes an 'essential nature' of perfection which given the right conditions will gradually emerge. Holmes describes this as akin to the acorn and the oak and Gessell sees it in terms of mirroring the cultural history of the race. The child in this view is therefore innately perfect. The tendency in such beliefs says Dearden is to ignore the social nature of man.

Wordsworth and Rousseau would say it was the social world of man which destroyed this innate goodness. If we are unable to present to the child perfect growth conditions then we will never prove the growth theory to be right. On the other hand ascertaining what these perfect conditions would be is an almost impossible task. As Dearden sees it acceptance of this view of our 'essential nature' can mask authoritarianism. It suggests also that there may be no place for individual autonomy and implies a belief in the inevitability of PROCESSES.

The growth ideology according to Dearden developed out of late - eighteenth and nineteenth-century Romanticism "a nest from which both Marxism and fascism emerged as two of its broods."[2] In the Marxist view the individual is merely an aspect of historical determinism. In the growth theory the individual in the most extreme view is totally at the mercy of nature--and the individual is absorbed into history or 'democracy'. Maslow's idea of self actualisation modifies this somewhat. Here growth is still a matter of laws which bring people to the point of

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1. R.F.Dearden, The Philosophy of Primary Education, Routledge and Kegan Paul, London, 1968, p.31.

2. Ibid., p.35.

self-actualisation but they value privacy, detachment, meditativeness and independence. Dearden describes this as an ethical stance which has yet to be defended. (See Peters he says 1958 ch5 sect.2)

Froebel made the most well known case for the growth metaphor "drawing on Schelling's strong sense of identity between mind and nature to construct a profound conviction about the unity in all life forms; and of course he left us the perfect single term for the metaphor: kindergarten."[1] In his Education of Man he said "the young human being is looked upon as a piece of wax, a lump of clay, which man can mold into what he pleases...." and said that parents could learn from contemplation of even the humble weed how perfectly nature creates beauty and harmony without force.[2]

Growth theory in Dearden's view does not bring us nearer to knowing what the aims of primary education ought to be. Froebel's goal of "complete unfoldedness" has been criticised by Dewey, for it "represents a vague sentimental aspiration rather than anything which can be intelligently grasped and stated."[3] Yet Dewey said that the aim of education is growth or rather that education IS growth. From his writings Dearden deduces that Dewey's belief is that nothing is of value to us unlesss it enters into our experience with a realization of its value, and a valuable experience is one that has the two features of interaction and continuity. "For Dewey, growth is the enjoying and further development of experiences realized by us to be valuable, and hence the aim of education is to bring about such

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1. David Nyberg,Pruning the Growth metaphor, The Educational Forum, November, 1975,p.25.

2. Ibid.,p.26.

3. R.F.Dearden,The Philosophy of Primary Education, Routledge and Kegan Paul, London, 1968,p.37.

4. Ibid., p.39.

growth."[1] But we can be mistaken in our judgment says Dearden as to what is of value, for notions of what is of value are subjective and education is often valued only in retrospect. He also points out that "Dewey's theory of value would seem to share a general defect of all growth theories in that rich and integrated selves can be realized which are nevertheless morally evil."[2] Which in turn presupposes that those who are looking for a theory for the aims of education cannot avoid the issues of morality.

Behaving morally as Dearden says is something that has to be learned, it is not a natural adjunct of growth. He states that the theory of growth has value however in the ideal of a personal autonomy based on reason and independent of authority and believes that this is a basic or minimal ideal where growth is seen to be towards a chosen human ideal and not a mindless quasi-biological process.

> Analogies, however, are not identities, and sufficient confusions have come to light in the course of this critical appraisal of the growth ideology to invite the question whether this notion, when taken as a model of the educatonal situation, may not have outlived its usefulness. 3

It is of little use in constructing a curriculum to look at the nature of plant growth he thinks or to search for some hypothetical notion of the 'nature of the child', instead we draw on the wisdom of experience and what has been judged to be worthwhile, and in a liberal democracy it is possible to pursue the ideal of personal autonomy.

It is not clear to me how he extracts this ideal of personal autonomy from the ideology of growth unless he is saying that a concept of

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1. R.F.Dearden,<u>The Philosophy of Primary Education</u>, Routledge and Kegan Paul, London, 1968,p.39.

2. Ibid.,p.44.

3. Ibid.,p.49.

growth is acceptable if it includes personal autonomy which is contrary to what he suggested about the freedom implied in the growth concept as being open to authoritarian interpretation i.e. growth allowed within imposed constraints which is what schooling essentially is. One factor Dearden does not mention is that children will grow with or without an education system. Growth is inevitable. What education tries to do is to have influence on the rate and nature of growth encouraging it in certain directions through its formal institutions which are usually organised and controlled by power groups.

The ideal of personal autonomy which Dearden holds dear is hardly a major factor in such a context. Personal autonomy is in fact anathema to many of the ideals of schools and those who organise them. The curriculum for instance is designed for all children not for individuals. Teaching is done in groups. Testing is most often norm-referenced. Children work to timetables and move by bells. Their work is measured , sequenced, tested. Often they have to wear a prescribed uniform and follow a code of rules peculiar to the institution in which they find themselves. The only autonomy a schoolchild has is in deciding whether or not to listen to or believe the teaching he/she is taught and to invent ways of flouting the rules. This power is most fully exploited in the secondary situation. Autonomy and institutionalised compulsory education appear to be incompatible.

In biological growth says Nyberg a preexisting form is implied, which is either fulfilled or mutated, and leads to a theory of innate ideas, as propounded by Plato and considered by Descartes, Leibnitz, Kant , Hegel and Chomsky. The growth metaphor is in fact a paradox if one believes in innateness. The metaphor appears in several different forms says Nyberg:

E1 Education is growth
E2 Education for growth
E3 Education as Growth

G1 Growth is education
G2 Growth for education
G3 Growth as education

He then proceeds to prove that 'Education IS growth' and Growth IS education' are illogical terms and should not be used. This also leads him to speculate on the fact that any part we as teachers play in education is a form of interference in 'growth', each time we make a decision on choice of content or how to handle deviancy. He is assuming that people take growth metaphors literally which is one of the dangers of any use of metaphor when in fact a metaphor is not a mere synonym.

The copula gives the metaphor the strength of a factual statement when it is in fact intended to promote more than comparisons, analogies or similarities. A metaphor can go further than this. What it proposes is a way of looking, a new way of thinking. It generates a tension between ideas we already are familiar with and in this space creates room for innovation and imagination. If we take any educational metaphor too seriously, too factually, then we are missing the function of metaphors. It is true that they often lead to theories and models of education, but if we reify or institutionalize these then we end up with the equivalent of a dead metaphor and our attitudes and thinking become fossilized. A.S. Neill for instance made the notion of growth something peculiarly his own. To him it meant freedom and he advised parents to leave their children alone, not to interfere so much in their natural development. "Neill took from the notion of the growth the point that you cannot force the pace of develoment, nor can you turn a seed potato into a prize marrow."[1] The important idea was to create the optimal conditions for growth. Rousseau and Neill are

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1. John Darling,Education as Horticulture: some growth theorists and their critics, Journal of Philosophy of Education,Vol.16,No.2, 1982,p179.

similar in their thinking but Rousseau considered it necessary for Emile to face up to the realities of life, harsh as they might appear. He is also manipulative in his use of pedagogical power whereas Neill is not. Rousseau has a blueprint in mind of what he wishes Emile to be, Neill has none. Both however stress the importance of understanding the child's mentality. One of the basic tenets of Growth practitioners says Darling is the need for protection of the 'plant'. There is however no notion of equality in the Rousseau Emile relationship. He fails to exhibit what Bertrand Russell felt one should have in such a position of authority and that is a sense of reverence.

Darling himself sees no reason to reject the growth metaphor per se, limited though it may be, and realises that it leads to concerns such as one expressed by Lawton that it is sometimes interpreted in a laisser-faire attitude which achieves nothing but chaos.

> Those committed to the growth metaphor are concerned to highlight, through it, what they see as the perversities of traditional educational practice, while opposition to the metaphor reflects a more conservative approach to schooling. One's view of the metaphor's worth is thus a reflection of one's educational values. 1

Darling says that Carl Rogers who is influenced by psychotherapy as Neill was writes in a similar vein to Neill e.g.

> if I trust the capacity of the human individual for developing his own potentiality, then I can provide him with many opportunities and permit him to choose his own way and his own direction in his learning. 2

Peters is very critical of the growth theory says Darling and so to a lesser extent is Max Black who says " It may well be that the overworked

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1. John Darling,Education as Horticulture: some growth theorists and their critics, Journal of Philosophy of Education,Vol.16,No.2, 1982, p.183.

2. Ibid.,p.184.

analogy of the biological organism has served its purpose,"[1] but he himself believes that the metaphor of the plant still flourishes and rightly so.

Greene presents a metaphor about the range of educational philosophy she has surveyed and finds that "the searchlight of thought about teaching moves over similar landscapes and simply pauses in different places."[2] The "triadic" process that is teaching involves the same terms and much the same dynamic for all. The poetic language of Buber tells us that we each have to establish a relation to our own selves and Greene states that "Teachers must have in their own minds and imaginations a view of what is desirable when it comes to human learning and human life."[3] This is why I believe that teachers need particularly to be aware of the language of education and especially the metaphors which dominate and charge it. There are links to be seen betwen the main sources of educational thinking and changes reflecting history, culture and politics. Sometimes one metaphor dominates or becomes a 'bandwagon', but once aware of them one can be eclectic and profitably select or synthesize the most appropriate and develop one's own personal philosophy of teaching for just as no-one can make a metaphor for you so no one else can tell you how to teach nor will it always be the same experience. There is little doubt that an appreciation of language is at the heart of any rational or humane perspective of teaching and learning.

Denis Lawton points out that the word curriculum is itself a

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1. John Darling,Education as Horticulture: some growth theorists and their critics, Journal of Philosophy of Education,Vol.16,No.2, 1982, p.183.

2. Maxine Greene,Philosophy and teaching,Handbook of Research on Teaching, Macmillan, London,1986,p.490.

3. Ibid.,491.

metaphor--'a course to be run' and that its original meaning probably has little impact on us. This area of education abounds with metaphors such as 'core curriculum', 'spiral curriculum', 'streaming', 'setting' and 'banding' which are meant, as most metaphors are, to be illuminating or enhance understanding. In this vein it is possible, he says to examine curriculum metaphors as-- building structures--as a plant-- as a product--as a commodity. He thinks it might be more profitable to examine their nature rather than their uses, whether for instance they are radical, conservative or reactionary.

There are three concerns Lawton has with curriculum metaphors. First, those which mislead rather than clarify and he draws on Dearden's work in this, here metaphors are stretched from one context and applied to another e.g. the notion of a 'balance' as in diet. Such terms are secondary rather than primary principles, and it is no use appealing to the secondary principles until we have sorted out the primary. There may be more consensus also on what constitutes a 'balanced' diet than a 'balanced' curriculum. The metaphor is therefore obscure, yet as he says there is often an assumption that such consensus in fact exists.

Secondly Lawton attacks the use of the term 'objectives' in curriculum planning because "it is over-specific: an objective is a clear and LIMITED educational intention indicating not only a directon but a finishing point, whereas the essence of education is that it is open-ended."[1] An objective is often defined in terms of change in pupil behaviour which is measurable. Such terms are frequently used in business management.

Teachers are often expected to plan in terms of 'units' of work e.g. language unit on a particular topic. Once again the term is overlaid with

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1. Denis Lawton,'Metaphor and the Curriculum',<u>Metaphors of Education</u>, Heinemann, London 1984, p.83.

connotations of measurement or packaging of teaching and learning into definite specific amounts or 'doses'. Module is another 'in' word. One effect of this style of working is to treat the 'units ' as self-contained and with little reference to previous or later work. This tendency was brought home to me recently when supervising a trainee teacher who had been given the slogan "Catch 'em teach 'em test 'em" which might prove a practical philosophy for the limited period of a teaching practice and each lesson within it but ignores the overall purpose of the work. It is little different from the Aim, Content and Method approach which used to be applied to each lesson plan. All of these overlook the necessary span and scope of teaching and spontaneous teaching and learning situations. It is not something to be measured out like medicine or food but an ongoing process preferably at the learner's pace or to use yet another current term the 'client'. The compartmentalizing of subjects and the pressure of exam-oriented syllabi has probably led to this state. It is possibly inevitable to a certain degree but I suspect as Lawton seems to, that it is also the effect of a certain way of seeing teaching, a metaphor taken from areas such as business systems with their efficiency studies. When we use such terms in teaching we are in a sense dissecting a live organism and hoping it will live through the process. Likewise the term 'system' is also unattractive, redolent as it is of the 'mechanistic' model.

Lawton says the term 'objective' is useful and useable in clear cases as when practical skills are to be acquired but many areas of the curriculum are indefinite in terms of objectives e.g. Literature . Yet this is exactly what teachers are often asked to do in the pursuit of norm-referencing as in traditional examinations. Poetry writing would be impossible to assess yet we do assess paintings. This difficulty is the reason also for the increasing use of multiple-choice tests where sometimes

even the authors cannot decide on the correct answers.

A metaphor that works in one part of the curriculum may well not work in another. Sequence may be important in Maths but not in Literature. An obsession with 'sequence' is one of the pitfalls James Moffet points out "I believe--that sequencing en masse can only occur grossly over a very long haul and that specific sequencing--day-to-day and even month-to-month--should occur on an individual basis."[1] He believes it to be the biggest snare in the curriculum "When educators speak of sequence, they virtually always mean for a group and most often for a year."[2] Moffet believes we fail to distinguish between biological growth and sequence of subject matter and disregard how in fact people develop, which means "You can't GENERALIZE for a whole peer group about anything so SPECIFIC as to what kind of reading or writing its members' growth demands ..."[3] for to be meaningful "Growth means being able to do more things and to do old things better, not merely hopping from one stepping stone to another."[4] This is not to say that the teacher cannot work out a desirable sequence but that it is then used to suit the pupil not vice versa. In fact he describes the normal sequence in language development from speech to dialogue, from intimate to remote audiences, from vernacular to literary style, from small immediate subjects to more remote, from recording-reporting-generalizing to theorizing, from perception to memory to ratiocination, from present to past to potential and from chronology to analogy to tautology. This is not a 'fixed' progression but a general outline of how one can expect a reader and writer to possibly develop.

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1. James Moffet,Active Voice,Boynton/Cook,U.S.A.1981,p.5.

2. and 3. Ibid.,p.9.

4. Ibid.,p.10.

James Nattinger welcomes the use of a new method in language teaching. It is known as CLT or Communicative Language Teaching, and he explains how it is linked to metaphor in general and indicates a move away from metaphors commonly used to describe language teaching. He says "Any model, any theory, any description is a metaphor of a sort, so most of the explaining and learning we do takes place metaphorically."[1] The first to be used, according to Herron, says Nattinger was a GYMNASTIC metaphor. It used to be thought that just as muscles get stronger with exercise so it would be with the mind:

> Some of the implications of this metaphor are that students are full of latent abilities which, because of lack of training, have never been developed; that teachers are trainers who will discipline them into practicing these unused powers; and that language, the focus of this exercise, is a formal object which consists of meanings to be extracted and mastered.2

Later audiolinguistic methods embraced the PRODUCTION metaphor which linked language teaching to the development of marketable and usable skills. In this schools are like factories. This resembles the impression model described by Scheffler with its focus on input and storage.

More recent methods have called themselves "humanistic" and "learner-centred" and in this the metaphor is that of the child beginning learning of its first language. Teachers respond here to emotional and cognitive needs of their students. "Meaning itself is something that emerges as it is negotiated."[3] But effective as it may have been, second language learners are not children but experienced language users and processors so a more acccurate metaphor is needed and sought which will

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1. James R. Nattinger, <u>Communicative Language Teaching: A New Metaphor</u>, TESOL Quarterly, Vol.18, No. 3 September 1984,p.392.

2. Ibid.,p.392.

3. Ibid.,p.393.

retain the best of the former one.

Various strategies are used in the classrooms. Role playing designed to promote extended discourse is one. Process writing with ample revision to encourage fluency is another. Readers are seen as "actively creating meanings on the basis of the discourse clues they find, just as in speaking and writing."[1] This follows Widdowson's idea that "reading is not a reaction to a text but an INTERACTION between writer and reader mediated through the text."[2] This indicates a trend away from the idea that a text is simply a container of words similar to the metaphors of the mind as a container to be filled. "In the new metaphor...meaning is seen as being attached to words when they are used in particular contexts."[3] Reading is therefore not finding complete meaning but encoding. Stories with an element of surprise or mystery prove particularly useful as they encourage prediction and also "folktales because they often contain inter-culturally predictable PATTERNS [my emphasis]."[4]

What emerges from this work is a realisation that rather than learning correct structures and applying them students learn by interacting verbally and as Hatch has said " out of this interaction syntactic structures are developed."[5] Linguistics has usually been concerned with the formal properties of language learning rather than knowledge. The new findings contradict the former premisses "that monologue rather than dialogue is the basis of language; and that basic meanings are independent of an

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1. James R. Nattinger, Communicative Language Teaching: A New Metaphor, TESOL Quarterly, Vol.18, No. 3 September 1984,p.396.

2. and 3. Ibid.,p. 397.

4. and 5. Ibid.,p.398.

individual's particular experience."[1]

New models of language structure and cognitive discourse processing show a close link betwen language comprehension and production and language content and existing knowledge. Chafe has explored the relationship between language and consciousness, and language and memory. We make meaning from language he thinks by focussing on semantic information, translating surface structures as quickly as possible , and storing them in memory .

> These stored semantic facts, he says, are "schematic STRUCTURES [my emphasis] consisting of an "event," "action," "process," or "state," and a number of "participants" having expected case roles. These schematic strutures are themselves further integrated into the user's world knowledge, which is itself organized in terms of prototypical situations called FRAMES and SCRIPTS. These are complex cognitive units that represent series of cause and effect relationships about particular subjects and frquently occurring episodes in our lives. Such knowledge-based structures are seen to provide a framework for comprehension PATTERNS [my emphasis] in discourse as well as to account for interference strategies, which are an extremely important part of discourse processing. 2

From this description one's mental life appears almost like a movie record which can be stored, replayed, edited, rescripted and so forth. Where this fits in to my proposition that learning is closely linked to metaphor lies in the fact that in this language teaching method, making mistakes, dealing with incongruities, is all part of the process of learning. My contention is that a mistake or a misunderstanding resembles a metaphor where the frames do not match or make sense just as if one film had in the middle of it a frame that came from another film. One might call this a metaphoric model of learning which has implications for teaching.

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1. James R. Nattinger,Communicative Language Teaching: A New Metaphor, TESOL Quarterly, Vol.18, No. 3 September 1984,p.399.

2. Ibid.,p.399.

Nattinger says that research into artificial intelligence is working along the same lines, that is, exploring how we think. Studies of chess masters for example show that they do not 'see' individual chess pieces but clusters or chunks. These are again a form of patterning. What emerges from these studies is the awareness that "If we understand how language works, cognitive researchers feel, we will be far along the path to understanding how the mind works--in reasoning, learning and remembering."[1] Computational metaphors are therefore in vogue, though language teachers feel that these may be modelled on structures that are too formal. They are also conscious that other factors such as environment and syllabus content also affect learning. Perhaps the new measure of the mind will be not its storage capacity but its metaphoric capacity.

Montaigne criticised the pedants for their images of learning as he believed the human mind was not a thing of limited capacity but infinitely extensible an idea accepted now generally acknowledged. What he saw in the pedants was a lack of elasticity of mind, they were too rigid. His own mind ranged over the current metaphors of his time and as Clark says his imagery never stands still.[2] This is a facility we need to encourage and develop, for to question old metaphors, to accept new metaphors and to create new metaphors means to be forever adapting, learning and changing. The poet Rainer Maria Rilke said "Imagination is required if we are to create meanings or to reinvent our traditions."[3] Buber said that "The

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1. James R. Nattinger, Communicative Language Teaching: A New Metaphor, <u>TESOL Quarterly</u>, Vol.18, No. 3 September 1984, p.403.

2. Carol Clark, <u>The Web of Metaphor</u>, French Forum Pubs., Kentucky, 1978, p.82.

3. Maxine Greene, Philosophy and teaching, <u>Handbook of Research on Teaching</u>, ed. M.C. Wittrock, Macmillan, New York, 1986, p.490.

teacher must institute the kind of dialogue that enables students to break with the 'collective' and establish some relation to their own selves."[1] Martin Heidegger saw that computing was likely to become the dominant mode of cognition but if this was fused with "meditative thinking" in which one is aware of one's relationship to the world and to nature then this might prevent technology from dominating cognition, which was obviously the intuitive fear of those language teachers wary of the newer language teaching metaphors.

Similar fears have been expressed by people such as George Herbert Mead who saw the protection of self coming from a model of "education as 'conversation', belonging to a universe of discourse" and in which he thought that the personality of the teacher should disappear "behind the process of learning."[2] More recently Paul Hirst speaks of conceptual frameworks that are publicly shared. In this view the capacity to symbolize is fundamental. Jane Roland Martin thought this gave too much emphasis on development of mind rather than person.

> Her challenge dramatizes a growing tension in approaches to education and to teaching in contemporary philosophical thought. In one sense it might be viewed as a tension between the pure cognitivists or the analysts and those with a more experiential or action-oriented view.. It might be regarded as a resurgent struggle betwen those oriented to rules and norms in the Kantian tradition and those concerned with history, consciousness, and change.3

The part philosophers play, says Greene, is in elucidating concepts and terminology. Wittgenstein for instance became concerned with discrepancies between what is said and what is actually meant and his work is considered a bridge between analysis and contemporary phenomenology. Husserl said that what was perceived depended on the standpoint of the individual

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1. Maxine Greene, Philosophy and teaching, Handbook of Research on Teaching,ed.M.C.Wittrock, Macmillan, New York, 1986,p.490.

2. and 3. Ibid.,p.492.

perceiver and that we need to break with the attitude which believes that the outside world is nothing more than a mass of sense data or a phenomenon conclusively defined by science in its most unreflective mode. "The significance for the teacher lies in the stress on standpoint and interpretation, on the importance of refusing the taken-for- granted, on the recognition that reality is constituted rather than simply given."[1] The need for the school to foster imagination is also evinced from the work of Sartre who saw that freedom involved having a vision of possibilities, of alternatives. One needed to develop therefore a posture of interrogation.

The general view seems to be that our world is only constructed through the meanings which we impose upon it. Maurice Merleau-Ponty says Greene thought that it was the realisation that there is something hidden or "in reserve" or still unknown that enables people to "break through the horizons of what they can grasp--to thematize, to articulate , to learn in an intersubjective world."[2] Teachers may be doing little to get children to really think about this fact or to perceive that their taken-for - granted world is a social construction.

> Seldom do they [teachers] communicate the idea that what is taken for granted as normal and unchangeable is a reality humanly constructed over time. That is why so little attention is paid to the interpretive mode of knowing. It is probably why there is so little questioning of the inequities in our society, the structures and organisations of schools, testing practices, regulations and controls.3

This is apparent to many teachers who do question the system, the syllabi, the tests etc., but for many the world-as-is suits them and they see no need for change. A focus on metaphor in any sphere of the curriculum could help to awaken people to the false and ephemeral nature of reality.

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1. Maxine Greene, Philosophy and teaching, Handbook of Research on Teaching,ed.M.C.Wittrock, Macmillan, New York, 1986,p.494.

2. and 3. Ibid.,p.495.

In the introduction to <u>Metaphors of Education</u> Taylor says that:

> In the literature on these topics it was clear that ideas transported from their original fields of application were being employed to describe, to legitimate and sometimes to explain, complex, multi-determined processes and procedures in ways that, however useful, were often inappropriate to educational contexts.[1]

Once removed might have been inappropriate but twice removed as many of them were when applied to Third World countries or colonies they often proved woefully inadequate and inequitable as Mathew Zachariah explains of the period from 1950 to 1980.

The dominant metaphors have been traced back to Greece and Rome and then via Europe from whence they have percolated to other countries where educational institutions have been set up on the same models. The agricultural and horticultural metaphors applied to education are two such examples. Zachariah maintains that "Many of our thought processes about education's role in development are animated largely by metaphorical views of people as clay or people as plants."[2] He is aware that metaphors can guide and enrich but they can also distort and confuse for "as a semanticist would say about the use of symbols, the map is not the territory."[3]

Post-war conditions necessitated a transformational role for education and this in his opinion "bolstered the view that it had a molding mission."[4] Seeing people as clay presupposes that they are inanimate until formal education gives them life and this is given by people who have

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1. William Taylor, <u>Metaphors of Education</u>, Heinemann, London, 1984, p.1.

2. Mathew Zachariah, Lumps of Clay and Growing Plants: Dominant Metaphors of Education in the Third World, 1950-1980, <u>Comparative Education Review</u>, Vol.29, No.1 1985, p.2.

3. Ibid., p.3.

4. Ibid., p.4.

already undergone the process. Quality varies in people just as with real clay and not all pots are expected to turn out perfectly so the results can be graded according to quality and finish. The molding process also has to be done quickly and efficiently and there was always an assumption that Western methods of clay-molding were the most desirable until time proved that this was not always so and critics spoke of 'dysfunctions' within the system. After Vietnam some American scholars began to ask questions and to be prepared to listen to others from the Third world. Then the more powerful countries began to be seen as exploiters, and economic growth for its own sake came in for criticism. Growth in fact was limited to certain sections of society such as urban rather than rural. These same problems were being mirrored elsewhere and efforts to reform educational systems to be "more effective in their molding and training mission were meeting considerable resistance from entrenched bureaucracies and persons or groups with vested interests."[1] Questions now familiar to us were being asked such as who benefits most from education.

One scholar David B. Abernethy came to the conclusion that popular education could both encourage and inhibit development--and equality was not being achieved. The pervasive and deleterious effects of such things as hidden curriculum were beginning to be realised. The newer metaphor of the growing plant emerged where children are expected to thrive if given naturally conducive conditions.

Zachariah believes that dependency and conflict theories are also compatible with the growing plant metaphor and that those who tend to Marxist theory are working with the plant metaphor where all are assumed

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1. Mathew Zachariah, Lumps of Clay and Growing Plants:Dominant Metaphors of Education in the Third World, 1950-1980, Comparative Education Review, Vol.29, No.1 1985, p.12.

equal. In the dominant Soviet and Eastern European states education more closely resembes the clay metaphor. In the writings of those who eschew dependency theory they do not suggest revolution or overthrow of capitalism and exploitation but development of the individual's potential to bring about change. He believes that this is because they inherited the growing plant perspective as heirs of Dewey.

Freire's work in Brazil says Zachariah recognized that effective learning takes place when it begins where the learner is and with his/her needs and creates opportunity to use learning. His concept embraced material and spiritual dimensions, the concept of education as the practice of freedom (not indoctrination) and the conscientization of oppressed people. In his education process all grow, both teachers and students. Illich prefers the plant metaphor to the clay one says Zachariah for he said:

> Education implies a growth of an independent sense of life and a relatedness which go hand in hand with increased access to, and use of, memories stored in the human community...This presupposes a place within society in which each of us is awakened by surprise; a place of encounter in which others surprise me with their liberty and make me aware of my own. [1]

Samuel Bowles appeared at first to uphold the clay metaphor says Zachariah but later wrote that "An economic structure able to absorb all the educated is not possible under conditions of national dependency, and a system of schooling which complements all people's social utility also is not possible."[2]

An alternative to the growing plant metaphor, Mao Ze Dong's China

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1. Mathew Zachariah, Lumps of Clay and Growing Plants:Dominant Metaphors of Education in the Third World, 1950-1980, Comparative Education Review, Vol.29, No.1 1985, p.17.

2. Ibid.,p.18.

"apparently proved that modern educational systems need not be heartless sorting and selecting machines"[1] and to prove that self-actualization for individuals was a possible alternative to alienation and exploitation. The aim was a non-hierarchical social order. Whilst a state pays for education it will necessarily become bureaucratized and the clay metaphor dominates says Zachariah at the expense of the poorer people and Education will not compare with armaments for priority of funding. Some teachers will still attempt to nurture the individual he thinks but to be more effective in terms of social justice schools have to become more autonomous, in order to be agents for critical evaluation and reform. The main question must be who benefits and at what cost. The aim needs to be, thinks Zachariah, to build culture without promoting one group at the expense of others, which will necessitate a less hierarchical social structure--less differentiation between manual and mental labour and more merging of school work and paid employment. One can only speculate says Zachariah where this evolution [a new paradigm] will occur. He seems to think it may be an endless Sisyphean task.

Metaphors of education arise to fill the human need to make the passage from childhood to adulthood meaningful both for the recipients of education and those responsible for organizing it. Every so often a concept of what education might be arises and captures the public imagination. The Outward Bound school is just such a concept. Stephen Bacon has written of it as a conscious use of metaphor, a form of metaphoric education with close affinities to a parable or allegory, an

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1. Mathew Zachariah, Lumps of Clay and Growing Plants:Dominant Metaphors of Education in the Third World, 1950-1980, Comparative Education Review, Vol.29, No.1 1985, p.19.
   Yet Cleverley J.,The Schooling of China,George Allen and Unwin,Sydney 1985, says gardening and engineering metaphors prominent,see p.225.

approach to metaphor that has he says been used in psychotherapy by Milton Erickson. In the outdoor experience students are exposed to experiences that he says are isomorphic with their real life situations and they must use non-typical strategies to solve metaphoric challenges. This complex cognitive process he calls the transdirectional search. Essentially it means they are using past experiences to make sense of the present.

> In normal educational experience such as a lecture, the listener tends to perform the transdirectional search on an intellectual level. Conversely when using metaphor, the transdirectional search goes beyond intellectual concepts and draws upon important emotional experiences. In addition, the metaphor usually matches the pattern of experience rather than single concepts. The process of matching a whole PATTERN [my emphasis] is so powerful that the metaphor and its real life correlates become inextricably linked.1

In some ways this seems not unlike the total involvement small children have with their play tasks. Action is the important ingredient says Bacon. There are covert psychological messages implicit in the activities of the course. The person undergoing the course is travelling an inner journey . What the instructor has to do is to find the meaningful context which most benefits the students and then lead them to it skilfully and elegantly. The wilderness represents a sacred space and has an archetypal attraction in Jungian terms which schools never have. The students thus participate in what are really age-old patterns of human development and this generates a special spirit on the course. The sense of a sacred space makes transformatory processes happen more easily and makes the changes more profound and more permanent.[2] Bacon sees the process as truly holistic and simultaneously pragmatic and sublime. His view is one alternative to the more usual metaphors of education.

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1. Stephen Bacon, The Conscious Use of Metaphor in Outward Bound, Colorado Outward Bound School, Denver, Colorado,1983, p.9.

2. Ibid.,p.58.

Paivio has said that probably the most important practical outcomes of research on imagery and verbal processes will be in relation to problems of education. One of the main difficulties in teaching is that we cannot see into the student's mind. We can only 'read' the external signs such as attention, apathy, or responses such as questions etc. Even if teachers believe in beginning where the students are and with what they already know there is no guarantee that a class will all be at the same place. Every student is different and even teachers expert in their content areas and with good teaching methods and objectives still have to 'key' in to each learner to help him or her make sense of new material especially. It is almost like trying to tune in to a radio programme going on in each person's head and adding more to it without creating too much interfernece or blocking what is already there. The old metaphors of wax tablets, empty pitchers and tender plants are no longer viable unless one still believes in what Freire calls the 'banking' method. The student is responsible for his/her own learning but the teacher is still the link in the process of acquiring new knowledge, new techniques or improving on old ones. Metaphor can be seen as a kind of microcosm of the whole learning experience if we consider it in the light of new knowledge of how the brain works, not merely as a vast catalogue system nor a busy computer but something more complicated than either of these and capable of endless permutations of information.

Petrie sees metaphor as an important element in the teaching method. His thesis is "that metaphor is one of the central ways of leaping the epistemological chasm between old knowledge and radically new knowledge."[1] What happens is that new information is processed "from a

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1. Hugh G. Petrie,Metaphor and Learning,in _Metaphor and Thought_, ed. D.Ortony, Cambridge University Press, New York,1979,p.440.

given context of understanding to a changed context of understanding."[1] This makes sense if we consider that to educate is to change a person. The material to be learned may be factual or logical but if it is to be made the learner's own then metaphors, analogies and models can be crucial to that process of making the new material intelligible and accessible. When Petrie speaks of metaphors in this context he is assuming the interactive type of metaphor rather than the simply comparative. "The interactive level of metaphor is particularly appropriate ... because it CREATES similarities."[2] Even though the metaphor may be a comparative one for the teacher who already knows the subject. To Petrie metaphor in this area is not merely a sentence in the linguistic sense but an utterance meaning or speech act because of the importance of context.

This notion seems to fit also into the idea that Vygotsky has of geological layers of understanding where a new layer can only be added if the base layers are already there, that is to say that the new knowledge has to be understandable even through the metaphor, in terms of what is already known. Petrie describes a student being told that "The atom is a miniature solar system." The student transfers this knowledge of the solar system and applies it to a new understanding of atoms recognising however that there is an anomaly, and accepting this. "There is no radically new knowledge, for the cognitive structures remain the same; only their field of application has changed."[3] If the student has not got such prior knowledge then the metaphor is meaningless, is understood only as an anomaly

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1. Hugh G. Petrie,Metaphor and Learning,in Metaphor and Thought, ed. D.Ortony, Cambridge University Press, New York,1979,p.443.

2. Ibid.,p.442.

3. Ibid.,p.444.

or is taken literally.

> Literal language requires only assimilation to existing frameworks of understanding. Comparative metaphor requires simple extensions of the framework in the light of a more comprehensive framework. Accommodation of anomaly requires changes in the framework of understanding.1

Petrie notices a strong similarity in this process to that which Kuhn describes in the changing paradigms of science. In the teaching situation it is the teacher who usually provides the metaphors. They are similar to the exemplars described by Kuhn, which allow theory to be applied to practice. It is the activity of the student or "ACTING in the ecology" that is a vital component in the learning process.

> ...metaphor is what enables one to pass from the more familiar to the unfamiliar in the sense that it provides one mechanism for changing our modes of representing the world in thought and language. It provides this mechanism not through a direct labelling, nor through explicit rules of application, but rather because in order to understand an interactive metaphor one must focus one's ACTIVITIES on nodes of relative stability in the world. Language bumps into the world at those places where our activity runs up against similar boundaries in diverse situations.2

Petrie agrees with Searle who has said that the process of construing a metaphor is a natural extension of ordinary thought and activity. The teacher supplies a metaphor to help, which is in a way like setting a problem to solve a problem. The essence of its success seems to lie in the interaction and activity this generates. As Vygotsky says "from action to thought" or Piaget "to understand is to invent."

Valerie Walkerdine is also interested in how children learn and considers the way children's thinking is initially tied to familiar contexts and as Margartet Donaldson has said has to be "prised out of the

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1. Hugh G. Petrie, Metaphor and Learning, in _Metaphor and Thought_, ed. D.Ortony, Cambridge University Press, New York, 1979, p.444.

2. Ibid., p.447.

old primitive matrix in which all thinking is contained"[1] in order to approach formal reasoning. She believes that children are able to reason in familiar contexts because "their learning involves being able to adopt positions in discourse in relation to familiar practices and to operate accordingly."[2] She explores how children work out context and considers that "the crucial moment of understanding lies in a specific relation of signified to signifier."[3] In this she is guided by semiotics which stresses that the relationship between signs is not to be understood simply as a linguistic relation but as a social one. Unlike Saussure she does not believe that we can understand the relation of language to thought without considering social practices.

A practical example of what she means is illustrated by the young parents of a new baby who are at a loss to interpret the baby's crying. To study their words would not fully explain their situation. Not only would one need to examine their language, but also gestures and actions and behind all of these is the knowledge they may or may not have of baby care and current child rearing practices which may be influencing them. "There is a historical and social dimension which we must include to understand their discourse"[3] which does not create the context but influences it. This approach is usually applied to the analysis of texts. As Dewey said:

> The conceptions of SITUATION and of INTERACTION are inseparable from each other. An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment, whether the latter consciously

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1. and 2. Valerie Walkerdine, From context to text: a psychosemiotic approach to abstract thought. from Children Thinking Through Language, ed.M.Beveridge, Edward Arnold, London, 1982, p.129.

3. Ibid., p.131.

4. Ibid., p.132.

consists of persons with whom he is talking about some topic; or the toys with which he is playing; the book he is reading (in which his environing conditions at the time may be in England or Ancient Greece or an imaginary region); or the materials of an experiment he is performing. The environment in other words, is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had. Even when a person builds castles in the air he is interacting with the objects which he constructs in his fancy.1

Walkerdine has observed young children and how they switch in and out of a vast repertoire of discourses. This has led her to recognize that there is an initial opening METAPHOR which children recognize and interpret and has the effect of 'calling up' for the participants the relevant discourse. Children in one instance played with Lego and the opening metaphor was a comment about a big crane, which object became, in her words " a crucial link in the potential chains of meaning." That is to say that it triggered off a whole discourse as the children played.

...although features of the objects [as in the Lego] themselves are crucial, what is important is that that these objects can never be understood except in terms of a specific discourse, such that the objects are read metaphorically to produce the actual linear sequencing of the game.1

This seems to me not unlike the way adults deliberately use artificial starters such as the weather as topics for initiating discourse. In these children's games one word or phrase seems to be the impulse which directs the flow of the discourse. Nor does it seem to the author that the children are acting upon the objects in such a way that the language is a secondary process relegated to a level of representation AFTER concepts are formed. It seems more plausible to her to infer that it is the relation of signified

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1. John Dewey, Experience and Education,inS.M.Cahn Philosophical Foundations of Education, Harper and Row, New York, 1970,p.236.

2. Valerie Walkerdine, From context to text: a psychosemiotic approach to abstract thought. from Children Thinking Through Language,ed.M.Beveridge, Edward Arnold, London,1982, p.134.

to signifier which is determinant in structuring the course of the play, and it is the children who "construct METAPHORS out of signified/signifier relationships to 'read' the objects and that these are crucial in understanding the way that a particular discourse is 'called up'."[1]

Walkerdine uses Jakobson's use of the term 'metaphor', for he says that language is characterized in terms of two basic axes SELECTION (metonymy) and COMBINATION (metaphor). Formal reasoning involves the metonymic axis:

> In practical reasoning we determine the truth or validity of a statement in terms of its correspondence to the rules of a practice, whereas in formal reasoning truth is determined in terms of the internal relations of the statement itself. To reflect on the internal relations alone we have to ignore the metaphoric content of a statement which might distract from the focus on the logical relations entailed in the statement, namely by directing attention to the practice to which the statement refers.2

It is easier to look for internal meaning in writing or text, as is done with the scriptures.

Walkerdine argues that the linguistic system itself provides the tools necessary to formal reasoning and so we can examine how chidren learn to reflect consciously on their practices and on the internal relations of the statements themselves. The psychologist Olson has claimed that we do not need to have recourse to explanations which focus solely on the properties of the mind, we can observe them in technology such as writing, and Vygotsky and Luria thought similarly. What is important for children says Walkerdine is that the logical relations of a task are embedded in a meaningful context. As proof of this she cites tests done by McGriggle and

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1. Valerie Walkerdine, From context to text: a psychosemiotic approach to abstract thought. from <u>Children Thinking Through Language</u>,ed.M.Beveridge, Edward Arnold, London, 1982,p.136.

2. Ibid.,p.138.

Donaldson where the tasks proved easier to do on a metaphoric rather than a metonymic axis. Formal reasoning she says draws its validity from, and depends entirely upon, reflection on the metonymic axis--on the relations between signs and not on their metaphoric content: in other words the 'meaning is in the text' as Olson says. In this situation metaphor can cause confusion as it distracts from concentration on the task. Mathematical discourses for example minimize the presence of metaphor. It has been shown that children use metaphor in daily social practice but when approaching formal reasoning the metaphoric axis has to be suppressed. In test situations they will relate even abstract tasks to things they see and know.

Walkerdine states that children learn to treat statements in different ways at school and certain practices in early education lead the way to formal reasoning so that children are weaned from the authority of the teacher to the text. For instance in maths games chidren find it hard at first to distinguish between the rules of the game and the rules of discourse because they are all presented in the same mode. Gradually they learn what is accepted behaviour such as whether to draw margins, use pencil etc. The emphasis is on the activity.

> ...while there is considerable attention paid to the rules of the practice, there is very little evidence of teachers encouraging children to approach the problems using the discursive patterns of reasoning either in relation to the limits of practices or in relation to statements themselves.1

This is because of the approach in primary schools and accounts thinks Walkerdine for the development of reasoning in terms of the internalization of action and not in discourse. When children try to speculate they are often discouraged and led back to experience.

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1. Valerie Walkerdine, From context to text: a psychosemiotic approach to abstract thought. from Children Thinking Through Language, ed. M. Beveridge, Edward Arnold, London, 1982, p.145.

Whilst observing maths lessons she noticed that teachers describe giving children experience of objects in order to teach them particular mathematical concepts but what the chidren actually do is perform a series of translation exercises so that "a statement embedded in a particualar practice is transformed into written numerals where the meaning is internal to the text."[1] It appears that children have to be led to the discursive form of mathematical statements via a process which retains the same metonymic form but gradually strips away the metaphors. The teacher next leads them from utterance to written forms of the numerals and drawings are used as iconic metaphors for the blocks which have previously been used. The metaphor of 'making' is still used and is physically demonstrated by the teacher moving her finger down the line as she says "makes". The children begin to do the same and speak of 'carrying' also. One can see the children visibly moving from utterance to text and in cases where a child is not moving the teacher goes back to the explicit use of metaphor even naming the blocks as 'houses' and 'people'. What is so crucial here says Walkerdine is that the use of these familiar terms does not make the task more concrete or active but "allows it to enter into a system of meaning."[2]

> Children do not have raw experiences of concrete objects: meaning is created at the intersection of the material and the discursive, the fusing of signified and signifier to produce a sign. These meanings are located in, and understood in terms of, actual social practices, represented in speech as discourse. It is by analyzing the form and content of discourse, the processes of selection and combination, of metaphor and metonymy, that we can account for the origins of processes and reasoning.3

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1. Valerie Walkerdine, From context to text: a psychosemiotic approach to abstract thought. from <u>Children Thinking Through Language</u>,ed.M.Beveridge, Edward Arnold, London, 1982, p.146.

2. Ibid.,p.149.

3. Ibid.,p.153.

Young children can shift in and out of discourses not because they possess reasoning skills but because "the metaphoric content of the task allows them to examine the task within the boundaries of a social practice."[1] This they seem to do quite naturally whereas formal reasoning has to be learned by gradually making metaphor implicit and leading students towards a text.

Thomas Green agrees that metaphors are nice but not necessary to learning except perhaps to gain religious knowledge.[2] He claims reasoning to be a superior mode. However, whilst Petrie may be confusing in his comments on anomaly in the light of Walkerdine's observations and others it would appear that children need them and young adults too at some stages of learning. According to Steven Miller what is more important than deciding whether metaphors are important to teaching practice is to examine the theories behind the practices:

> ...the difficulty in understanding the proper use of metaphor as a pedagogical technique stems from a failure to see that metaphorical statements OUGHT to be applied and analyzed at the level of the social and psychological theories that are believed to be the theoretical (and hence professional) underpinnings of practice.3

Metaphor may be central to the "conceptual structure" of particular subject matter and only indirectly (if at all) to the psychological theory. For the theory 'sets the stage' for a possible use of metaphor.

Miller believes that "metaphorical statements are so facilely employed

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1. Valerie Walkerdine, From context to text: a psychosemiotic approach to abstract thought. from Children Thinking Through Language,ed.M.Beveridge, Edward Arnold, London, 1982, p.153.

2. Thomas F.Green, Learning without Metaphor, inMetaphor and thought, ed.D.Ortony, Cambridge University Press, new York, 1979,p. 463.

3. Steven Miller, Some Comment on the Utility of Metaphors for Educational Theory and Practice, Educational Theory, University of Illinois, Summer 1987,Vol.37,No.3,p.221.

in educational and other contexts that their question-begging nature is often overlooked."[1] and "they are at best partial explanatory accounts of processes or states of affairs not fully understood at the present and used to justify psychological and social theories for teaching practice."[2] We cannot, he says, say whether metaphors help one group more than another. It may be just as important as Green has suggested to train teachers how to apply the techniques of logical inference to specific content areas.

Thomas Sticht who sees metaphors as condensed similes elaborates on their use in teaching as propounded by Petrie and says that it is possible to improve communication and reasoning skills in children and marginally literate adults in a very short training period which also improves their ability to produce and comprehend metaphors. He sees metaphor as a tool which extends the capacity of active memory USING THE MEDIUM OF SPEECH to help us memorize, encode and decode. Rhyme and rhythm are tools in a similar sense.

In 1975 Ortony discussed three ways in which metaphors helped learning, by COMPACTNESS in that metaphors transfer chunks of experience from well-known to less well-known contexts; by VIVIDNESS i.e. power of imagery and by the INEXPRESSIBILITY thesis or the hidden meanings which they carry and which are never encoded in the language. Compactness and expressibility both suggest that metaphor had its origins in oral language.

Petrie dwells on the use of metaphor as a teaching aid to tease and puzzle the learner of new knowledge but as Sticht says metaphors themselves

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1. Steven Miller, Some Comment on the Utility of Metaphors for Educational Theory and Practice, Educational Theory, University of Illinois, summer 1987,Vol.37,No.3,p.222.

2. Ibid.,p.227.

are not always comprehensible to students especially when they come from different cultures i.e. the experience implicit within them is unknown to the students, and metaphors rely on shared understanding.

> To comprehend the metaphor, the student must first infer that the teacher means the student to shift from a mode of cognition in which ideas are being fitted to an existing knowledge structure, to a metaphorical mode in which the construction of a third knowledge structure consisting of the relations educed between the two domains referenced by the metaphor is accomplished.1

One can imagine that this could be as confusing as if one was actually spoken to in several languages at the same time. A possible analogy for this might be the changing of a key in music Students assume that utterances are sensible and the anomaly of a metaphor puzzles them as Petrie pointed out. The student has to find some basis for the similarity of the two domains in the metaphor. Both domains must therefore be explained by the teacher and student to establish the basis of the analogical relationship. There is a need therefore for interaction with the teacher. This observation by Sticht emphasizes my thesis that teachers need an acute awareness of the nature of metapor and its potential for teaching purposes. As Sticht says:

> To understand the function of metaphor as a tool for thought, we have to distinguish between the tool functions of metaphors when they are used in an intuitive manner, and those tool functions involved in the use of metaphor as a "metacognitive" tool for creative problem solving, for theoretical purposes, for literary effect, or for the types of educational purposes with which Petrie is concerned.2

We are in fact says Sticht built to perceive relationally.

It has been found that adults sometimes lack the skill to form categories into which subjects and events may be sorted on the basis of some similarity and their literacy level is also inadequate. On a six week

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1. and 2.Thomas G. Sticht, Educational Uses of Metaphor,in<u>Metaphor and Thought</u>,ed. D.Ortony, Cambridge University Press,New York, 1979, p.480.

course described by Sticht some such adults practised producing classification matrixes--reading texts and then inferring superordinate categories. The course was similar to one used by Silverman, Winner and Gardner to teach sensitivity to style in art, and comprehension and production of metaphoric language, to pre-adolescents. Much discussion centred around similarities in text and differences and the need for labelling them. Such tasks use the "cognitive anomaly" described by Petrie in teaching situations. To Sticht this weakens its value as a specific instructional methodolgy but what is being learned in these situations is not a new mode of thinking. That is true, what is evolving is a new perception for teacher practice and for facilitating learning and a realisation that "schooled persons seek relationships in a greater variety of situations by appealing to a broader range in which things, events, and processes could be related."[1] He says that Slobin has already told us that "New forms first express old functions, and new functions are first expressed by old forms."[2] training in analysis skills may he thinks facilitate the developmarent of metacognitive skill in the use of metaphor to stimulate knowledge INVENTION not simply knowledge RETENTION. Novelty and surprise are not the prerogative of metaphor says Sticht, insight of a similar type can arise even in maths and formal logic when an unexpected conclusion is reached.

Jardine and Morgan were inspired in their research on analogy as a model for the development of representational abilities in children by an incident one of them observed. During a school lunchtime children lay on

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1. Thomas G. Sticht, Educational Uses of Metaphor, in Metaphor and Thought, ed. D.Ortony, Cambridge University Press, New York, 1979, p.484.

2. Ibid., p.484.

the ground with their feet on the school railings. They said that they were "playing at graphs" which led the observer to conclude that:

> ...it may not demonstrate the concrete ways in which children attempt to produce the abstract sense and significance of mathematical representation, but may perhaps demonstrate precisely the opposite. Even at their most abstract, the sense and significance of mathematical representations are sustained only insofar as they remain analogical to the concrete, embodied images or actions of the subject.1

Concerned, as these authors are with the training of teachers they used analogy as a means of stimulating undergraduate students who themselves had to physically represent the measurements of a group, eventually reducing the information to figures as opposed to outlines, graphs etc., they came to an understanding of how the point of abstraction was reached and could presumably from this exercise appreciate a child's point of view and how complex the learning process can be. Teaching addition for example would not be simply a ritual that one went through but a thoughtful process which included imagining how the children could make sense of it. From these experiments the conclusions were that:

> The apparently univocal, unambiguous concepts and categories acquired by children over the course of their development emerge as the fossilized residues of powerful, dynamic analogical processes, in which features of experience are twisted, fibre on fibre, and similarities, likenesses, patterns, correspondences and kinships are produced. This process ties new levels of experience with old without reducing one to the other and without denying or dispelling the kinship between them. This means that our experience and understanding of the world, as adults, itself bears a resemblance (sometimes a distant one, sometimes a close one) to that of children. Our ways of understanding the world are not equal to the conventional, fossilized residues of our schooling, but are living analogues to those of children.2

Students in training come with fossilized ideas very often and need to be

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1. David W. Jardine and G.A.V. Morgan, Analogy as a Model for the Development of Representational Abilities in Children, Educational Theory, Summer 1987, Vol.37, No.3, p.209.

2. Ibid., p.217.

made alert "to confront the prejudice of their own experience and understanding...one could almost say to stop taking their experience of the world literally and must begin to take it analogically."[1]

Tim Linzey was similarly inspired to use a metaphorical device with trainee educational psychologists at the University of Otago in order to make them aware of the implications of some of the unintended influence of their assessments and interventions on children. The students were to approach people such as spiritual mediums, palmists and tarot card readers as clients, and to observe "the legitimate and illegitimate processes that these psychic health professional were using."[2] And in the ensuing class discussion they were to compare the psychic's influential powers with their own. This 'experiment' was designed to encourage the students to 'play' with ideas , to extend the scope of their thinking in a novel way:

> My intention was to make a type of paradoxical injunction to engage in a particular type of heuristic activity; to look for senses in which it might be so. This type of activity is of course highly confirmatory, inferential, and inductive in its logic. The use of metaphor is a prompt to maximise the similarities between the two uses of influence over clients. The aim was to broaden their understanding of how the educational assessment process itself might influence the client.2

This is no more absurd than teachers thinking of themselves as gardeners or potters or doctors, or trainers or data programmers but at least these students knew they were using a metaphor. Similar 'play' goes on in role-playing and in war-gaming. Teachers need to be aware of the metaphors they teach by and have a duty to continually examine and reassess their world, in fact to keep learning with their students.

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1. David W. Jardine and G.A.V. Morgan,Analogy as a Model for the Development of Representational Abilities in Children, Educational Theory, Summer 1987, Vol.37, No.3,p.209.

2. T.J.Linzey, How to Kill a Metaphor, A paper presented to the conference of P.E.S.A., University of Melbourne,August 1987,p.23.

Nietzsche's educational philosophy as analysed by David Cooper[1] is based on Nietzsche's criticisms of existing systems and their aims. Cooper uses these as a basis for his own critique of education particularly the the current obsession, as he sees it in Britain, with technical and vocational education and he is also critical of the concept of initiation into the disciplines or forms of knowledge, that is a reified form of knowledge as presented in a school curriculum.

"The death of God" says Cooper is Nietzsche's metaphor, not for the dissolution of religious faith, but for "the devaluation of our hitherto highest values."[2] This nihilistic or Godless age he sees as a failure to grapple with challenge and to be a negation of our uniquely human nature, for "The individual is something totally new and creating anew, something absolute, all his actions entirely his own. In the last resort, the individual derives the values of his actions from himself alone."[3] Authenticity or Eigentlichkeit is his metaphor for the individual. The pursuit of this authenticity can create problems for the individual who reacts and cannot conform with the rules for instance of an institution. An example Cooper gives is Rickie Elliot in E.M. Forster's The Longest Journey who is faced with the choice of resigning from the boarding school or becoming a 'poseur'. Hypocrisy is anathema to authenticity. Even 'child-centred' and 'discovery methods' says Cooper could compromise essential principles by forcing the pace. The teacher has to be aware not only of his/her own beliefs and values but those of the pupils because of

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1. David E. Cooper, Authenticity and Learning, Routledge, Kegan and Paul, London 1983.

2. Ibid.,p.1. Cooper says, see, for example, Zarathustra's Prologue, Thus Spake Zarathustra, Vol.I p.277ff.

3. Ibid.p.3.

being involved in the forming of them. Teaching methods therefore need evaluation and decisions made as to who has the responsibility, school or society. One can see the dilemma here when considering current contentious issues in New Zealand such as secular versus Christian values in schools, Peace studies, Sex education and Union studies. Values can be indoctrinated as we are well aware. To adapt one of Cooper's comments we have to beware of putting Buddha on the paths of pupils who do not know that they should kill him. The nature of one's schooling is therefore vital according to Nietzsche and he condones the need for discipline 'at the right time'[1] For him learning and forging values is a personal endeavour. As Cooper says "there is necessarily something lonely about the quest to forge values and beliefs for oneself"[2] As Hesse shows in Demian it is "the trying out of a way, the intimation of a path" or finding what Cooper calls 'the individual essence'[3] He also says that the Polonius type of knowing oneself represents the person as a multiplicity of selves and does not constitute the true search. Korzybski in Science and Sanity also has much to say on this. Solitary introspection of the kind recorded in Van Gogh's letters is he believes, not the way to self-understanding. Katherine Mansfield bears this out in her journal where she speaks of the reference to Polonius as typical of the kind of exhortation written in autograph books, to her disgust:

> Of course, it followed as the night the day that if one was true to oneself...True to oneself! which self? Which of my many--well really that's what it looks like coming to--hundreds of selves? For what

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1. David Cooper, Authenticity and Learning, Routledge, Kegan and Paul, London 1983,p.5,citing Aus Dem Nachlass der Achtzigerjahre,p.722.

2. Ibid.,p.6.

3. Ibid.,p.8.

> with complexes and repressions and reactions and vibrations and reflections, there are moments when I feel I am nothing but the small clerk of some hotel viithout a proprietor, who has all his work cut out to enter the names and hand the keys to the wilful guests. [1]

What people lack says Cooper is an ability to distance themselves and see the real self and situation. Sincerity as Sartre has said is the power to reject and make choices. No-one can justify values for another. Inevitably "A paramount and constraining feature of oneself and one's society is the language system--the language in which beliefs and values one may want to entertain must be expressed." [2] The Polonius model of inner search according to Nietzsche is wrong because it believes self to be the source of thought, when it is through thought that the 'I' is posited: "Your true being (wesen) does not lie hidden within you, but immeasurably high above you, or, at least, above that which you usually take as yourself." [3] Which seems to suggest that we construct ourselves.

Tim Linzey speaks in the same vein: 'The self is not to be viewed as some entity that is there waiting to be discovered. Rather, we quite literally construct ourselves in the process of actioning the decision.' [4] He believes this is what Socrates meant in his Delphic aphorism "Know thyself". Models or mental representations, he believes, play a crucial part in this self determination. "The understanding of the self then emerges from the apparent coherence or aptness of the metaphor, embedded in

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1. Katherine Mansfield, <u>The Letters and Journals of Katherine Mansfield</u>, ed. C.K.Stead, Penguin, England 1978, p.205.

2. David Cooper, <u>Authenticity and Learning</u>, Routledge, and Kegan Paul, London 1983, p.11.

3. Ibid., p.14.

4. Tim Linzey, University of Otago, 'Self Esteem, Self Concept and Self Realization', Paper given at N.Z.A.R.E. Conference, Wellington. p.2.

the model."[1] Models may of course be undesirabe or unhealthy. To Linzey "This process of deciding or inventing oneself is one of the truly crucial human capacities."[2]

Apparently no writer has been more insistent than Nietzsche that one's language is the repository of beliefs and values whose sudden overthrow would divest that language of sense."[3] So much so that he would prefer his revaluations to be 'danced' rather than put into words because values are inherent in our words. This explains his "massive recourse to metaphor; for it is only through this that the intimate ties between words and concepts can be loosened so as to free words for new employments."[4]

For Nietzsche then metaphor gives power and freedom and enables new ways of seeing and thinking. He also believed that our capacity for self-concern was at the centre of authenticity. People who are not authentic 'fall' into ways of thinking and behaving which seem to them the norm. They go along with 'Das Man'. This frees them from personal responsibility. Heidegger believed the authentic person had resoluteness and Cooper refers us to Lionel Trilling on the same topic. A corollary of authenticity then is honesty. Peters and Dearden similarly seek autonomy for pupils says Cooper but what Nietzsche demands of man is based not on rational calculations but on the essential nature of man which should let him be open to new possibilities. It is not enough for us to trace the origins of our beliefs and values which is mere 'geneaology' in Nietzsche's words. His concern

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1. Tim Linzey, University of Otago,'Self Esteem, Self Concept and Self Realization', Paper given at N.Z.A.R.E. Conference, Wellington. p.6

2. Ibid.,p.21.

3. David Cooper,<u>Authenticity</u> <u>and</u> <u>Learning</u>, Routledge, and Kegan Paul, London 1983,p.14.

is with a new kind of person who will create new kinds of values, and who can be produced only through education or 'breeding', not through social, political, or economic reform and progress [breeding in this sense is not eugenics] but he doubted whether educational institutions were capable of this task. The fault of seeing knowledge as useful was demonstrated in the German school system when it abandoned the pursuit of the ideal man and concentrated on natural science and German studies with a consequence that Cooper calls 'the erosion of the original idealist spirit':

> The growing needs of army, state, and the industrial economy transformed the system at every level: the curriculum became more 'relevant' ; teachers were appointed and dismissed according to political complexion; there was a growth in 'specialisms', especially in the natural sciences; and an examination system, for filtering the future servants of the state, developed massive proportions. [1]

There are of course still people now who would approve of just such a system. and this metaphor of education, as a form of 'reproduction' or the way a state or power group guarantees its own needs are met and its own perpetuation, is well documented by people such as Bowles and Gintis. Cooper says academics retreated from this scene in late nineteenth century Germany and tried to pursue 'knowledge for its own sake'. Nationalism also, says Cooper became apparent even in the school textbooks and it was against such a background that Nietzsche developed his critique of schooling: "For Nietzsche, teaching which aims towards 'real' goals, such as economic ones, cannot belong to true education; nor can teaching whose aim is the acquisition of 'knowledge for its own sake'."[2] His epithets about scholars who do this are derogatory to say the least. Cooper says this does not mean that Nietzsche disapproves of scholarship or practical arts but they are not wholly what education is

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1. David Cooper, <u>Authenticity and Learning</u>, Routledge, and Kegan Paul, London, 1983. p.29.

2. Ibid., p.30.

about. For him it is concerned with 'Life' and 'Nature' and is related to 'understanding' and 'wisdom', even though he never gives a definition of what education is. Cooper says, there is in fact no equivalent word in German.

Nietzsche's criticism of modern education is that it tries to make men 'current'. This coinage metaphor implies acquisitiveness, materialistic aims, economic concerns. In fact this might be applied to our present educational situation where life and therefore even education revolves around a stable or flourishing economy and the actual nature of our 'living' is rarely examined. In schools whose aims are practical or utilitarian "pupils will be trained to fill those roles which the economy of the day (or the day after) requires."[1] Even 'higher' education Nietzsche believed, can often merely "furnish people with the theories and ideologies that presently prevail."[2] Much of Kuhn's critique of Science is on this theme of institutionalised paradigms within which academics work. This monetary metaphor also signifies what Cooper describes as a hedonistic or eudaemonian perspective. The cult of specialism prevails in this situation and thus we lose any sense of holistic education. Examinations become mandatory and an emphasis is put on memory and speed of learning such as Gregory also decried, and which to Nietzsche is "incompatible with the development of that state of mind which characterizes the educated spirit."[3] Nietzsche had particular loathing apparently for the specious type of journalist who flourishes in this atmosphere, the media 'pundit', to him a mockery of 'the universal man' who would be symbolised by Goethe.

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1. David Cooper, Authenticity and Learning, Routledge, Kegan and Paul, London 1983.p.34.

2. and 3. Ibid.,p.34.

The 'breadwinners' and the 'old maids' approach to education as Nietzsche calls them both stifle the 'solitary' and 'inner' man and consequently the authentic person. If you are not 'current' then you find yourself ostracised, outside the mainstream. Cooper says the first approach is the 'technicist' view "the idea that the technological power at man's disposal is the fundamental feature of our times, and that their energies should primarily be directed towards utilizing this power for the sake of increased material welfare."[1] This model of man as exploiter of nature gives government the power to harness and channel this energy and then the main purpose of schooling is to supply the technicists and the support system they will need.

A good example of this 'current' view is seen in the present outcry about the lack of qualified science and mathematics teachers in New Zealand. Speaking to the Institute of Policy Studies Megan Clark described how "New Zealanders are avid consumers of the veritable feast of products and benefits of science and technology" but the education system is failing to supply scientists and technicians, creating what she calls a "famine in human resources".[2] This may be fair comment on standards of teaching in science subjects because of poor training, conditions of work, lack of resources etc. but the interesting aspect of this is that such demands are based on the assumed need for a technologically-oriented society and the need to feed and supply industry with the technical personnel it needs. What

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1. David Cooper, Authenticity and Learning, Routledge, Kegan and Paul, London, 1983. p.36.

2. Megan Clark, senior lecturer Victoria University of Wellington, speaking to The Institute of Policy Studies Seminar on 'Science and Technology: Attacking the 21stCentury'. Reported in the Evening Post Wellington September 5th 1987. See also Royal Society report on Science in Education in New Zealand.

Nietzsche and Cooper criticise is the narrowness of the technicist's and scientist's view of education.

The voices pleading for a more humanistic culture are rare. In Culture, Education and Society Crouch speaking of the British experience says " Worried simultaneously by the country's declining ability to produce a labour force suited to the needs of employers and by the cost to the Exchequer of public education, the Conservative government is seeking to make education for the mass of children who lack major academic ability narrowly vocational."[1] He is not totally opposed to this movement believing that good teaching overcomes all constraints put on Education, but Roger Poole in the same journal speaks of humanist education being driven back by "monetarist philistinism in ever more complex forms."[2] What would Nietzsche say to us now? That technicism is hostile to life and Nature for a "man before all else learns to live...in the workshop of the only mistress there is, Nature."[3] Like Ortega y Gaset, says Cooper, who some years later saw technicism as the continuation of primitive pursuits by sophisticated means.

Nietzsche's 'natural' man is not the romantic or primitive view such as that of Rousseau. He is not as Cooper says in that "'child-centred' horticultural pedagogy which portrays the teacher as a discreet nurseryman gently tending the natural growth of the budding child."[4] What metaphors

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1. Colin Crouch,'Education and culture: grounds for cheerfulness', Culture, Education and Society Vol.40,no.4,Autumn 1986.p.369.

2. Roger Poole,'The end of a humanist enterprise', Culture Education and Society,Vol.40,no.4, Autumn 1986.p.349.

3. David Cooper,Authenticity and Learning,Routledge,Kegan and Paul, London,1983.p.36.

4. Ibid.,p.38

does he use? Education is "liberation, clearing away of weeds, rubbish, and vermin which attack the tender buds of the plants...it is the imitation of nature where Nature is motherly and compassionate."[1] Which suggest to Cooper that Nietzsche sees discipline as part of this care.

The features which characterize the technicist view are: a calculative mentality in which nature equals stock, or property to be used, and human energy part of this. Its nature is to become exclusive and drive others out and its mode of thought is calculative. 'Leisure' is the supposed antidote to this. Scientific mentality sees human suffering as merely another problem to be solved. In politics everything is measured in economic terms and questions of whether for instance we pay enough attention to education become whether we spend enough money on it. As Cooper says one of the most powerful allies won over to technicism is language and often by constant repetition and misuse concepts change meaning to suit the purveyor:

> A pervasive linguistic device, of the first importance, which technicism wins over is METAPHOR. I do not mean isolated metaphorical uses of individual words, but whole fields or systems of metaphor in terms which we talk about, conceptualize, and display attitudes towards, the world. For example, those systematic metaphors which constitute 'organic' and 'contractual' theories of the state. In good times, people are free to create new metaphors, thereby suggesting new perspectives, dissolving old associations, and paving the way for new conceptions. But in bad times, when mass-media, public spokesmen, advertisers, and other mouthpieces share an outlook, metaphors can become one-sided and are warped to fit the outlook. 2

Cooper gives the example of Heidegger's references to 'dwelling' and 'home' which have become imbued with overtones other than what he meant by 'home'. Likewise military metaphors, Cooper sees proliferating in our technicist society. We need to go no further than a focus on sports and business

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1. David Cooper, Authenticity and Learning, Routledge and Kegan Paul London 1983.p.38.

2. Ibid.,p.44.

journalism and see how many are used there.

As for the notion of 'leisure'. Nietzsche sees this as 'culture spice' or fairly meaningless. To him the real life is a useful life. This is not to be confused with education for employment such as Cooper says Mary Warnock espouses.[1] She is influencing current thought but as Cooper says, nothing is said about the 'ethos' in which teaching is to be done. This seems to be the reason for our marked lack of progress in education. We see it as a system and plan it as efficiently as any business but without an overriding philosophy about what it is to be human it is meaningless.

Education is often described as initiation into disciplines or subject areas. This organisation of 'Knowledge' Nietzsche sees as failing to help people to know how to live, for each person has to work out values and coping strategies for him or herself. 'Knowledge' is inimical to authentic living, but philosophical understanding he considers as essential. Nietzsche believed that "guided in the right ways, he [the young person] will succeed to that philosophical astonishment ...upon which alone...a deeper and nobler education (Bildung) can grow."[2] and that philosophical development would teach one how to understand situations and be an ongoing development whereas the usual emphasis in schools stifles philosophical thinking, which he claims is the 'highest need'and 'natural instinct' of the young. He does not see philosophy as a 'subject' or 'discipline to be killed by examinations but as a way of understanding 'situations' and helping one to form values and guide action. Moreover he thinks that scientific discoveries have made

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1. Mary Warnock, Schools of Thought, Faber, 1977.

2. David Cooper, Authenticity and Learning, Routledge and Kegan Paul, London1983.p.53.

less impact than the philosophical discussions they have given rise to.

Knowledge contrasts unfavourably with myth, religion and morality because according to Nietzsche it is not concerned with values. For him philosophy has a distinctive concern with meaning and is occupied with 'the hieroglyphics of existence', with providing 'a picture of life as a whole...(to) learn from it the meaning of your life'...to understand meaning is necessary before setting values, but 'meaning' is not in a grammatical or linguistic sense but a careful examination of language:

> ...in particular the stocks and webs of cliches, metaphors, hyperboles, analogies, slogans, chatter and received truisms that attach to and envelop the 'situations' which love, wealth, death, and so on, present. But more than that, these stocks and webs constitute the 'situations'...'Situations' are encountered only in so far as they are conceived in certain ways by people. 1

Nietzsche stresses that one's language is part of one's situation and understanding of this situation; it is an integral and important part of one's life and must be acknowledged as such. And as quoted above metaphor is one part of this , part as it were of the private and communal ambience in which one lives, thinks, acts and speaks.

Cooper says that Nietzsche treats 'practical training in speech' and 'linguistric self-mastery' which will involve a sharp ear for cant, misleading metaphor, and mere chatter, as a 'holy duty' of education. What education can do is help people to cope in such situations. Simply offering information is no guarantee of relevance or usefulness for a person in a real life situation. One contradiction which Cooper points out, is, that defenders of liberal education point to the rules learnt as one of the advantages gained. But in fact there are no rules in for example criticism in English, yet criticism is encouraged. People tend to assume rules which do not in

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1. David Cooper, Authenticity and Learning, Routledge and Kegan Paul London 1983.p.56.

fact exist in subject disciplines. It is habit says Cooper which breeds an illusion of rules. "This is why talk of a discipline's rules, metaphorical as it is, is a serious matter, for like many metaphors it can be a dangerous one."[1] Cooper says it is the effect of the 'rule' metaphor on the initiates into a discipline rather than its effect on the disciplines themselves which is the main worry, and tells us that R.K.Elliot has warned of this in his talk of orthodoxy and its dangers.[2] It is in schools especially that time and freedom to explore alternative views is limited, unlike universities where feverish criticism may appear to be going on but much of this activity is 'mere virtuosity' says Cooper. More importantly, he declares that "Authenticity belongs to lives, and therefore embraces more than the beliefs, interpretations, and 'cognitive ' activities of man. Feelings, emotions, and the 'affective' are also to have their place in authentic living."[3]

Nietzsche believed that 'Knowledge' threatened emotional capacity. We appear to think differently when, to solve problems e.g. racial tension, we set up committees etc. But Cooper sees that we need what Schiller has described as the capacity "to make alien feelings our own" whereas simply piling up more information about them will not enable us to walk in their shoes or get into their skin as Harper Lee had Atticus tell his children.[4]

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1. David Cooper, Authenticity and Learning,Routledge and Kegan Paul,London 1983, p.61.

2. Ibid.,p.62, citing R.K.Elliot, Education and Human Being, in S.C. Brown(ed.),'Philosophers Discuss Education',Macmillan,1975,pp65-6.

3. Cooper,p.64.

4. Harper Lee,To Kill a Mocking Bird,Penguin Books ,England 1967, p.35. Atticus to his daughter Scout...'You never really understand a person until you consider things from his point of view--'
'Sir?'
'--until you climb into his skin and walk around in it.'

George B.Leonard says we should not blame the schools for demanding " 'Right answers', specialization, standardization, narrow competition, eager acquisition, aggression, detachment from the self."[1] These are what society has demanded of them. R.S. Peters has said that education of the emotions is "getting people to see the world differently in relation to themselves"[2] but the difficult question is whether this is a task for schools or one they are capable of dealing with.

Nietzsche borrows two metaphors from a long tradition in German thought. One is the metaphor of 'knowledge' as 'destructive' and 'dissolving' and the other is of a 'screen' or 'veil'. The scholar by study and analysis tends to 'dissolve' people. We have probably all known professional 'experts' who appear to lack human sympathy or empathy. More importantly, he declares that "Authenticity belongs to lives, and therefore embraces more than the beliefs, interpretations, and 'cognitive' activities of man. Feelings, emotions, and the 'affective' are also to have their place in authentic living."[3]

For Nietzsche it is not that the person is a metaphysical entity transcending whatever can be described in terms of cells, roles and the like, but that such descriptions are private and abstract, obtained in a parasitic way from the notion of the person as a unitary whole. Immersion therefore in disciplines, may, Nietzsche feels, sever ties between persons and for this reason he extols the virtue of Literature, where people are

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1. George B.Leonard, Education and Ecstasy, John Murray, Great Britain, 1970,p.124.

2. David Cooper, Authenticity and Learning,Routledge and Kegan Paul,London 1983, p.64,citing R.S.Peters,'Ethics and Education ', Allen and Unwin,1970,pp32-3.

3. Cooper,p.66.

treated as whole persons. A good example Cooper gives of the scholar with all his emotional capacity atrophied would be Casaubon in George Eliot's novel Middlemarch, who leads an arid emotional life whilst devoted to his worthless work.

Nietzsche ascribes a central role in education to language. "Concepts...[are] only possible where there are words...we cease to think when we try to do so without the constraint of language..We can only 'fix' experiences, and as it were place them outside of ourselves when we communicate them to others through signs."[1] The central thought here is attributed to Wittgenstein and his attack on 'private language'. As Cooper says "To have a concept is to clarify distinct items of experience as being similar; but criteria of similarity are the interpersonal ones provided by a public language."[2] This is what I believe we share mainly through metaphor-making. Nietzsche says that only where there is "a uniformly valid and binding designation of things" is a concept possible.[3] In an early article he claimed that items in reality are not similar, "every concept originates through making alike what is not really alike" and "everything of which one becomes conscious is thoroughly arranged, simplified, schematized, interpreted."[4] This prevailing desire for order and pattern, a central interest in this work, is one he recognises. Language has to cope with our ever-changing needs for interpreting the world.

Nietzsche believes that the 'will to power' rather than self-preservation is the inspiration for our further development. Presumably here he means power in the sense of control of our environment. Constructing a

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1. David Cooper, Authenticity and Learning, Routledge and Kegan Paul, London, 1983, p.68.

2. 3. and 4. Ibid., p.69.

descriptive language is one form power takes. For Nietzsche philosophical accounts of the world are disguised descriptions of the GRAMMARS of language which have succeeded in their mission and object terms like 'tiger' or 'I' stand for 'fictions' constructed for interpreting 'the medley of sensations'. For Nietzsche there can be no descriptions of 'the true world' because there is no such world, as we cannot think how it would be to be without thought. Truth and knowledge then, as standardly conceived, are necessarily unattainable--"the greatest fable is that of knowledge"[1] --and we continually seek new concepts of truth and knowledge. This presumably is one of the tasks of education.

Grammar, Nietzsche says, deludes us into thinking that what we describe with words is reality " because of the sharp grammatical distinction between subject and predicate, we think of the objects as substances distinct from the properties predicated by them".[2] Grammar seduces us into thinking of agents even where there are none. AN example is lightning. Which leads Nietzsche to say "I am afraid we are not free of God because we still believe in grammar."[3] This reflects a need that humans have for passing moral judgments, requiring us to "interpret events...as events caused by intentions."[4] Which leads to a 'deception' the scientist fears to commit, as heir to earlier notions, deception as failure to live in the truth of God and to have produced an account of reality that matches the divine conception. Thus it is a moral, a metaphysical faith upon which our faith in science rests.

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1. David Cooper, Authenticity and Learning, Routledge and Kegan Paul, London 1983.p.73.

2. Ibid.,p.75.

3. and 4. Ibid.,p.76.

Our standard notion of truth then is a Realist one. Which leads inevitably to the conclusion that our will to truth is a will to power, meaning that people tend to accept those theories and beliefs which give them power. Science for example helps to conquer our fear of the unknown, once again this appeals to our desire for order. Once we have a 'truth' we are reluctant to give it away. Knowledge itself becomes a form of power. Words therefore are horizons to our knowledge rather than truths. Those who uphold 'truths' do so because of the inherent power they receive from them. If we were to understand the nature of 'truth' and 'knowledge' Nietzsche believes we would better understand ourselves and our world. To unmask the falseness of truths is of course to threaten those in power. Both Wittgenstein and Nietzsche, says Cooper, clearly think that many of our ways of talking must be overturned and reconstructed and for this reason they both reject 'private languages', and both stress the intimate connection between grammar and thought.

The implications of such thinking are however far from negative or depressing, for as Nietzsche says "The world has once again become 'infinite' for us, in so far as we cannot dismiss the possibility that it contains infinite interpretations."[1] Also if we are aware that the criterion of truth is power we are less likely to be misled or deceived. To him the most sublime form of power is that of the creative artist "the power of the creative, free individual"...who can " fix an image of what should be--they are productive, in so far as they actually change and transform."[2] If we reject realism he believes we can be more aware of this power and scope

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1. David Cooper<u>Authenticity and Learning</u>,Routledge and Kegan Paul, London 1983,p.81.

2. Ibid.,p.82.

which knowledge shares with art--interpretative, creative power which is free and not constrained and narrowed. Concepts then can be remoulded and through the 'death of God' there will be a new appreciation of individual creation and the interpretation of ideas.

In a sense Truth and Knowledge are unattainable and an artist senses this in his dissatisfaction with his work. The artist goes on when others stop for he knows there is more to know and see and do. We have exaggerated the importance of the factual and this has to be remedied through education. The disciplines as we know them have so far have only been gropings towards answers, towards this instinctive need we have for order, sense of pattern and design. "Truth is no illusion if it is understood in terms of the order, coherence, and power over 'the medley of sensations' which beliefs and theories can afford."[1]

One of Nietzsche's most important works, says Cooper is his The Gay Science which title refers to the gai saber, the poetic art of mediaeval troubadours from Provencal, for he believes that the pursuit of truth should share the same vitality, exuberance and joy they demonstrate, above all their inventivenes, with "the spinning of new metaphors, the suggestion of new analogies, the cutting across old classifications, the refusal to be opposed by the weight of tradition and orthodoxy: these are some of the ways truth should be pursued and education should encourage."[2] Integral to this is the need also for a conscience that would despise accepting any unquestioned belief. The greatest difficulty we face is in having to use the same language to reconstruct the ideas already embedded so deeply through language use so far.

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1. and 2.David Cooper, Authenticity and Learning, Routledge and Kegan Paul, London 1983.p.88.

Moral betterment, says Cooper was once considered the principal purpose of schooling. Fashion, he thinks has changed because of the emphasis on 'child-centred' education. His view may be slightly exaggerated. I would have interpreted this as what the child NEEDS rather than WISHES. The difficulty is how to create authenticity if there appears to be a need for moral training when one contemplates the anarchistic tendencies of modern youth. Cooper seems almost to accept that in many places indoctrination might be necessary but in schools where moral education might not be a sisyphean exercise he can see that a concern for authenticity has some value. Nietzsche thought that in his country there was a failure to give attention to moral matters, and commended in his later notes the moral ideals of christianity, as a moral code IS necesssary for social stability, that is, for most of the populace . The 'overman' however has to be allowed to transcend this, as, to Nietzsche, there is nothing educative about moral training which must use immoral means to gain its ends. He also sees that "suffering is often a precondition of individual achievement, greatness and self-realization."[1] This is a precept difficult to accept although it is a strong tradition in the Christian religion. Suffering can strengthen and refine people but it is difficullt to prove that such is necessary.

Nietzsche gives a philosophical description of the nature of authentic existence and what his ideal man or overman could be if educated rightly. Some of his virtues would be self-honesty; conquest of fear; mis-trust towards both received and 'scholarly' opinion; despising the petty and the mediocre; a developed sense of history; self-discipline; willing nothing beyond one's capacity; full awareness of what that capacity is;

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1. David Cooper<u>Authenticity and Learning</u>,Routledge and Kegan Paul, London 1983,p.97.

the ability to command and to obey; the refusal to regret or do the 'dirty' on one's chosen and considered purposes; abstention from merely negative criticism; the ability to 'laugh at', hence stand at a distance from, hence be ready to alter how one has been; the power to turn sufferings and illness into new sources of strength; spontaneous, as against brooding, calculative responses to treatment by others.[1] These values he calls extra-moral or 'moraline free'. Whereas, Dewey, in 'Moral Principles and Education' in Cooper's opinion, falls into the trap of saying that the moral worth and work of the school system is to be measured by its social value and the primary aim of the process is to produce the 'good citizen'. A current and interesting tendency [and a new metaphor--a social one] which Cooper comments on, is the replacing of moral viewpoints eg. attitude to crime and punishment, with new categories, in fact speaking of it as a social disease.

Nietzsche's values are not altruistic or selfless they pertain to the individual's good, not community welfare, nor do they rest on a notion of equality--conscience is rejected as a form of self-betrayal and some suffering is to be accepted. His values then cannot be in Kant's terms universal. Uniqueness of the individual precludes this for Nietzsche. He sets no prescription for what man ought to be "I am a law only for my kind," says Zarathustra "I am not a law for all."[2]

Cooper suggests that the imperative nature of moral judgments helps to distinguish moral from aesthetic judgments and Nietzsche does not consider his values as imperatives. For him, as for Dewey, a primary aim of education is to develop harmoniously the powers of the individual. For Dewey this is

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1. David Cooper<u>Authenticity and Learning</u>,Routledge and Kegan Paul, London 1983,p.81.

1. Ibid.,102.from Thus Spake Zarathustra trans. Kaufman p.521.

defined, as mentioned previously, in social terms, but not for Nietzsche who sees the product of such a system as unreal, unauthentic.

Pity, for Nietzsche is of two kinds; the weak Christian pity acting according to precept, and the 'moraline- free' or 'noble' pity. I imagine he means the kind we are moved to by great drama as in Lear. This is the pity which is appalled at man's inhumanity to man, for in man "creature and creator are united", whereas most pity appplies to the "creature in man." He says "My kind of pity...is a feeling... I feel...when I see precious abilities squandered...or when I see someone...lagging behind what could have come of him."[1] Many teachers I believe would understand this kind of pity. Most of us, he says wear masks, in order to conform but the truly free spirit seeks solitude to shed this social mask. As he says there are literary characters such as the Master in The Glass Bead Game and Siddartha who experience great difficulty in choosing between the two worlds.

Nietzsche is criticised because like Plato he speaks of educating an elite, but my impression, through Cooper's portrayal of him and his work , is that in his conception of education one must strive for what might be, a perhaps impossible ideal, the perfect person. Inevitably in each era there will be some who strive or achieve above all others. These I take it would be the overmen, most likely artistic, creative, free-minded creatures whom we should respect and cherish, for they will question our mores and force us to think ahead and think anew.

Nietzsche asserted also that we should judge a society, not by its political forms, its economic arrangements, or its legal system, but by the nature of its education. Progress, and democracy as he witnessed it, merely

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1. David Cooper Authenticity and Learning, Routledge and Kegan Paul, London 1983.p.106.

belittled man. For him the goal of education is "the production of genius"..."a justifying man' ...a"higher type of man". He says "My metaphor for the (justifying) type is, as one knows, the word 'overman'..."[1] by which he means a truly authentic individual and the ideal product of an ideal education. In Zarathustra's famous metaphor, man, as he now is, is portrayed as on a rope slung between the beast and the 'overman'. He can crawl further only through the provision by the agents of the state of true education. What he means by 'justifying', says Cooper, is that we accord supreme value to this creature for through him society itself will emerge into a new phase. In this sense he is a figurative symbol not for what is or will be, but what might be, and society must support him to this end. It is in this sense that his philosophy seems [to me] to be antithetical to Christianity which sees God or Good in everyman but presumably those responsible for education must in Nietzsche's terms see a potential overman in every student. Our literary minds have always pre-empted us, for Katherine Mansfield among others says the same thing "Genius lies dormant in every soul.."[2]

Cooper can see that our methods of education at present tend to denigrate the outstanding, special, or different person with our preoccupation for equality. We are in fact all trying to be 'current'. To attain the 'overman' we have to be dedicated to Kultur, that is a transforming process which strives to attain something superior and more human than the average person whose feelings are stunted by trivia, entertainment, stimulants etc. and who envies the genius who has escaped this. For Nietzsche then education is not simply input of resources but a

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1. David Cooper Authenticity and Learning, Routledge and Kegan Paul, London 1983.pp.114-5.

2. Katherine Mansfield, Journal of Katherine Mansfield, ed. Middleton Murry, Hutchinson, New Zealand 1984.p37.

task for those with the right awareness of what confers value on human existence and who allow each person to reach for his/her own potential as 'overman'. The person Nietzsche saw as exemplifying this ideal was Goethe, mainly because he was aware of his own capacities and limitations. He apparently also attacked many of the 'isms' of his day, this being the era of encyclopedic writings. His notion of freedom also matched Nietzsche's for he believed it to be not a matter of possessing rights or of absence of interference from authorities but as a property of one's personality and to be displayed in disciplined creative activity. Two metaphors he used to describe types of people, they are 'aristocrat' and 'bourgeois' though not used in a social class sense. One is preoccupied with what one has, the other with what one is. What the aristocrat has is a sense of self-worth. A key motif in Goethe also, says Cooper, is a sense of harmony and wholeness, saying that a person "only achieves the unique and wholly unexpected when all properties are uniformly united in him."[1] It has been said of him that he looked upon the world as an artist. Mansfield said of him " ...he did say marvellous things. He was great enough to be simple enough to say what we all feel and don't say. And his attitude to Art was noble."[2]

Cooper concludes from his study of Nietzsche that there are four foci for educators to consider, the philosophical; the linguistic; the aesthetic and the genealogical. The first means "the understanding [is to be] developed through education...of a type that is geared to the individual's self-conscious adoption of stances towards the significant situations

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1. David Cooper, Authenticity and Learning, Routledga and Kegan Paul, London 1983.p.129.Quoted from K.Vietor,'Goethe:The Thinker',Harvard University Press,1950,p.143.

2. Katherine Mansfield Letters and Journals' ed. C.K.Stead,Penguin, England 1977.p.255.

which he confronts as a human being."[1] Especially important is a concern with language:

> ...as long as (schools) do not accept as a holy duty the most immediate practical training (Zucht) in speech and writing, as long as they skirt around the mother-tongue as if it were a necessary evil or a dead body, I do not count those institutions as truly educational.2

Assessment of one's beliefs and values is possible only when language nuances are understood. In his view "in a sense all words are metaphors, since they serve to combine, in their fields of reference, radically dissimilar items."[3] Nietzsche calls words 'pockets' into which people are constantly putting in or taking out. He would probably agree with the person who described the work of teachers of English as training pupils to be critics, for he had a particular loathing for the crassness and insensitivity of much journalism.

The linguistic focus, will, says Cooper, be on metaphor, with which sentiment I would naturally concur.

> By 'metaphor' I do not mean primarily individual words or phrases used in non-literal ways, but those large, organizing segments of discourse in which things are spoken about in terms literally appropriate to something else. Such metaphors are among the most powerful determinants of how we conceive things...[such as] metaphors which have had great influence in educational thought --the child as a plant to be reared, say, or as a container to be filled...it is imperative to be sensitive to these metaphors...4

Nietzsche warned us to be shy of them, to mistrust them. Metaphors says Cooper can be insidious and so interwoven into speech that their impact is not fully realised by us. Which leads him to say: "A teacher, it seems to

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1. David Cooper<u>Authenticity and Learning</u>,Routledge and Kegan Paul, London,1983.p.133.

2. Ibid.,p.136.

3. Ibid.,p.137.

4. Ibid.,p.138.

me, can have few more important tasks than to alert the young to, and loosen the grip of, the many metaphors we live by."[1]

Cooper discusses the problems in schools now and what could be done about them. He does not seem to see how Nietzsche's ideas could be implemented. One key he appears to miss in Nietzsche is the essential need for activity. I believe that Nietzsche's reference to 'dance' gives us the clue. Not in the sense of mere busyness but the kind of activity in which the whole person is involved such as experienced in truly creative endeavour. The type of work where pupils act and produce plays rather than merely reading them or where principles in science and maths are used and applied as described in <u>In The Early World</u> would seem to be a move in this direction. My interpretation of Nietzsche's 'death of god' is that we tend to reify the ungodly as godly and we are driving youth mad with mixed metaphors, cliches and outmoded, even dead, metaphors.

This chapter has looked at some of the dominant metaphors of education and some of the thinking about metaphor itself and its relationship to education both theory and practice but not at educational administration as this is specifically dealt with in the following chapter. It is fairly obvious that the metaphors which influence educational theory come from a wide range of sources and as Elliott says "The chief importance of metaphors of education, generally lies in their rhetorical function, which is to stimulate imagination, to arouse feeling and to prompt action."[3] And "theories of learning are dependent on metaphors, because they are centrally

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1. David Cooper<u>Authenticity and Learning</u>,Routledge and Kegan Paul, London,1983.p.139.

2. Elwyn S.Richardson,<u>In The Early World</u>,N.Z.C.E.R., Wellington,1972.

3. R.K.Elliott,'Metaphor, Imagination and conceptions of Education,'in <u>Metaphors of Education</u>, ed. W. Taylor,Heinemann, London,1984,p.44

concerned with mental acts and conscious processes or with the operation of mental mechanisms below the level of consciousness, all of which are describable only by metaphorical means."[1]

Education is concerned with many abstract concepts and is difficult to evaluate. If education means changing people we need to know how we are changing them, why, and for what purpose. Certain assumptions and beliefs are implicit in education, first that human beings 'au naturel' are unfitted for human society and must undergo socialization processes to fit them for a place in society. Decisions as to what this constitutes are based on authority, sometimes claimed to be God-given, tradition, physical exigencies, pressure groups, survival needs etc. Describing such necessary processes requires descriptive language which will conjure up beneficial, philanthropic or nurturing images depending on the experiences, beliefs and aims of the person/s with the power to impose or create change. An educational word such as kindergarten is filled with such meaning. As Elliot asks, if education is for instance all about PREPARATION what are we preparing for?

Philosophers and sociologists particularly take a more holistic view of mankind than most of us and see the larger patterns. Theodore Brameld is such a person who sees philosophy of education as philosophy of culture and that most of our concepts of education come from sources dominated by four main conceptual fields. Because of this he thinks that we need to refine an anthropological philosophy of education for the future and one goal should be a transcending, converging mankind. He wrote this in the early seventies when the culture seemed to him to be one in a state of crisis, so we do not seem to have moved far in his chosen direction. He

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1. R.K.Elliott,'Metaphor, Imagination and conceptions of Education,'in Metaphors of Education,ed.W.Taylor,Heinemann, London,1984,p.38.

takes an anthropological approach because culture and personality are bipoloarities of the same reality, neither can exist without the other. He sees teachers as putting into action what he calls a culturology of knowledge. In his terms ORDER refers to PATTTERNS of relationship, and PROCESS refers to the DYNAMICS of culture and sense of purpose and direction within the ordered patterns of relationship. Institutions and faiths, rather than dealing with human crises, to his mind appear to create habits of acquiescence. To him the U.S. seems a schizophrenic culture, both self-interested and competitive as well as having generous, philanthropic social interests, and where curiously he finds the culture saturated with supernatural faith and science is seen as inferior to religion as a final source of protection and authority.[1]

Brameld believes that because psychological problems are dealt with psychologically the sociological problems are not dealt with but he foresees a time of cultural revolution and a shifting of cultural patterns:

> Frustrated as he so often has been by life-denying customs, by ignorance and superstitions, by cleavages in loyalty and other values, man has never approached anywhere near full command of his own energy, creative intelligence, and strength. He has been ruled over far more frequently than he has ruled. He has been starved, hoodwinked, exploited, cajoled, intimidated, frightened far more often than he has been decently fed, well-informed, respected. encouraged, aroused. 2

Everything Brameld says here has been reflected in education also and is observed particularly in the images of childhood and schooling in the previous chapter. We are often jolted into re-appraising our beliefs says Brameld when " our cherished patterns conflict with someone else's

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1, Theodore Brameld, Patterns of Educational Philosophy, Holt Rinehart and Winston, 1971, p.30.

2. Ibid.,p.36.

patterns."[1]

The history of philosophy attests to its age-old concern with the totality of life and philosophy of education is likewise concerned with characteristics of unity. Schools are seen by Brameld as "victims of specialization."[2] He also observes that there have been four dominant patterns of culture: essentialist, progressivist, perennialist and reconstructivist. They are only concepts, not real systems, and they each overlap. No one philosophy of education will slot neatly into any of these, what I would call sets and subsets within which one can identify various metaphors.

That part of his work which looks at contemporary philosophic movements clearly indicates the sources of some of our current metaphors. They are: Existentialism and the quest for authenticity reflected in the works of such as; Soren Kierkegaard, founder of the movement, Kean-Paul Sartre, Gabriel Marel, Albert Camus, Karl Jaspers, Martin Heidegger, Ortega y gasset, Martin Buber, Paul Tillich. All testify to the struggle of the individual in the face of systemic, rational forms or 'essences'of thought. Friedrich Nietzsche was eventually counted among their number and the philosopher-novelist Fedor Dostoevski. The ruthless power of modern civilisations to overwhelm individuality and personality was their concern and they particularly opposed objectivity, industrialism and war. Loneliness and suffering as part of man's struggle they are also sensitive to and in Buber there is an emphasis on dialogue as a necessity for full human development. Neo- Freudianists include Rollo May, Abraham Maslow and

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1, Theodore Brameld, Patterns of Educational Philosophy, Holt Rinehart and Winston, 1971, p.44.

2. Ibid.,p.56.

Carl Rogers, all known as existential psychologists. Other names are Carl Jung, Alfred Adler, Harry Stack Sullivan, Karen Horney, Erich Fromm, Abram Kardiner, and Franz Alexander, all psychotherapists, and Harold D. Lasswell a political scientist and theorist. All of them recognize the seminal influence of Freud but have modified his concepts. They believe that environmental and especially social conditions are as influential as sexuality and aggression. For Sullivan interpersonal relations are a central concern. They also believe that civilisation can progress, and many of the problems people experience are seen as effects of outmoded and enslaving institutions. It is almost impossible to distinguish clear demarcations between the different schools of philosophy and their adherents so more than one label is ascribed to some of them; Fromm for instance is regarded as both Freudian and Marxist.

Neo-Marxism says Brameld, emphasises man's struggle to fulfil human needs especially economic ones. Terms formerly used such as class-consciousness have been modified with new terms such as Brameld's own culturology. Two names he mentions in this sphere are the Yugoslav philosopher Gajo Petrovic and Herbert Marcuse. In the area of Philosophic Analysis which is concerned with conscious logical mind the names of Ludwig Wittgenstein, Bertrand Russell, G.E.Moore, Rudolf Carnap, Herbert Feigl, Moriz Schlick, Gilbert Ryle, C.E.Ayer, Hans Reichenbach and J.L. Austin are the ones he gives. Wittgenstein is recognized as the outstanding figure here particularly for his ordinary-language theory "which maintains that the reliability of thought is to be anchored less in the artificiality of philosophic and scientific constructions than in familiar, habitual usages of everyday discourse."[1]

1, Theodore Brameld, Patterns of Educational philosophy, Holt Rinehart and Winston, 1971, p.78.

Both he and Cassirer favoured multiple styles and levels of communication.

Zen Buddhism is not a philosophy according to the analytic philosophers says Brameld but has affinities with existentialism. Both challenge the objective, neutral and unemotional posture of scientific philosophers. Its history is ancient and among those with a professed interest have been Alan W. Watts, Carl Jung, Martin Heidegger, Huston Smith and F.C. Northrop who made a plea for "solid bridges of understanding across the vast distances of space and time that separate some of the greatest of all civilisations in history."[1] This is particularly interesting as the bridge metaphor is used once again. The leading exponent for the West has been the Japanese Zennist D.T.Suzuki . He describes Zen as being concerend with "the non-verbal, non-symbolic, and totally undefinable world of the concrete as distinct from the abstract...for Zen is to move with life without trying to interrup its flow; it is an immediate awareness of things as they live and move, as distinct from the mere grasp of ideas and feelings ABOUT things which are the dead symbols of a living reality."[2] This rather succinctly indicates why metaphors give us so much trouble.

To understand Zen therefore means to undergo an intellectual and emotional metamorphosis says Brameld. One can see even from this sketchy summary of Brameld that many of the referencs quoted in this study have been influenced by some of the names he categorizes. Nietzsche particularly seems to me to encapsulate the essential problems in education which include to my mind autonomy, responsibility, freedom, democracy and accountability, a correlate of responsibility. How much freedom do we need,

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1, Theodore Brameld, Patterns of Educational Philosophy, Holt Rinehart and Winston, 1971, p.80.

2. Ibid.,p.81.

or are we entitled to, and our students, and is responsibility always the other side of this coin. Even the term democracy has a false ring to it now and has become a metaphor for a kind of consensual form of represention vastly different to its original meaning. Teachers face a particular dilemma in defining the terms as they are in a special position in society, responsible as they are, like parents, to help the next generation move forward.

The metaphors of and in education seem to fall into two distinct spheres as articuated by David Pratt, they are either humanistic or technically oriented. My own impression from the literature is that before we reach a stage where the humanistic tendencies take over and hopefully have a paradigm shift towards a synthesis of arts and science we will be subjected to a period of strife within education, during which period the dominant metaphors will be the military ones.

The signs are already in evidence. One can see them in the panic reactions in America where there is great fear of being overtaken in the technological race by the Eastern countries, and a growing realization that education or lack of it is at the heart of their seeming failure. Just as Sputnik caused millions of dollars to be poured into science from the schools up, the pressure is on now to produce technocrats and technology when the needs for the future, if we have one, will be be for people who are global in their vision of what it is to be human and whom one hopes will exist in a world that has achieved non-racism, non-sexism, and environ -mental balance and harmony. In the interim the military metaphors will predominate as they already do on the technological front. War on ignorance will be the new catchcry as well as war on want and on drug abuse and this may deploy resources traditionally reserved for defence. Fortunately, we now know more about the needs of children and realise that social wellbeing

is inextricably linked with education so perhaps the new war on ignorance will have some spinoffs for youngsters even if the end at present, the production of supertechnicists, hardly justifies the means.

> On the one hand there are the technologists, with their systematic procedures, military metaphors, and their behavioural and positivistic language. On the other hand, there are the humanists, with their intuitive thinking, poetic language, and their subjective and interpersonal priorities.1

In areas where competition is rife as in sports and business the language of war is already endemic. It will all depend on who controls power what the outcome will be, and at the moment the pendulum seems to be towards the technocrats with their aggressive, industrial and economic muscles. Both sides use language as a powerful tool.

Roger Poole giving his impressions of ten years editing of the New Universities Quarterly journal of Education speaks of the changing face of education as reflected in the new language of education. The humanism to which he and his editorial colleagues subscribe appears to be under flagrant attack. He goes so far as to say that under the present ministry the educational establishment has been dismembered. The schools look ravaged, local government passes on the resentment it feels, youth is disaffected by unemployment and teachers feel forced to strike in the face of continual disparagement of their status. Universities have also fallen prey to the new wave of Benthamite monetarism and 'Managerial interest' which among other moves implemented differential payments for teaching and research. This leads Poole to the conjecture that under such a regime the favoured will be those whose work aligns most with government policy, and the arts and humanities are the most likely to suffer.

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1. David Pratt,'Curriculum design as humanistic technology,'<u>Journal of Curriculum Studies</u>,1987,Vol.19,No.2,150.

In this monetarist climate the word culture seems to Poole to lose its meaning as:

> We have watched as Sir Keith Joseph has incapacitated, then humiliated the universities; let the schools rot; and consigned more and more young people of all ages to a future where there will just be quantitatively less, and qualitatively less good, education for them to apply for.1

Education is now interpreted he says, as 'skills' related to the needs of the marketplace. 'Performance indicators' are the new byword and applied even to the Arts.

> An entire new terminological 'tone-row' has been put into place. 'Skills' have been moved in to take the place of 'abilities', of knowledge, talent, capacity. 'Funding' has been moved in to replace 'support'. 'Performance indicators' have been substituted for thought, research, teaching. 'Jobs' have been moved in to replace 'careers'. 'Tenure' has been moved in to replace a life-long devotion to a badly-paid and socially disesteemed choice of the low road. 'Grant' has been substituted for quinquennial plans'. 'Efficiency' has been substituted for 'quality'. 'Improvement of management and cost-effectiveness', 'grant' for in-service training of teachers', 'training in management', 'appraisal of performance', 'redeployment of teachers so that their skills can be put to better use' -- a whole sub-language of Management has replaced the real language of Culture, Education and Society.2

The age of Newspeak has finally arrived and the language of management is dominant and empowering to the point where Poole believes that 'the right to manage' appears to transcend all other rights. Succesful businessmen are thus moved across into erstwhile esoteric specialist areas such as education and hospital management usually to do a cost-cutting exercise in the name of efficiency and good management but in practice hurting the community it is supposed to serve. Even the term 'vocational' which originally meant 'calling' is now used to denote paid employment.

The worst effect of this new philosophy of government by managers:

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1. Roger Poole, NUQ Culture Education and Society, Vol.40, No.4, Autumn 1986, p.350.

2. Ibid., p.351.

> Young people are regarded as windowless monads in a pan-determined economic universe, helpless before market-forces ('Reality') and provided (or unprovided) with marketable 'skills'. An intensely Patrician order regards the young citizenry of these islands as mere Viconian 'clients'...1

Surprisingly he does not refer to that other popular euphemism 'human resources' but as he speaks of the state of the nation in Britain we in New Zealand can witness the same dehumanising movement here, where, as he observes 'efficiency ' has replaced ethics, and where callousness has replaced concern.

Evidence has been drawn on to indicate that metaphors are too important and too powerful for teachers especially to ignore. When people are unaware of how language is used to control them they are powerless. Without adequate understanding of language children are deprived and not merely in the sense of having a restricted code. They are less than whole persons and in no way can they become autonomous or authentic. Pratt speaks of the two poles of the curriculum continuum as humanistic and technocratic but perhaps the factor that should concern us most is what many observers, such as John Goodlad, whom he quotes have observed in classrooms, a total aimlessness. "If there were central concepts or children's needs and interests guiding the selection of specific learning activities, they escaped our attention."[2] Cooper says that we need to be aware of the metaphors we live by. One might add to this a message for teachers especially that unless we are aware of the metaphoric aspects of education we are literally the blind leading the blind.

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1. Roger Poole, <u>NUQ</u> <u>Culture,</u> <u>Education</u> <u>and</u> <u>Society</u>, Vol.40,No.4, Autumn 1986,p.354.

2. David Pratt,'Curriculum design as humanistic technology,'<u>Journal</u> <u>of</u> <u>Curriculum</u> <u>Studies</u>,1987,Vol.19,No.2,158.

CHAPTER VI

EDUCATIONAL ADMINISTRATION

A critical observation and examination of the metaphors used in schools should affect practice by exposing the often unconscious assumptions involved in the language we use.1

Formal education has evolved from being the prerogative of royal and religious elites to gradually embracing entire communities and in many countries is largely a responsibility of the state. Consequently it has become institutionalized. Education is generally perceived as a universal need and the right of every child although there is no guarantee that he or she will receive such. One reason is that provision of education is a costly undertaking, another is that this investment can be a source of friction because of competing aspirations within a society. Educational administrators responsible as they are for large numbers of people and funds either private or public are inevitably concerned with power and with politics. Criticism of education naturally devolves on administrators. It is currently endemic and reflected in the large number of commissions of enquiry both here in New Zealand and overseas.

It has been demonstrated in a previous chapter that our view of the child is symptomatic of our view of education. Likewise our concept of

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1. Noeline Alcorn,'Learning to Manage Educational Institutions:Some Theoretical Considerations', Delta 35, New Zealand, May 1985 p.14.

educational administration is influenced by our perceptions of teachers, principals and government agencies involved in education and also their perception of their role. An examination of the language used to describe educational administration reveals the dominant metaphors although Coladarci and Getzels warn us that;

> An examination of the language of administration indicates a rather widespread reliance on metaphors, similes and analogies. In one sense this can be viewed as the earmark of a young science. However we must be sensitive to the possibility that such language will lead to asking the wrong questions and defining the wrong problems. 1

They are obviously of the school of thought which considers metaphorical language as unscientific and imprecise even though they acknowledge that they can be useful devices for communication. They are also concerned as they might well be that metaphors are often treated as literal and this can be dangerous. It may be that administration is as much an art as a science. A survey of some of the literature on the subject soon reveals a dichotomy between those who would prefer to systemize the whole area taking their models from systems theory particularly and those who see it as a describable but not easily defined field of enquiry because it concerns human relationships and is inevitably influenced by findings in the Social Sciences. We speak generally of an education system and this term itself is called a root metaphor by Tompkins.[2]

This chapter looks at some of the dominant metaphors in educational administration, at the schools and their leadership and the ways in which they are organized and at the origins of some of their ideas and practices.

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1. Arthur P.Coladarci and Jacob W.Getzels, The Use of Theory in Educational Administration, School of Education, Stanford University, 1955, p.13.

2. P.K.Tompkins, The functions of human communication in organization, in Handbook of Rhetorical and Communication Theory, eds C.A. Arnold & J.W.Bowers,Allyn & Bacon,Newton,MA,1984.

Schlechty and Joslin are convinced that metaphors shape behaviour and that some commonly used metaphors shape the way school problems are defined but that most of these are inadequate to the task. "Rather than liberating thinking about educational problems, these metaphors focus attention on solutions that are piecemeal and at worst misguided."[1] The ones they disapprove of are : the school as a factory; as a hospital; as a log ; as a family; as a war zone.

They would prefer to use the metaphor of the school as a knowledge work organisation. The factory image is scorned because "it shapes the way problems and solutions are defined, it also shapes perceptions about how roles and relationships should be defined in schools."[2] Principals are viewed as managers, teachers as workers and students as products. It also emphasises dominance and submission, superordination/subordination and passivity. In effect students are raw material to be processed and the worst tendency is that they are then viewed as objects which is dehumanizing. There is also a tendency to believe that to produce high quality output one must be very selective of intake and "defective products that wind up on the scrap heap of society can be justified as the necessary cost of quality control."[3] In the hospital model can be seen a desire for teacher autonomy and moves to diagnostic prescriptive individualized programmes of teaching. School psychology with its methods of testing also fits in to this model. If this model were strongly enforced they believe we would see administrators relegated to a level below teachers and students and teachers would expect

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, Teachers College Record, Vol. 86, No. 1,Fall 1984,p.156.

2. Ibid.,p.157.

3. Ibid.,p.158.

a one-to-one relationship akin to doctor and patient or client. The log metaphor is the wish of some reformers such as Mark Hopkins and indicates to them a return to the classics, high honour for teachers who will be more carefully selected and assurance of an environment with no discipline problems. In this model education is offered only to those who desire it. The authors believe it is promulgated by an elite in higher institutions of education.

The family metaphor is more often heard in schools themselves where teachers speak of 'their' children. This model respects the uniqeness of the individual child, believes in teaching the whole child and developing a relationship with him or her, and for this reason teachers do not like being separated from their children even for in-service. The war zone imagery is heard in teachers talking about their work.

> The battlefield imagery is sometimes used to convey the notion that students are "troops to be commanded and armies to be deployed." At other times the suggestion is that students (and parents) are enemies to be conquered, that classes are battles to be won, and that lesson plans are matters of strategy and tactics.1

Establishing authority becomes a prime concern, corporal punishment is approved of with expulsion as a threat. Teachers and administrators present a united front and sometimes expect extra pay for their dangerous working conditions.

All of the above are used to describe schools yet none of them adequately describes just what a school is and how it functions, there is some truth in all of them. As Schlechty and Joslin point out to mix these metaphors can result in confused thinking and planning. They believe that because a school is very much preoccupied with work it has taken on board

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, Teachers College Record, Vol. 86, No. 1,Fall 1984,p.160.

the language of the factory. I do not believe that this is so. I rather think that it arose originally from the need for schools to prepare workers for the factories of the Industrial Revolution and because administration techniques in industry increasingly influence how schools are run. It also stems from the attitudes of adults towards young children which I have detailed in another chapter. Young children have traditionally been handled and catered for as if they were objects or possessions. Adults have all the power even in schools and results of schooling are measured in a similar way to industrial production models. This is seen in the current obsession with accountability and performance indicators as described by Marshall Smith and Jane David recently. Performance indicators are as she says: "Statistics that reflect the health of an education system and that can be readily and repeatedly collected."[1] That is norm-referenced test results from national standardized tests such as the scholastic attainment tests in the United States. Marshall sums up what might be called the public perception of education " An education system can be thought of as made up of three parts: input and resources, processes and outcomes."[2] Such a simplistic, reductionist view gives no regard to the nature of the individual child or the finer shades of meaning in the term 'education'. It is mainly considered as such by those who are responsible for financing the system and those who view education as preparation for the labour market. Nevertheless I agree with Schlechty and Joslin that a school is not or should not be seen as a factory or production line and for many of the same reasons which they give.

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1. Jane L.David, Aid or Threat to Improvement, Phi Delta Kappa, March 1988, p.499. Note also the use of a medical metaphor.

2. Marshall S.Smith, Educational Indicators, Phi Delta Kappa, March 1988, p.488.

Schlechty and Joslin believe that the medical metaphor cannot work because unlike doctors "teachers have not been socialised as professionals. Indeed, teachers do not even possess a common language to describe their actions. Without such a common language, practice cannot be submittted to critical evaluation."[1] This same point is reinforced by Peters who says elsewhere that the teaching profession needs what other professions such as doctors and lawyers have, a body of specialised knowledge.

Mark Hopkin's imagery of the log metaphor is they think a nostalgic dream of bygone days and a panacea to weary teachers. This is so far removed from the reality in which most people teach and children learn that it is in their terms impossible.

The appeal of the family model is obvious but "not only do teachers have too many children to know, they know students far too short a time."[2] They dislike the war zone metaphor because of its negative connotations, although they admit that "wars do dislocate problems and create the need for solutions"[3] a point I shall return to later for as they say "What the persistent and widespread use of the war metaphor might suggest is the need for a new way to frame the educational debate."[4]

Their own conclusions on this theme are that "The purpose of the school is to provide youth with those experiences that adults believe will foster the ability to master, articulate, and use the dominant systems of our culture."[5] Among some of these they mention the language and number systems. Others convey the dominant values we share and for this they

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, Teachers College Record, Vol. 86, No. 1,Fall 1984,p.161.

2. 3. and 4. Ibid.,p.162.

5. Ibid.,p.163.

choose an overall metaphor that of KNOWLEDGE.

> Thus it can be argued that, broadly conceived, the purpose of schooling is to motivate, instruct, and support children in doing tasks that will foster the ability to use knowledge. Hence, it can be argued that the purpose of schools is to get children to do knowledge work.1

Their rationale is that in our society "knowledge work organisations have emerged as one of the most important organisational phenomena in our culture"[2] as if this proved it justified. Knowledge does not necessarily equate with wisdom and one could also say that war was a dominant preoccupation of the twentieth century. However they cite Drucker as prophesying that in the next century knowledge work will be the dominant occupation of most of those who graduate from our schools. No mention of any idea of the vision of the good but a utilitarian vision of job-filling for the future.

General management theory has in their view been of limited use in schools because as many critics have pointed out their models are based on factories, offices and military organizations. Moreover:

> Implicit and explicit in this literature is the assumption that kinds of management styles and organisational styles that are appropriate to motivating, instructing, and evaluating persons who manipulate symbols and who manage people is fundamentally different from the organisational forms appropriate for dealing with persons who manipulate and produce physical objects.3

Such misfits as, results-oriented management, which became measurement dominated managememnt, and management by objectives, which became management by behavioural objectives, are their examples of illfitting techniques translated from business to education. Efficiency became confused with effectiveness. . The search for excellence in business had its appeal they say because there were and are resemblances between businesses and school

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, <u>Teachers College Record</u>, Vol. 86, No. 1,Fall 1984,p.163.

2. and 3. Ibid.,p.163.

but not sufficient to make them work for schools.

Under their new knowledge work metaphor students become insiders for they are the primary workers. It will succeed they believe because "the knowledge work metaphor provides for interpreting and explaining some of the results of recent research on effective teaching."[1] Here they see distinct parallels between what has been found true in industry with unskilled workers that "tight supervision, clearly defined tasks, immediate corrective feedback, and careful inspecton of how the task is done are all recommended strategies in the supervision of unskilled workers."[2] In schools the equivalents would be careful monitoring, immediate corrective feedback and the provision of clear tasks with a high probable success rate. Where they see a vacuum in the training of teachers is that teachers do not know how to move children on from being unskilled knowledge workers to higher order skills or abilities. They recommend teachers to look for their models to the training skills of people in such places as IBM and Hewlett Packard.

So they replace the factory model with a business model taken from the computer world and the teacher now becomes an executive manager, he/ she moves off the factory floor where the raw material (students) used to be procesed and now he/ she oversee them in the role of supervisor. So convinced are they of the benefits of such a mental move that they believe that teachers will see themselves in a new light, their status will be enhanced and their previous authority relationship will be redesigned. Seldom do teachers teach individuals now, they say, so they can see no

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, <u>Teachers College Record</u>, Vol. 86, No. 1,Fall 1984,p.164.

2. Ibid.,p.164.

anomaly in this new role. Now the principal becomes a manager of managers:

> Results-oriented management would probably replace management by behavioural objectives. It would probably become commonplace that evaluative conferences would center on goal-setting, timelines to be met, products to be presented, and mutually agreed criteria for evaluating the merit and worth of these products. These goal-setting conferences would probably be a time when when the teacher/manager could indicate the resources he or she would need if the timelines were to be met and the products to be forthcoming.[1]

This model is scarcely an advance on the factory model. They still speak of products and there is a suggestion here of constant time pressure in the form of time-lines. It describes a school as if it were a robotic producer of information-filled personnel for the information machines. The authors are full of admiration for those who already work in this model, that is the leading computer companies who create novel responses to market conditions. This is a total acceptance of business efficiency and profit-making as the hallmark of success, the very things they have criticised in previous school models.

They also solve the problem of centralisation versus decentralisation by quoting their business gurus Peters and Waterman who say that "The establishment and articulation of superordinate goals and binding myths is necessarily a function of the top administration of the organization......what the school system is about, where the school system is going must be PREACHED [my emphasis] from the superintendent's office."[2] Moral authority must reside with the chief officer. In the school, the leader must be the chief teacher "the person who defines problems and inspires others to solve them."[3] Leadership is more important than managerial skill and it is here that the responsibility for profits or

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, Teachers College Record, Vol. 86, No. 1,Fall 1984,p.166.

2. and 3. Ibid.,p.168.

results lies. What schools can learn from the best run companies is that "the function of the central office is problem identification, not problem solving."[1]

What Schlechty and Joslin urge us to do is to forget the older metaphors of education and grasp at the same ideals which have created successful companies in today's competitive economy. They are convinced that these same practices will work in the schools. No doubt that they would achieve results, any change usually boosts production, initially, because change itself is a stimulus. Whether we would seriously accept their suggestions is doubtful. They offer no proof that their model works. They presume that schools can function in the same way that the competitive adult working world does. Their emphasis on building in guarantees for success ignores the fact that a large part of learning involves making mistakes.

The models of excellence quoted from the work of Peters and Waterman is in fact misleading, for, in <u>A Passion for Excellence</u> by Tom Peters and Nancy Austin, one of the schools held up as a model of excellence wrote in its charter the following metaphors:

> Education presumes a climate of care.
> The schoolhouse must be a kind of home.
> the student should feel known but revered
> love of learning is an acquired taste
> Schools are...to serve their communities as havens of learning [2]

Factors such as environment, personality of leadership and vision were also considered important: "Best private -sector leaders have a literal

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1. Phillip C.Schlechty and Anne Walker Joslin, Images of schools, <u>Teachers College Record</u>, Vol. 86, No. 1,Fall 1984,p.168.

2. Tom Peters and Nancy Austin,<u>A Passion For Excellence</u>,Collins, London, 1985,p.395.

picture of their vision."[1] Energy, commitment, involvement and empathy are also noted as essential prerequisites both in teaching and in leadership. They also quote from a successful leader the fact that the more power you give to people the more responsibility they take. One military man speaks of 'rhythm' and another person, of "a visceral form of spiritual energy"[2] The last remark may be moving nearer to the truth of the secret of success in education.

> One must be around that which works, which sings, which has rhythm, which has passion, which has enthusiasm, before one can understand just how broad the gulf is betwen the losers (that's defeatist talk) but things that are humming and things that aren't. 3

Passion appears to be the key to excellence, but it is a pity that they still talk as our education system does, of winners and losers. We still seem to have a battle mentality in education as in sport.

It is no surprise to come to the end of their exhortations and find that they are motivated not by their concern for every child in the next century but by their anxiety as to whether their country "America will lead or follow in the search for excellence in the postindustrial society."[4] They are prepared to sacrifice much in order to be politically superior. One wonders how such ends can ever justify the means they choose.

They believe that the family model requires too much individual attention and concern yet the new model advocates close supervision during time on task and constant feedback which must also be demanding in terms of time. They dislike the Hopkins model which is concerned with time for thinking, dreaming, and philosophizing, and is not work or task oriented.

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1. Tom Peters and Nancy Austin, A Passion For Excellence, Collins, London, 1985, p.409.

2. and 3. Ibid., p.409.

4. Ibid., p.169.

Their own model appears to take no account of of the human need for play as well as work activity. The companies they wish to emulate are involved in computer technology where the tasks are often repetitive [RSI a metaphor for this ?] and where 'workers' are, even more than in the factory model, part of a mechanical process and one in which in fact they themselves can be controlled by the same machines. Factories in the U.K. are using computers to monitor time at work, on task, punctuality, efficiency etc. and pay is automatically adjusted to output--the machine controls the person--it has no conception of dealing with a functionary who is late, tired, or possibly ill.

Schlechty and Joslin speak of schools transmitting culture but their view of culture seems very narrow almost as narrow as that of E.D. Hirsch who considers it to be a massive acquisition of general knowledge on Nationalistic lines as he portrays in his Cultural Literacy. Their metaphor is not an attractive one for education in the broadest sense of the word--school as knowledge and work organization--suggestive as it is of concern mainly with symbol systems, important though these are. They assume a heavy bias towards acquisition of this specific aspect of culture and with an emphasis on accountability, efficiency etc. They appear to forget that learning goes on all the time and is not always specifically task-based nor does it all go on in school. Skills may be transferred in this way but transferring them across disciplines and making the mental bridges between disciplines goes on through many other activities. For example one wonders how a school drama production would fit into their scheme of things.

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1. Tom Peters and Nancy Austin, A Passion For Excellence, Collins, London, 1985, p.401.

2. Ibid., p.409.

One metaphor persistently used in any discussion on what constitutes a well run school is 'climate'. It is usually suggested that this is a distinctive characteristic and emanates particularly from the style of administration. It has led Newell to say that:

> No task of educational leadership is more important than the creation of an enabling climate, that is, a climate which enables people to function with increasing effectiveness. It is in this way that the leadership in an educational organization can provide for greater task accomplishment and continuing personal growth. Climate is an encompassing dimension in a school, and educational leadership is effective only to the extent that it serves as a force for improving school climate.1

Finlayson believes that the term 'school climate' may be an ambiguous and outmoded metaphor. In his experience people find it hard to define. It is recognized, but its meaning is often personal and idiosyncratic.

From a study of bank customers by Schneider it was found that they form summary or global perceptions of a bank depending on how they are treated and how they perceive employees' behaviour to each other. So in his view "individuals act as information processors and derive meaningful abstractions from sets of cues which they observe in their day to day contact with the bank."[2] These abstractions serve as frameworks for their experience. If we apply this to a school then according to Finlayson:

> This essentially psychological view conceptualizes the sense-making process at the level of the individual members of the school. It does not offer any account of the interactional, organisational and cultural processes in the course of which the meaning systems used by the members are collectively built up and, in turn, maintain those processes.3

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1. Clarence A. Newell, Human Behaviour in Educational Administration, Prentice-Hall, New Jersey, 1978, p.245.

2. D.S.Finlayson, School climate: an outmoded metaphor?, Journal of Curriculum Studies, Vol.19, No.2, 1987, p.163.

3. Ibid., p.163.

This seems a strange comparison to make as pupils in a school are not 'customers' and the school is not a financial service as is the bank, although there are people who see it in market terms as a client service. However one can see a connection in that people do get an impression when they enter any institution as to its atmosphere or 'climate', whether it be the behaviour they witness there or details of furnishings which they notice, all of which register an impression and presumably leave a memory. Institutions are likewise often judged by externals. How a sense of school 'climate' is built up is something we know little about says Finlayson for research has concentrated largely on a scientific search for 'knowledge', where 'effectiveness' is measured quantitatively in term's of pupil achievement.

The term 'climate' itself creates a problem says Finlayson, depending on one's view of language, which is our " means of symbolizing and communicating experience"[1] Empirical researchers use it as "a means of formulating precise and unambiguous descriptions of reality"[2] and consequently have problems with definitions as in most of the research he has examined. For those who believe that language is essentially metaphorical he says there is no problem, for they believe that language itself partly shapes the construction of reality. This is Salmond's view, that language is "an instrument for the negotiation of meaning."[3] And Huff has said that metaphor offers a particular form of language for discussing organizations, a language which has a "logic and coherence drawn from human experience in another

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1. D.S.Finlayson, School climate: an outmoded metaphor?, Journal of Curriculum Studies, Vol.19, No.2, 1987, p.164.

2. and 3. Ibid., p.164.

area."[1] Pondy asserts that "metaphors serve both as models of and models for the situation."[2] The latter has also pointed out that we have a tendency to regard organisations as "products of conscious design which function according to the rational model."[3] This has distracted us from closely examining the metaphors of organizational theory. Weick has apparently viewed them as anarchies, seesaws, space stations, garbage cans, savage tribes, octopoids, marketplaces and data-processing stations. Others have compared them to football matches and theatre dramas but Morgan has said that no one metaphor fully accounts for the total nature of organisational life. Interesting that he uses the term life which itself suggests that an organization has a life of its own.

Metaphors therefore are used to help describe and explain the design, function and workings of complex organizations. For social policy, Schon has said, that metaphors become "an interpretive tool for the analysis of that policy."[4] First one has to be aware of the metaphors being used.

The other thing we should be aware of says Finlayson is what Edelman has pointed out that metaphors are not merely linguistic devices or tools but have political implications: "By naively perceiving it as a tool, we mask the profound part it plays in creating social relationships and the 'selves' of those involved in the relationships."[5]

Both 'climate' and 'system' have been described by Tompkins as 'root metaphors' which have in turn been defined by Brown as:

> 'those sets of assumptions, usually implicit, about what sort of things make up the world, how they act, how they hang together and,

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1. D.S.Finlayson,School climate: an outmoded metaphor?, Journal of Curriculum Studies,Vol.19,No.2,1987,p.165.

2. and 3. Ibid.,p.165.

4. and 5. Ibid.,p.166.

> by implication, how they may be known. As such, root metaphors constitute the ultimate presuppositions or frames of reference for discourse on the world or any domain within it'.1

So those who share similar metaphors are looking at their world or organisation through the same window as it were, they share the same paradigm in Kuhn's terminology. Burrell and Morgan, Finlayson says, point out that the major paradigm is generally functionalist which assumes that the social world is of an objective nature.

In Finlayson's view the term 'school climate' is an example of that type of metaphor which represents dominant orthodoxy rather than generating new ideas it "serves to inhibit creative thinking and to perpetuate approaches and procedures of a particular kind."[2] Research tends to define it in its geographical and meteorological sense as something in the environment of the school. To identify this experience questionnaires have generally been used to determine individual experience of the organisation, which is often described by respondents as if it were a dimension of a human personality. From research done so far he finds there is no real consensus on the nature of 'climate'.

Anderson, in a review of the literature, tries to impose some order on this hunt for a mythical 'beast' which no-one can recognize. She assumes that 'climate' is a holistic concept embracing the whole school and her typology explores four dimensions: the ecology, which is the physical external aspects; the milieu, characteristics of individuals in the school; the social system' which includes the patterns of rules and operations; and the culture, which includes reflected norms, values, belief systems, cognitive

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1. D.S.Finlayson,School climate: an outmoded metaphor?, Journal of Curriculum Studies,Vol.19,No.2,1987,p.166.

2. Ibid.,p.166.

structures, and meanings of persons within the school. There is no mention of whether she studied the metaphors her subjects used but as Finlayson points out even the labels she used are metaphorical and function merely to sort the literature on school climate. He believes that researchers themselves are often misled by the language they use and that the findings they consider statistical are often in fact social.

He is not surprised therefore that climate studies tend to attract criticism, he quotes Michael Rutter's Fifteen Thousand Hours as an example, but he believes that to treat participants in a school merely as a source of data as Anderson does is "to symbolically deny their identity as active, choice-making persons with values, feelings and concerns of their own."[1] In a causal model such as Anderson's, climate "is given the status of both a dependent and independent variable. As the latter, it is given an instrumental role; it is seen as a means of realising some good more effectively."[2] Reality is so defined that interaction and relationships become statistical rather than of personal, social or political significance. "Such thinking is consistent with the dominant scientific orthodoxy, with a rational view of decision-making in education, and with a systems view of organization."[3]

Researchers are therefore rather frustrated in trying to define climate. It is almost a rhetorical mythical beast "The optimistic ones pin their faith on more sophisticated methodology while the pessimistic ones seem to be inhibited from evaluating and exploring other metaphors,"[4] because they are considered as belonging to the realm of folklore and culture and

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1. D.S.Finlayson,School climate: an outmoded metaphor?, Journal of Curriculum Studies,Vol.19,No.2,1987,p.169.

2. 3. and 4. Ibid.,p.169.

not scientific.

Anderson also believes that the aim of such research is usually for purposes of school control. Policy-makers want to control that which may be controllable but as Tompkins has pointed out meteorology is not always controllable. Research so far has the effect of depersonalizing schools yet Finlayson asserts research into business organisations respects the individual as in Peters and Waterman's In Search of Excellence. Checkland also has shown how individuals contribute to the creation of climate. He has argued that " the hard use of the system metaphor is inappropriate in organizations and that its assumptions about methodology require considerable modification in order to accommodate the complexities of the social world."[1]

Argyris and Schon see the organization as a learning system and identify some of the psychological and social barriers which serve as constraints on learning. This says Finlayson, adds to a new metaphor current in DES publications, "the thinking school" which clearly appreciates the concept of climate and its importance. It is possible as Finlayson says that the concept of 'climate' to which every individual contributes may be at odds with the traditional concept of the leader who represents the group values and consensus model. The research into 'climate' might undermine academic traditional concepts of school leadership and control. Coping with change will bring new metaphors, especially to symbolize new structures and methods, for the old one of climate may deny the contributions of some of the partcipants, in his view.

The notion of 'climate' is not in itself outmoded but the ways of

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1. D.S.Finlayson,School climate: an outmoded metaphor?, Journal of Curriculum Studies,Vol.19,No.2,1987,p.171.

examining it have been too narrow. A similar problem exists in New Zealand with the the expression 'special character' a term beloved of private schools which have integrated into the New Zealand State school system. This special character is something the owners of these schools and their communities believe in, and which the Government recognizes in its legislation. What is it? It is almost indefinable, but closely associated with the philosophy or ideology of a school which often has particular religious affiliations.

Everything impinges on and is influenced by the school's character. It is as variable as weather and may be affected by quite small details and changes; the furnishings, the colour schemes, the sex of its members, the size of the roll, the composition of the staff and the nature of the individuals within it, even their personal belief systems. It is, in a sense, a living ethos manifest only at any one moment for it changes over time. It is that which is sensually, perhaps aeshetically or even spiritually or cognitively experienced by members of staff, students, parents or visitors. Many attest to its palpability. Yet it can be different for each person although many may identify from their experience similar things such as perhaps friendliness, particular type of discipline, efficiency etc. It is a pattern of experience which that organisation deliberately or not, willing or otherwise, creates for individuals and for the public. It can be as allusive and elusive as the nature of a personal relationship but has in fact no permanent individual existence for it is only 'alive' when the organisation is in working mode as it were. The empty school in the holidays has lost it. Changes of staff upset its equilibrium. One has only to be in a school on a mufti day or during exams or when the whole shool receives good or even sad news to be aware of this 'living ', changing and sometimes ephemeral nature of the 'school'. It is more than the ambience we

like or not in a restaurant, a force generated not only by the method in which the school is organised but composed of the individual personalities of both its administration and clientele, an energy both created and dissipated. It may be as false as the school's Latin motto which no-one understands or as real as the smile with which one is greeted at the door.

Climate is often described in terms generally used of human personality. Like human personality it has potential for good or evil. David Reynolds discussing 'The Delinquent School' and the factors which may encourage deviancy in pupil behaviour in a particular school says that "Further research from the U.S. has also suggested that the academic 'climate' of high schools is an important influence on pupil's scholastic attainment."[1] Administrators in schools can make policy to create climate or influence it e.g. rules, uniform, imposed values, but like the 'hidden curriculum' the true character of an organisation will manage to show its own face because it is the sum of its parts, to every viewer and researcher and even the people within it. If they look in a mirror they will see part of its makeup.

There seems to be general agreement that education and its administration is influenced by metaphors, but to what degree, and whether those in vogue are useful, practical or even desirable, or defensible, is somewht debatable. The key figure in the school scene and considered particularly responsible for the 'climate' or 'tone' of the school [another abstract metaphor], has traditionally been the the head, whose role will now be examined, before looking at metaphors in organisations which have been the dominant influences in school administration so far.

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1. David Reynolds, The Delinquent School, in The Process of Schooling, eds. M.Hammersley & P.Woods, Routledge and Kegan Paul and Open University, 1976, p.219.

The key figure in any educational institution is of course the principal or headmaster as he used to be called and this is a species which Robert Protherough has chosen to examine through a study of literature, for he believes that books have helped to shape a notion of what they are or should be like. The general image in the nineteenth century came from popular novels and he examines twenty such school novels or novels set in school from 1869 to 1914. He finds in them that 'greatness' tends to be presented in superficial terms as a matter of presence, outstanding physique and a commanding manner. So often are these described that they in fact seem to merge into a composite figure:

> ...majestic figures, creating a godlike effect of awe and terror, outsize in terms of physique and personality and separated from ordinary mortals by their powers of speech and by a special rhetorical style. 'Dignified', 'grave', 'stern' and 'solemn' are the epithets most frequently used to describe these figures.[1]

The title 'doctor' also serves to separate him and he is of course never seen without his cap and gown and appears only on formal occasions. This detachment is a singular mark of his office. When he does appear he is described most often as 'awful'. One is described as "the personification of majesty, dominion, ferocity and awe."[2] Boys are therefore not only awestruck by his presence but rendered dumb.

These men rarely display a sense of humour and in fact their voices often, bellow , roar and thunder . They are generally outstanding orators and as they are often clergymen they give sermons in voices that instil the fear of God quite easily in their young charges. They have a style of language which Protherough calls "headmaster rhetoric". Even "Boyish

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1. Robert Protherough,Shaping the Image of the Great Headmaster, British Journal of Educational Studies, Vol.XXXII, No.3,October 1984,p. 240.

2. Ibid.,p.241.

misdemeanours are described in elevated language, both to intensify their seriousness and to avoid the contamination of commonplace terminology."[1] And punishment is also "elevated by appropriate metaphors" so that expulsion becomes surgical "pruning" or removal of a "malignant disease". The oratorical style is also evident in the habit of repetition for effect. So incomprehensible is he to schoolboys that one author puts a completely unintelligible speech into the mouth of one of his headmasters.[2]

The most outstanding characteristic they all have is that they appear to do no work:

> Instead of being the leader of a group of 'assistants' essentially engaged in the same work as himself, the head is increasingly seen as the organiser of a team of specialists; his authority rests less on scholarship and more on his management skills; in particular he tends to be judged by his public appearances. 244

The antithesis of these figures is that of the Doctor in Tom Brown's Schooldays who is seen in a wide variety of roles but according to Protherough in a number of novels published early in the twentieth century the head is a very shadowy figure in the background. So in most of the novels he has examined, the head's major role is that of judge, executioner, priest and monarch. He speaks to an individual only to admonish or punish, and lurid details of his prowess at inflicting punishment are legion.

> Virtually all the headmasters are described as preaching affecting sermons in chapel, addressing the school at prizegivings or other occasions and publicly denouncing wrongdoing. Their position and power are emphasised by the accompanying ceremonial, the thronelike chair, the surrounding acolytes.3

His ultimate power is to destroy a boy by expelling him, itself a ritual. In

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1. Robert Protherough, Shaping the Image of the Great Headmaster, <u>British Journal of Educational Studies</u>, Vol.XXXII, No.3, October 1984, p. 243.

2. Ibid., p.244.

3. Ibid., p.245.

essence what is described in most of these stories is a stage performance

> The essential quality of a headmaster, it seems to be suggested, is that he should be able to act out the accepted role, to play convincingly what is becoming a stereotype. There is something theatrical about all the major set pieces in these books.[1]

Only in one is there a more human headmaster who is aware of his role-playing, Grimstone of Vice Versa(1822) who acts the tyrant in school but is also portrayed as a loving family man. Nevertheless in school he behaves with all the mannerisms already described as typical of headmasters. He is particularly adept at making boys feel shame and guilt. Protherough believes that Anstey is mocking "the unreal image of an omnipotent figure with unquestioned power who suppresses any of the softer human qualities."[2] Even later authors still subscribe to this notion of the headmaster as a "potentate", a "majestic figurehead" before whom boys tremble with fear but whom they secretly admire. As Protherough sums up "Humanity has disappeared: the office swallows up the man."[3]

What is the truth behind this vivid but unedifying picture of headmasters and how do they they see themselves in reality ? Colgate in a selection of reflections on The Role of the Head in 1976, edited by R.S.Peters claims that "The authoritarian head is obsolete today" and Peters himself confirms that traditionally in Britain the autonomy of the head was exercised in a very authoritarian and paternalistic way, and although he recognizes a need for authority he believes that the arbitrary and dogmatic use of authority is uncalled for. The schools need professional

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1. Robert Protherough,Shaping the Image of the Great Headmaster, British Journal of Educational Studies, Vol.XXXII, No.3,October 1984,p. 246.

2. Ibid.,p.248.

3. Ibid.,p.249.

administrators but he sees also that the head should personify the values of the school, exercising wisdom and giving moral leadership for a school can never be truly democratic as most of its members are immature and some are specialists whose expertise should be respected. Peters warns that the adoption of business management techniques might however be more damaging than paternalism because the leadership style becomes part of the hidden curriculum of a school and pupils may learn from it undesirable values. At the time of writing he was unaware of any conception of a head which was not either paternalistic or managerial and that the authors selected would in fact contribute to just such a conception. I will briefly summarise their findings.

Bernbaum[1] traces the historical position of headmasters and says that traditionally they were chosen if they were well educated and had the right personality but the managerial function is becoming more important because the job has become so complicated it must be done in a professional manner. The unique position of the headmaster emerged in the nineteenth century where the head was usually a gentleman and a clergyman. As schools grew larger discipline became a problem and the punitive disciplinary aspects of headship developed, the cane became part of the role.

In answer to more stringent demands from the public and after various enquiries and commissions later in the century headships became open to laymen, the powers of the trustees declined, an independent professional career in teaching became possible and notions of responsibility and service emerged. Arnold of Rugby typifies this new breed and teaching by example became a precept of the new style. A pattern emerges from the structures

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1. G.Bernbaum,in The Role of the Head,ed. R.S.Peters, Routledge and Kegan Paul, London, 1976.

and conditions existing then says Bernbaum which we can still discern today. They became experts and were paid a salary but shortage of money was always a constraint and it was largely their energy, commitment and skills which enabled them to survive. They were in charge of teaching some of which they did themselves and also managed finance, accounting, recruitment, control of staff and pupils and kept up links with the ouside community. After 1902 inspectors had a right to visit schools and Bernbaum believes that these men largely drawn from the major public schools were mainly responsible for establishing the literary, classical, liberal ethos and diminished the scientific, technical and commercial qualities of the Higher Grade Schools.

By 1914 biographies and memoirs were testifying to the Christian leadership, benign authority and punitive powers of the schools. By the 1920's the general quality of teaching staff had improved and the leadership rather than the pedagogic role of the head received more emphasis. Control of staff was done by the conventional system of testimonials and references.

After the Second World War and the 1944 Education Act the whole pattern of secondary education changed. The development of large comprehensive schools and the wider intake challenged traditional definitions of headship. With compulsory schooling heads no longer had to worry about rolls [no longer true] but their work became more concerned with control and motivation. In large schools they were also exposed to more challenges to their power from large departmental groups and specialists within their ranks. The head's previous control over the curriculum was now diminished and there were more areas of potential conflict, politicians, teacher unions, local authorities, an increase in fact of what we would now call 'pressure groups'. The nature of the head's role was more often analysed, and questions were raised as to whether he should have a detached or directive role.

Many heads of course still envisaged themselves in the traditional mode and a pamphlet put out by the Headmaster's Association called for maintenance of the head's unique position for the ideal was still conceived in charismatic terms. Outside of schools however there have been increasingly critical views of this role especially says Peters since the sixties for education is now much more a matter of public concern than it used to be.

Bernbaum refers to a head who has written from his experience, F.J. Godwin, former headmaster and HMI, who advises that control and discipline are the first priority. The main difficulties he lists as, leadership, discipline, organisation, administration and above all personal relationships. He tends to follow the authoritarian tradition for he says that one must constantly walk about in the 'danger zones' and be suspicious of 'democratic' schools and staffrooms. He rejects the newer managerial and administrative approaches in favour of authority, leadership, dignity, control and independence. This confirms Bernbaum's perception that headmasters are generally reluctant to give up their traditional role. Another interesting facet of his study is the background of headmasters, for he finds that the majority as in previous decades come from the same few schools and universities. They are more likely to delegate tasks which are specific but not those that relate to the generalised and personal qualities of leadership and control which they tend to see themselves doing quite well like 'getting on' with people, or manipulating people. Their lowest self assessments are mainly concerned with improving teacher performance and helping staff with discipline problems and they recommend their successors to be open to change and not conservative which in view of their own traditional stance seems anachronistic.

The idea of training for educational management troubles W. Taylor because he thinks that we may thereby encourage people to behave in ways

antithetical to certain fundamental educational values. He quotes Jules Henry in support;

> One should not confuse the so-called business ethics based on laws of contract, the stability of currency, and the retention of the market-a satisfied market- with moral principles that govern the relations between human beings.1

Taylor is sceptical even though others have found the approach worthwhile for he believes that it can lead to a 'them' and 'us' relationship instead of stressing shared values in a community and one of the ongoing tasks as he sees it in any society is to identify the minimum of rules necessary. Management practices moreover which rest on naively conceived principles are unlikely to be effective. One might replace principles here with the term metaphors for the same is true. Taylor observes that despite the custodial and socialising tasks thrust on to the school in recent years "the school is primarily an educative institution"[2] and everything else which goes on in school is merely to this end. Which also leads one to consider just who the administrator is working for.

Managerial training can never substitute says Taylor for the stature of the educated person as an educator. Professional competence is difficult to judge or to lay down criteria for:

> The subtle and elusive nature of criteria of professional competence can take on meaning only within a community of practitioners, which alone can exercise the kinds of social control effective in maintaining standards. Without conscious and willing participation by the individual in such a community all attempts at external evaluation are likely to be ineffective.3

Management in business requires institutional commitment whereas

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1. William Taylor,The Head as Manager, in The Role of the Head, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976.p.41.

2. Ibid.,p.42.

3. Ibid.,p.43.

professional commitment says Taylor is always to a set of values and principles for practice. Current trends are weakening professionalism. Another suspect aspect of business management in his view is that management principles are assumed to be scientific and that behaviour within the system is rational. I find the same quarrel with the work knowledge organisation model presented by Schlechty. Taylor refers to Brian Davies who has said that :

> One needs to be thoroughly sceptical about the mixture of reification and over-generality constantly found in systems approaches, without denying their possible heuristic value.1

One danger pointed out is that content and method rather than being priorities may be ignored altogether in a systems approach so that one has structure without content.

Heads are paid to make judgements says Taylor and the answers to some of their problems have yet to be found. He doubts whether current trends really assist even though he acknowledges that there are aspects of management that can profit from a sytematic approach. He place more emphasis on empathy with individual pupils and staff, an ability to find the connections between seemingly unrelated facts, knowing when to compromise and when to take a firm stand, as some of the finer points required in a head. One priority must also be the kind of personal and professional growth that leads to an ability to make judgments for himself, his pupils and his staff. For this he see more hope in the right kind of education in educational administration than he does in professional management training. What Taylor says here fits with my own view that the managerial approach confuses education and training. They are not the same, but different and

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1. William Taylor,The Head as Manager, in The Role of the Head, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976, p.45.

complementary.

Hughes has noted a tendency among professionals to despise administrative roles but to be accepting of administrative responsibiity if and when these are offered to them. He states that:

> The secondary school head is the CHIEF EXECUTIVE of a professionally staffed organization, and may also be regarded as the LEADING PROFESSIONAL of that organization.1

According to Chester Barnard " executive work is not that OF the organization but the specialized work in MAINTAINING the organization in operation"[2] and this work has two aspects for it goes on within and outside of the organization.

What Hughes is drawing attention to here is the fact that the head's role is one which more than any other in the school links the school as a system to the wider society and the systems within that. External influences on the head affect the school considerably.

In a study involving seventy-two heads in England and Wales, one of the findings was that:

> the occupant of an executive position , who is granted little authority and recognition by his superiors, tends to behave in relation to his subordinates in a cautious and defensive manner, which exposes him to as little risk as possible.3

And the reverse was also true. This finding has been supported by other research in the United States and suggests a clear need for institutional autonomy.

> It may well be that professional initiative and the exercise of discretion cannot properly be expected from school executives who

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1. Meredydd G. Hughes,The Professional Administrator: the case of the secondary school head, in The Role of the Head,ed.R.S.Peters, Routledge and Kegan Paul,London,1976,p.51.

2. Ibid.,p.51.

3. Ibid.,p.53.

are regarded and who regard themselves, as the powerless minions of a centralised and powerful bureaucracy.[1]

From the study, two distinct factors in the concept of the head as leading professional emerged: a traditional dimension, and an innovating (or cosmopolitan) dimension. These two aspects generally proved to be independent of each other and not antithetical aspects of a head's role, and led to grouping of heads as ABDICATORS, TRADITIONALISTS and INNOVATORS. The extended professional who was above average in personal teaching and pastoral emphasis and in openness to external professional influences--whereas the others had one or more of these qualities. An extreme abdicator he says is probably non-existent. In the opinion of the researchers some heads were over-extended and carrying too big a responsibility. In large schools they found that good intentions for pastoral care often became impossible to implement and counselling increasingly became a delegated task.

In conclusion Hughes states that analysis shows that the 'traditional' emphasis conflicts with basic features of the chief executive's role, but the 'innovative' emphasis fits more easily. A great deal depends on how the profesional administrator perceives his own role. If modelled on traditional stereotypes this may clearly create difficulties in a large organization. But if he takes a leadership role and encourages colleagues in their joint efforts "his contribution will be invaluable in enabling the combined expertise of a professional staff to be mobilised for the achievement of agreed organisational objectives."[2]

Robin Barrow considering the competence of heads explains that there

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1. Meredydd G. Hughes,The Professional Administrator: the case of the secondary school head, in The Role of the Head,ed.R.S.Peters, Routledge and Kegan Paul,London,1976,p.54.

2. Ibid.,p.60.

is what he calls a natural conception of a head and one that he believes we ought perhaps to hold on to even in changing times. Because we perceive headship as a complexity of administrative tasks does not necessarily mean according to Barrow that any of these are contingent factors regarding headship. Nor might charisma or the ability to handle relationships.

He also asks why an authoritarian concept of the head's role contrasts with a managerial concept. We have a tendency he thinks to to make assumptions that one type is incompatible with another, and he lists some of the catchphrases: Christian, gentleman, authoritarian figure, paternal figure, manager, counsellor, primus inter pares, administrator, chairman etc. He questions whether there is in fact a recipe for what constitutes a head. What we can say is that he is responsible for policy decisions, for directing the school and determining objectives, not merely seeing that these are met or carried out. This he says is a minimal definition. It is conceptual rather than definitive. Most heads see their job as one of 'running' a school. So we can define our conception of a head as "one who has responsibility for the running of the school in the sense of determining its direction or aims or objectives."[1]

When we ask what is necessary to be effective says Barrow then all that is needed is competence and freedom, competence in selecting educational objectives, deciding priorities and determining policy. There is no set determinate body of knowledge to draw on yet no novice teacher would be likely to have the philosophic competence required:

> What I mean by a philosophic competence may be characterized in terms of such formal rquirements as consistency, coherence, concern for good reason, and impartiality. But perhaps its two most important

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1. Robin Barrow,Competence and the Head,in<u>The Role of the Head</u>, ed.R.S.Peters,Routledge and Kegan Paul,London,1976,p.67.

> strands are the ability to recognize different kinds of questions for what they are and the ability to avoid conceptual muddle..... To have such competence is to be in a position to unravel complex issues and to treat them adequately, appropriately and reasonably.[1]

Such competence does not date and is not dependent on being up to date with new theories, "it is a skill that is timelesss in its application."[2]

Barrow does not accept the view that all knowledge is relative and calls this idea "an alternative strange doctrine."[3] His picture of a head emerges as one whose talent lies in breaking practical issues (in the sphere of education) down into their separate parts; in recognizing what sort of procedure is appropriate to the resolution of each part; in knowing where to turn for expert advice and in understanding the limits of any particular expertise and in setting any particular problem in the context of a wider perspective. He is the theoretician rather than the practitioner in that his task and his skill lies in critical reflection on various possibilities and in determining policy in the light of information, some of which may be fed to him by members of his staff, rather than playing an active part in carrying out that policy. This defines the 'running' of a school.

There is also he says another dimension to be added to the mere skill of reviewing alternatives competently and that is the imaginative element, this to him is not merely lateral or creative thinking. This definition of competence includes a "dispositional element or character trait..."[4] Yet even with all of these things freedom is still needed; to

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1. Robin Barrow,Competence and the Head,in<u>The Role of the Head</u>, ed.R.S.Peters,Routledge and Kegan Paul,London,1976,p.71.

2. Ibid.,p.73.

3. Ibid.,p.74.

4. Ibid.,p.75.

appoint staff, control the curriculum and allocate resources--otherwise policy cannot be put into practice. This freedom may be curtailed by limitations within the staff.

Barrow makes no mention of the skills a head might have in influencing staff to do his behest. Charisma, he does not consider one of the prerequisite characteristics of a head, but where it exists it can be an asset if used with good intent. Nor does the head have to be a moral leader even though one might not wish him to be an immoral influence but as far as administrative excellence is concerned this is not an issue, according to Barrow. His point is that qualities often perceived as desirable are not necessary whereas competence and freedom are vital. Many of these other aspects are ones which can be delegated, and the ability to delegate is another dimension of competence, as is the ability to recognize and appreciate talent in other people.

Barrow is of the opinion that no management course could ever adequately equip one with the diverse types of expertise a head needs. To assume that all heads should have all of the generally listed is to expect too much. He sees a head as a director of policy not an administrator--and on sharing decision making with staff he says:

> There is only one purely rational way of distributing authority and that is on the grounds of appropriate competence. He should be placed in any sphere who has authority deriving from his expertise in this sphere.[1]

The rationale for a head will be that "by definition he will have the sort of expertise that makes him an authority in the sphere of selecting educational objectives and issuing practical directives."[2] Such

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1. Robin Barrow, Competence and the Head, in The Role of the Head, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976, p.71.

2. Ibid., p.85.

expertise will differ from that of doctors "in that it does not guarantee the same degree of unanimity amongst those who possess it and does not consist in coming up with answers to problems that can be demonstrated to be unequivocably 'right'." If all staff had equal philosophic competence then decision making could be shared. The head's philosophic competence gives him a right to resist consensus. "For consensus may sometimes be the outcome of prejudice, ignorance, inability to see the force of an argument and so on."[1] The situation would be different if the head were not much more competent than his staff. If he is to be simply a chairman then there is a need to develop the philosophic competence of all teachers.

Authority is not easily accepted says Barrow and he questions whether any particular authority can be justified. His concern is to argue that a certain kind of competence is necessary to the proper running of a school and that possession of that competence is the justification for an individual's being trusted with authority. If heads are inadequate it may be because their authority is resisted or that power does corrupt.

One thing is obvious to Barrow and that is that they are often badly chosen, either because selectors are looking for the wrong qualities or because it is difficult to judge degrees of philosophic competence in different people, and perhaps we should lay more stress on educating people for leadership. It is ironic he thinks that those who call for more democracy in schools are also those who would like to see less study of educational theory but in his view "There never has been, and there never will be a short cut to competence."[2]

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1. Robin Barrow, Competence and the Head, in The Role of the Head, ed. R.S. Peters, Routledge and Kegan Paul, London, 1976, p.87.

2. Ibid., p.90.

The emphasis in Peter's selection is mainly on secondary schools but Coulson examines the role of the primary head and looks at some of the factors which sustain the concept of the traditional paternal form of headship in English primary schools. In his study women are acknowledged because of their being in the majority in infant schools.

Heads, says Coulson, have some discretionary freedom but are not autonomous:

> The rules of management are made by the Local Authority under powers delegated to them by the 1944 Act: they therefore lay upon the head inescapable duties.1

Much depends on local conditions but a head is generally free to interpret his role in a personal fashion. Coulson thinks that traditionally in Britain the head is seen more as a teacher than as an administrator "the head expects to influence teachers by his own example and to persuade them to identify themselves with his aims and methods."[2] He also usually tries to know every child in the school and uses assemblies to communicate with them as a group. The head is also expected to protect his staff from criticism and interference by parents, and the children from the pernicious effects of the community's values. [Interesting that the staff do not apparently view themselves as part of the community] Change is also usually brought about by the head.

This very traditional concept of headship, combining personal control and moral authority, comes originally from the public school tradition which has been described previously, it resembles very closely, thinks Coulson the Victorian pater familias and is favoured by principals themselves. He

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1. A.A.Coulson, The Role of the Primary Head,in The Role of the Head, ed. R.S.Peters,Routledge and Kegan Paul,London, 1976,p.93.

2. Ibid.,p.93.

believes that primary school heads and teachers feel themselves to be more in loco parentis than do teachers in secondary schools. It is also seen, because of its caring nature to be women's work. The close resemblance to the maternal role also contributes to the paternal image of the head. He believes women are less committed to their careers and value pleasant social relations at work. They are therefore more accepting of authority and so cultural norms of male superiority at work are thus upheld. Teacher immersion in the classroom work also removes her from concerns with general school policy and administration.

Coulson reiterates what several authors have already said about teaching: "There is no agreed body of generalisable, pedagogic knowledge underlining primary school teaching."[1] Personality is preferred above professionalism. This may rest on a popular assumption that child-bearing is natural and intuitive. All of these factors combine to make the primary school resemble a family.

A more rational concept of headship may come he believes once teachers abandon what Hoyle has called 'restricted professionality' and move towards 'extended professionality' where the work of teachers is seen in a broader context. This would lead, he thinks, to greater involvement in educational decision-making. The role of the head must develop, for no longer can we presume that the traditional head's values will match those of society. Extended curriculum input from specialists outside the school and within a staff have combined to remove the onus of all decision making from the head. Practices such as team-teaching have also lessened the autonomy of the teacher who has also had to become involved in more collaborative

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1. A.A.Coulson, The Role of the Primary Head,in<u>The Role of the Head</u>, ed. R.S.Peters,Routledge and Kegan Paul,London, 1976,p.76.

decision-making. The role previously held by the head has also become shared by team leaders. No longer either is the head a kind of buffer between the school and and the community, but more often now he is the link with it and even brings outsiders into his school. He is also more involved in social and welfare problems than previously. He takes this on mainly because he is the only one who has the time.

The traditional centralised authority pattern persists says Coulson because "At the root of the primary head's paternalism lies the ego identification which he normally has with the school."[1] He tends to over-identify with it. This is an obstacle to the general professionalization of teachers generally--for "the other side of the coin of the head's freedom is the teacher's subjection. However benevolent and supportive the head's paternalism may be, it curtails the authority and responsibility of other teachers and therefore adversely affects their professional status."[2] The pattern needs to change says Coulson from a paternalistic one towards a more collaborative one. This could be achieved he believes by separating the head's legislative and executive functions. This could be done with a collegial system--a collective type of authority but the head would still be needed as a coordinator. Teachers he feels should participate in the appointment of a head. Career teachers as Coulson calls them i.e. long-serving highly qualified teachers could absorb many of the head's traditional administrative and public relations functions. For this he believes that they need to be trained in structuring and analysing their own experience for more effective use.

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1. A.A.Coulson, The Role of the Primary Head,in The Role of the Head, ed. R.S.Peters,Routledge and Kegan Paul,London, 1976,p.102.

2. Ibid.,p.104.

Coulson has referred to the majority of women in primary education and nearly always at the assistant teaching level which he seems to believe is due to their being less career oriented and subject to normative pressures from society which have become reflected in the traditionally paternalistic attitude of heads. In New Zealand Margaret Malcolm found also that "the sex role stereotypes are strongly ingrained." One reason is that "In general, marriage is a career ASSET to a man, whereas it is a career DETERRENT for women."[1] This is true in areas other than education also. Overseas reaearch has shown she says that women with careers in administration are more likely than men to be unmarried. One wonders if the pattern was different and women predominated would we speak of a maternalistic or matriarchal school administration. She says that research in America showed that women principals were more democratic; had schools with more positive teacher, pupil and parent attitudes towards education; had higher degrees of professionalism; and demonstrated superior pupil performance. These were all in primary schools and as Malcolm says the findings do not prove superiority but that there are more differences between people than between men and women. What is clearly evident though is that "men are the gate-keepers to positions of school management."[2] And she noted as I have found also that with very few exceptions the literature refers to male heads. Peters does say in his foreword that 'head' is meant to indicate both sexes but most of his writers refer to heads as males. The word 'head' is itself a metaphor suggesting presumably an important part of a body and the thinking centre. We speak of the 'body politic' and it would appear that a school is also thought of in anthropomorphic terms.

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1. and 2. Margaret S.Malcolm,The Almost Invisible Woman,<u>Set 78</u>,No.2, Item 12, N.Z.C.E.R.,Wellington.

Colgate says that in 1972 there were calls for teachers to have a say in the selection of heads, male or female; for he is one of the rarer writers who recognize that both exist. Few heads in his opinion today presume to be the moral and spiritual leaders that they were once expected to be but he also believes that if they become too self-critical and doubtful about their capacity to be leaders revolution will erupt. To be a head in his terms implies a duty to lead but this does not mean that one can ignore changing attitudes to authority.

Colgate supports what Peters has said that authority when questioned is not necessarily superseded but becomes rationalised and adapted. The common analogy comparing the head to the captain of a ship generally draws criticism says Colgate but to him, the school, like the ship, needs someone who knows where the school is going, for "Schools which do not change are not stable, they are stagnant. The head must be an innovator."[1]

Colgate seems to assume that only the captain of a ship can know where it is going and how to get there. He accepts the managerial concept of the head's role because it is more rational than the traditional authoritarian one and because the four questions which Barry and Tye have suggested that any head should ask himself will require consultation with colleagues (Where are you? Where are you going? How do you intend to get there? and how will you know when you have got there?). The framing of these questions refers to 'his' objectives not those of the school collectively. This reminds us of the kind of so-called 'democratic' discussions which Peters has referred to and which in reality are merely consultation.

A head must take responsibility for all that takes place says

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1. H.A.Colgate, The Role of the Secondary School Head,in <u>The Role of the Head</u>, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976,p.112.

Colgate but he does not say how a head copes with ideas and aims and values which conflict with his own. Presumably he would overrule dissension and use other people's ideas only when they were in line with his. It is true what he says however about the risks involved in bringing about change for students may suffer in the process and he also reminds us "No two heads are alike....just as no two schools are alike."[1] He believes that there is need for a new concept of headship which permits leadership but is not autocratic

Another question he raises is why is it that we have difficulty getting children to come willingly to school, getting them into the 'citadel' as Peters has called it. His own broad philosophy is to prepare pupils for life--as they see it, in a time of rapid changes. Such a sweeping aim is liable to draw fire because it is open to such diverse interpretations, for some see school merely as a ticket to a career and others looking further ahead see survival as the main task.

Colgate acknowledges that outsiders, his term, will expect schools to teach skills to enable youths to become self-supporting and many will judge by exam results. "The society which foots the bill for education relies on competition for its very survival."[1] He himself would still base his moral values on the commandments even though many would consider this an old-fashioned view. Colgate thinks the head should be the decision maker but agrees that the terms on which people are being consulted should be made clear. If the head consults only with senior staff then oligarchy is being substituted for despotism. His answer would be to set up some form of committee structure. He agrees with Bernbaum's perception that since 1944

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1. H.A.Colgate, The Role of the Secondary School Head,in The Role of the Head, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976,p.115.

a pyramid type of career structure has arisen in schools.

The head therefore in Colgate's view has a managerial and a pastoral role. Allotment of time is one crucial task and one problem in schools is the rigidly controlled use of time. In Britain he says that most courses for school administrators allot some time to methods of curriculum analysis because of its perceived importance.

Delegation is a necessity for "He [the head] cannot and should not even try to know all that is going on in the school."[2] Not enough time is given for senior staff to accept a share of delegated tasks. "As a result senior staff are forced into a situation where the routine thinking gets done and planning gets shelved."[3] It is easy to see that this leads to the continual crisis or maintenance type of management that others have criticised as a faulty management style. It also results in experienced teachers rarely getting the opportunity for 'hands on' type of administrative' experience which would be a useful training for senior positions. In most LEAS says Colgate only the head is supernumerary to the staffing allowance and until some senior staff at least are taken off this there is little hope for improvement.

Colgate also believes that teachers cannot undo damage done to children during their early years by circumstances beyond their control. There is a limit to what schools can be expected to do and they need to be aware that change can have drastic effects upon children.

Heads usually use the assembly to communicate with children but he

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1. H.A.Colgate, The Role of the Secondary School Head,in The Role of the Head, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976,p.113.

2. Ibid.,p.119.

3. Ibid.,p.120.

does not see this as desirable because it is a monologue rather than a dialogue with the pupils. On assessment he notes that "As a profession, teachers do not take kindly to assessment of themselves."[1]

Colgate thinks we have tended in education to believe that leaders are born not made but it is his belief that training is just as necessary as it is for teaching. Heads are limited in their range of control. They usually have no control over salaries and size of plant, they also often work on shoestring budgets in the public glare. "Few people know how a factory, a ship or a hospital is run but everyone has been to school and has ideas on how it should be run."[2]

John Watts does not believe that authoritarian leadership is inevitable or necessary, and speaks on the nature of participatory school government from his experience as principal of Countesthorpe School in Leicestershire. Most heads claim that decisions are based on consultation. " Yet none of this consultation constitutes participatory government in the sense...in which [it] has been practised at Countesthorpe since it opened in 1970."[3] Here change was envisaged as a continuous process. One way to ensure this was to involve all staff, for "With the general growth in the size of the schools there is a danger that the teacher may come to feel depersonalized and alienated."[4]

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1. H.A.Colgate, The Role of the Secondary School Head,in <u>The Role of the Head</u>, ed. R.S.Peters, Routledge and Kegan Paul, London, 1976,p.124.

2. Ibid.,p.125.

3. John Watts,Sharing it Out: the role of the head in participatory Government, in <u>The Role of the Head</u>,ed.R.S.Peters, Routledge and Kegan Paul, London 1976,p.127.

4. Ibid.,p.128.

Heads usually initiate change but their impact, in Watts view, generally dwindles after about five years and where an 'authoritarian progressive' is in power he often creates division which outside agencies can exploit. It is usually the head who defines the schools objectives and values and curriculum-- what is taught, and controls internal organisation--who does what, and also organises the timetable, and distributes available money--which is the most common cause of friction, chooses staff and controls media communication. At Countesthorpe all of the major policy decisions are based on staff consensus, and student contributions also, and sometimes input from parents and governors. A general meeting or Moot is open to all, including non-teaching staff and students.

> A final proposal will be the work of many hands, a modification of many ideas. Once it is ratified though everyone is committed to making it work, because no one has imposed it from above without opportunity to shape it.[1]

Watts says that he enjoys administrative tasks but even these could be delegated, and he spends twenty-five percent of his time teaching. The head's influence on committees may be authoritative but not authoritarian, and this authority is a trust that has to be won. For example he can give information to which he is privy from local authorities and knowledge of legal obligations. External authorities still contact him, for outsiders seem to need one person to represent the school. He is sensitised to all the participants and to outside agencies and feels that "The transmission of pressure is through my bloodstream and I feel no guilt about being paid danger money."[2] His metaphor of headship appears to be that of a

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1. John Watts,Sharing it Out: the role of the head in participatory Government, in The Role of the Head,ed.R.S.Peters, Routledge and Kegan Paul, London 1976,p.131.

2. Ibid.,p.133.

pressure in a way suggestive of the notion of steady state in systems theory.

At Countesthorpe conflict is resolved by open discussion and this works provided all participants can tolerate conflict, use it to identify issues and make compromises to reach consensus leading to commitment. This requires regular time for talking, and in the event of insoluble conflict then Watts feels he would have to leave. This time taken for decision-making tests one's patience which is one stress of the job. Another is the need to switch roles to please outsiders who still expect to deal with the school as an entity through him alone, this factor will serve he thinks to preserve the extant traditional authoritative model and even prevent the establishment of revolving headships. Also he found that there are people including staff who almost seem to need an authority figure to rebel against. For such reasons he believes it will take a long time for people to accept this concept of participatory administration more generally.

That Watts has faith in the system is obvious and indeed he warns that he has "argued for a spreading of this power, for sharing it with teachers before it is taken into the hands of non-educationists."[1] With growing power in local government "Heads would become accountable direct to councils, and education officers give place to chief executives, civil servants with who knows what notions on education."[2] Crystal-ball-gazing he sees the schism between heads and teachers as leading to a situation where they will both lose power "that will be garnered in County Hall where the old autocratic head will then sit in all his remoteness under the new

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1. John Watts,Sharing it Out: the role of the head in participatory Government, in The Role of the Head,ed.R.S.Peters, Routledge and Kegan Paul, London 1976,p.135.

2. Ibid.,p.135.

guise of efficient corporate management."[1]

The words of John Watts now seem strangely prophetic as we see education increasingly controlled by economists. More recently Paul Bredeson of Ohio University asked the students in an educational administration course to identify the metaphors of administration as evidenced in current literature and from observation of five school principals in order to examine the implications of these, for:

> Although metaphors, like language itself, are attempts to find a unity of experience and understanding for a field of study, practice --or even an entire culture, the very words and analogies used--may limit the view that one has of phenomena and the world.2

Behaviour thus becomes a function of the words we use rather than the opposite.

Social systems theory placed importance on ROLE and Blumberg and Greenfield said that "Principals daily face pressures of competing images about what their role should be."[3] In research on effective schools it was also found that the "behaviour of the school principal is the single most important factor supporting high quality educational programs" and that "while schools make a difference in what students learn, principals make a difference in schools."[4]

For ten days they shadowed the principals and found that "None of the principals was radically deviant from the principal's role described in most textbooks on educational administration."[5] But they had adapted the

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1. John Watts, Sharing it Out: the role of the head in participatory Government, in <u>The Role of the Head</u>, ed. R.S. Peters, Routledge and Kegan Paul, London 1976, p.136.

2. and 3. Paul V. Bredeson, An Analysis of the Metaphorical Perspectives of School Principals, <u>Educational Administration Quarterly</u>, Vol.21, No1, Winter 1985, p.30.

4. Ibid., p.31.

5. Ibid., p.32.

The researchers found in the literature a "rich tapestry of metaphors of the principalship."[1] Historically from the 1880's a functionalist view has dominated. They range from "principal teacher" to "building administrators." Knezevich has described the principalship as "a constellation of positions." Others have emphasized the management and leader functions.

> The school principal also has been characterized as a consummate manager using Mintzberg's typology as employed by Kmetz and Willower; a combination administrator-manager and educational leader by Roe and Drake; a leader with technical, human, and conceptual skills that are practised in five major functional areas--the instructional program, staff personnel services, student personnel services, financial physical resources, and school community relations--by Lipham and Hoeh; an organisational change agent by Small; a synthesis of applied philosopher, school manager, and behavioural scientist by Wayson; a politician and facilitator by Miklos; and a wide variety of other characterizations including broker, negotiator, gamesman, missionary, social person and thermostatic person still by others. 2

Coombs and Thurston have, says Bredeson, suggested that "metaphors go beyond mere theory building in administration and represent crucial links between theory and practice."[3] According to Sergiovanni the major views of educational administration and their predominant concerns are contained in three generative metaphors; EFFICIENCY (the rational mechanistic), the PERSON (the organic), and the POLITICAL DECISION MAKING (bargaining).

From the principles of scientific management and the influence of Frederick Taylor and Franklin Bobbit "The rational mechanistic metaphor of a well-oiled machine epitomizes the notion of efficiency in education."[4] And Weber's notions of bureaucracy have given us theories of management.

Bredeson says the custodial functions of schools have been and still

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1. Paul V.Bredeson,An Analysis of the Metaphorical Perspectives of School Principals, Educational Administration Quarterly,Vol.21, No1, Winter 1985,p.33.

2. 3. and 4. Ibid.,p.34.

are dominated by metaphors from these areas. From these we have inherited performance objectives, competency testing, management by objectives, management information systems, and planning, programming and budgeting systems.

The organic metaphors generally guide the humanistic principal concerned with growth and feeling. Bredeson believes that " Getzel's and Guba's 'social systems model' provides a two-dimensional way of combining the concern for efficiency, the nomothetic, with the needs of the individual, the idiographic."[1] This model he favours because of the mix of metaphors it draws on, such as the missionary and the gardener, thus combining care for nurture with purposeful action, though one wonders how psychologically healthy it is to give staff smiley stickers and personal gifts as rewards for aiding the principal in his/her work. This seems redolent of behaviourist applications removed from the classrooms into the staffrooms.

The third metaphor reflects the links of the school with its environment:

> The metaphors in this sense envision the individual and organization as players and actors in a game, bounded by rules, with divergent stakes and interests in the outcome of decisions that are made as the "game " is played. Bargaining and negotiating for solutions that satisfy the competeing demands are the metaphorical milieu of this strand.2

Among the descriptions these have led to are the the garbage can model, and loosely coupled systems of administration. Principals become, amongst other things, ombudsmen, advocates, orchestrators, jugglers and brokers.

This study of principals found that each of them displayed evidence

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1. Paul V.Bredeson,An Analysis of the Metaphorical Perspectives of School Principals, <u>Educational Administration Quarterly</u>,Vol.21, No1, Winter 1985,p.35.

2. Ibid.,.36.

of efficiency, humanism and political bargaining. To describe each principal in terms of one of these three dominant metaphors would in Bredeson's view be an oversimplification and a distortion of the role of the head in the school context. He reminds us that it might be more significant to look at metaphors of purpose "which are much more deeply embedded in the principalship."[1]

Principals brought to their task their own perception of their role as well as there being a role envisaged by the traditions of a school, community expectations and such. How they adapted and set up routines reflected all of these things.

> The principal who envisioned the role as that of a chief executive officer carried out the responsibilities from the main office and functioned from behind a desk, much like the common conceptualization of a command center. The disciplinarian differed in that he involved himself in almost every aspect of school operations and decision making in which school discipline could possibly be an issue.2

The affective or person-oriented principal kept out of the office. Each one therefore played his part according to his own personal and profession nal strengths.

Metaphors in this sphere "reveal a great deal about the the shared cultural associations of the principals as well as provide a profile of individual creativity and adaptability to the role of principal...[and] each practiced [practised] the craft of the principalship within the parameters of three broad metaphors of purpose."[3] They are: MAINTENANCE, SURVIVAL and VISION , which can be envisaged on a continuum.

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1. Paul V.Bredeson,An Analysis of the Metaphorical Perspectives of School Principals, <u>Educational Administration Quarterly</u>,Vol.21, No1, Winter 1985,p.37.

2. Ibid.,p.37.

3. Ibid.,p.38.

Maintenance, that is keeping the school open and running is seen as an ongoing task and a major responsibility. Where other people have often defined one of their major roles as that of curriculum leadership, but many admitted that in this area they were aware of their shortcomings. The emphasis on maintenance led also to communication as a priority often through formal networks. "Communication was seen as the lubricant to help things run smoothly and to help provide and maintain a sense of security and a positive situation for learning."[1]

Few of them saw the need for much change in their schools except in their perceived need to replace some teachers. "The system and its continuing operational process were accepted as givens."[2]

Other research attests to the fact that the dominant concern of principals is maintenance activity. The maintenance metaphor dominates the daily worktime and tasks, leading Bredeson to wonder whether principals are thus able to meet other responsibilities such as external adaptation and goal attainment. The metaphor of survival has severe limitations as he points out:

> The emphasis on survival for principals and for the schools in which they operate is one that focuses on meeting immediate needs and the mustering of the most vital resources available for continued existence. the immediacy of crisis-based management is characterized by: short range planning, the need for dramatic, often harsh and autocratic, actions; an environment that is likely to be stressful; educational priorities and time, resources, and energy allocations skewed towards the present; and little attenton to long-range outcomes or to the implications of activity for the schools and the people in them.3

Socio-economic conditions are partly to blame for the prevalence of this

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1. Paul V.Bredeson,An Analysis of the Metaphorical Perspectives of School Principals, Educational Administration Quarterly,Vol.21, No1, Winter 1985,p.39.

2. Ibid.,p.40.

3. Ibid.,p.42.

situation Bredeson believes: "Financial survival was a powerful influence on the principal's priorities and activities."[1] This is not hard to believe as we are all familiar with the cake-stall syndrome which helps to keep our own schools supplied, sometimes with absolute necessities, so it is easy to accept his perception that survival is a key metaphor in school administration.

At the other end of the continuum is the metaphor of vision although all three are interrelated. One head saw this as her most important task whilst survival mechanisms were delegated in order for her to concentrate on policy guidelines and fiscal mandates.

> Broadly conceived vision is the principal's ability to holistically view the present, to reinterpret the mission of the school to all its constituents, and to use imagination and perceptual skills to think beyond accepted notions of what is practical and what is of immediate application in present situations to speculative ideas and to, preferably, possible futures.2

[Interesting also that the longstanding metaphor of 'mission' is used here] Tasks of this 'visionary' nature took up less than five and one-half per cent of the principal's total number of daily tasks. Yet they saw that one of their main tasks was to communicate this vision to the school community. Parents were seen as good if they supported the school but few heads desired more active participation from them.

Bredeson's findings were "That all five principals shared a common culturally standar[d]ized image of the principalship."[3] Role expectations were largely set by teachers, administrators, students, parents and professional training institutions all of whom stressed the

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1. Paul V.Bredeson,An Analysis of the Metaphorical Perspectives of School Principals, <u>Educational Administration Quarterly</u>,Vol.21, No1, Winter 1985,p.39.

2. Ibid.,p.43.

3. Ibid.,p.45.

dominant maintenance metaphor. So much time was spent in this area that vision became impossible. And most of them recognized the importance of curriculum involvement and leadership yet failed to demonstrate this. The principal in the researchers' view "has become the dumping ground for all of the maintenance responsibilities in the school."[1] The role has become complex and "The principalship has become a catch-all for all of the tasks not accepted by other administrators, by teachers or the community."[2] Principals can of course, as Bredeson points out, feel more comfortable with all their BUSY tasks. Sometimes this is easier than long-range planning which provides no immediate tangible rewards. Awareness of this needs to be built into training for administrators.

In conclusion Bredeson finds that "The metaphor of vision offers the most hope of the principalship, but it is also the most problematic."[3] Each head, in this study, was frustrated by the frenetic pace of their work. The role of the principal has become "stagnant" and a hotchpotch of jobs:

> The challenge for principals is to examine their daily routines, their priorities, and their resources and see how they might best function through being knowledgeable of the past, remaining well grounded in the present, and continually looking to the future. 4

Young children's perceptions of principals are equally interesting. In a study done in New Zealand Anne Smith found that the majority view of principals is that they are people who punish, and it appears that children see the principal as quite a punitive figure. There were twice as many

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1. Paul V.Bredeson,An Analysis of the Metaphorical Perspectives of School Principals, Educational Administration Quarterly,Vol.21, No1, Winter 1985,p.46.

2. Ibid.,p.46.

3. Ibid.,p.47.

4. Ibid.,p.48.

answers indicating the principal was a punisher than there were indicating that he or she was a rewarder. The principal was certainly seen as a powerful figure who has control. Some thought one had to pay to be a principal and others thought you had to dress up in principal's clothes. These images do not seem far removed from the forbidding and theatrical figures Protherough portrayed even though Colgate believes that the authoritarian figurehead is obsolete.

The same principals viewed themselves very differently. They saw themselves as rewarders and as liason people between the school and the community, male heads focussing on their position as boss and the women stressing organisation. Smith suggests that children judge principals and teachers by surface appearance or by reputation. She says that Rogers in another study had similar findings.[1]

Peter Qin a New Zealand secondary school headmaster believes that in the selection of principals physical strength and stentorian voice are still qualities some people look for in leaders. The stereotype prevails. His belief is that the demise of corporal punishment will eventually eradicate this invalid conception of the ideal head.[2]

My own view is that the maintenance of any school can be divided roughly into two main areas, the building and ITS maintenance and the maintenance of the school as an educational or learning centre. I can see no rationale for expecting an educational leader to concern himself with the physical aspects of the school or any function that is not more directly involved with the teaching and learning that is presumed to go on and is

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1. Anne B. Smith, Children's Ideas About Teachers and Principals, SET No.2,1985,N.Z.C.E.R.,New Zealand.

2. Peter Quin, Authority Figures,Te Awa-Iti, Porirua, New Zealand, June 10, 1988.

the natural purpose of its existence. In every school there is a need for two functionaries, one dealing with the building per se as a place where the other work can go on. In this respect almost every school has the same requirements so this should not be difficult to organise and as this is an area of high cost it might even be centralized and run to a strictly mechanistic model, as a building is, in a sense a machine for living and working in. The 'factory' model still has some uses, for management of things, but not people.

The multiple roles of heads are often compared to managers in other spheres than education. Henry Mintzberg says that there are key roles in any management position. The overall impression his studies gave was that managers are not the reflective, systematic planners one might suppose. They in fact work at a relentless pace, their activities characterized by brevity, and discontinuity. They are strongly oriented to action and actually dislike reflective activities. And unlike the headmaster in fiction these managers "perform a number of regular duties, including ritual and ceremony, negotiations and processing of 'soft' (informally acquired, unofficial) information that links the organization with its environment."[1] Contrary to folk wisdom managers did not need a formal information system, they in fact favoured the verbal media especially telephone calls and meetings. The job is complex and forms a gestalt even though patterns are hard to detect. The strategic data bank of the organization is therefore not in the memory of its computers but in the minds of its managers and the best of them will use the best of the management models used elewhere.

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1. Henry Mintzberg, The Manager's Job: Folklore and Fact, set, No 1, 1985, N.Z.C.E.R. reprint from Harvard Business Review.

Having looked at some of the practices and principles of heads it is interesting to compare these with a recent work on theories of educational management by Tony Bush who believes that making relevant theory available to practitioners can promote a greater understanding of the managerial problems they meet daily. He stresses the importance of purposes or goals for managers of educational organisations and considers the relationship between theory and practice. Using a building metaphor to explain that theories and concepts provide the framework for managerial decision-making he presents for consideration five major models of educational management, FORMAL models which emphasise hierarchical structure, rational processes and official authority--DEMOCRATIC, which stress authority of expertise, shared values and objectives and consensus decision-making--POLITICAL models with competing interests--SUBJECTIVE models open to individual interpretation and AMBIGUITY models which emphasize the unpredictable nature of organisations, their lack of clear goals and the fluid nature of participation in decision-making. The variety of approaches reflects the many disciplines on which educational management draws and an examination of these models will undoubtedly reveal the metaphors on which they are partly based.

Bush finds Glatter's definition useful. It states that educational management is concerned with:

> ...the internal operation of educational institutions and also with their relationships with their environments, that is, the communities in which they are set and with the governing bodies to which they are formally responsible.1

Defining goals and purposes which are considered an important part of management is made difficult by the vagueness of stated aims of education.

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.2.

The individuals involved in schools do not necessarily share the same purposes but the principal is obviously in a strong position to assert his. An examination of the language used by administrators has already revealed some of the metaphors which determine their policies. A head is caught between the bureaucratic and professional demands of his [or her] role.

Bush believes that the growth of the subject of educational administration reflects the view that training in management is important, however he finds that practitioners in school are wary of theory and there is a great variety of styles in decision making. He believes in the use of theory for as Bolman and Deal have said "We have to develop patterns and frames in order to make sense of the complexities of everyday life."[1] Reliance on one's own experience ignores the value of other people's experience and a change of context may require a change of style.

Bush finds no one dominant theory in use, though there are three characteristics. They tend to be normative, selective and often based on observation of practice. Theories which have come originally from industry or commerce often undergo different labelling in their new applications. As Cuthbert says : "The study of management in education is an eclectic pursuit. Models have been borrowed from a wide range of disciplines..."[2] Bush has distilled these into five models. In each one Bush says the school and the role of the head are perceived differently, as Mangam expresses it:

> Like it or not we do not see a REAL world that is truly here; each of us INTERPRETS his ENVIRONMENT and copes with it by fitting it into meaningful patterns.3

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.14.

2. Ibid., p.18.

3. Ibid., p.20.

Patterns once again. It does begin to seem that whatever area of human life one examines, patterns are important to recognise. Parts of the pattern will be discernible from the language used and the metaphors therein.[1]

FORMAL models tend to treat organisations as systems i.e. a complex of interdependent interacting units. The organisation is often hierarchical which can be demonstrated by charts showing the pattern of formal relationships between individuals and the institution--the informal are not accounted for. Which has led Renshaw to comment that "most schools remain static, hierarchical and paternalistic in character. Internally they retain a tight authority structure."[2] Schools as has already been demonstrated reflect the patriarchal nature of society. In formal models schools are seen as GOAL-SEEKING organisations. The head especially is seen as having a particular aim for his school's development. Formal models represent AUTHORITY as a product of position in the HIERARCHY. There is an emphasis on ACCOUNTABILITY--usually [in U.K.] to the local education authority and to the director of education. The head has RESPONSIBILITY for everyone in his school. All of these factors suggest an authoritarian, fairly rigid structure of devoluted mainly male power. Such an organisation we might suspect could lack appreciation of the individual, of autonomy, of the unusual or the unexpected. Like other systems meant to produce goods of a regular standard to a set procedure there is a tendency for the 'person' to be lost or alienated by the sheer efficiency of the organisation. If the 'status quo' is satisfactory it is perpetuated and change is unlikely. Formal models therefore tend to enclose the school and to close it off from

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1. Metaphors are emphasised with bold type in this section on Bush.

2. Tony Bush, <u>Theories of Educational Management</u>, Harper and Row, London, 1986, p.23.

the environment. Yet as Talcott Parsons asserts the school is always part of a wider system "it is never wholly independent."[1] Structures can become so rigid they are difficult to change. Such models stress coherence and identity with the organisation is encouraged. The key concepts appear to be responsibility, hierarchy, accountabillity, authority and goals.

STRUCTURAL models are essentially similar to formal models. Becher and Kogan have recognized the difficulty of introducing change into such models e.g. changes in curriculum--they say that: "Many changes, including those generated from within, fail because they are unable to accommodate to existing structural constraints."[2] Much depends they believe on the nature of relationships betwen the central authorities, the institution, the basic units of the system and the individuals. It has been pointed out that even where structures are not explicitly labelled differential salary and status distinguishes the PECKING ORDER of an institution. The style of organisation may also be perceived by staff or head as being democratic when the structures make it definitely HIERARCHICAL. As Bush says "Structures remain powerful influences on the nature and direction of development within institutions," or what Clark refers to as "the heavy hand of history."[3]

The advocates of SYSTEM models emphasize the UNITY and integrity of the organisation and focus on the interaction betwen its component parts for "QUALITY CONTROL and maximum effectiveness in a large educational organisation are possible only by the use of the systems approach"...say

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1. Tony Bush, <u>Theories of Educational Management</u>, Harper and Row, London, 1986, p.44.

2. Ibid., p.25.

3. Ibid., p.28.

Lauder and Myers,[1] but one wonders what control a school would have over e.g. Adrian Mole's acne, his emotional development, his relationship with his family his girl friend Pandora and his neighbours--or whether in fact school has much control over quality excepting in regulating what clothes to wear, times of attendance and behaviour in school time to some degree. We can all testify to the fact that thankfully 'quality' is a factor schools have had little control over so far.

The dangers of a very successful systems approach seems to be to endow the institution with a 'character' as if it were an entity in itself. We see this in the 'old school' affection and the 'alma mater' concept, the exhortations to think of the school's name and reputation as something one is personally responsible for. Greenfield has noted this tendency to reify organisations. It is assumed in the systems approach that members share mutual goals. One consequence of this is that such organisations close themselves off from external contact and criticism. More open schools cultivate relationships with their environment e.g. parents, neighbourhood etc. Community schools are more often 'open' and colleges which forge links with work places. Highly selective schools and universities are often 'closed'.

Hoyle criticizes the assumptions of system models

> Schools are certainly not organisations consisting of carefully articulated parts functioning harmoniously in the pursuit of agreed objectives. They are characterized by conflict, malintegration and the pursuit of individual and group interests. Nevertheless a certain degree of systematic integration is necesary for their effective functioning.2

He might have also added that they often spend a good deal of energy on

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1. Tony Bush, _Theories of Educational Management_, Harper and Row, London, 1986, p.29.

2. Ibid., p.31.

promoting the idea that they are successful.

BUREAUCRATIC models as praised by Weber for their EFFICIENCY stress the importance of HIERARCHICAL authority structures. Such organisatios are also GOAL-ORIENTED with power and decision making flowing down from the apex of a PYRAMID. Work is specialised and governed by RULES and REGULATIONS and advancement is on MERIT. Robots would do well in such a system which does not emphasise personal relationships. It has been suggested by critics of this type of organisation that it encourages COMPETITION.

RATIONAL models emphasize managerial PROCESSES and the focus is on DECISION-MAKING. The manager rationally and systematically analyses situations, identifies and evaluates possible action. As Cuthbert says "The management process is depicted as a matter of systematic, informed, rational decision making."[1] They also depend on agreed ORGANISATIONAL OBJECTIVES and HIERARCHICAL STRUCTURES. Even though such models may be extremely difficult to put into practice "Rational perspectives are the dominant normative models despite their practical limitations."[2]

HIERARCHICAL models stress VERTICAL RELATIONSHIPS, vertical communication patterns and ACCOUNTABILITY of leaders who must take responsibility for the work of their subordinates also. One factor which encourages the dominance of heads in such structures is their defined LEGAL AUTHORITY. As *Bush* expresses it:

> In education several factors tend to support this characteristic of unidimensional leadership. Official bodies and individuals behave as if the head or principal is the fount of all knowledge and

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.33.

2. Ibid., p.35.

authority. The Department of Education and Science (DES) model articles of school management are unequivocal in stating that 'the headteacher shall control the internal organisation, management and discipline of the school'.1

Yet the head's difficulty in maintaining this role nowadays has been widely testified. The literature of education tends to describe a norm of behaviour in schools which is not always a reality. They may describe the organisation as it has been set up without reference to how it works in reality. As for specified goals, as Bush says "It is often difficult to ascertain the goals of educational institutions. Few schools have formal written statements of their objectives such as exist, for example in University Charters."[2] [This will change in New Zealand if and when the Picot[3] report is adopted and implemented] Whether goals, when articulated are ever met is hard to judge. To assume that all behaviour in an organisation is rational is a misconception in human terms for "Professional judgment is based as much on intuition and background of the individual as on rational processes conditioned by the rule book."[4]

Shaw, has gone so far as to describe reality by drawing an analogy with guerilla warfare tactics as opposed to guided missiles.[5] Theorists also anthropomorphize institutions, speaking of schools as if they were human entities capable of articulating objectives. A formal view of schools with its emphasis on authoritative leadership tends to assume that policy flows from the top down, as it might do in a military organisation--

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1. Tony Bush, <u>Theories of Educational Management</u>, Harper and Row, London, 1986, p.39.

2. Ibid., p.40.

3. <u>Administering for Excellence</u>, Report of the task force to review educational administration, New Zealand, 1988.

4. and 5. Bush, p.41.

but in reality schools have a variety of people with expertise, authority and ability, to make their wishes heard. This is in fact one area of tension and sometimes stress among professionals who do not like being criticized by anyone they deem less competent than themselves. As Bush says "authority of expertise...may come into conflict with positional authority."[1] Formal models also take little notice of change. Speed of change may preclude such things as rationality so they are only " partial descriptions of organisation and management in education.[2]

All theories tend to be normative says Bush but democratic models are particularly so and reflect the prescriptive view that management OUGHT to be based on agreement. Professional members have an authority deriving from their specialized expertise rather than any official authority vested in them as in formal models. Democratic models assume a RIGHT to SHARED DECISION MAKING. Consensus is really compromise reached by force of ARGUMENT and RATIONALISATION rather than by voting.

> DEMOCRATIC models assume that organisations determine policy and make decisions through a process of DISCUSSION leading to CONSENSUS. Power is shared among some or all members of the organization who are thought to have a mutual understanding about the objectives of the institution. 3

This style according to Bush originated with the Collegial model in universities and an extensive committee system but is limited in some universities by franchise which makes it somewhat elitist. Polytechnical colleges have also largely adopted this system. Problems occur where "There is a dichotomy in colleges between academic policy which is generally the

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.43.

2. Ibid., p.45.

3. Ibid., p.48.

responsibility of the 'democratic' academic board and resource management which is usually the preserve of the principal and heads of department."[1] This creates a tension between participation and accountability.

In schools teachers generally want to participate on decision making and it is generally considered that the quality of decision making is improved by their participation. Job satisfaction is increased which leads to greater commitment. Participation is also important says Bush because staff usually have to implement any changes in policy. Whicher has described six styles of decision making:

1. head controls decision making and announces these to staff who are expected to comply.

2. same as above but head gives reasons.

3. Head begins process and leave staff to discuss before final decision.

4.Head invites colleagues to join the early stages but then make final decision.

5. Staff involved at all stages but head defines criteria determining choice of solution.

6. The head becomes an equal member of a corporate decision making body.

All of the above can be seen in the styles of the heads previously described. The last is the only truly democratic model and is seen at Countesthorpe where the first head of the college said;

> The Moot establishes its own constitution, procedures and chairmanship. It meets as necessary, about once in six weeks. Other decision making groups are responsible directly or indirectly to the Moot and any individual may challenge their decisions through the Moot.2

At Countesthorpe Bush says this is a normative approach because it reflects

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1. Tony Bush, <u>Theories of Educational Management</u>, Harper and Row, London, 1986, p.52.

2. Ibid., p.55.

Watt's vision that participation is the most appropriate way to determine policy. Only one further step, that is involving the outside community, could be added here and this is catered for in the Picot recommendations.

Where a head chooses his own staff and where the staff is fairly homogenous consensus is more likely to occur. Conflict breaks down the democratic model. One difficulty with such models is that it is no easy task to establish responsibility for organisational policy. Responsibility becomes diffused and as has been mentioned previously accountability is more difficult to pinpoint. External groups find this a particular difficulty. In the traditional structures the head is the first person outsiders look to, he represents the school to them. But as Bush says "Heroic models of leadership are inappropriate when influence and power are widely distributed within the institution."[1]

The democratic principal according to Bush is almost always a successful practitioner responsive to the needs and wishes of colleagues and uses formal and informal means to test and elaborate policy initiatives. Authority in these situations comes from expertise rather than officially vested authority. Such a head's control is more subtle and "typified as the FACILITATOR of an essentially participative internal process."[2] The role is described as 'pivotal' for it is still that of a leader constantly negotiating for his or her position. The most favourable aspect of such leadership is that he/she has as it were a finger on the pulse of the school and is not removed from even its most minor activities by virtue

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.60.

2. Ibid., p.61.

of office. Such models says Bush are highly normative and idealistic. It is also a slow process and demands adequate constant participation, for enthusiasm and interest can dissipate among participants. Decisions may also be made without adequate understanding and such models may underestimate conflict within education--conflict which may be long and drawn out in the battle to win consensus. It is feared also that "The ideal of democracy may succumb to the reality of bureaucratice power" [1] and experts will hold sway.

Important questions of accountability also "lead inevitably to the conclusion that in educational institutions there cannot be more than a conditional democracy." Critics believe that it is an unrealistic ideal and that the democratic model veils the persistent power of headship and the existence of inevitable conflict. Baldridge has even said "Collegial management is probably dying--if it ever existed at all..." [2]

In POLITICAL models decision making is a bargaining process in pursuit of the self interest of groups. Conflict is a natural part of this process and power is the prerogative not of formal leaders but of dominant groups such as departments. We usually regard central and local government and political parties as being concerned with politics and as Bush says "It is useful to loosen this close identity between government and politics before seeking to apply political metaphors to educational institutions." [3] He therefore recognizes that these 'labels' are metaphors for they indicate styles of administration approximating to those of

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.64.

2. Ibid., p.65.

3. Ibid, p.68.

government. Some have described such as 'micro-politics.'

In formal models it is the head who usually introduces outside influences, but in political models groups are swayed by external forces and factors which they introduce into the system. Resource allocation is always crucially important but in times of scarcity the pressures created aggravate the conflicting demands for them. Baldridge in summary says;

> The broad outline of the political system looks like this: a complex social structure generates multiple pressures, many forms of power and pressure impinge on the decision makers, a legislative stage translates these pressures into policy, and a policy execution phase finally generates feedback in the form of new conflicts.1

A good example of this kind of conflict and pressure occured in recent years over falling rolls in the secondary schools in New Zealand, when administrators were forced to consider staff cuts which had to be discussed and negotiated with staff.

Five different forms of power are described by Bush; that deriving from official position; specialist expertise; personal power; and that which comes from having control of the rewards, which creates coercive power, or the ability to enforce compliance which is more akin to authority than influence. Heads can wield all or most of these and therefore "have the capacity to determine to a considerable extent the behaviour of their colleagues."[2] Each compliance reinforces this power by a submission to the power of that leader.

A newer and more equal concept is that of relationship exchange. Bush believes the concept of EXCHANGE is a profitable way of examining relationships in education. The head exchanges the 'goods' he has to

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.76.

2. Ibid., p.78.

offer in exchange for cooperation. [this concept sounds like bribery or barter] *Both parties profit. Teachers may negotiate exchanges themselves* as in alliances or coalitions. Bush obviously considers this theory a potentially useful one, and Baldridge is the leading writer on this.

Political models focus more on goals of sub units than on the total organisation. Critics say that political models focus on conflict and manipulation and policy formulation rather than implementation, considering group interests more than the institution as a whole, but it is obvious that the political model is often practised if not in toto then within institutions that profess to be something different.

SUBJECTIVE models claim to consider the individual: "Organisations are regarded as complex notions which reflect the numerous meanings and perceptions of all the people in them.[1] I have used this notion myself in speaking of a school's character. So in subjective terms schools are social constructions. *Greenfield*, says *Bush*, *has been the main promoter of* this view of schools which counterbalances the dominant model from systems theory which has been criticized for its focus on the institution as a concrete reality.

Where individuals compete or conflict then even the subjective model can mirror political theories, but conflict is not a norm. In these models STRUCTURE is a product of HUMAN INTERACTION and organisation models are seen as fictions. There is much truth in this, that designing a chart of positions is no guarantee that the organisation will in fact keep to the proposed model. Behaviour, process and individual purposes are considered rather than institutional goals. The only study of a school based on this

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.89.

subjective or PHENOMENOLOGICAL approach which Bush knows is that done on Rivendell school by Best et al. In such models the school is not a monolithic organisation but each teacher has an interpretation of the school. Structure is not imposed but created by the interaction of the participants. Little attention is paid to the relations between the organisation and the environment. Subjective models are primarily prescriptive and do not he thinks present a clear framework for analysis. It seems to me that while an organisation could be examined in terms of any of the other models this subjective model could also be applied because it would focus on aspects missed by the others.

Greenfield's theory has apparently been the subject of much criticism. As Bush says "The focus on individual meanings offers an additional dimension in our attempts to understand schools and colleges but, on its own, subjective theory fails to explain processes and behaviour in education."[1] Hills has said that "when one examines organisations one noticeable feature is their similarity and high degree of order"[2] and Bush says that teachers "emanate from a common professional background which often results in shared meanings and purposes."[3] So even the subjective model with its emphasis on individual differences does not change this. Subjective models counterbalance the emphasis on structure, routine and the depersonalising effects which some models appear to have. Both types of models if used in conjunction give an overview of institutions and an understanding of the behaviour of individuals within them.

AMBIGUITY models derive from the notion that ambiguity is a major

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.103.

2. and 3. Ibid., p.104.

feature of decision making in most public and educational organisations. Goals are not always clear. There is also a degree of uncertainty as to the outcomes of processes, and effects on individuals. The metaphor LOOSE-COUPLING has been used in this model to describe the tenuous links between groups in such organisations, that is to say there is a degree of flexibility in the workings of each part of the organisation. Structures in large organisations are complex and often overlapping so "charts conceal more than they reveal about the patterns of relationships in institutions."[1] Ambiguity models fit with professional autonomy in such things as relationships with clients and in what is called in this model FLUID PARTICIPATION in decision making. Schools are subject to many influences in their environments and long term planning and decision making are affected. Decisions are not always planned but made on ad ad hoc basis to suit conditions and needs.

Ambiguity models stress advantage in decentralisation. The loose coupling of units in such an organisation is seen as a positive aspect: "A loosely-coupled system can isolate its trouble spots and prevent the trouble from spreading."[2] Cohen and March in 1974 proposed a GARBAGE CAN model where they saw decision making in schools as fundamentally ambiguous, its technology unclear and participation fluid. They distinguished three choices in decision making, by OVERSIGHT, FLIGHT, or RESOLUTION. Bush says "The garbage can model has a clear application to educational institutions where there are many participants with ready- made solutions to apply to different problems."[3] All other theories presume that goals

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.111.

2. Ibid., p.113.

3. Ibid., p.116.

are clear, whereas ambiguity models stress their problematic nature and it is believed that in the process of decision making goals are discovered. Ambiguity models exist in an ambiguous world where events and circumstances are always changing, and ensure that management in education is a hazardous and changeable activity, influenced by more than market forces. There is ambiguity of purpose, power, experience and success. In these circumstances leadership can be participative or avoid direct involvement in policy making and concentrate on structural and personal matters.

If heads choose like-minded staff they avoid problems in following their chosen model. In ambiguity models leaders are said to be primarily catalysts, negotiating rather than commanding. Bush agrees that most schools have ambiguous features. "So ambiguity perspectives can be regarded primarily as analytical or descriptive approaches rather than normative theories. They claim to mirror reality rather than suggesting that organisations SHOULD operate as anarchies."[1] The degree of unpredictability is exaggerated. Predictablity is dependent largely on stability--so during times of change the ambiguity model flourishes. Such models offer little guidance to leaders-- and proponents of such theories as the garbage can model admit this but their theory had not been fully explored at this point in time [Bush 1976] What this model, which Baldridge has called, "organised anarchy"[2] does, is add another dimension to the other more usually favoured models

Bush calls his five models windows or different ways of looking at educational institutions. Taken together they give a picture of

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.122.

2. Ibid., p.124.

administration in UK schools at least. One model may predominate in a particular school but any one of the others may also be reflected there. Influential factors Bush believes will be; the size of the school, the organisational structure, the time devoted to management and availability of resources. The rate and nature of change is also a powerful influence. Not one or all of these gives a complete picture of educational administration as Bush agrees. Some, such as Ellstrom, have claimed that it is possible to use all of them to appraise organisations where "the models are viewed as compatible, rather than as mutually exclusive alternatives."[1] This I believe is possible, for each model is not only a view of the school but a way of seeing on the part of the researchers. If you look at a school through only one window you wil only see part of it. A school evolves and may consciously or not adopt one or other of the models at different times in its history. What Bush calls windows might equally well be described as metaphors, words such as democracy, bureaucracy, political, garbage etc. None of these can be taken literally and in no two situations will the terms have precisely the same meaning. They are called models which as Black has shown are a type of metaphor, a way of perceiving. They help to describe and structure how reality is perceived by using something with which we are already familiar to illuminate or help structure a new perception. Formal models for instance have many of the features associated with military organisations but this metaphor would probably have little appeal in educational circles whereas models from business management may seem innocuous enough until their implications are fully explored.

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1. Tony Bush, Theories of Educational Management, Harper and Row, London, 1986, p.133.

Gareth Morgan is aware that metaphors construct our world for us as he closely examines the images that pervade organizations. Effective managers he says are skilled in the art of "reading" situations, and it is metaphors that lead us to see and understand organizations in distinctive yet partial ways:

> Metaphor is often just regarded as a device for embellishing discourse, but its significance is much greater than this. For the use of metaphor implies A WAY OF THINKING and A WAY OF SEEING that pervade how we understand our world generally. For example, research in a wide variety of fields has demonstrated that metaphor exerts a formative influence on science, on our language and on how we think, as well as on how we express ourselves on a day-to-day basis.[1]

In 'reading' organizational life there is always, he says, some theory being applied. These theories are all based on metaphors "Many of our taken-for -granted ideas about organization are metaphorical, even though we may not recognize them as such."[2]

The main metaphors he examines include organisations as; mechanisms, organisms, cultures, brains, political structures, psychic 'prisons', states of flux and transformation, for :

> By using different metaphors to understand the complex and paradoxical character of organizational life, we are able to manage and design organizations in ways that we may not have thought possible before.[3]

It is not difficult to see the relationship between his metaphors of business organizations and those of education.

Organizations that are designed and run in a mechanistic fashion are usually bureaucracies says Morgan and most are bureaucratized to some degree. The influences can be traced back to the military and he cites Frederick the Great of Prussia 1740-1786 who had a vision of a mechanized

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1. Gareth Morgan, Images of Organization, Sage publications, California, 1986, p.12

2. and 3. Ibid., p.13.

army which he shaped from a mob, modelling it on Roman lines introducing ranks and uniforms, standardized regulations, increased specialization of tasks, the use of standardized equipment, the creation of a command language, and systematic training which involved army drill. Men were taught to fear the officers more than the enemy. We can see parallels here with schools; uniforms, hierarchical levels of authority, school rules and discipline all being traditional facts of school life and as we have seen from the traditional images of headmaster he was usually a figure to be feared. Newell has said that "School systems generally have adopted a line-and-staff type of organisation. This type of organization was taken from the military service and business, and has served the needs of traditional organizations."[1] The mechanistic model persisted for good reasons;

> Mechanistic approaches to organization have proved incredibly popular, partly because of their efficiency in the performance of certain tasks, but also because of their ability to reinforce and sustain particular patterns of power and control. The machine metaphor has particular appeal for individuals and groups who wish to exercise a close control over people and their activities... 2

Charles Babbage advocated a scientific approach to organisation and management emphasizing the importance of planning and appropriate division of labour. Morgan lists the characteristics of the machine metaphor; goals and objectives are set and aimed for, everything organized rationally and efficiently, every detail specified and every job detailed. It is largely a matter of planning and control.

Adam Smith praised the division of labour in his Wealth of nations in 1776, and Max Weber with his definition of bureaucracy noted that

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1. Clarence A. Newell, Human Behavior in Educational Administration, Prentice-Hall, New Jersey, 1978, p.119

2. Gareth Morgan, Images of Organization, Sage publications, California, 1986, p.38.

bureaucratic form and mechanisation of industry were comparative and he was interested in the social consequences of this. Management theorists and practitioners such as Frenchman Henri Fayol, American F.W.Mooney and Col. Lyndall Urwick of Britain were all interested in problems of management which was seen as a process of planning, organization, command ,coordination and control, and their theories became known by various acronyms such as MBO and PPBS.

Frederick Taylor an American engineer pioneeered what is now known as scientific management which advocated time and motion studies, detailed and minute observation and organisation. Both industrial production and office work were influenced by this, but these methods although a growing trend, produced human problems for humans are not robots. Others in this vein were Frank and Lillian Gilbreth.

William Taylor quotes the first director of the London Institute of Education who said "Unless the machine can be stopped its use for the educator is gone."[1] And Taylor also says that to conceive of human behaviour in terms of mechanisms is "one of the oldest conceits of our language and thought."[2] However these ideas do not translate easily into the educational scene;

> ...an interpretation of quality control drawn from industrial practice (those techniques of inspection based on sampliag methods) is of only very limited application to the determination of quality in non-marketed goods as 'education.' There are problems defining quality. The use of the word 'control' implies a pattern of relationships that bears little relationship to the human reality of institutional and systems management. The production metaphor suggests a degree of precision in the process of inspection that we know cannot be achieved in educational settings....The images invoked by quality control invite unhelpful comparisons with processes that

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1. William Taylor,Metaphors of Education,Heinemann, London,1984, p.9.

2. Ibid.,p.9.

have little to do with education, and lend a superficial glamour to bureaucratic values.[1]

One might imagine that these images would by now be outdated but in fact they are still giving cause for concern to those interested in education in the fullest sense of the term and not merely as training. The current problem is that many people do see education as a marketable commodity and seek to impose the language of business onto education so that there is now a preoccupation with accountability, quality control and performance indicators.

Henri Fayol in France focussed on middle management and to him poor methods were the result of a lack of theory. His principles of administration composed five elements plan, organize, command, coordinate, control, but he also emphasized flexibility and a sense of proportion. Fayol believed that training for administration could begin early. He said that "it can and should be acquired in the same way as technical ability, first at school, later in the workshop."[2]

Roberts Owens says that in 1887 "Woodrow Wilson was the catalyst who crystalized early thinking about the professionalization of administration."[3] He stressed the importance of the search for principles and considered it a fit subject for university study. By the time of Fayol and Taylor says Owens the Western world was becoming an "organizational society". Life was becoming more complicated, there was increasing conflict, labour unrest, revolution, and the rise of communism. In the new urban

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1. William Taylor,<u>Metaphors of Education</u>,Heinemann, London,1984, pp.14-15.

2. Robert G. Owens,<u>Organizational Behaviour in Schools</u>,Prentice-Hall, New Jersey,1970,p.6.

3. Ibid.,p.4.

industrial society Max Weber saw hope in bureaucracy as an ideal form of organization in ideal circumstances. Owens assigns Taylor, Fayol and Weber to the era of scientific management between approximately 1910-1935. Luther Gulick and Lyndall Urwick wrote an influential book in 1937 which promoted the ideas of; line and staff, span of control, unity of command, and delegation of responsibility.

Owens calls the next period the Human Relations movement from 1935-1950, which spawned the concepts of; morale, group dynamics, democratic supervision and personnel relations.[1] By 1938 Chester Barnard had written his influential book on The Functions of the Executive. The newer style of administraton was based on scientific enquiry involving psychologists, sociologists and political scientists.

Another popular metaphor of organisation says Morgan is that which considers it an organism, and grew from the frustrations and problems associated with the mechanistic model. It focusses on "needs' and environmental relations. "We are encouraged to understand how organizations are born, grow, develop, decline and die, and how they are able to adapt to the changing environments. We look also at relations between species, and the evolutionary patterns found in the interorganizational ecology."[2] Where organisation had previously been seen as a technical problem now it was concerned about social needs and how these affected work performance. The recognition of needs such as those outlined by Abraham Maslow began to be taken into consideration. Beginning with the now well known studies at the Western Electric Company in Chicago under Elton Mayo, work motivation was

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1. Robert G. Owens, Organizational Behaviour in Schools, Prentice-Hall, New Jersey, 1970, pp.6-7.

2. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.14.

explored and psychologists became interested in how work could be structured to modify systems in order to create motivation. Human and technical needs began to be seen as interdependent.

The organism metaphor has strengths and limitations says Morgan. There is an emphasis on understanding relations between organizations and their environment and a perception that improvement can come through attention to 'needs.' It also realises that internal balance is necessary and that there exists a range of options. It allows for innovation and has contributed to the theory and practice of organizational development especially through the contingency approach, that is adaptgation to the environment. It focusses on 'ecology' and interorganizational relations but as he reminds us "Sometimes it is said that a way of seeing is a way of not seeing."[1] One limitation is that we are led to see organisations in a way that is too concrete "Organizations are very much products of visions, ideas, norms, and beliefs, so that their shape and structure is much more fragile and tentative than the material structure of an organism.....[and]... they depend upon the creative actions of human beings"[2] Organizations, unlike organisms, also have a choice as to whether they wish to compete or to collaborate. They are not always unified and there may be schisms and conflict, so the emphasis on unity may be a weakness. There is also the danger says Morgan that the metaphor may become an ideology, but one would imagine that this could happen to any metaphor.

> The population-ecology view of organization in effect develops an equivalent ideology for modern times, holding up a mirror to the organizational world and suggesting that the view we see reflects a law of nature. In effect, natural law is invoked to legitimize

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.73.

2. Ibid., p.74.

the organisation of society."[1]

The danger in this is that we fail to see that humans have power to make choices and influence their world.

The organism metaphor recognizes relationship with the environment on which it is dependent. Systems theory took the living organism as a model of how organizations work, as Morgan says "Early systems theory thus developed as a biological metaphor in disguise."[2] Where the mechanical model saw an organisation or institution as self-contained just as a machine can be, the sytems approach conceives of open as well as closed systems. We can see from earlier descriptions of schools that some appear closed off from their environments leading a singular life of their own, a miniature world within the world. Some exclusive and very traditional educational institutions still cultivate such exclusivity and independence.

Taylor refers us to Davies and his criticism of the systems approach:

> It may be useful to conceptualise the whole complex of educational institutions as comprising a 'system', so long as we do not allow the neatness and simplicity of the model to become reality. Perhaps all educational institutions display certain 'essential features'... The point is that this whole apparatus of terms used to display relationships, fit,and order obscures certain sorts of issues by sharpening our awareness of others.3

So he thinks we should be fairly sceptical about systems theory. Bertalanffy himself said that the theory could end up in meaningless analogies, for instance if one considered the state an organism then the individual could become subsumed within it like an unimportant worker in a

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1. Gareth Morgan,<u>Images of Organization</u>,Sage Publications, California,1986,p.76.

2. Ibid.,p.45.

3. William Taylor, The head as manager: some criticisms,in<u>The Role of the Head</u>, Routledge and Kegan Paul,London,1976,p.45.

beehive.[1]

Systems theory "has pervaded all fields of science and penetrated into popular thinking, jargon and mass media" said Bertalanffy.[2] It has undoubtedly affected educational administration. It created the tendency to view the schools as models, be they formal, hierarchical, bureaucratic or whatever and to assume that they go no further than that. In fact as Bertalanffy points out it is precisely those non-linear (i.e. non-modellable) aspects of a system, the interaction within the system, that the theory attempts to deal with; going beyond structure to examine the workings of the parts. It can therefore be examined on many levels, the physical, the intellectual, the spiritual, the social, medical, philosophical, social, whatever...It looks not only at organization, naming of parts, assigning of rights and duties, but can also examine the functioning day by day , hour by hour, minute by minute, as recent studies of schools (e.g. Michael Rutter's _Fifteen Thousand Hours_) have done.

What can be missing is a holistic overview of all the elements and how they achieve or otherwise the function society ascribes to the education 'system'. Clearly these two do not always coincide, as the spate of current criticism proves. Not only are the day to day workings put under the microscope but we see that social policy may influence the outcomes also i.e. the school itself no matter how well it is organized and controlled may not be able to produce the answers we ask for--we have to look at what is going into the system and the likely future path of the 'material' coming out at the other end of the system for the life patterns available

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1. Ludwig von Bertalanffy, _General Systems Theory_, George Braziller, New York 1968, p.35.

2. Ibid., p.3.

e.g. jobs etc. will affect the ongoing business of the school because of the attitudes, background and aspirations of its 'clients'. These aspects would be considered in the culture view of organization. The 'system' is therefore not the whole of education or even the sum of its parts but part of a life-long process inheriting influences from the past decades and with concerns and influenced by the long range future. In this sense it is partially like a 'living' entity or organism with a history, a life, a future.

An education system is not schools, a department of education or curriculum or merely what individuals extract from it, it is one facet of a culture and an aspect of human life and history both of the individual and his/her society and time. As Bertalanffy says model-building has become so fashionable it is hard to imagine that his idea at first met with so much resistance. The growth of cybernetics helped to develop the theory but that is only one part of a general theory of systems.

Kuhn describes scientific revolutions as paradigms where in traditional science the 'parts' are broken down and put together again in a linear fashion. Systems theory deals with more general, non-linear problems than the analytical-summative ones of classical science says Bertalanffy and GST as it has become known is not a search for vague and superficial analogies but it would seem that 'system' as applied to education has in fact become just that. In a sense education is not a system but an impingement on human nature of other systems it is an effect or result not a system in itself. For instance one could give different replies to the question "Are you educated?" and "What education have you had?"

Corporate [body metaphor] identity in schools is deliberately conjured

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1. Ludwig von Bertalanffy, General Systems Theory, George Braziller, New York 1968, p.19.

as it is in corporations to instil loyalty ,pride etc. In the one instance the end motive is profit in the other the aims are more diffuse for one is prescribing aims for chidren usually and their future. Both physical and mental control are also involved.

The systems view looks at the world in terms of relationship and integration says Capra and "although we can discern individual parts in any system, the nature of the whole is always different from the mere sum of its parts."[1] Order, patterns, relationships are all integral to a systems approach and systems are seens as either open or closed, wholes within wholes. In nature they already exist, in organizations we try to find them or create them artificially. The open systems are those which "have to maintain a continuous exchange of energy and matter with their environment to stay alive."[2] This is described usually with the notion of 'feedback'. A living organism unlike an artificial system is self-regulating and has a self-adjusting capacity, known as 'homeostasis' and not to be confused with equilibrium.

Whatever the limits of the systems approach it helped say Morgan to break out of the bureaucratic model and it establishes congruencies betwen different systems. Newer metaphors have emerged since but the old ones still persist as Hedley Beare says "School is too much an institution, too overly an organization which demands human conformity. The school is one of the most heavily bureaucratized institutions in the world."[3] So this theory has helped to change some of the more restrictive attitudes to

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1. Fritjof Capra,<u>The Turning Point</u>,Fontana,London,1982,p.287.

2. Ibid.,p.291.

3. Hedley Beare,School and Community as Educational Partners,in <u>Policies for Participation</u>, ed.John Watson,N.Z.C.E.R.1977,p.175.

educational administration, or at least given us another way of looking at organizations even if some of them like many of the schools have not changed. It was two British researchers Tom Burns and G.M.Stalker, Morgan tells us, who established in 1950 the distinction between mechanistic and organic approaches to organization and management.[1] But as he reminds us "Theories, like readings are interpretations of reality."[2]

The principles of classical management theory as they became known, were not always the right ones to follow for different businesses required different systems. Some actually suited the bureaucratic style for some purposes especially for mass production but not in the smaller situations. To be successful the more mechanistic style requires a stable environment . The electronics industry developed in an organistic way with everyone having input initially.

It is interesting that theories of evolution should also have influenced ideas about business. Change is a matter of evolution says Morgan and "evolution is always a pattern of relations embracing organizations and their environments."[3] What we look for in organizations are collaborative relations and what we have learned he says is that "organizations are open systems and are best understood as ongoing PROCESSES rather than as collections of parts."[4] Through this view we become more conscious of the need for flexibility, perceive needs, appreciate interaction, consider a range of options and are prepared for innovation.

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.50.

2. Ibid., p.12.

3. Ibid., p.69.

4. Ibid., p.72.

It is obvious that the education system or a school within it is not an organism any more than a business is but it has parallels with an organism, so that it can be imagined as such and planned and controlled using this metaphor. What is lacking is in fact corporate identity as a reality, and where this does appear to exist to some degree, as in 'character', 'climate', 'structure' etc. it is an artificial 'grid' overlaid as it were on the group of people sharing a common physical base usually and with common aspirations. The school is in existence for the sake of the individual and increasingly for the sake of society, especially now it seems for the economy of that society. The most successful schools like the most successful businesses may have an organismic view of themselves and deliberately work in this way or are administered on this model. What organismic unity the school does share is created by the systems metaphor which it consciously or not employs and serves. Such a metaphor may be excellent for planning as it gives a sense of structure, it enables one to have a view, albeit a biased one, of the relationship between the parts but no theory can ever mirror practice exactly.

A newer metaphor is the organisation as a 'brain':

> The metaphor draws attention to the importance of information processing, learning and intelligence, and provides a frame of reference for understanding and assessing modern organizations in these terms. And it points to a set of design principles for enhancing these qualities.1

The brain itself has been described throughout history in many ways, with different metaphors, and Morgan examines two of these, the brain as an information processing computer and the brain as a holograph. He believes that by using the brain as a metaphor for organization we may improve our

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.14.

ability to organize in a manner that promotes flexibility and creativity for "no man-made system comes close to matching the sophistication of even the simple kinds of brains."[1]

The metaphors used so far of mechanism, bureaucracy and organism have been useful for organizing people where planning relies on predictability but breaks down in situations where people are required to handle the unexpected and there is a need for some degree of autonomous rational behaviour and adjustment, not merely acting in a process and product fashion. We need organizations which in fact act like rational human beings. The brain is therefore an obvious metaphor for organization to emulate in the sphere of organizational intelligence. Sometimes the brain metaphor is used says Morgan in relation to strategic management and control but less often is the organization itself viewed as a brain.

What is now known as the "decision-making approach" was pioneered by Herbert Simon and his colleagues:

> his theory of decision making leads us to understand organizations as kinds of institutionalized brains that fragment, routinize, and bound the decision making process in order to make it manageable. 2

The use of computers has contributed towards this task and the information system becomes an integral factor in any organization. The question now says Morgan is whether the organization itself is capable of learning. Cybernetics grew during the war he says from the desire to combine mathematics theory, engineering, social and medical science and communcations theory "to create machines with the adaptive capacity of organisms."[3]

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.79.

2. Ibid., p.81.

3. Ibid., p.85.

Current interest is also in how to use this in organizations.

The concept of negative feedback, a process which eliminates error is an integral part of cybernetics. Where traditionally a master plan with clear objectives is usually broached, with a cybernetic approach one examines all the possibilities both positive and negative. A similar style of planning known as the RINGI is practised in Japan says Morgan and can eliminate problematic factors before a plan goes into action. It is however a protracted process.

A more exciting way to view the organization as a brain is to consider holographic principles. Holography invented in 1948 by Dennis Gabor:

> uses a lenseless camera to record information in a way that stores the whole in all the parts. Interacting beams of light create an "interference pattern" that scatters the information being recorded on a photographic plate, known as a hologram, which can then be illuminated to recreate the original information. One of the interesting features of the hologram is that if it is broken, any single piece can be used to reconstruct the entire image. Everything is enfolded in everything else, just as if we were able to throw a pebble into a pond and see the whole pond and all the waves, ripples, and drops of water generated by the splash IN EACH AND EVERY ONE OF THE DROPS OF WATER THUS PRODUCED."1

In such a view of organisations then every part has the potential capacity of the whole or the whole is mirrored in the parts. It is now thought that the brain functions in such a manner. This would explain the massive computations it is capable of handling, far in excess of any known computer as yet.

> Neuroscientist Karl Pribram of Stanford University has suggested that the brain functions in accordance with holographic principles: that memory is distributed throughout the brain and can thus be reconstituted from any of the parts. 2

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.80.

2. Ibid., p.80.

The brain resembles a holograph in its patterns of connectivity. All parts of the brain are closely interdependent. We also know that the right and left brains combine to produce patterns of thought. The secret of the brain's capacity seems to rest on this connectivity. The principle of redundancy makes it extremely flexible and adaptive; that is, it allows for error and probability and allows new functions to develop. It is endlessly adaptive just as we might wish an organization to be. It has been suggested therefore that by:

> building patterns of rich connectivity between similar parts we can create systems that are both specialized amd generalized, and that are capable of reorganizing internal structure and function as they learn to meet the challenges posed by new demands. 1

For an organisation to function as a holographic brain would require that the principles of REDUNDANT FUNCTIONS and REQUISITE VARIETY were built in, that is simultaneous specialization and generalization. In effect no-one could turn around and say "That's your problem " for everyone would be involved and there would be no fixed roles.

The principle of minimum critical specification says Morgan suggests that managers and organizational designers should primarily adopt a facilitating or orchestrating role, creating "enabling conditions" that allow a system to find its own form.[2] Such a design allows maximun flexibility and requires that one should specify only what is absolutely necessary for a desired activity to occur. In a real life situation, at a meeting for example the role positions can circulate and change. Much time can be taken if organization is completely random but:

If, however, they use their autonomy to learn how to find

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1. Gareth Morgan,Images of Organization,Sage Publications, California,1986,p.97.

2. Ibid.,p.101.

> appropriate patterns of connectivity, they can develop a remarkable ability to find novel and increasingly progressive solutions to complex problems. Such systems typically find and adopt a pattern graded in a hierarchical manner, in that sets of subsystems link to higher-order systems, but the pattern is emergent rather than imposed.1

As yet very few organizations he says function in this mode.

Innovative organizations Morgan suggests need to be designed as learning systems. The Japanese style is cybernetic. In his view "most organizations reflect a bounded rationality because they are populated by people."[2] But holographic styles can break beyond the bounds of single minds by combining the cognitive capacity of the group. And as he says modern brain research has shown that there is a side of the brain underused so far, that is its holistic, analogical, intuitive and creative capacity.

> If new organizational designs can tap these creative possibilities they will provide further means of extending and transforming organisational capacities for rational action.3

Organizations reflect their time period. Bureaucracy for instance belonged to the age of the written word, whereas with modern communications technology we can look to different ideas and methods and new metaphors. The brain metaphor does however tend to overlook the element of conflict that arises in human institutions and the role of power. The learning process he says requires a degree of openness and self-criticism that is alien to traditional modes of management.

One might expect that educational administration would favour just such a model, involved as it is so closely with the process of learning, however most of the evidence seems to point to firmly entrenched modes of

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.103.

2. Ibid., p.107.

3. Ibid., p.108.

administration. It is probably one of the slowest to change because it is rooted in a long tradition and because any experiments are difficult to justify. There is another reason for resistance to change which I suspect is nearer to the truth. Morgan says that the inclination of most managers is to cultivate secrecy, exclusion, and a perceived need to keep a tight rein on all operations. It is essentially the protection of personal power. In the educational situation this power is knowledge which has traditionally been acquired piecemeal through the long apprenticeship of schooling.

> any move towards self-organization must be accompanied by a major change in attitudes and values, the realities of power may be reinforced by an inertia stemming from existing assumptions and beliefs. Learning and self-organization generally call for a reframing of attitudes emphasizing the importance of activeness over passiveness, autonomy over dependence, flexibility over rigidity, collaboration over competition, openness over closedness, and democratic enquiry over authoritarian belief. For many organizatons this may call for a "personality change" that can only be achieved over a considerable period of time.1

The reframing of attitudes could mean abandoning old metaphors and finding new or more appropriate ones.

According to Morgan the rise of Japan as a successful industrial power has made us increasingly aware of the relationship between culture and management. The metaphor itself is a word originally applied to the tilling of land. We can in fact perceive of organizations as cultures for;

> Organization is now seen to reside in the ideas, values, norms, rituals, and beliefs that sustain organizations as socially constructed realities.2

These constitute patterns of shared meaning. Morgan proposes an interesting thesis that just as we once defined ourselves by nationality so

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.109.

2. Ibid., p.14.

now there is a tendency to define oneself by work and position within an organization so that workers of a specific type throughout the world may have more in common with each other than with some of their compatriots. If this noticeable movement increases then it could be one method of bonding across nations for he thinks that : "Ways have to be found of binding the society together again....and many of the major cultural similarities and differences in the world today are occupational rather than national."[1]

One of the characteristics of culture is that it creates a form of enthrocentrism says Morgan and this happens in the workforce also. Hierarchical structures for instance separate people by their roles and tasks. Unions exist to protect this very phenomena and act in his words as a counterculture. If one relates this idea to the educational system the similarities still exist for each 'level' of teaching is clearly marked by differential pay and social status. School is a very elaborately constructed culture with its rituals, traditions, and private language. One is initiated into it at an early age and although each has as we have been told its own climate or character they all have a great deal in common. It has affinities for instance with other public institutions notably the prison system because most of its clientele does not attend there voluntarily.

Culture shapes the character of organization says Morgan and corporate culture develops an ethos. Positive reinforcement is used by many firms to develop this identity, for it does not develop merely from following rules. Organisational psychologist Karl Weick describes the process through which we shape and structure our realities as one of ENACTMENT. Culture- is "an active, living phenomenon through which people

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1. Gareth Morgan,Images of Organization,Sage Publications, California,1986,p.113.

create and recreate the worlds in which they live...[and]...Organization becomes the enactment of a shared reality."[1]

In schools there is an awareness of the cultural nature of the curriculum "The curriculum is ...interwoven with the social fabric that sustains it...Common education will be based upon the universal elements of the culture and such aspects of the specialities as are of general concern."[2] It is also said that when a society moves from a class to a classless society remnants of the class culture persist in the schools.

The test of leadership is often how well one can create this sense of shared reality for "cohesive groups arise around shared understandings."[3] Modern organizations says Morgan are sustained by belief systems that emphasise the importance of rationality; their faith in these processes is less than rational but: "The myth of rationality helps us to see certain patterns of action as legitimate credible, and normal, and hence to avoid the wrangling and debate that would arise if we were to recognize the basic uncertainty and ambiguity underlying many of our values and actions."[4] The culture metaphor provides the "glue" to weld the organisation together and " focuses attention on a human side of the organization that other metaphors ignore or gloss over."[5] It gives people however a false sense of power for they are often under controls they are not fully aware of.

Political metaphors focus on the sets of interests, conflicts and power

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, pp.130-131.

2. B.O.Smith, W.O.Stanley and J.H.Shores, Cultural Roots of the Curriculum in The Curriculum: Context, Design and Development, Oliver and Boyd Edinburgh and Open University 1971, p.16.

3. Morgan, p.133.

4. and 5. Ibid., p.135.

plays that shape organisational activities. Organization says Morgan is intrinsically political even though the members may avoid facing this fact. They usually, he found, prefer to think of themselves as rational entities untouched by politics. This is seen particularly in education as John Davies explains when he describes the traditional approach of those in education and how there is now "a rejection of that long-enduring fiction that the schools of America are apolitical, and repeated emphasis on the closeness of the relationship between the polity on the one hand and the education system on the other."[1] Politics are an essential aspect of organizational life Morgan asserts. We would do well he thinks to consider its original meaning:

> the idea of politics stems from the view that, where interests are divergent, society should provide a means of allowing individuals to reconcile their differences through consultation and negotiation.2

Politics to Aristotle for instance meant creating order out of diversity. By looking at organizations as systems of government we can he thinks appreciate aspects which are often ignored. When we use terms such as autocracy and democracy we are drawing parallels he says with political systems. Studying organizations from a political stance generally entails examining INTERESTS, CONFLICT, and POWER, and power influences who gets what, when and how. The primary source comes from authority. He describes two types, charismatic which comes from earned respect and traditional from position such as royalty, and bureaucratic or invested authority legitimated by procedural means or as a right because of ownership or on

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1. John L.Davies,'The Politics of Education' some theoretical and comparative considerations,in The Politics of Education in New Zealand, ed.Margaret Clark,N.Z.C.E.R.,Wellington,1981,p.2.

2. Gareth Morgan,Images of Organization,Sage Publications, California,1986,pp.142.

merit as in a meritocracy. All of these are found he says in modern organizations. One can recognize their parallels in the education system from the milk monitor right through to a vice -chancellor or minister for education.

Control of resources is one source of power and something has already been said about the power a head is invested with and how competition for scarce reources creates conflict in schools. Rules and regulations can also be manipulated as a power ploy, as in the example Morgan gives of "working to rule." Decision-making is another area where influence can be brought to bear and as he notes "One of the most effective ways of getting a decision is to allow it to be made by default."[1] Much power therefore lies in the business of organizing such things as agendas.

One area of control that probably applies particularly to the educational sphere is in the control of knowledge and information. Those who politically withhold information are sometimes called "gatekeepers"[2] for they can successfully prevent people from obtaining knowledge. The examination systems of schools can be viewed in this light in the sense that control over curriculum, books and resources can be a limiting factor in the personal acquisition of knowledge.

New technology, as Morgan points out, is increasingly used not to diffuse information but to control access to it and to keep people under surveillance. There is also the vested interest in the power of being an expert to whom other people turn for information. What Morgan calls boundary management occurs where access to people is prevented by protective associates

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1. Gareth Morgan, _Images of Organization_, Sage Publications, California, 1986, pp.166.

2. Ibid., p.167.

and he cites the case of Nixon's aides, who were said to have prevented him getting information on Watergate, as an example.

The ability to cope with uncertainty and the control of technology are two other sources of power that Morgan mentions. As well as interpersonal alliances, networks and informal organizations within the main organizaton, for "The skilled organizational politician systematically builds and cultivates such informal alliances and networks.".. which is a way of winning friends and pacifying potential enemies.[1] One other major area of politicking is in what he calls counterorganizations such as unions. These groups act as pressure groups and cope with the power of the organization by maintaining counter-power and this can be a career in itself.

If leadership involves an ability to persuade others then it is also defining reality for others. Morgan discusses three aspects of symbolic management, the use of imagery, the use of theatre and the use of gamesmanship. The first arises in the language deliberately used to conjure up, for example, images of group solidarity. The theatrical devices are the performances enacted to convey power and may also be reflected in the arranged setting of e.g. the office furnishings. Timing and presentation are also used as power ploys for dramatic effect. Some people treat the whole organization as a game to be played, with skill, and sometimes with cunning.

Gender stereotypes also have their part in the power relations says Morgan and "Whether or not gender is perceived as a factor shaping power relations, the choice or inclination toward one gender management strategy or another can have a major effect on one's success and general influence within an organization.

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1. Gareth Morgan, _Images of Organization_, Sage Publications, California, 1986, pp. 173.

A paradox which Morgan found in these studies of power was that most people when interviewed expressed a feeling of powerlessness even though they appeared to have in some cases considerable power. There were in fact structural factors defining their stage of action.

> This deep structure of power leads us to recognize the importance of factors such as class relations in determining the role we occupy within organizations and hence the kind of opportunity structure and power to which we have access. It draws attention to the way educational systems and other processes of socialization shape basic elements of culture.[1]

Power both attracts power and is a route to more power and yet Morgan finds it difficult to define. It is definitely connected, he thinks, to patterns of dependence "However it is far from clear whether power should be understood as an interpersonal behaviour phenomenon or as the manifestation of deep-seated structural factors"--this is a question for the sociology of organization[2] But from the illustrations he has given it is possible to analyze some of the power ploys in operation in any organization.

Political science, says Morgan, speaks of pluralist and unitary societies. The former is one where groups compete but where unity comes from diversity, or where they are antagonistic and radical change is needed to restructure society. The latter, an older view, is where there is a vision of a unitary whole, such as when the sovereignty of a state is upheld. Organizations, are like microcosms of these larger societies and each frame of reference [or metaphor] leads to a different style of management.[3]

Morgan found that people avoid admitting that they are involved in

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1. Gareth Morgan, <u>Images of Organization</u>, Sage Publications, California, 1986, pp. 183.

2. Ibid., p. 185.

3. Ibid., p. 187.

politics in the workplace even though they observe and comment on its ramifications all around them. We should, he thinks, accept the reality and use it for fruitful analysis and discussion.

> The political metaphor encourages us to see how ALL organizational activity is interest-based and to evaluate all aspects of organizational functioning with this in mind...The metaphor also helps to explode the myth of organizational rationality.1

This myth helps to overcome the contradictory nature of organizations which in effect are competitive and cooperative at one and the same time.

> The emphasis on rationality attempts to bind together a political system which, because of the diversity of interests on which it builds, always has a latent tendency to move in diverse directions, and sometimes to fall apart.2

The political metaphor helps us to accept the lack of harmony and unity as a necessary feature. We then have a better understanding through it of human behaviour in organizations and we recognize the sociopolitical implications of different types of organization and the roles they play in society. The danger says Morgan is that once we are alerted to the political nature of an organization it can raise our own poltical awareness and behaviour, and "its use may generate cynicism and mistrust in situations were there was none before."[3] This he says is a very real danger and the metaphor can become a tool in our own personal political moves. Many current writings on management use this as a ploy and breed a negative view of organizations as traps set merely to exploit people.

> This kind of thinking loses sight of the more general implications of the political metaphor, such as the Aristotelian vision of politics as a constructive force in the creation of social order, and the possibility of using political principles to examine and restructure

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1. Gareth Morgan, <u>Images of Organization</u>, Sage Publications, California, 1986, pp.195.

2. Ibid., p.195.

3. Ibid., p.197.

the relationship between organization and society.[1]

As with the nature of metaphor itself we return once more to Aristotle and it seems that we also have problems deciding whether one should align on the side of the individual or the group. This seems to me to lead to the tricky question of elites and whether we can ever escape the apparent necessity for some people to take leadership roles which inevitably suggests that they also have more power. The political metaphor, thinks Morgan, may err on the side of overstating the case for the individual.

The allegory of Plato's cave explores the nature of reality and how we perceive it. Much of what we consider real is really illusion and some of our creations, says Morgan, become traps for us, and he describes such as "psychic prisons," a metaphor for the way we construct an illusion of reality and become trapped by our own thoughts, ideas, beliefs or preoccupations originating in the unconscious mind. This "metaphor offers many important insights about the psychodynamic and ideological aspects of organization."[1] Where Plato thought one should seek enlightenment through the pursuit of objective knowledge the modern psychoanalyist believes that we should seek to understand ourselves because we create or own world. This metaphor of the psychic prison is really asking us to what extent our organizational behaviour is shaped by our personalities and our repressions. Interestingly many of the rules in early churches were concerned he says with controlling sexual behaviour and Michael Foucalt considers that mastery and control of the body is fundamental for control over political and social life.[3]

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1. Gareth Morgan, <u>Images of Organization</u>, Sage Publications, California, 1986, pp. 198.

2. Ibid., p.15.

3, Ibid., p.208.

"Historically a strong case can be made for the idea that anality has been the major form of repressed sexuality shaping the nature of organizations."[1] This goes beyond individual personalities even though we may see ample evidence of it in individual behaviour. So the unconscious concerns of individuals are reflected in the organization. Women are inclined says Morgan to see Freudian interpretations as unbalanced and analyse organizations in a different way. They are particularly aware of male dominance and patriarchal structures and perceive a basic need to change fundamental organizational values.

Becker's view of the way we behave relates to the fact that we try to create an illusion of immortality in order to cope with our inevitable demise. Thus organizational behaviour is seen as part of a quest for immortality.[2] Klein believes we build defences against anxiety. On this hypothesis Bion has described three typical behaviours called DEPENDENCY in search for a leader, PAIRING where a messiah is awaited, and FIGHT-FLIGHT in which group fears are projected onto an enemy of some kind.[3] Organizational behaviour is sometimes a defence against anxiety says Morgan. Blaming 'scapegoats' is a symbol of this type of behaviour.

Sometimes aspects of culture in an organization may be clung to even in the face of pressure to change what Morgan calls a kind of 'teddy-bear' syndrome. Fear of loss is significant and has been labelled the theory of transitional phenomena. What may be needed in fact is a substitute phenomena during the period of change. Jungean archetypes are also considered for

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.209.

2. Ibid., p.213.

3. Ibid., p.217.

they are found in dreams, myths, and ideas of primitive, ancient and modern man "structures of thought and experience, perhaps embodied in the structure of the psyche or inherited experience, which lead us to mould our understanding of our world in a patterned way.[1] Thus they influence how we cope with the world. This idea is more full explored he says in the work of Robert Denhardt in In the Shadow of Organization.

Where bureaucracy is designed to minimise the human factor Jung's thinking would lead us to accept the fact that this can never be removed. "The pathologies and alienations we find in organizational contexts can, from a Jungian standpoint, be interpreted as a manifestaton of this essential wholeness of the psyche.[2] Morgan refers to Frye's work on mythology and literature, which has been explored more fully in a previous chapter here, and which shows the preponderance of certain themes for "archetypal structures give people a sense of place in their own lives and in history and thus help them to make sense of who and where they are in the grand order of things. Whether organizational life reflects these basic patterns has yet to be explored. What has been done so far suggests that we may all be primitives at heart, "reproducing archetypal relations to make sense of the basic dilemmas of life."[3]

These psychic metaphors have been labelled "black hole" by some, but, says Morgan, visions of confinement are usually accompanied by visions of freedom so perhaps we have a source of creative energy still to be tapped. Much of human behaviour is still mysterious to us but through

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.224.

2. Ibid., p.225.

3. Ibid., p.227.

examining concepts such as those described as psychic prisons we at least explore the aspects which we all share and which must influence and affect our relationships with each other especially in the groups and organizations in which we are involved. David Bohm has said that if we try to study the world in causal terms:

> we will not discover the all-important "laws of the whole" embedded in the implicate order. To discover these we have to understand the movement, FLUX, and change that PRODUCE the world we experience and study."[1]

For our world is itself in a constant state of flux and change. Morgan explores this notion by considering three different images of change. The first is called *Autopoiesis:* the logic of self-producing systems. We usually suppose he says that change comes from the environment. But to Humberto Maturana and Francisco Varela, two Chilean scientists, all living systems are closed. They self-create and they self-renew which is where the term autopoiesis comes in. Any patterns of interaction in which they might engage are always self-referential. "Thus a system's interaction with its "environment" is really a reflection and part of its own organization."[2] The imlications of this for people in relation to organizations is fairly clear. The person is always a separate entity to the organization. I think of the analogy of a swimmer who enters a pool which is temporarily disturbed but not changed by him/her, and who is him/herself affected in some ways whilst in the water and even later but emerges the same in essence as before going in. In their view "There is no beginning and no end to the system because it is a closed loop of interaction."[3] This

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.234.

2. Ibid., p.236.

3. Ibid., p.237.

conjures up a vision of endless sets within sets within sets like looking endlessly into a mirror which is not unlike the holographic effects Morgan previously described. Their version of how the brain works is that "it establishes and assigns patterns of variation and points of reference as expressions of its own mode of organization. The system thus organizes its environment as part of itself."[1] We have become trapped in our thinking as observers they would say. Change has to come from "random variations WITHIN the total system. These may stem from random modifications introduced through processes of reproduction, or through the combination of chance interactions and connections that give rise to the development of new system relations."[2]

Other research described by Morgan shows that systems can be transformed by randomness, fluctuations instabilities and quantum jumps. What is necessary is a critical level of support. This theory is in opposition to Darwinian theory says Morgan. Systems do not adapt to the environment nor does the environment select the system configuration that survives but "It is the PATTERN [my emphasis], or whole, that evolves."[3]

Organizations which see themselves as discrete entities are disadvantaged says Morgan, their egocentrism limits them. Just as a face in a mirror is dependent on a host of conditions for its existence such as the biological processes that create and sustain the face and the physical and cultural conditions required for the existence of the mirror, the defining features of organizations are dependent on a host of less obvious contextual relations that

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1. Gareth Morgan,Images of Organization,Sage Publications, California,1986,p.238.

2. Ibid.,p.239.

3. Ibid.,p.240.

must be maintained if the organization is to continue to exist. To pursue an unrealistic identity is therefore futile. An awareness of the theory of autopoiesis enables organizations to face change and allows them to evolve in an open-ended fashion. Successful strategic development can never be unilateral "the process is always dependent on complex patterns of reciprocal connectivity that can never be predicted or controlled."[1]

These patterns of interaction and mutual causality are circular says Morgan so we require a new way of thinking. Notions of positive and negative feedback go some way to explaining them. Linear thinking says Magorah Maruyama leads to linear solutions[2] whereas " When we analyse systems as loops rather than lines we invariably arrive at a much richer picture of the system under consideration."[3] Once again patterns are at the base of physical and cognitive activity.

Another facet of organization derives from traditional thinking such as Tao which identifies the oppositions within nature for "the way of nature is characterized by a continuous flux and wholeness shaped by the dynamic interplay of yin and yang."[4] Essentially such thinking leads to a notion of a search for balance and developed what is called the dialectical method. Marx used this method to search for the "primary tensions or contradictions shaping a given society, and to trace their repercussions on the detailed pattern of social life."[5] Contradictions and conflict are

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.246.

2. Ibid., p.249.

3. Ibid., p.252.

4. Ibid., p.255

5. Ibid., p.257.

as part of the nature of social life. Our society continues to evolve says Morgan through dialectical process even if some of his predictions have not eventuated and we see change as coming probably through "irreversible pollution of the planet, from pressures in the Third World, or from nuclear holocaust, rather than from a revolution initiated by the working class."[1] One way of understanding change therefore is to examine it as Marx did as the product of the tension between opposites and analyse these but our linear habits of thinking often prevent us doing this. "A dialectical imagination invites us to embrace contradiction and flux as defining features of reality...[and]...The choice that individuals and societies ultimately have before them is thus really a choice about the kind of contradiction that is to shape the pattern of daily life."[2]

Organizational problems cannot therefore be solved in a piecemeal fashion. Problems may be, says Morgan, the natural consequence of the logic of the system which is one of the three described by him, either self-producing systems that create themselves in their own image, or the result of circular flows of positive and negative feedback, or alternatively as a product of a dialectical logic. Limitations he finds in this metaphor are that it can be too idealistic and can meet resistance. Also we see the logic of a situation more often in hindsight than before. In trying to predict the future we are always still embedded in the present and the past.

Morgan's final metaphor for organization is that of Instruments of domination. Here the focus is on the potentially exploitative aspects of

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1. Gareth Morgan, <u>Images of Organization</u>, Sage Publications, California, 1986, p.264.

2. Ibid., pp.265-267.

organization that is how we use them for our own ends. This really examines the negative aspects of organizational life such as occupational health hazards and the effects on people of organizations concerned mainly with profit. Weber, says Morgan, analysed three types of domination as legitimate forms of authority or power; the charismatic, the traditional and the rational-legal. Like others he saw bureaucracy as a powerful dominating force. Morgan says that "The real value of these perspectives is that they show how even the most rational and democratic forms of organization can result in modes of domination, where certain people acquire and sustain a commanding influence over others, often through subtle processes of socialization and belief."[1]

This is easily seen in school administration structures which use several types of power control, particularly usurping the parental or natural [traditional?] authority over children by rationalizing that it is their future well-being which is their prime concern, and coercive legal power because schooling is mandatory as well as the bureaucratic hierarchies within the administration at school level and within state departments of education. There are also charismatic leaders who have influenced the philosophy of schooling, figures such as those considered in the previous chapter.

Morgan quotes Arthur Miller's play Death of a Salesman as a metaphor for "the way organizations often consume and exploit their employees."[2] Nowadays many of us are familiar with the redundancy syndrome and increasingly in education and in the labour market youngsters are led to expectations

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1. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.278.

2. Ibid., p.279.

that are never fulfilled because of economic considerations.

There is a strong case says Morgan for asserting that *organization* has always been class-based. And even though domination and exploitation may be not be the intended or stated aims they are often the effects of organization that is implicit rather than explicit. Bowles and Gintis illustrate how with their reproduction theory of education the system is utilized to protect and reproduce a dominant power group.[1] *In education* it is the control of knowledge and resources which is the dominant area of control the 'gatekeeping' function that has already been referred to. It is possible to see the modern state and multinational corporations as partners in systematic domination says Morgan.[2]

The usefulness of the domination metaphor as Morgan sees it is that so-called rational action can be dysfunctional or have unintended consequences and the metaphor draws our attention to this factor, whereas traditional theory often ignores values and ideology in a vain attempt to appear neutral. It enables us to examine the negative aspects of organization and to enable us to understand such things as the 'them and us' attitudes. "The strengths of the domination metaphor thus provide the basis for a truly radical critique of organization and organization theory" even though its critics would say that it it can lead to "a crude conspiracy theory of organization and society."[3] But as Morgan has shown domination may occur because of the internal logic of an organization and the metaphor can transcend the conspiracy theory. Besides if one believes Marilyn Ferguson

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1. S.Bowles and H.Gintis, Schooling in Capitalist America, Routledge and Kegan Paul, London, 1976.

2. Gareth Morgan, Images of Organization, Sage Publications, California, 1986, p.313.

3. Ibid., p.317.

there is also a new wave of thinking which she calls the Aquarian conspiracy which is working positively towards a non-exploitative and more sharing social system.[1] The factor we have to face up to perhaps is that dominance is not avoidable and we need to consider the nature of leadership, authority, responsibility and accountability, the very notions which educationists are also concerned about. As Morgan says:

> We live in a world that is becoming increasingly complex. Unfortunately our styles of thinking rarely match this complexity. We often end up persuading ourselves that everything is more simple than it actually is, dealing with complexity by presuimng that it does not really exist. This is very evident in the way fad and fashion dominate approaches to organizational analysis and problem- solving, an interest in one type of solution or set of techniques quickly giving way to another.2

The challenge he believes is to deal with complexity:

> by building on the use of metaphor--which is basic to our way of thinking generally--we have a means of enhancing our capacity for creative yet disciplined thought, in a way that allows us to grasp and deal with the many-sided character of organizational life. And in doing so, I believe that we can find new ways of organizing and new ways of approaching and solving organizational problems.2

Newell when describing concepts of organization in education says also that prescribed rules for action have mainly been recognized as less useful than the capacity to analyse the condition of an organization and adapt and plan with consideration for the future and the present situation. He says:

> Although the traditional concepts are still useful in certain respects, modern organizational theory when utilized with administrative insight allows more flexibility and requires less reliance upon fixed and rigid patterns. 4

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1. Marilyn Ferguson,The Aquarian Conspiracy,Granada, Great Britain, 1982.

2. Gareth Morgan,Images of Organization,Sage Publications, California,1986,p.16.

3. Ibid.,p.17

4. Clarence A.Newell,Human Behaviour in Educational Administration, Prentice-Hall, New Jersey,1978,p.120.

Nothrop Frye speaking of educational imagination said that anyone entering a profession had to at least make a gesture to recognize the ideal existence of a world beyond his own interests. Peter Ramsay says that there are difficulties with the term professionalism because as Millerson says there is adherence to a static model rather than an awareness of a process of developent. Some models are already proving themselves outmoded. Merdydd G. Hughes for example believed that the medical model was an apt one for schools management where analysts and clinicians complement each other's work.[1] In view of the current state of medical organization it is doubtful whether such a model is now seen as an ideal one.

Authority, responsibility, accountability and democracy seem to be the enduring terms in all of the literature yet none of the models adequately takes care of them. Accountability is a chimera says Taylor. Beeby says that terms such as hierarchical or democratic never tell the whole story. Policy does not simply 'filter' down, and Parsons said the same thing, that "people 'lower down' typically must exercise types of competence and shoulder responsibilities which cannot be regarded as simply 'delegated' by their 'superiors'."[2] A 'system' simply does not work like this as Beeby says:

> An education system can remain living and responsive to the needs of the children in its care only if, at every level in the hierarchy there is room for the individual to exercise imagination and initiative...3

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1. Meredydd G. Hughes, Educational Administration Pure or Applied, in newsletter of the Commonwealth Council for Educational Administration No.35, October 1984.

2. T. Parsons, in Administrative Theory in Education, ed. Andrew W. Halpin, Macmillan, London, 1958, p.46.

3. C. E. Beeby, Moving Targets, N.Z.C.E.R., Wellington, 1986, p.xlii.

Donald A. Schon sees most of the difficulties in management occuring in problem-solving, and as he says problems are not given they are constructed by us. "Each story constructs its own view of reality through the complementary process of NAMING and FRAMING" or what Dewey called the "problematic situation."[1] Drawing on his social policy experience Schon says once we see a slum for example as a blighted area we are convinced that the 'blight' must be removed as it is seen in terms of a medical metaphor. And in this situation something is removed that might destroy network and community support systems. The metaphors we use consciously or unconsciously therefore seriously affect our ways of seeing and solving problems. We discover truth through what he calls story telling and need to search beyond the 'surface' to the 'deep' metaphors that they reveal. We can become more aware of what he calls frame conflicts by looking at 'facts' in different frames. We all use this method intuitively says Schon but no technical term has been given to it. What happens is that:

> In each case the cognitive work involves participants in attending to new features and relations of the phenomena, and in renaming, regrouping and reordering those features and relations.2

Works such as that cited by Gareth Morgan can go a long way to making people aware of the metaphors dominating their institutions. Some people recognize them. Sylvia Ashton-Warner described working in America as like exploring a new culture with no compass for she found 'authority' to be resisted, yet she believes in the need for leadership. In her approach at school it seems that each day is:

> A shape contoured by benign routine which helps to stabilize, which

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1. Donald A. Schon, Generative Metaphor: A Perspective on Problem-Setting in Social Policy, in Metaphor and Thought, ed.David Ortony, Cambridge University Press, New York, 1979,p.264.

2. Ibid.,p.276.

> in turn engenders responsibility. For in making a new kind of school, stability and responsibility are major requirements for freedom of the mind.1

She believes that we should try to replace obsolete terminology with a new vocabulary of the future, for how can we talk of 'equality' when we have terms like 'head of department'. Much time and energy she says is spent discussing democracy but where she asks is the original vision:

> Vision does not come in many attractive packages but explodes in one mind alone, and it is fragmented and diffused when all are equal, which in practice turns out to be "All are authorities." 2

The metaphor she chooses for leadership is a very apt one:

> ...I use the word "conductor" in the text of an infant room, as of an orchestra where many playing together interpret one work, led by the vision of one composer. I do not recall seeing orchestras in rehearsal stopping for pleasant conferences to change a passage in the music since all are equal and have EVERY RIGHT. Besides, "conductor" concerns itself with something living, with unity, shape and rhythm; with a common intention and, above all, wholeness...none of which you are likely to see in "Head of Department."3

She may be talking of an infant classroom but this is a reflection or microcosm perhaps of any educational institution or the whole system.

Macpherson examines the way educational administration is a reflection of our culture and conceptions and how various people have explored this. There is much literature influenced by Mead for example which looks at the symbolism of roles and patterns of interaction referred to metaphorically as 'structures' and the symbolism varies with each culture. One study by Silverman and Jones found that administrators were driven by the dominant metaphors of their organisations. Seven meanings of structure for instance were apparent in a study by Macpherson.

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1. Sylvia Ashton-Warner, "Teacher" in America, Cassell, London, 1972, p.172.

2. Ibid.,p.185.

3. Ibid.,p.188.

> Although structure is from a Latin word 'to build', and refers to the construction, the composition or the inherent patterns in concrete, observable, mechanical or organic systems, all meanings used by the R.D.E's [Regional Directors of Education] were figurative. They were social constructs inferred from events over time. Converting the abstract to concrete, reification was widely evident, despite the metaphorical nature of the term. In some settings reification went even further, into deification.[1]

Metaphors were being used he says to sustain a natural systems view of reality, to perpetuate a bureaucratic rationality and to legitimate a structural-functional way of valuing practices. Which leads Macpherson to stress that "all administrators should develop a socially critical awareness of their practices, especially with respect to the administration of cultural capital..."[2]

In summation he says that "order is constructed in schools and systems through the dynamics of culture (myths, metaphors, rituals, language, ceremony) and through the systematic structuring of knowledge (selection, organisation, transmission, distribution, control and justification)."[3] 'Development' and 'reform' are therefore metaphors for a dialectical process which he sees embedded in social contexts whereby in his words a facet of social reality is being constructed. In view of my own reading in this area this appears to be true, there is no escape from metaphor even in educational administration.

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1. R.J.S. Macpherson, Taking up and Justifying Organisation: The Creation and Control of Knowledge about being organised, in newsletter of the Commonwealth Council for Educational Administration. No.41, 1986, p.8.

2. Ibid.,p.10.

3. Ibid.,p.12. His use of 'myth' appears to be not the artistic or literary sense but in the more usual one in ordinary language of falsity of conception.

CHAPTER VII

METAPHOR IN SCIENCE

"Metaphor was the beginning of wisdom, the earliest scientific method."[1]

The history of science is also a history of scientists trying to cope with language. As Andrew Ortony says "One of the dominant presuppositions of our culture is that the description and explanation of physical reality is a respectable and worthwhile enterprise--an enterprise that we call "science". Science is supposed to be characterized by precision and the absence of ambiguity, and the language of science is often thought to be correspondingly precise and unambiguous--in short literal."[2] To positivists this is so but the relativist view is that "the objective world is not directly accessible, but is constructed on the basis of the constraining influences of human knowledge and language."[3]

The nature of the language problem for scientists is multi-faceted. First there is the need for naming of natural phenomena i.e. for labelling and classification. Then there is the need to describe scientific

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1. C.Day Lewis,*The Poetic Image*,Jonathan Cape, London 1947,p.25.

2. Andrew Ortony ed.Metaphor:A Multidimensional Problem *Metaphor and Thought*, Cambridge University Press, New York,1971.p.1.

3. Ibid.

theories, discoveries and laws. Both of these areas influence how we speak and write about science and also how it is taught and learned. Nowadays we are also interested in how the scientific mind works i.e. how new ideas come about and because of an increasing study of language and of the nature of knowledge we have a whole range of 'languages' which impinge on science itself e.g. semiotics, semantics, symbolic logic. The rapid growth of science has made scientific language a problem, as Sir Arthur Quiller -Couch has declared disapprovingly :

> When it became an accepted custom for each nation to use its own language in scientific treatises, it certainly was not foreseen that men of science would soon be making discoveries at a rate which left their skill in words outstripped; that having to invent their terms as they went along , yet being careless and contemptuous of a science in which they have no training, they would bombast out our dictionaries with monstrously invented words that not only would have made Quintilian stare and gasp, but would affront the decently literate of any age.1

Then he goes on to describe his horror at, the to us, innocuous word 'anti-body'. Fairly harsh criticism of men of science whose difficult work is compounded by having also to construct a language to describe it. Richards was also aware of such criticisms. "These complaints are, commonly, that they are awkward or difficult to pronounce or too long, and that they are not labels but compacted descriptions or explanations. The prejudice is so strong that even the lexicographers succumb to it."[2]

Lancelot Hogben's The Vocabulary of Science is a useful overview of general linguistic problems in science, particularly concerning the first problem for scientific language, that is naming. For this purpose his definition of science is "the written record of man's understanding of

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1. Sir Arthur Quiller-Couch, On The Art of Writing, from lectures given at Cambridge 1913-14, Cambridge University Press, 1938.p.29

2. I. A. Richards , Philosophy of Rhetoric, Oxford University Press, New York, 1936.p.76.

nature"[1], a history of more than five thousand years of influence from Egypt, Mesopotamia, the Phoenician colonies, the Greek world, China, India and the Moslem world. He claims that we have little appreciation of the impact on our own world of the influence of Western Christendom in the formation of an international CONSTRUCTED vocabulary: "This world-wide vocabulary of Western science is the nearest thing to the lexicon of a truly global auxiliary that mankind has yet achieved. It derives its stock-in -trade almost exclusively from two dead languages."[2] These are of course Latin and Greek, and if Shakespeare said he had little Latin and less Greek then apparently according to Hogben modern students have even less, since it became unfashionable in the school curriculum. However this is not seen as a handicap if students come to Hogben's work ready "to make lively associations with already familiar terms"[3] [this sounds remarkably like another description of metaphor].

The vocabulary of science enters ordinary language and becomes international at an extraordinarily fast rate : "What was yesterday the jargon of the expert becomes an ingredient of the vernacular."[4] This word-building Hogben approves of but does not favour the modern habit of forming acronyms such as used by military and sales people, because they are known only to the initiated and are meaningless in any other language, whereas using 'traditional' methods as with his example TELEPHOTOGRAPHY, we can recognize the roots of this word and, as he points out, with a basic

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1. Lancelot Hogben FRS, The Vocabulary of Science, Heinemann, London, 1969.p.3.

2. Ibid.p.3.

3. Ibid.p.4.

4. Ibid.p.4.

vocabulary of a thousand roots we can have permutations of millions of words. It is by this means that we have coped with the accelerated growth of scientific discovery and the need for new names. Nor is there any need to study classical authors as formerly, for a basic vocabulary can be made available and easily memorised as his book demonstrates.

Hogben sees Christendom as having stopped the development of pagan science--the murder of Hypatia a symbol of this in A.D.415.--and the work of Augustine a part of this movement. Within four centuries Latin had been imposed as the Lingua Franca of the monasteries of Western Christendom. It was only through necessary work on the calendar and on herbal medicine that this stranglehold was released:

> Such was the situation in the century A.D.1150-1250 when monks such as Adelard [Abelard?] of Bath and Jewish scholars who had studied in the Moorish seats of higher learning in Spain, circulated Latin translations of the Arabic texts through which Western Christendom, like the Moslem world at an earlier date, had access to the teaching of Euclid, Ptolemy, Galen and Aristotle. These translations,especially (alas) of Aristotle, moulded the teaching curriculum of the European universities which took shape in the same period. [1]

He traces Western development in science from this period. In Mediaeval Europe "Latin was everywhere the medium of instruction, and knowledge of Latin was the gateway to study."[2]

By the mid-seventeenth century so many more people were involved in 'scientific' work and study and not all had been trained in Latin so it diminished as the Lingua franca of science e.g. "In 1687, Newton had published his Principia in Latin. Seventeen years later his Optics appeared in English."[3]

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1. Lancelot Hogben FRS,<u>The Vocabulary of Science</u>,Heinemann,London, 1969, p.7.

2. Ibid.,p.9.

3. Ibid.,p.9.

The need for a universal language of science prompted several people to try to develop a special language for this purpose e.g. Wilkins and Leibniz; and Descartes had apparently also suggested such a need. None of these attempts became generally adopted and it was the work of Linnaeus and Lavoisier which established a precedent with their systems of classification.

Greek words had been used by the Romans for the Greek science they had inherited but adapted to their own spelling:..."a Greek component of the world-wide vocabulary of Western Europe was already latent in the Latin used by men of science in Mediaeval Christendom. This is one reason why Western science turned to Greek when it ran short of vernacular vocabulary resources in the eighteenth century of our era."[1]

Latin persisted longest in Teutonic countries one reason being says Hogben that they were less able to adopt foreign influences into their language unlike English which had already absorbed much French influence. As he says there was "A well-established PATTERN for adapting any newcomer from the same source."[2] German language had absorbed few foreign influences and Hogben considers this one reason why people such as Faraday could communicate more easily and more widely than his German counterparts and Britain developed a tradition of popularising scientific work. Towards the later part of the century French chemists such as Lavoisier were involved in language reform which was easily assimilated by the British because they used a "common stock of terminals."[3]

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1. Lancelot Hogben FRS, The Vocabulary of Science, Heinemnn, London, 1969, p.12.

2. Ibid.p.13.

3. Ibid.p.14.

Hogben acknowledges our debt, particularly for language, to the Greeks, though he is critical of the, to him, overrated influence of Plato and Aristotle, of whom he says :

> ...the impact of his [Aristotle's] teaching on that of the Mediaeval universities of Western Christendom was largely retrograde. He dis-missed valid and incontrovertible evidence which led Empedocles (circa 465 B.C.) to conclude that air has weight. Therewith he rejected the cogent case advanced by Democritus (circa 430 B.C.) in support of a particulate theory embracing air and vapours as a third--what we now call gaseous--state of matter. He also bequeathed to posterity a MYSTIQUE which discouraged a rational approach to both the study of terrestrial gravitation and an understanding of combustion. [1]

Catholic Europe was studying Greek science through Latin texts based on Arabic translations, for the study of Greek was not encouraged by the papacy and Mediaeval universities did not offer Greek. By the fifteenth century Byzantine refugees had brought Greek manuscripts to Italy and once printing from movable type began, Greek texts became widely available. The immediate effect says Hogben was not to influence scientific nomenclature but to cause religious controversy. He found evidence of few Greek terms before 1750 (i.e. in the Shorter Oxford Dictionary). By 1800 these had multiplied enormously, because of new discoveries, including "living creatures and their parts, synthetic substances, units of measurement, instruments and other inventions."[2] Biological classification was foremost among these in its influence and " any advance of biological knowledge between 300 B.C. and A.D.1600 was trivial compared with progress between A.D. 1600 and 1750."[3] This had three main causes; commercial horticulture, colonization of the New World, and the invention of the microscope which despatched such

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1. Lancelot Hogben FRS, The Vocabulary of Science, Heinemann, London, 1969, p.17.

2. Ibid., p.18.

3. Ibid., p.19

beliefs as that of spontaneous production, from Aristotle's time and teaching. Previously most categorising had been of herbal medicinal plants. To cope with the huge influx of new findings was a problem.

Linnaeus published his *Systemata Naturae* (1735) and firmly established a tradition of giving every organism two names, generic (of genus) and specific (of species). Later John Ray published his *Methodus Plantarum.* The second volume of the Systemata had, Hogben says, the most impact on science. Jung was also interested in the writing of a standard-ized plant taxonomy. Hogben says the beauty of Linnaeus' system is his " meticulous classification of descriptive terms to clarify his classificatory system for plants."[1] At the beginning of the second volume is a complete glossary of all adjectives used "(a) to label characteristics of different parts of a plant (b) to describe its habit, site and uses, if any."[2]

Another unique feature of the second volume reinforced the trend in scientific nomenclature, that of turning directly to Greek for word-building. Linnaeus wrote in Latin, all the descriptive vocabulary is exclusively Latin but the names of all the major divisions of the classification system have Greek roots "thus starting a new fashion."[3] He was the first therefore to establish a specialized vocabulary and a PATTERN for using it.

If science consisted merely of naming then this growth of scientific vocabulary would have sufficed but Lavoisier makes it clear why this was not so. French academicians in 1787 published the *Methode de Nomenclature Chemique*

1.Lancelot Hogben FRS,*The Vocabulary of Science* ,Heinemann, London, 1969, p.24.

2.Ibid. p.24.

3.Ibid. p.24

by Guyton de Morveau, Lavoisier, Berthollet and Fourcroy. What Lavoisier says on language is quoted by Hogben: Languages "are are not merely passive signs to express thought, they are also analytical systems by means of which we advance from the known to the unknown and to a certain extent in the manner of mathematics...an analytical method is a language and a language is an analytical method..."[1] He quotes from him at some length and what he says is very relevant to this thesis:

> If languages are really instruments fashioned by men to make thinking easier, they should be of the best kind; and to strive to perfect them is indeed to work for the advancement of science...this method which must be introduced into the teaching of chemistry is closely connected with the reform of its nomenclature. A well-composed language adapted to the natural and successive order of ideas will bring in its train a necessary and immediate revolution in the method of teaching, we shall have three things to distinguish in every physical science: the series of facts that constitute the science, the ideas that call the facts to mind and the words that express them. The word should give birth to the idea; the idea should depict the fact.2

One could go into endless debate on these statements in the light of present day thinking e.g. which comes first the word or the idea, what is a fact, what do we mean by 'mind' or 'idea', however Hogben believes that Lavoisier may have been inspired by Linnaeus. This correlates with Holton's view which I shall refer to later, that metaphors can help to pass on ideas or germinate ideas in later science, what Bergland calls the passing on of'memes'[3] or what Korzybski calls our 'time-binding capacity'.[4] An excellent example of

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1. Lancelot Hogben FRS,The Vocabulary of Science,Heinemann,London, 1969,p.28.

2. Ibid.p.28.

3. Ibid.p.28.

3. Richard Bergland,The Fabric of Mind, Penguin Books, Australia, 1985,p.7.The word comes originally from Richard Dawkins The Selfish Gene,Oxford University Press, Oxford 1976.

4. Alfred Korzybski,Science and Sanity,The International Non-Aristotlean Library Publishing Co.,Pennsylvania,1941, 2nd ed.,p.39.

which is given by Mary Hesse :

> Galileo's success was not due entirely to the inspiration of a solitary genius, for it is possible to trace his method of combining experiment and theory back into the schools of the later Middle Ages in Oxford and Italy, and to trace his new conceptions regarding motion back to the logical schools of Paris in the fourteenth century.....these early gropings towards a more adequate scientific method.....It took centuries to find the right principles and methods of procedure...1

Hogben suspects that one reason for the growth of a chemical industry in Britain, France and Sweden was the diminishing of wood as a natural fuel source and the subsequent search for alternatives. Whatever the original reasons chemistry grew apace and with it the need for a revision of its language which Guy de Morveau did in 1781-2 with specific instructions:

> 1. Every substance should have a name in contradistinction to a phrase.
> 2. Names should be given 'according to the nature of the things intended to be signified by them.'
> 3. 'When the character of the substance is not sufficiently known to determine the denomination, a name which has no meaning' is better than one which conveys 'an erroneous idea.'
> 4. For 'new denominations, those which have their roots in the most generally known dead languages' are preferable, so that 'the word may be suggested by the sense and the sense by the word.'
> 5. The denominations should be consonant with the structure of the natural language which accommodates them. 2

Hogben believes that it was the compatibility of the French and English language which created rapport between their scientists. The French went on, to define units of temperature, calories, litres etc. Lavoisier did not survive the Revolution but his ideas did.

Another form of labelling, known as eponymous, had sometimes been adopted by horticulturalists and also physicists. It was the fashion of naming after people or what Hogben disapprovingly calls

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1. Mary B. Hesse, Science and The Human Imagination, SCM Press Ltd., London, 1954. p.32.

2. Lancelot Hogben FRS, The Vocabulary of Science, Heinemann, London, 1969, p.32.

'ancestor-worship'; forgiveable he says only where there is no known antecedent in classical language. Hogben never mentions metaphors, only scientific vocabulary, as his aim is mainly to provide an easy key for non-classical science students to understand scientific terms and their origins. His outline of the history of scientific terminology makes us aware of the difficulties faced by scientists in having to baptise as it were their foundlings, and the need for an internationally understood language to do this.

Theodore Savory has presented a similar study of scientific language[1] and asserts that we should be grateful to those who supply or suggest new names for scientific phenomena, and agrees with Hogben that most scientific words derive from Greece or Rome. Faraday appealed to Whewell for suitable words to describe his results, and thus we got the terms 'anode' and 'cathode'. The scientist, Savory believes, has an advantage over the literary person because no emotion needs to be conveyed by his words, his words come from a necessity rather than choice. His terms and definitions must be clear because the dissemination of scientific knowledge is by the printed rather than the spoken word whereas most other areas of knowledge trace their origins back to the spoken word. Pronunciation of scientific terms is consequently not uniform. Scientific words also do not change their meanings [unless they are supplanted] as other words change their associations in philological terms. In this respect he feels they come closer to the 'closed' symbolism of mathematics. Some have described science as an enemy of language because of this static nature. Yet he agrees that words such as 'utility' in wartime and 'atomic' more recently, have become emotively charged in previously unforeseen ways.

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1. Theodore Savory, The Language of Science, Andre Deutsch, 1953.

English scientific vocabulary began says Savory with Geoffrey Chaucer and he lists references from his work to illustrate this. Shakespeare by comparison has few scientific references. The words Chaucer used, such as salt peter, vitriole and magnesia were taken from Latin and Greek. Bacon was the first to use the words 'acid' and 'dissection' in their modern sense. In his time the human body was a focus of interest. The word skeleton does not mean bones says Savory but comes from skelete literally 'dried up'. As science grew so did the study of semantics. Newton's theory of gravity changed the meaning of the word and later as the nature of light was explored the word ether lost its old sense of the mythical atmosphere breathed by the gods.

One might ask where metaphor fits into this scientific scene which seems so far to be concerned only with naming or catachresis, defined by Max Black as "the use of a word in a new sense to remedy a gap in the vocabulary."[1] There is a sense in which every scientific word is a metaphor because it has been transposed from its original use to match the scientific fact or object, that is, the word is a bridge between the known or already named and the 'new'that which already existed but is only newly known or discovered. In this sense language is all metaphoric as Nietzsche believed, for a word as so many have pointed out is only "the sign for the thing signified."[2] Another name for New Zealand for example is Aoteoroa meaning land of the long white cloud. Both names refer to the same country but have different origins and referents. What the terms actually mean to individuals depends on innumerable factors including race, age, political

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1. Max Black, _Models and Metaphors_, Cornell University Press, New York, 1952, p.32.

2. R.I.Aaron, _The Theory of Universals_, Clarendon Press, Oxford, 1952, p.16.

and religious beliefs. The name is not the place and the place is not the name. Metaphor is really an abstract term as one cannot adequately define metaphor, only the metaphoric, for each new metaphor is unique. As for the single word

> ...a word is a conventional sign and a conventional sign is only significant to an intelligence possessing a concept by which the significance of the word is established. In other words as well as a conventional sign there is also a natural sign or the concept. [1]

William of Ockham who said this was discussing universals but I believe what he says applies to metaphor also. He says a distinction has to be made between two kinds of terms 'terms of first intention' and terms signifying terms themselves and those are 'terms of second intention.' He says "the terms of natural sciences, for instance, are terms of first intention, those of logic are terms of second intention." [2] We tend he thinks to confuse the sign and the thing signified. A metaphor is in this sense an intellectual abstraction.

Like Hogben Savory is concerned mainly with the lexis of science and does not explore how scientific theories arise or how they become transmitted to other people. The scientist avoids figures of speech in his prose says Savory and attempts to use emotionally neutral words. For this reason he resorts to the closed symbolism of mathematics whenever possible as in the formulae of chemistry. Yet an example of how a scientific term can be metaphorical is given by Savory when he says that the word 'automatic' derived from autos, self, became applied to any kind of movement which came from a cause within the moving object:

> Thus the beating of the heart and the peristalsis of the intestine

1. R.I.Aaron, <u>The Theory of Universals</u>, Clarendon Press, Oxford, 1952, p.16.

2. Ibid., p.16.

> were automatic. From this the phrase automatic machines was meant to imply that the internal nature of the machine enabled it to perform its functions as if automatically, that is to say it was a comparative, almost a metaphorical description; and since a machine reacts unconsciously and always in the same way to the stimulus which sets it going, the adjective acquired its present meaning of unthinking--invariable. 2

Other writers do recognise metaphor in science. Burke for instance :

> Indeed as the documents of science pile up, are we not coming to see that whole works of scientific research, even entire schools, are hardly more than the patient repetition, in all its ramifications, of a fertile metaphor? Thus we have at different eras in history, considered man as the son of God, as an animal, as a political and economic brick, as a machine, each such metaphor, and a hundred others, serving for an unending line of data and generalizations. 2

An awareness of metaphor is important because of its presence as an organizing element in enquiry says Fernandez.[3]

Some scientists not only acknowledge the usefulness of metaphors to their work but claim also to use a special type of metaphor. Exegetical or pedagogical metaphors help to explain theories such as 'electron cloud'. Such metaphors are an aid to visualisation but are not always particularly insightful. What Boyd calls 'theory-constitutive' metaphors do more than this, they act, as Kuhn has described, to establish fundamentally new theoretical perspectives.

> ...metaphor serves as a non-definitional mode of reference fixing which is especially well suited to the introduction of terms referring to kinds whose real essences consist of complex relational properties, rather than features of internal constitution. 4

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1. Theodore Savory, The Language of Science, Andre Deutsch, 1953, p.69.

2. James W. Fernandez, 'The Performance of Ritual Metaphors', in The Social Use of Metaphor, ed J. D. Sapir &J.C.Crocker, University of Pennsylvania Press, 1977, p.100.

3. Ibid., p.101.

4. Richard Boyd, 'Metaphor and Theory Change: What is "Metaphor" a Metaphor for?', ed. A.Ortony Metaphor and Thought, Cambridge University Press, 1979, p.358.

The more interesting metaphors Boyd believes are those for which there is no adequate paraphrase. There are examples in cognitive psychology of references to computer-like human attributes [in a previous age the machine was a common analogy]. Psychologists use words such as 'programming' and 'feedback' because "psychologists do not generally speaking,now know how to offer literal parahrases which express the same theoretical ideas."[1] This is illustrated by current debate over the term "functionalism". The cognitive content of theory-constitutive metaphors cannot be made explicit. It is a perennial problem of course to describe nature in anything but human terms because of our own nature. Even robots, computers and other man-made objects tend to be based either on man himself or his mode of thinking. We are reminded once more of our legs on tables and hands on clocks. Even computers have to simulate the linear fashion in which man speaks and thinks.

These theory-constitutive metaphors become shared property among scientists whereas literary metaphors belong to their author's work, even though the reader has his personal share in them that is generally a private concern, moreover the literary metaphor once public rapidly becomes outdated or cliche or part of ordinary language. The scientific metaphors which Boyd speaks of are as he says more like conceits which other scientists explore rather as the literary critic treats those of the writer.

> The sciences in general, and psychology in particular, are self-reflective disciplines, and the explication of theoretical concepts--metaphorical or not--is an essential part of the task of scientific enquiry.2

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony Metaphor and Thought,Cambridge University Press,1979,p.361.

2. Ibid.,p.362.

Boyd describes literary interaction metaphors as having CONCEPTUAL OPEN-ENDENDNESS "The function of a literary metaphor is not typically to send the informed reader out on a research project."[1] Whereas theory-constitutive metaphors display INDUCTIVE OPEN-ENDEDNESS. They are an invitation as it were to "explore the similarities and analogies between features of the primary and secondary subjects, including features not yet discovered, or not yet fully understood."[2] I think Boyd underestimates the power of literary metaphors for sparking imaginative thinking and further metaphor-making, but it is true that these mental processes go on mostly in private whereas scientists tend to work together in teams and in laboratories and in that sense their metaphors are common 'tools' to work with. Metaphors then can be invitations to research and "Theory-constitutive metaphors...represent one strategy for the accommodation of language to as yet undiscovered causal features of the world"[3] or in seventeenth century terms 'cut the world at its joints'. He might equally have said that they are often initially 'guesses' which have still to be proved. Garrett has written of the process by which new ideas are born in science. He analyses it as having five stages: The problem, Frustration, Incubation, Illumination (the flash of genius) and Verification.[4] It is obviously at the fourth stage that metaphor plays its part.

It is in the nature of metaphorical language to be imprecise, non-

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony Metaphor and Thought,Cambridge University Press,1979,p.363.

2. Ibid.,p.363.

3. Ibid.,p.364.

4. Alfred B. Garrett,The Flash of Genius, D.Van Nostrand Co. Ohio,1962,p.4.

referential and essentially heuristic as an empiricist theory of language would suggest says Boyd. His contention is that the terms of theory-constitutive metaphors may refer even though they lack explicit definition, but this is not imperative. A general theory of non-definitional reference is therefore required for:

> Scientific metaphors raise truly fundamental issues about language and linguistic competence, and the theory of reference required to understand them has several quite startling consequences, which are important both to an understanding of metaphorical language, and to an understanding of language in general. We shall discover, for example, that there is, in an important sense, no such thing as LINGUISTIC precision; there are rational strategies for avoiding referential ambiguity, but they are not a reflection of rules of linguistic usage. [1]

Putnam and Kripke say that we can refer to things by using "terminology which bears the right sort of historical relation to antecedent introduction ceremonies, or by employing stereotypical descriptions which look like definite descriptions but are not."[2] Field also suggests that there is a relation of PARTIAL DENOTATION between certain words and features of the world which is importantly like reference. In a sense languages have a history or genealogy. Putnam believes that a PRINCIPLE OF BENEFIT OF DOUBT is appropriate when assessing the reference of terms in the work of previous scientists, and A DIVISION OF LINGUISTIC LABOUR involving deference to scientists and other experts is essential to reference. So scientists are aware of the lack of precision and definition in the nature of their work which is usually a collaborative effort. According to Putnam paradigms become essentially true when accepted over time.

To Kuhn a paradigm is not a theory but a disciplinary matrix because

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony Metaphor and Thought,Cambridge University Press,1979,p.377.

2. Ibid.,p.377.

it is composed of ordered elements. It is in a sense a metaphoric view of the world, it can never be 'true' or 'literal'. Scientific education has always placed a heavy emphasis on modelling, acquiring of traditional modes of thinking and perceiving and requiring minimal personal interpretation.

> All models have similar functions. Among other things they supply a group with preferred or permissible analogies and metaphors. By doing so they help to determine what will be accepted as an explanation and as a puzzle solution; conversely they assist in the determination of the roster of unsolved puzzles and in the evaluation of the importance of each.[1]

Each initiate learns the paradigms within which he or she will work. But even when learning these paradigms the student does in fact create his own knowledge "Having seen the resemblance, grasped the analogy [which he has created for himself] between two or more distinct problems, he can interrelate symbols and attach them to nature in the ways that have proved effective before."[2] With practice he/she acquires the gestalt of the group or gains what Michael Polanyi calls 'tacit knowledge' learned by doing science rather than by acquiring rules for doing it. Kuhn believes that "our seeing a situation as like ones we have encountered before must be the result of neural processing, fully governed by physical and chemical laws... recognition of similarity [which is the basis of metaphor] must be as fully systematic as the beating of our hearts."[3] It might even be genetically laid down. Changeux is interested in what it means to have mental images and in his studies of neural activity in the brain it seems to be that "We become conscious of the world by burning out the synapses that lead to

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1. Thomas S.Kuhn,<u>The Structure of Scientific Revolutions</u>, University of Chicago Press.1962,p.184.

2. Ibid.,p.189.

3. Ibid.,p.194.

mental images inconsistent with the world outside."[1] He believes a kind of Darwinism operates in which only certain neuronal activities are stored and viable connections are burned in by experience and learning, which would account says Atkins for an individual's deep linguistic structure. We talk of knowing as seeing says Kuhn but we cannot see electrons and have to be satisfied with a metaphor. He suggests however that eventually this will not suffice and in the long run it will have to be eliminated in favour of a more literal mode of discourse. This raises the question of how we can do without metaphor. He considers decisions about theory to be "ultimately personal and subjective, some sort of mystical apperception is responsible for the decision actually reached"[2] for the human element cannot be eradicated; scientists he says make choices based on a mutiplicity of human reasons and feelings. Translating a theory or world view into one's own language is not to make it one's own for it may be used without being internalized. The paradigm passes on through the process of education. This conversion he likens to a gestalt switch. The puzzle solvers play the game to new rules, they work within a new paradigm, their vision of the world is influenced by new metaphors which will also eventually be replaced. Kuhn largely agrees with Boyd and says "Metaphor plays an essential role in establishing links between scientific language and the world."[3] Metaphors change as the theories change. Science is a process of continual communication and dialogue breaking down old paradigms and creating new or partially new ones.

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1. P.W.Atkins, 'No soul, and not Special', a review of Neuronal Man: The Biology of Mind by Jean-Pierre Changeux, Oxford, in London Review of Books 21 May 1987, p.18.

2. Thomas S.Kuhn, The Structure of Scientific Revolutions, University of Chicago Press.1962, p.199.

3. Thomas S.Kuhn, 'Metaphor in Science', in Metaphor and Thought, ed.A.Ortony, Cambridge University Press, New York 1979, p.415.

Boyd overviews all the theories in this field so far and proposes to analyse the notion of reference in terms of EPISTEMIC ACCESS, that is, the use of a term will have to answer the question "To which kind (or kinds), or property (or properties) or magnitude etc. does our use of this term afford us epistemic access?" As an example the term DNA permits scientists to report to each other to publish articles, promote criticism and debate, and makes possible verbal reasoning. " The use of language makes possible not merely the formulation of theories and publicity and cooperation in their assesssment; it makes possible for reasoning (whether individual or public) to be VERBAL reasoning: to take place in words."[1]

Boyd covers much of the same ground as Hesse in her work although he has no reference to her. Epistemic access then is a feature of language use and synthesises most of the current thinking about the nature of scientific language. It gives the non-scientist also a route to understanding terms such as 'black hole' by giving accesss to the expert's knowledge of such a concept. Boyd argues that this is contrary to empirical views of concept acquisition in that the lay person does not have to acquire the concept 'black hole' for himself, he gains it vicariously as it were from those in the know--it is available to him if he chooses to use it at whatever level--and to learn more about it if he so wishes--it can become part of his language repertoire [his stock of webs and images] even though he might use it with limited knowledge of its fullest meaning. So acquiring this concept 'second-hand' as it were shows that much of linguistic competence is not distinctly linguistic--but a general social and intellectual skill. Much of what is called learning in science is

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony <u>Metaphor and Thought</u>,Cambridge University Press,1979,p.383.

just such acquisition, learning the jargon, the patterns, and never really getting to grips with acquiring personal meaning for oneself.

Once scientific discoveries have been made it is not linguistic or scientific rationality which dictates the unique new referent for the term in question says Boyd, but our need to accommodate it to our causal structure of the world, it is a routine feature of the process of reference, and a routine response to the acquisition of new knowledge. New knowledge therefore is acceptance of new meanings at different levels of accommodation depending on whether one is a scientist or a lay person. Boyd concludes that:

> If the articulation and refinement of a body of metaphors all involving the same metaphorical theme proves to be genuinely fruitful in scientific theory-construction, then the only epistemologically plausible explanation is that most of the relevant metaphorical expressions refer, and that the metaphorical statements in question --when interpreted in the light of the non-standard referents of their metaphorical terms--express important truths.1

And furthermore:

> Reference is continuous if the term in question continues to provide epistemic access to the same kind. Similarly, several roughly simultaneous uses of some terms are coreferential if they are embedded in patterns of usage which afford epistemic access to the same kind(s)2

The empiricist view, since Locke has been that scientific terms and method are precise and this precision comes from terms which are "associated with fixed, conventional, and explicit definitions of their extensions or referents"... and methods which involves "Precision in reasoning, careful experimental design, diligent reporting of data, proper control of

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony Metaphor and Thought,Cambridge University Press,1979,p.401.

2. Ibid.,p.402.

3. Ibid.,p.403.

experimental variables, precision in measurement." The first sort of precision in terms is a matter of following linguistic rules. When Black says that metaphors lack scientific precision, Boyd believes it must be because they fail to meet the first of these empirical tests of precision. To Boyd there is no linguistic precision, there are no rules to follow.

Boyd's explanation makes one think of another metaphor, that this complex relationship is like the network of a large family tree where relationship is measured in blood ties, marriage etc. and what he does is show how metaphors bond ideas and link them sometimes tenuously, as in family relationships, to others. If a metaphor becomes redundant or replaced by a newer model then this analogy still fits as in disease, death etc. or in more extended family relationships. If 'no man is an island' certainly it begins to appear that no word or metaphor is either, once in circulation it becomes public property and becomes, destroyed, popularised or refined according to human inclination and needs. If referents or ostension of general terms were precisely fixed says Boyd they could not 'cut nature at its joints' as Hume and Locke realised --and in the epistemic access view reference is a social rather than a private phenomenon. To cope with difficulties arising from this Boyd says we have to apply methodological principles of rational enquiry--not linguistic principles:

> Assess evidence in the light of the best available GENERALLY accepted theory unless compelling evidence dictates its rejection. Rely on the advice of recognised experts. When your standards of evidence contrast sharply with those of others, seek to identify the source of conflict and so on.1

Boyd's approach is essentially a dialectical one.

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony Metaphor and Thought,Cambridge University Press,1979,p.405.

Pylyshyn is not satisfied with Boyd's approach. He sees the functional-analysis and systematic-reduction such as used in artificial intelligence and computing fields, which he calls a top-down approach, as more useful and precise. He says "any metaphor which leaves one feeling that a phenomenon has been 'explained' even though only a superficial level of functional reduction or process explanation has been offered, is to my mind (presumably also by Boyd's criteria) unproductive."[1] This would be true he claims of Boyd's example of 'demon' and Freud's metaphor of energy and flow--also of a large number of metaphors in cognitive psychology. Metaphors can be too comfortable he thinks--when accounts come to REST on them. He does appreciate that metaphor is "not unproductive of research...on the contrary the very intuitiveness of the metaphor inspires a bumper crop of experimental research. What it does tend to inhibit, however, is the process of functional reduction."[2] For him metaphors make too many assumptions and what might be a metaphor to Boyd could be literal to him. This same problem occurs of course in philosophy and literature.

Another problem with metaphor is that at first it was considered to have no part in science--now it is recognized, there are adherents who see it as a pivotal part of science--others who see it as only part of the process of discovey, of explanation and teaching--and some who would prefer to eliminate it altogether because of its nebulous nature. There is now enough evidence to prove that metaphor is intrinsic to science. It is as well to be aware of the dangers of metaphor which Pylyshyn reminds us of and it must be true as he says that there are metaphors which do more harm than good.

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1. Zenon W.Pylyshyn, Metaphorical Imprecision and the "Top-Down Research Strategy", in Metaphor and Thought,ed. A. Ortony, Cambridge University Press, 1979, p.431.

Boyd concludes finally that "there are no distinct principles of linguistic precision in science, but rather that linguistic precision is one of the consequences of methodological precision of a quite general sort.[1] A metaphor should be used in science he thinks when an important similarity or analogy exists between its primary and secondary subjects. "The imprecision of metaphors does not preclude their employment as constituents of scientific theories...they refer by virtue of SOCIAL and intersubjective (as opposed to personal) mechanisms, which connect scientific research with independently existing (objective) features of the world."[2]

Dedre Gentner comes to similar conclusions about metaphors in science and says that "overlap in relations is necessary for the perception of similarity between two domains."[3] In complex analogies it may be more difficult to identify the relations that are to be preserved and there may be several relevant relationships as in Rutherford's solar system model of the hydrogen atom. "A science analogy must be seen as a system of mappings, not an undifferentiated set of predicates to be judged simply by their correctness in isolation."[4] Gentner uses the term 'analogy' to cover metaphor, simile and model. The structural quality of a good scientific analogy requires bare specificity, usually this is something familiar, and the internal structural characteristics require primarily clarity and richness. In expressive analogy such as we have in literature a rich collection of

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1. Richard Boyd, 'Metaphor and Theory Change:What is "Metaphor" a Metaphor for?',ed.A.Ortony Metaphor and Thought,Cambridge University Press,1979,p.406.

2. Ibid.,p.406.

3. Dedre Gentner, 'Are Scientific Analogies Metaphors?',in METAPHOR Problems and Perspectives,ed.D.S.Miall,Harvester Press,Great Britain, 1982,p.111.

4. Ibid.,p.114.

associations is valued whereas in explanatory analogy an abstract, well clarified, coherent system of relations is valued. Gentner raises some interesting questions as to whether the naive models of novices develop into those of the experts in stages parallel to those of the development of the topic and whether analogies start off rich and unclarified and become pared down. She believes that it is here that the creative process in science may be involved.

Martin and Harre think that "we need metaphor because in some cases it is the only way to say what we mean since the existing semantic fields of the current terminology referentially related to the subject in question are inadequate to our own thought."[1] They make a clear distinction between a metaphor and a model or non-linguistic analogue:

> An object or state of afairs is said to be a model when it is viewed in terms of its relationship to some other object or state of affairs...if we use the image of a fluid to explicate the supposed action of the electrical energy, we say that the fluid is functioning as a model for one conception of the nature of electricity. If, however, we then go on to speak of the 'rate of flow' of an 'electrical current', we are using metaphorical language based on the fluid model. 2

This suggests that the model precedes the metaphor, a debatable point as one 'thinks' the metaphor and then explains with the model. Clive Sutton believes that "The model, just like the metaphor from which it is derived exerts a persuasive power upon those who take it seriously." It is true as Martin and Harre say that further metaphors 'spin off' the original one, and:

> Speaking metaphorically on the basis of a model, a scientist is enabled not only to posit but to refer to theoretical entities by the use of terms which transcend experience in that their semantic content is not fully determined A PRIORI by the empirical conditions for their application. Meaning is not exhausted by the conditions

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1. J.Martin and R.Harre,'Metaphor in Science', METAPHOR Problems and Perspectives,ed.D.S.Miall,Harvester Press,Great Britain,1982, p.89.

2. Ibid.,p.100.

of assertability.[1]

Metaphor is necessary to science as they see it for:

> The metaphoric employment of a term brings about a reordering of its semantic field, as well as those of the term with which it is used, so generating new intensional contents, most of which are yet to be explored...a realist construal of science requires predicates, of which those created by metaphorical usage of existing empirical predicates are the very exemplar. [2]

Lavoisier could speak of 'facts' as if they were divinely immutable but modern scholars doubt factual statements. Nietzsche said that physics was only an interpretation and arrangement of the world not an explanation of it and that all truth is a human creation historically conditioned.[3] Science constantly looks for order and patterns and tries to make language fit this task but language has a personality of its own and does not always oblige. Words bring with them their own life history, colour and associations. These can confuse the science expert as much as the initiate. They are inadequate tools for the complete understanding of science even metaphor which is a complex and sophisticated use of language cannot adequately express the nature of the universe. As van Fraasen says "Acceptance of a theory is not belief."[4] We are limited by our own humanity:

> Since Einstein we have to live with the truth that we will never be able to understand completely the universe because the innate structure of our brain is inadequate to do so. Even Einstein, although he calculated with the fourth dimension, was incapable of experiencing its reality.[5]

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1. J.Martin and R.Harre,'Metaphor in Science', METAPHOR Problems and Perspectives,ed.D.S.Miall,Harvester Press,Great Britain, 1982,p.101.

2. Ibid.,p.104.

3. Ibid., introduction p.xvi.

4. Bas C.van Fraasen,Images of Science,University of Chicago Press, 1985,p.281.

5. Holmar von Ditfurth,'Science Popularisation:Getting to the Heart of the Matter', UNESCO Features No.754.

This is seen as a positive factor by some people for it makes us more tolerant, less dogmatic and von Ditfurth believes it brings us to where a religious sense begins, a conclusion Mary Hesse would concur with. She tells us that scientists should no longer hold a positivist view, even though many still do, because "in the light of modern physics it is no longer possible to regard science as a literal description of what exists in nature."[1] She believes that linguistic analysis gives us insight into the nature of scientific meaning:

> ...scientific theories describe nature in terms of ANALOGIES drawn from familiar types of experience. The analogies may be drawn from classical mechanics (as in billiard-ball theories of the atom), from pure mathematics (as in much of modern physics), or even from voluntary human behaviour (as in animistic and theological types of 'science'). Analogical description is not literal description as previous generations of scientists imagined, but neither is it entirely unrelated to the reality of nature. It owes its successs both to the fidelity to nature as revealed in experiments, and to the fertile imagination which selects appropriate analogies from familiar experience and familiar types of language, and thus exhibits relations between one aspect of experience and another.2

There is a growing awareness of the importance of metaphor in science. I.A.Richards said "even in the rigid language of the settled sciences we do not eliminate or prevent it without great difficulty."[3] Shibles found that "Whole philosophies and theories are seen to be expanded metaphors."[4] And David Miall came to the conclusion that "Philosophy, psychology, literary theory and science--all find themselves challenged to define their scope and aims by this presence at the heart of their

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1. Mary B.Hesse, Science and the Human Imagination, SCM Press Ltd., London,1954,p.12.

2. Ibid.,p.12.

3. I.A.Richards,Philosophy of Rhetoric,Oxford University Press,New York,1936,p.92.

4. Warren Shibles in preface to Analysis of Metaphor in the Light of W.M.Urban's theories,Mouton,The Hague,1971,p.10.

activities this one phenomenon, metaphor."[1]

Shibles maintains that each philosophy, school of science etc. is based upon a number of basic metaphors (he includes analogies) which are then expanded into various 'universes of discourse'. Gerald Holton says one might question this because in the face of reason and positivism, "metaphors by definition are flexible, subject to a variety of personal interpretations, and often the results of an overburdened imagery."[2] Therefore they may be natural to the artist but not to the scientist, and he quotes Turbayne as being critical of some of the metaphors used by some scientists in particular Descartes and Newton, on Mechanism. But Holton is aware that linguists and historians have proved to us that metaphor is linked to our thinking ability. Holton speaks of our 'store' of metaphors which is inclined to make one imagine a mental thesaurus of metaphors such as those described by Carol Clark in _Web of Metaphor_[3] --but this is a misnomer if we believe that the best metaphors are products of 'new' thinking.

Holton believes that "modern science began with a quarrel over metaphor"[4]. In Book I of De Revolutionibus, Nicolaus Copernicus, speaking of his vision of the universe criticised those whose theories portrayed lack of balance or aesthetic harmony which he saw as integral in such a Divine creation: "Yet the metaphor of uniform circular motion as the divine key for solving the problems posed by the phenomena--even in antiquity--had

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1. David Miall, ed._METAPHOR Problems and Perspectives_,Humanities Press Inc.,N.Jersey,1982,p.xviii.

2. Gerald Holton, Metaphors in Science and Education, Chapter VII of _Metaphors of Education_ ed.W.Taylor,Heinemann,London, 1984.p.92.

3. Carol Clark,_The Web of Metaphor_,Studies in the Imagery of Montaigne's Essais,French Forum Publishers,1978.

3. Holton,p.92.

infected the thinking from which the scientific revolution of the seventeenth century came."[1] Such a metaphor as Holton points out is not merely one of Aristotelian transfer of meaning but what Sir Ernst Gombrich calls "a restructuring of the world".[2] Metaphors then can have profound and long-lived influence.

For a more recent example of the pervasive power of metaphor Holton cites the case of Thomas Young in 1804 and his ideas about the nature of light as a wave phenomenon--which is based on an analogy comparing light impulse to sound waves from organ pipes. This 'intuitive' leap, although it later proved wrong, was remarkable in that he linked two areas of study formerly unconnected, but his study of sound and his observation of Newton's rings had led him to this remarkable conclusion. As Holton says one looks in one's students for evidence of such imaginative thinking--and he also describes this as "an examplar of the creative function of metaphor in the nascent phase of the scientific imagination."[3]

Other remarkable examples Holton cites are from Faraday's notebooks as well as Fern and Maxwell. His favourite is one by Einstein described in his own handwriting as "the happiest thought of my life"[4] --that is pertaining to his theory of relativity in 1907. As Holton says "The urges to find analogies, and thereby to simplify and unify the various branches of a science , are actively at work in the background of the research of these

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1. Gerald Holton, Metaphors in Science and Education, Chapter VII of Metaphors of Education ed.W.Taylor,Heinemann, London,1984.p.94

2. Ibid.,p.94.

3. Ibid.,p.96.

4. Ibid.,p.96. citing an unpublished manuscript from about 1919 entitled in translation 'Fundamental Ideas and Methods of Relativity Theory, Presented in their Development' at the Einstein Archives in Princeton.

explorers."[1] It is particularly interesting that these are from personal notebooks and give us an insight into how that mind was working at the time and how metaphor becomes a way of explaining sometimes to oneself--this is important. There is no sense here of ornament or substitution --the words used mirror the mind at that moment in time. This is what makes such notebooks so fascinating to read, one almost enters into that person's thought PATTERNS. Teachers could perhaps share more in the thoughts of their pupils in science just as the journal writing in English has proved a fruitful area for teacher -pupil dialogue.

Liam Hudson finds similar evidence in his references to Watson's account of the discovery of the structure of DNA ..."unless some very special trick existed, randomly twisting two polynucleotide chains around one another should result in a mess."[2] An interesting mixture here of metaphor and idiomatic speech. And Garrett speaks of Thomson's 'raisin pudding' model to describe the atom as a matrix of positive and negative charges of electricity , which was prevalent until his pupil Rutherford came along.

Metaphor then in science as Holton discovers is sometimes an expression of deep insight, of bridge-building--not all of which prove correct or productive but often part of a movement towards a solution. He finds another scientist with a similar view and quotes him "Wherever one looks in the history of particle physics, one sees this magical transmutation, producing new theories from old through a process of analogical

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1. Gerald Holton, Metaphors in Science and Education, Chapter VII of Metaphors of Education ed.W.Taylor,Heinemann, London,1984.p.97.

2. Liam Hudson, Frames of Mind, Penguin Books,U.K.,1968. Hudson is discussing the differences in perception of convergers and divergers and is here illustrating with excerpts from Watson's account of the discovery of the structure of DNA,in Watson,J.D. The Double Helix, Weidenfeld and Nicolson, London, 1968.

recycling."[1] Furthermore this writer believes that scientists are not "the passive DISCOVERERS of the unproblematic facts of nature.....[but] they actively CONSTRUCT their world."[2] Others take a different view such as Boyd who believes that rather than constructing our world with language "Instead WE accommodate OUR language to the structure of a theory-independent world."[3]

Holton is convinced that "there are not merely OCCASIONS for using metaphor, but NECESSITIES for doing so, as when trying to remove an unbearable gap [an expression Einstein used] or a monstrous fault."[4] Holton believes in metaphor because it is an "epistemological necessity "because of the limits of induction-"Where logic fails, analogic continues."[5] Even if it doesn't bridge a gap it at least carries one forward. Once again this notion of essential movement in metaphor. Einstein, Holston remarks, noted that "we often select concepts without some logical necessity. They are the product of the free ranging of the mind in "a free play"[6] rather than the result of 'abstraction' from observation. Metaphor he believed helped to cross the bounds between levels of the scientific system. Similar ideas says Holton occurred also to Francis Bacon, and Kant noted

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1. Gerald Holton,Metaphors in Science and Education,Chapter VII of <u>Metaphors in Education</u> ed. W.Taylor,Heinemann, London,1984.p.98. citing Pickering,A.(1980)'Exemplars and Analogies'<u>Social Studies of Science</u>,10,pp.497-508.

2. Ibid.,p.98.

3. Ibid.,p.98.Citing David Boyd in <u>Metaphor and Thought</u> ed. Andrew Ortony, University of Cambridge Press, New York, 1979.p.408.

4. Ibid.,p.98.

5. Ibid.,p.98.

6. Ibid.,p.98. Quoting Holton,G.'Einstein's Search for the Weltbild', Proceedings of the American Philosophical Society,125(1),February 1981.

that "the imagination does not distinguish between life-world experience and scientific experience."[1] Such experiences have even led scientists to describe ions for example as if they could be seen.

One very interesting observation Holton makes is a reference to Gombrich who said that "the linear character of language makes it hard to hold in mind some concepts that become quite evident when put in diagrammatic form."[2] This made me think of the times when one resorts to diagrams to explain for example a complicated Shakespeare plot to a class or the way we portray music as notes on lines separate for each voice or hand yet music is not truly linear. It is perhaps the linear style of our language which holds us back...as it must also be our way of thinking. Marilyn Ferguson believes this is so:

> We construct all our explanations on a linear model that exists only as an ideal...Semanticists like Alfred Korzybski and Benjamin Whorf warned that Indo-European languages trap us in a fragmented model of life. They disregard relationship. By their subject-predicate structure, they mould our thought, forcing us to think of everything in terms of simple cause and effect. For this reason it is hard for us to talk about--or even THINK about--quantum physics, a fourth dimension, or any other notion without clearcut beginnings and endings, up and down, then and now.3

Gombrich said "This may be one of the psychological reasons for our instinctive equation between seeing and understanding."[4] (We say "I see what you mean.") As Holton says "The constraints of the two dimensional surface on which to draw or print must after all, affect our thinking

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1. Gerald Holton,Metaphors in Science and Education,Chapter VII of Metaphors in Education ed. W.Taylor,Heinemann,London,1984.p.99.

2. Ibid.,p.100

3. Marilyn Ferguson,The Aquarian Conspiracy,Granada,Great Britain, 1982,p.160.

4. Holton,p.100.citing Gombrich,E.H.1972 Symbolic Images:Studies in the Art of the Renaissance,London:Phaidon.

constantly."[1] Cicero too is quoted: "The metaphors drawn from the sense of sight are much more vivid, almost placing before the mind's eye what we cannot discern."[2] Holton says that a catalogue of scientific metaphors would include many " visualizable metaphors and ...anthropomorphic and folkloric metaphors. Human life, the life cycle, and human relationships pervade, in sometimes only slightly disguised form, the most sophisticated scientific papers, and more so, our textbooks."[3] Which immediately makes one think that hunting for these and discussing them could be an interesting exercise for students.

Newer sciences Holton says borrow their metaphors from the established sciences yet they have drawn them from basic human experiences. 'Body' metaphors he says are common [Carol Clark found these were often applied in politics][4] and he says as Macrae points out "our experience of our bodies is prescientific."[5] [This can only mean that the label science did not exist]. Because science is constantly changing so it constantly needs new language and new metaphors to describe new things or events or to replace old ideas and as Holton says the search for the new often borders on the tasteless. He senses a move from metaphors of order and harmony to more destructive [evil?] connotations. As he says "It is indeed the terminology of a restless, even violent, world."[6] On the contrary I keep

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1. 1.Gerald Holton,Metaphors in Science and Education,Chapter VII of Metaphors in Education ed. W.Taylor,Heinemann,London,1984.p.105.

2. and3.Ibid.,p.100.

4. Carol Clark,The Web of Metaphor,Studies in the Imagery of Montaigne's Essais,French Forum Publishers,1978.

5. Holton,p.101.McRae,D.G.(1975)'The Body and Social Metaphor'in Benthall,J.and Polhemus,T,The Body as a Medium of Expression,London, Allen Lane.p.67.

6. Holton,p.102.

finding evidence of recurring images of light and patterns which is why I have stressed or emphasised these throughout this work wherever they occur in my findings. Perhaps even with metaphors one only sees what one is looking for.

Holton is aware also of the 'metaphoric' state of the student in the science classroom, head full of preconceived notions and metaphors, of which he/she is largely unaware--some peculiarly his/her own, some of them part of the folklore of the time and place one lives in. The richness of metaphor in science (some examples he gives are; big bang, inertia, negative feedback..) may be effective tools for the scientists, but "pathetic fallacies for students."[1] This is a neglected area in metaphor study, the two-way process involved between the metaphor-maker and the metaphor-unraveller, there has to be an area of shared understanding, of common knowledge and assumptions before a metaphor is meaningful. This is the area where knowledge can be transmitted, where learning and teaching can take place. There seems to be insufficient evidence as to the effects of metaphor on the listener-receiver. For example when Berggren[2] refers to Marvel's "green thought in a green shade" as an example of an effective poetic schema, we can take it that he and presumably other literary critics or philosophers would accept this as a metaphor. What is unknown to us is exactly what Berggren visualizes or [wary of Richard's admonition about literally 'seeing'] what Berggren thinks about when he contemplates or reads this metaphor. Just as interesting would be to know what Marvel's thought processes were as he constructed this attractive line...and what

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1. Gerald Holton,Metaphors in Science and Education,Chapter VII of <u>Metaphors in Education</u> ed. W.Taylor,Heinemann,London,1984.p.102.

2. Douglas Berggren,The Use and Abuse of Metaphor,1,<u>The Review of Metaphysics</u>,Volume XVI, No. 2 Issue No.62,p.248.

every reader since has thought. This we may never know, but we need more research into the effects of some such lines. So often in literature the 'right' interpretation is 'fixed' by the literary critics who are revered and respected in matters of standards and taste. Too much so perhaps. Some readers and teachers are so imbued with the standards and beliefs of their own teachers that they are fearful to state their own opinions. There are some who will go so far as not to teach e.g. a Shakespeare play they have not 'done' before, because they have not been taught what to think and say about it. One wonders if similar things happen in science, whether certain ideas or theories get misrepresented or omitted from school curricula. Contentious issues such as theories of evolution would obviously reflect different viewpoints and no science teacher could possibly keep abreast of everything new in science.

If one reflects on what Turbayne says about metaphors and myths--if we recognize that myths are untruths about truth which are difficult to explain or understand in ordinary language then several possibilities emerge... they cater for 'simple' intellects for whom the truth would be too difficult to understand; there is no truth therefore we lie (or mythmakers or those in power do) about phenomena we cannot understand; or people are deliberately misled because those who know the truth (have seen the light?) do not really want others to do the same. Symbolism of myths and metaphor then becomes a way of preserving elites. Such is the effect of the metaphors in some mystical poetry such as described by Lutfi Abas.[1]

Margaret Mead believes that the public is scientifically illiterate because 'key' metaphors are not shared. She also noticed that

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1. Lutfi Abas,Symbols in Kemala's Poems:A Study of Signs in Mystical Poems in*Semiotics Unfolding* ed. Tasso Borbe,Mouton,Amsterdam,1979 pp.681-688. (Described in more detail p.142 of this study.)

scientists mainly talk to other scientists, and it may be true to say that one's language reflects and reveals one's world view. Searle also has much to say on this. This area of difficulty is highlighted Holton believes by the work of such people as R.Horton on African Thought. Holton examines some of the common metaphors of science including a particularly interesting one relating to the TASK of the sciences i.e. their function, and here he finds the most dynamic one to be that of "the mountaineer gradually ascending, and thereby gaining not merely the conquest of the peak, but the aesthetic, largely visual thrill of an OVERVIEW, encompassing the whole circular area below, from horizon to horizon, and, in the unearthly stillness at that high altitude, seeing at a glance the way the details of the landscape below fit together in one meaningful picture."[1] This is the same metaphor I used myself in introducing this work but one which occurs in other works such as The Conscious Use of Metaphor in Outward Bound by Stephen Bacon[2] in which he considers the philosophy of that type of instruction a paradigm which is "truly holistic" and in which he sees the individual's struggle with the wilderness as a parallel to the human search for the sublime. Also in Richard Bergland's The Fabric of Mind he sees the intellectual pursuit of knowledge as metaphoric expedition or exploration as T.H.Huxley who said in 1887 "The known is finite, the unknown infinite; intellectually we stand on an island in the middle of an illimitable ocean of inexplicability. Our business in every generation is to reclaim a little more land."[3]

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1. Gerald Holton,Metaphors in Science and Education,Chapter VII of Metaphors in Education ed. W.Taylor,Heinemann,London,1984.p.106.

2. Stephen Bacon,The Conscious Use of Metaphor in Outward Bound Colorado Outward Bound School,Denver,Colorado,1983.

3. Richard Bergland,The Fabric of Mind,Penguin,Australia,1985,p.6 citing Huxley,T.H.,Collected Essays,Macmillan,London,1906.

Bergland speaks of pitons of progress as when mountaineers mark their routes, and of standing on the shoreline of wonder. He is aware that "A special kind of tension at once links us to and separates us from our intellectual institutions." It may grow from this: "you and I are meant to find new 'truths' at the shoreline; the institutions are supposed to keep the truths at the centre."[1] His new paradigm is that the brain is a gland not a repository of electrical impulses but a hormone secreting gland working in cohorts with the other glands of the body; I was going to use the word harmony, in a state of health this would probably be more correct. He is aware that his view will be resisted by the scientific establishment as most 'new' ideas are resisted until in Kuhn's terms a paradigm shift occurs. In his book he stated :

> Without commitment to a paradigm there can be no science... the study of paradigms is what prepares a student for membership in a particular scientific community. Men whose research is based on shared paradigms are committed to the same rules and standards for scientific practice. ..scientific revolutions are inaugurated by a growing sense that an existing paradigm has ceased to function adequately in the exploration of an aspect of nature." 2

This human desire and need for the vision, the holistic sense is what draws people to meditation to the search for a sense of unity with nature for the meaning of life. For a time people believed science might offer answers to questions which religions never seemed to satify. Now more and more there seems to be a movement towards a combination of all three. Literature vicariously explains or mirrors life but there is a sense in which literature is all lies, art also goes some way to appeasing this internal desire for aesthetic or spiritual harmony. There are some who find the most satisfaction

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1. Richard Bergland,<u>The Fabric of Mind</u>,Penguin,Australia,1985,p.6.

2. Ibid.,quoting Kuhn,T.S.,<u>The Structure of Scientific Revolutions</u>, University of Chicago Press,1962.

in mathematics or in music. Whatever the pursuit there is a common thread, that is the search for pattern, for order or at least a recognition of this where it seems to exist and a drive to establish it artificially as in taxonomies etc. Language gives order to thought or is it the other way about, which does come first the word or the idea? There is a spate of literature now trying to give us this holistic view e.g. The Aquarian Conspiracy,[1] The Turning Point.[2] The difficulty in teaching is to bring young people as rapidly and painlessly as possible to this point universally and yet give them time and space to learn by and for themselves and to arrive at this level naturally ; also for them to question our paradigms and to reflect on possible new ones. The amount of scientific knowledge now must be vast compared with that of a century or even a decade ago. We surely do not want to force or pressure-feed youngsters so we need expert methods which do not waste their time and yet develop skills sequentially or in tempo with their maturation. This is not an easy task-- it surely means also that we have to look at learning as a whole not merely within subject boundaries. More and more we need to read, write and think across subject areas, not simply within them. There is no reason why poems cannot be written about gases and atoms and why art cannot study scientific models. Each individual needs to develop his or her own view of the world. The physicist says he is searching for the harmony which links all the phenomena he observes. Holton calls this the metaphor of the Weltbild-- which can be traced from Goethe, Schleiermacher and Alexander von Humboldt.[3]

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1. Marilyn Ferguson, The Aquarian Conspiracy, Granada, U.K., 1982.

2. Frijof Capra, The Turning Point, Fontana, London, 1983.

3. Gerald Holton, Metaphors in Science and Education, Chapter VII of Metaphors in Education ed. W.Taylor, Heinemann, London, 1984. p.107.

What all seem to be striving for is a 'Grand Unification Theory' John Ziman reviewing Holton says " Unification is the Supreme Project of Science, metaphysical and religious in inspiration."[1] Holton says [with slightly ironic tone] that scientists have even been known to lapse into poetry on this matter. He sees the recurring metaphors of science as circles ever increasing, joining, rising, as linked to the dominant 'mountain-climbing' metaphor. The latest advances on this unification theory were reported after a recent 300th Anniversary to celebrate Newton's work. It is now thought that the elementary constituents of the universe are nothing but different modes of vibration of tiny string-like loops, called "super-strings"--a new metaphor.

Perhaps the most surprising finding in studies of scientific work is the close resemblance to things normally described in the realm of religion. Holton quotes Einstein who said: "The state of feeling which makes one capable of such achievements is akin to that of the religious worshipper or of one who is in love; his daily strivings arise from no deliberate decision or programme, but one of immediate necessity."[2] An exalted aspiring state--is this what drives scientists--if so how are we to develop this joy , this excitement, this love, this sense of wonder and thirst for knowledge [wisdom?] in our students? I am reminded also of the words of Dr Paul Brunton : "Scientists may lead the way from sheer materialism into the discovery of the Spiritual Self. If they continue to investigate they will ultimately find the Truth, for there is nothing else

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1. John Ziman,'What shall we look into now?', London Review of Books, 21 May 1987,p.16.

2. Gerald Holton, Metaphors in Science and Education, Chapter VII of Metaphors in Education ed. W.Taylor,Heinemann,London,1984.p.109. quoting from Holton,G.,Thematic Origins of Scientific Thought. Cambridge,Mass.;Harvard University Press.p.378.

they can find. Their path is getting narrower and narrower [that metaphor again!].It is leading them inescapably towards the Spirit."[1]

Holton sees metaphors such as he has described as serving four functions :

1. To serve the individual privately.

2. To serve the circle of the indoctrinated.

3. To serve both of these and the more ignorant public

4. Chiefly to serve the more ignorant public.

Writers I have mentioned such as Ferguson and Capra are doing much work in this fourth area. To share what Holton calls 'key metaphors' of science is a difficult task. This perhaps leads into a rather sensitive educational sphere. From Plato's time on the problem has been how many elite can fit on this metaphoric mountain top--can we all make our way there? If this is desirable how do we achieve this equality of outcome? The scientist clearly has a duty Holton believes, to be aware of the "metaphoric distance"[2] between himself and his colleagues and students. Metaphors need to be used with care for they can be as misleading as they can be meaningful. A clear example of mis-learning can come unintentionally from practical demonstrations also, says Holton, reducing information to media style presentation in order to teach and communicate, can seriously adulterate the original concept. Any examiner is familiar with learned but misunderstood concepts. For this reason Holton prefers the lively personal presentation. An interesting anachronism in these days when other people are urging more use of e.g. computer and programmed instruction. He sees a clear importance

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1. Dr Paul Brunton,<u>The Inner Reality</u>,Rider & Co.,London,1970,p.113.

2. Gerald Holton,Metaphors in Science and Education,Chapter VII of <u>Metaphors in Education</u> ed. W.Taylor,Heinemann,London,1984.p.110.

in the personal dimension and the place of discussion. From his own observations he has seen that "the more successful demonstrations are actual happenings ...a personal commitment...is the [necessary] element."[1] What he does not mention which is probably just as important is the discourse which is usually available in live performances--and, as he says:

> The scientist-educator of course negotiates easily the jump between the ground metaphor and its debased forms that actually come to the eye in the classroom.[via films, charts, diagrams etc.] But the new student may not be able to follow him in making this leap, the more so as usually nothing is said about any necessity to make one.[2]

This is a timely warning for all teachers. There is still a need for 'bridge-building'--the person who helps us, who truly teaches, moves between the 'tenor' and the 'vehicle' the 'focus' and the 'frame' of the metaphor; sometimes to help us construct our own personal metaphors of understanding.

This is where metaphors are useful to science particularly in the need for explanation. Berggren agrees for he says that an intelligible explanation must be vitally metaphorical and here no less than in poetry stereoscopic vision is essential and "the better or more generally explanatory a theory is, the more extensively metaphorical it has become."[3] What is perhaps rarely explained to children is the fact that metaphors are part of science as they are of literature.

Holton says that Gombrich has pointed out the difficulty which the primitive mentality has in distinguishing between representation and symbol

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1. Gerald Holton,Metaphors in Science and Education,Chapter VII of Metaphors in Education ed. W.Taylor,Heinemann,London,1984.p.111.

2. Ibid.,p.111.

3. Douglas Berggren, The Use and Abuse of Metaphor,II, in The Review of Metaphysics, Vol.16,pt.3, 1962,p.460

Sperber[1] explores this. Holton's view of metaphor is :

> In what I have said, I have associated myself with BOTH of two competing views of metaphor: I see metaphor acting sometimes as a means for the transfer of meaning across discontinuity, as a bridge or boat is a means for transferring a person across a river; [this in itself is a dominant literary metaphor] or, in other cases, as a more active tool of metamorphosis, of a restructuring of a portion of the world view.In either case, the metaphor has explicit or implicit boundaries. Since the metaphor is always contingent on the context, its boundary will also change as the context shifts...But while the detailed shape and power of a metaphor changes, I see a constancy that endures, and that I regard as the thematic centre of the metaphor.2

So myth and metaphor are a necessary part of the mystique of science, what Holton calls the mythopoeic function and he calls on Turbayne to support his view: "[Be] aware there are no proper sorts into which the facts must be allocated, but only better pictures or better metaphors."[3]

Sorting things out, making patterns, finding links, making sense out of nonsense, this is what metaphor and science is about. Making mistakes, getting things wrong, unlearning and relearning is part of an individual's growing and learning experience just as it is a part of science.

Most of us have grown up believing that to be 'scientific' is to be clear, precise, logical, unemotional, objective and zealous in the perpetual pursuit of truth. Scientists are often portrayed in literature and films for example, as coldly clinical, living in a world of esoteric beings who speak a language barely understood by ordinary mortals. In recent years science has come to be identified also with the creation of a frightening environment in which not only deadly organisms are stored and classified

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1. Dan Sperber,<u>Rethinking Symbolism</u>,Cambridge University Press,1975.

2. Gerald Holton,Metaphors in Science and Education,Chapter VII of <u>Metaphors in Education</u> ed. W.Taylor,Heinemann,London,1984.p.112.

3. Ibid.,p.113 citing Turbayne,C.M.(1962),<u>The Myth of Metaphor</u>, Conn.:Yale University Press.P.217.

but in which man's ability to travel in space, to manufacture ultimate weapons of destruction and even to play God with human genetics has further removed and elevated scientists as something akin to superhuman or inhuman, good or evil, depending on one's point of view. Our increasingly 'scientific' world especially the technology of human communication systems has further heightened this sense of the power of science. Brock Utne has written on this in particular:

> Nature is regarded as feminine, and the scientific quest as an essentially virile, masculine adventure with penetration as the key to manly success...in Bacon's words "conquer and subdue her and (even) shake her to her foundations."1

Scientists she says speak of 'mastering' nature and science has become a dogma just like Christianity. She considers that they thrive on competition as much as any soldier and the reason why they are insensitive to social responsibility is because as John Ziman says they acquire a set of ideas that makes them part of a cult. They can become so obsessed with enquiry they lose sight of ethical considerations. Like Virginia Woolf she thinks that our compartmentalisation of knowledge is partly to blame. We know that our language structures our view of the world and our concepts therefore betray our attitudes and beliefs and mould our behaviour. For instance as Brock-Utne says the concept of work in Marxist terms ignores the work of women. Likewise women are beginning to question male concepts of 'security' and 'defence' as well as 'science'.

Yet'science'is also about searching and about learning. It is in every childhood question "Why ?",in every thoughtful gaze in wonder at new life, at beauty in nature, and in the struggles to solve problems in ordinary everyday situations. The science already known to us has helped us

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1. Brigid Brock-Utne, Chapter 4'Science, Higher Education and Peace Research', Educating For Peace, Pergamon Press,1985,pp111-142.

understand our environment and ourselves, we use it also to understand the past and to try to predict the future. Defining science is not easy now but in 1858 William Whewell could say with authority:

> The sciences to which the name is most commonly and unhesitatingly given, are those which are concerned about the material world; whether they deal with the celestial bodies, as the sun and stars, or the earth and its products, or the elements; whether they consider the differences which prevail among such objects, or their origin, or their mutual operation. And in all these Sciences it is familiarly understood and assumed, that their doctrines are obtained by a common process of collecting general truths from particular observed facts, which process is termed INDUCTION. It is further assumed that both in these and in other provinces of knowledge, so long as this process is duly and legitimately performed, the results will be real substantial truth. 1

He even spoke of "doctrines of solid acknowledged certainty"[2] yet when we look to a more modern philosopher of science there is a much less certain tone. Mary Hesse with a more holistic view than Hogben shows how an alternative view has been established with the aid of philosophy, of social science, hermeneutics and the sociology of knowledge. In her early work _Science and the Human Imagination_[3] she traces the development of scientific thinking particularly the theories of planetary motion and how they developed and how new knowledge was treated by science. According to Hesse our thinking has been strongly influenced by the Greek philosophers to whom a life of contemplation was the ideal as man's most noble faculty was his reason. The material world was regarded as in some way a limitation or corruption of the perfect world of form and spirit so their aim was to cultivate the soul to dwell on Perfection--which was to be found in the static and unchangeable features of the world. Contemplation therefore favoured

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1. William Whewell,D.D.,_History of Scientific Ideas_ Vol.1,J.W.Parker and Son,London,1858.p.4.

2. Ibid.,p.3.

3. Mary Hesse,_Science and The Human Imagination_,London,1954.

mathematics and astronomy and cultivated the belief that the heavenly bodies were "divine, eternal, uncorruptible and unchanging."[1] Practical work and experiments were not favoured. When this era went into decline because not everyone aspired to the ideal life of philosophy people turned, says Hesse, to religious mystery cults from the East. History like the planets was assumed to go in endless cycles. Christianity brought new hope and purpose, she believes, either denying the main assumptions of Greek thought or re-interpreting them.

According to Hesse the new religion was the Hebrew religion of the old testamant--the new church was to early christians the New Israel--and we have still not worked out, she thinks, the adjustment of these two views of life--the Hebrew faith and Greek philosophy which still held sway up to the seventeenth century in matters of science.

Augustine is acknowledged as the main influence in assimilating Greek learning to Christian theology--but for him the earth was to be studied not merely as contemplation and knowledge for its own sake but to assist in the worship of God. This was a period coping also with magic and astrology. In her words natural science became the 'handmaid of theology', and it became usual to "look in nature for allegories and symbols of the divine activity."[2] She quotes Michael Roberts on this type of analogy:

> The four-element theory for example, was of very little value for the purposes of chemistry or engineering, but it possessed one great merit which our ninety-odd element theory does not: it gave an account of the facts of chemistry which was at the same time an allegorical picture of the realities of the spirit. The relations of earth, air, fire and water, it seemed, corresponded in some way

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.16.

2. Ibid., p.19.

> to the relations of body, spirit, intellect and love. The facts of chemistry, expressed in such terms, were subjects for the poet, and science, philosophy and poetry were often one...it is difficult to say whether the works are to be taken as narratives of chemical experiments, as allegorical morality, or as symbolic poetry, or as a combination of all three ...Even today, we find ourselves talking of the world of religion and art in metaphors and analogies related to a chemistry or physics which we know is obsolete. 1

As Hesse says, mediaeval scientists seemed to trust Greek and Latin writers and did not try to verify their stories of birds and beasts with direct observations of nature at first but she sees evidence of sculpture drawings and illuminated manuscripts becoming increasingly naturalistic as time went on. Like Hogben she traces an impetus and stimulus given to knowledge from the Arabic versions of Greek texts once they became available. Now Arisotle's work became more widely known and something of a threat to the church which Aquinas managed to avert by welding the two systems of thought together, to the detriment of science Hesse believes and which confirmed "Aristotelian cosmology as the world view of the educated man...whilst for ordinary people the Christian drama of redemption was the unquestioned framework of their lives, and they represented it in terms of an astronomy which was more Greek than Christian."[2] Consequently their 'world' was shattered by the rejection of this in the sixteenth and seventeenth century. Hesse explains the influence of this cosmology--for the Greeks:

> The only motion worthy of divine beings was conceived to be circular motion and the most perfect body ...is spherical, therefore the heavenly bodies and the earth must be perfect spheres...In the heavens motion was naturally circular...on earth and in the regions below the moon motion was naturally up and down in straight

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1. Mary B. Hesse, <u>Science And The Human Imagination</u>, SCM Press Ltd., London, 1954. p.20, citing Roberts, M., <u>The Modern Mind</u>, London, 1937. Hesse also adds a footnote to the effect that an example of Robert's last point can be seen in Little Gidding by T.S.Eliot.

2. Ibid., p.22.

lines...the earth being at rest at the centre of the whole system.[1] In the heavens matter was called 'aether' which was considered eternal, unchanging and incorruptible. On earth were the four elements earth, water, air and fire--all in ceaseless flux and instability. Anyone who questioned this belief was in fact a heretic--and for such was Anaxagoras exiled from Athens in the time of Pericles. The difficulty of accepting such divinities was mitigated for the Christians by acknowledging that God had created these heavenly 'divine' bodies..

The source of a force to create movement was never adequately explained except in terms of 'spirits' and 'invisible angels'--and heaven was considered to be out in space and hell in the bowels of the earth. Dante's Divine Comedy portrays just this belief system (1314). It was also believed that the movement of the planets created music. Hesse is not averse to this 'mediaeval' notion that nature is symbolic of religious truths and wonders why we do not believe that "science is given to men that they may glorify God through His work and that they may use it for man's good."[2]

The alternative theory to that of Aristotle was Ptolemy's theory of epicycles (A.D.150) which originated in the work of Hipparchus of Rhodes in the second century B.C., but because this included the earth as one of the planets it was considered impious, so Aristotle's theory was almost universally accepted throughout the Middle Ages as providing the 'true' description of the mechanics of the universe. Some "reconciled the two systems by thinking of Ptolemy's epicycles not as descriptions of real

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.23.

2. Ibid., p.27.

motions, but as mathematical fictions, only useful for purposes of calculation."[1] This was the status quo until Copernicus when "as one suddenly sees the solution of an anagram, or the rearrangement of the kaleidoscope, he saw the tremendous simplification which would result from giving the earth rotation on its own axis, and revolutions about the sun."[2] The novelty of this idea was difficult to accept and little advance was made until Galileo (1564-1642) who has been described as the first scientist of the modern age, by combining mathematics and the use of a telescope. I have referred previously to Hesse saying that such methods combining experiment and theory can be traced back to the later Middle Ages, her point being I believe that ideas such as this do not come from a vacuum. She speaks of "these early gropings towards a more adequate scientific method...it took centuries to find the right principles and methods of procedure."[3] Galileo did however supersede the Aristotelian system. Galileo's method was to "idealize the real world, and when a first approximation had been made with ideal conditions it is then possible to come back to reality and correct some of the errors due to factors which have been left out."[4] This method says Hesse became the dominant one in science and the pursuit of knowledge generally.

Following Galileo, Descartes formulated a law of dynamics that "a body under no forces describes a straight line with uniform velocity"[1] --which still left the motion of the heavenly bodies unexplained--until the

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.30.

2. Ibid., p.31.

3. Ibid., p.32.

4. Ibid., p.36.

5. Ibid., p.36.

postulation of elliptic orbits by Kepler. How he reached his theory is "a curious illustration of how things happen in the early stages of science"[1] Because he believed the sun to be the most magnificent body in the universe he proposed, on false premises, that the sun forces the planets around rather as the spokes of a wheel push round its rim, thus creating the first step towards Newton's theory of gravitation that the curves described by the planets are ellipses.

Seventeenth century scientists of the new Royal Society in London were still puzzling over this problem of the heavenly motions when Newton told them he had already solved it, which when published gave us his Principia Mathematica in 1687:

> For the first time a single simple hypothesis--that of gravitational attraction--was capable of explaining both motion of inanimate bodies on the earth and the motion of the solar system. This was conclusive proof that Aristotelian physics and Aristotelian cosmology were inadequate, together with the whole theory of the heavenly and sublunar regions, the music of the spheres, the pictorial representation of heaven and hell and the rest of the imaginative world picture of the Middle Ages. In its place a new cosmology based on Newtonian mechanics began to emerge, a cosmology which has been called the 'billiard-ball universe', in which reality was conceived solely in terms of particles of matter moving under their mutual gravitational attraction and colliding with one another in an infinite three-dimensional space. 2

It becomes evident that science is closely linked to man's view of himself and his universe, his place in it, and his beliefs and it becomes clear that each 'advance' in knowledge is built on the thinking of previous people and their theories and also how crucial it is that these are accepted by one's contemporaries. Also apparent is the way man has learned gradually to combine observation, language, historical knowledge, imagination, use of

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954.p.37.

2. Ibid., p.37

tools and general knowledge. A main idea may come from one person but that person's thoughts are cast into a common pool and sometimes create ripples for a long time afterwards.

Hesse sums up this development as largely attributable to Christian influence; growing freedom from fear of demonic powers in nature; the growth of practical arts and techniques (practical work not despised by Christians) and a rejection of the Greek analysis of matter and form as the basis of science. In her view it is Christianity which removes the taint of evil from all things in nature man included, for to her thinking, "in Hebrew and Christian thought evil in the world is not inherent but is the result of man's disobedience."[1] She cites Sir Thomas More and Sir Thomas Browne in support of this argument and Bacon who considered man's fault to be arrogant rationalism instead of "recognizing in them [works of nature] the stamp of the creator himself."[2] Aristotle, she says, had also recognized the design aspect in nature, but Greek thought looked to a study of nature as subject for philosophy rather than control of the environment which Bacon extolled in his works and which was stated in the aims of the Royal Society.

Descartes had also stated that scientists should not concern themselves with ultimate answers because these can never be known. So to Hesse modern natural science only began when Christian presuppositions about nature had displaced those of the Greeks.

According to Hesse it was the seventeenth century which saw "a subtle

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.40.

2. Ibid., p.41, citing Taylor, H.O. Thought and Expression in the Sixteenth Century, New York 1920, p.370.

change in the use of language and in the meanings of important words"[1] -- subsequently leading to the division between the language of science and the language of poetry and religion. Michael Roberts whom she cites has studied this and shown how scientific ways of speaking about 'fact' and 'truth' and the mechanistic outlook influenced and confused people. Hobbes had noted how words were abused by being used metaphorically "that is, in other senses than they are ordained for."[2] Scientists at this point were trying to make their use of language more exact and logical and such was Royal Society policy.

> Thus the ultimate reality of matter and the limitations of knowledge to the five senses became the habit of thought of ordinary men, not because they read the work of Hobbes or of Hume, but because the very language they spoke was better adapted for dealing with these aspects of experience than with the aesthetic and the emotional.3

Thus plain speech became the primary form of expression and this according to Hesse even influenced the Church and led to literal transliterations of the Bible and a move to rigid fundamentalism. The effect on poetry she believes was to make poets lose confidence in metaphor and create eighteenth century poetry dull to our ears. "Words like 'truth','reason' and 'knowledge' had narrowed in scope...they were interpreted with reference to the methods and results of science." 'Reason' became not an all-embracing idea of moral, aesthetic and intellectual powers but purely logic. 'Imagination' covered anything not included in reason. Coleridge was to criticise this idea of logic and wrote on the importance of this new concept of imaginaton. Truth was considered not to be found in poetry but

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.55.

2. Ibid., p.55.

3. Ibid., p.56.

only in that which could be tested by scientific method and described in plain unambiguous language. Science in effect became a new kind of 'religion' to dominate the Western world and which she says remains unshaken even by new findings.

Biological evolution theories were the first to dispel some of the mechanistic view, but in physics it persisted to the nineteenth century. A new study of man was also developing as Comte established sociology and his theory of three stages of human development, the theological, the metaphysical and the positive:

> In the theological stage explanations of natural phenomena is in terms of the actions of the gods, in the metaphysical stage it is in terms of abstract principles and forces, God being replaced by Nature, and in the positivist stage there is no attempt at explanation in terms of ultimate courses at all, but all facts are simply described in relation to one another. 1

He introduced the idea of a new religion of Humanity or Positivist religion.

Ideas about evolution had filtered through the decades says Hesse long before Darwin articulated them --another example of how scientific ideas are themselves evolutionary--although as she says not every one saw development in terms of progress. Rousseau looked back to a primitive Golden Age which he considered we had lost. Darwin's Origin of Species in 1859 seemed proof of historical progress. Herbert Spencer and Thomas Huxley were among those who considered it a cause celebre. Lay interest in science increased at this point and people began to see the story of the development of science as the story of themselves and became consequently more sceptical of religion, a problem which liberal minds of the nineteenth century tried to address.

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.61.

Hesse describes how the mechanistic view of the universe and especially the popular 'billiard-ball theory of atoms' as described by Newton and his contemporaries was replaced eventually by three developments in physics; the electromagnetic theory of radiation, the theory of relativity, and the quantum theory. Clerk Maxwell was responsible for the first theory, about the propagation of light and electromagnetic waves such as radio waves. No way could be found to describe the motion of such waves because "A wave is not a physical thing but a PATTERN in some material."[1] No mechanical model could approximate to the 'aether' or substance in which these waves were thought to move, so they [that is he and his successors] offered a mathematical explanation "for a scientific explanation does not necessarily require a model which can be pictured in terms of the motions of particles of matter."[2] This was the first theory to depend chiefly on mathematical symbolism and hardly at all on representational models. It has since become typical of the theories of mathematical physics. Hesse says that the significance of this did not register for some time. This reminds me of something Whewell said in his earlier philosophy of science, that "Our fundamental ideas are not acquired from the external world by our senses, but have some separate and independent origin."[3] For instance we have no faculty for forming an idea of space. It is not obtained by experience "whether we call the conception of space a condition of perception, or an idea, or by any other term, it is something originally inherent in the mind

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1. Mary B. Hesse, <u>Science And The Human Imagination</u>, SCM Press Ltd., London, 1954. p.70.

2. Ibid., p.70.

3. William Whewell, D.D. <u>History of Scientific Ideas</u> Vol.1, John W. Parker and Son, London, 1858. p.77.

perceiving, and not in the objects perceived."[1] Our senses are not necessary then in order to make sense, which means we are not constrained in our imagination and not sense-dependent. Richards made a similar point that descriptive language does not need to create 'pictures'.

Hesse says it was relativity theory which finally displaced the 'billiard-ball' idea of the universe. Michelson and Morley found that the speed of light was constant whatever the speed of the body against which it was measured. Einstein's conclusion from this gave us his theory of relativity "The essential point is that the further we go in examining the ultimate particles of nature the less like particles do they become, and the less does their behaviour conform to the laws of Newtonian mechanics"[2] The consequences of this are:

> First the absolute space-time system of Newton is denied. The universe ceases to be a collection of bits of matter moving about in a boxlike space with absolute velocity, and becomes a more immediate description of our experience. Velocity and time and the other qualities of bodies become notions [metaphors?] which are relative to someone measuring them--we begin to have as it were a relative human viewpoint upon nature instead of the absolute god-like view point imagined by classical physics. [3]

Thus our notions of reality become less static, more imaginative, nearer perhaps to poetry and religion. One is reminded also of Piaget and his belief that children have to invent knowledge as it were through their own experiences. As Hesse says knowledge becomes our knowledge limited by our capacities.

Laplace's theory of determinism became outdated says Hesse because

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1. William Whewell, D.D. History of Scientific Ideas Vol.1, John W. Parker and Son, London, 1858. p.94.

2. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.74.

3. Ibid., p.76

particles "do not have any simultaneous position and velocity."[1] So we can no longer believe that human actions are mechanically determined. She explains how mathematics has become increasingly important to science which no longer needs visible models for proofs and traces the development of Euclidean geometry which after twenty-two centuries was outdated by Reimann about 1859 with new ideas about the geometry of space. She demonstrates how mathematics has become increasingly pure, abstract and difficult for lay people to appreciate. The advent of symbolic logic replaced Aristotelian syllogisms. People like Leibniz also considered that a logical objective language could be practically applied in diplomatic work where confusion over accepted meanings sometimes causes discord. Mid-nineteenth century George Boole used calculus or algebra to construct a logic whereby Aritotelian logic was represented symbolically. It had been assumed previously that "all propositions were reducible to the subject-predicate form"--but it became evident that "in mathematics itself the notions of inequality, the convergence of an infinite sequence, and many other types of argument cannot be put in the subject-predicate form"[2] Some hoped that all philosophy might be reduced to just such a logical form---but as Hesse states:

> Such a formal symbolic language can never be a substitute for thought, because the application of a symbolic method to any empirical subject matter presupposes very careful analysis of the subject-matter, and a reasonable certainty that its essentials have been grasped and properly expressed in language. In other words it presupposes that the work of clarification has already been done, and it is precisely here that difficulties arise which are not only confusions about the use of language, but are fundamental disagreements about the nature of the world. Again, there are some

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.78.

2. Ibid., p.86.

> aspects of experience which are best expressed in language which is full of metaphor, and some necessary overtones of meaning are lost when a word is precisely and uniquely symbolized. The vagueness of living languages as compared with mathematics is the price they pay for their full applicability to the world and their capacity for growth. [1]

Nineteenth century developments tended to a type of relativism and a rejection of absolutes. If this makes us distrust logic when applied to the real world Hesse sees this as an advantage. Experimental knowledge is seen to have human and material limitation. It became accepted that our understanding might be finite and that the existence of a superior being who did understand was indeterminable. Hesse sees this as a new humility in man which in itself has religious overtones: "The new attitude is more consistent with the Christian view of man as a dependent creature whose existence is essentially bound up with that of the universe."[2] So to her rationalism is not the threat for the twentieth century but relativism--the belief that everything "is relative to historical circumstances or to the psychological needs of the individual."[3]

Humans tend says Hesse to explain things in terms of what is known to them even though these things themselves may not be understood. Thus myth explains nature and in science explanations are often based on analogies as in wave theories likened to those of the sea. But she wonders if it is still true to say that "science attempts explanations in terms of pictures and analogies drawn from the familiar world."[4] Scientists have usually adopted a positivistic approach with an emphasis on data of sense

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.88.

2. Ibid., p.90.

3. Ibid., p.90.

4. Ibid., p.92.

experience as described by philosophers such as Hume. They all prefer experimental results to theories. A new form of positivism however tends to avoid general statements about the nature of the universe. Toulmin she says is certain that we should avoid general explanations from scientific research. Too much of this he thinks tends to false notions of science among lay people and distorts technical terms used in science. Hesse quotes J.D.Bernal[1] as also believing that the function of a theory is to organize existing knowledge and can only be appreciated by the initiated involved with it. To him the scientist does not seek dogmatism and is quite satisfied with the uncertainties which are the nature of scientific work.

Hesse herself can see no reason why 'scientific myths' cannot be used in a wider field if they have relevance, nor does she think that common terms used in science should not still be part of common speech, for the influence flows both ways, and "it is clear that categories of interpretation within science have been influenced by prevailing religions and philosophical ideas[2]." Which, incidentally, makes one wonder how in our own times when so much science is devoted to weaponry how much those involved become imbued with the rationale for their manufacture. Hesse and like-minded philosophers feel some justification in mingling philosophy and science. She quotes Waisman[3] who has said that scientific concepts have an 'open texture' or are not complete within themselves. Kant set a tradition for philosophers to consider other knowledge as "greatly

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1. Mary B. Hesse, <u>Science And The Human Imagination</u>, SCM Press Ltd., London, 1954. p.94.

2. Ibid., p.97.

3. Ibid., p.97.

outweighing scientific knowledge in importance"[1] and considered religious and moral knowledge to be possible but distinguished from scientific knowledge because of the dual nature of reason--pure scientific reason which sees the phenomena of nature, and practical reason which can penetrate the essence of things. Opinion is divided as to how to interpret these two. Science seems to have distanced men and their knowledge of themselves from the knowledge of things--a dichotomy which Hesse sees in Buber's _I and Thou_. One knowledge is subjective, the other objective: "The impersonal attitude of observation, experiment, measurement, is replaced in personal relationships by something more dynamic, in which demands are made and responses given and in which the whole personality is judged by the quality of its response."[2] A relation of encounter can be achieved between people and their world Hesse believes and here she states what seems to be the basis of her own philosophical viewpoint: "The deepest levels of our experience are not comprehended by our relations with other persons, but in the relations of all of us to the God who is the ground of all existence."[3] This may be true for her and for many others but not necessarily for all of her readers, though it is true as she says that poets have expressed their knowledge of God through encounters with people or with the reality of nature itself. Emmet, in her interpretation of Buber calls this power of creative awareness "spirit...it seems to come of grace, it creates the moment of relationship, of communication of whole-ness; it is thus the bond of unity; and it comes with the promise that it will lead us into truth."[4]

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1. Mary B. Hesse, _Science And The Human Imagination_, SCM Press Ltd., London, 1954. p. 98.

2. and 3. Ibid., p. 100.

4. Ibid., p. 101. Citing Emmet, D.M., _The Nature of Metaphysical Thinking_, London, 1945, p. 212

One reads similar thoughts by those who describe transcendental meditation. Hesse believes such experiences can be part of science as other scientists have witnessed in their perusal of other scientists' journals and notes [see Holton on Einstein earlier in this chapter] As this area is not her main theme she does not pursue it but I will refer later to Green and his Shabby Curate of Poetry who has more to say on this. The question Hesse is left with is whether scientific theories actually bring us nearer to the reality of things and whether knowledge has to be divided up into scientific and non-scientific contexts and attitudes. Whitehead has a holistic view and Hesse herself has demonstrated in her survey of scientific developments and particularly theories about the nature of the universe, the inter-dependence of science and culture . It is in the present century that she sees division between science, history, poetry and theology: " in practice the business of science is carried out more and more in mathematical terms which the layman cannot follow, and the resulting situation is rationalized by a theory which declares the languages of science and the humanities to be mutually untranslatable."[1]

A problem which all philosophers of science have tried to address Hesse says is how to distinguish between the various classes of description science uses for example to describe 'real' objects, sense experiences, rationalisation and experiences which are not available to sense experience but do exist. She describes the attempts of people such as Hume, Pearson; Russell and Whitehead whose work she seems to favour. Purely logical constructs do not easily apply to all categories of experience and controversy erupts over the responsibility for decisions. Descriptions of

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.105.

scientific perceptions of sense data alone are not considered acceptable. Inevitably she says we have to accept the explanations that scientists themselves use when describing their experiments--but linguists can examine this language used in scientific concepts.

The operational theory of concepts tried to define science in terms of operations only, but even this was not always possible because in some cases the actual physical operations are impossible; measuring space, for example. She quotes Dingle explaining how science has changed. The theory of relativity has changed the conception of the nature of physical science: "Formerly science was regarded as the study of an external world, independent of the observer whose experiments and observations were simply means of finding out how the world was constructed and by what laws its behaviour was governed. The emphasis has now shifted from the nature of the world to the operations of experiment and observation."[1] As Hesse expresses it more simply we cannot regard measuring the diameter of an electron in the same way that we might have measured a half-crown. On the other hand she thinks there is no need "to rush to the other extreme and deny the validity of any analogy which has no immediate justification."[2]

The most difficult problems about the status of concepts arise apparently in the modern quantum theory of atoms for an observer in a laboratory researching this would 'see' nothing resembling an electron only photographs and instrument readings. Even where measurements cannot physically be made they are still deemed possible. It seems says Hesse that "we cannot escape the conclusion that scientific theories involve two sorts of

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.127.

2. Ibid., p.129.

concepts--those which can be measured and therefore operationally defined, and those which enter into theories as part of the apparatus for correlating observations."[1] More complex scientific concepts cannot be operationally defined. We have to consider therefore two kinds of scientific concepts the theoretical and the experimental. To illustrate how language describes such a theoretical concept Hesse describes the dynamical theory of gases developed during the nineteenth century. There is a relation between the volume in which a gas is contained, its temperature, and the pressure exerted upon it. Boyle's Law says the volume varies inversely as the pressure. Gay-Lussac's Law says how the absolute temperature varies directly as the pressure. This can be written as $P = \frac{T}{V}$. These laws can be regarded says Hesse as first-order generalisations of the experimental results--summarising them in a convenient form. But, she says, a scientific theory has to do more than this--and link this relation with other aspects of the behaviour of gases, their chemical composition, behaviour near the point of liquifaction etc. "This is where second-order generalisations, or hypotheses are required, and where concepts usually enter which are not operationally definable."[2] In this situation it is postulated that gases consist of a large number of similar particles (molecules) in random motion. Subsequently the dynamics of a system of such particles is worked out to see whether any of the relations arrived at can be identified with the laws of Boyle and Lussac-- "Such a set of identifications, which will be mathematical equations, constitute the DICTIONARY which translates the theoretical language of the hypothesis into the experimental language of the laws."[3] The system of

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1. Mary B. Hesse, *Science And The Human Imagination*, SCM Press Ltd., London, 1954. p.132.

2. and 3. Ibid., P.135.

particles can be regarded says Hesse as a dynamical MODEL, or ANALOGUE of the gas:

> If a model is to be scientifically useful, it must be familiar to us, with its laws well worked out, and it must be easy to extend and generalize it so that its other properties, which we have not so far used, may be related if possible, with the other properties of gases. The model must have as it were, a life of its own, which is independent of these properties of gases which we are using it to explain. 1

Analysis of models can be carried out with most of the theories of modern physics--as examples she says "the theory of heat conduction depends on the model of fluid flow; all wave theories and field theories depend ultimately on models taken from hydrodynamics...and even quantum theory...can be shown to depend essentially on the simple dynamics of particles--it makes use of analogies taken from this theory, but with restrictions of meaning."[2] This is I suppose similar to literary critics using terms such as tone, texture etc. to describe objects which in reality do not have these qualities.

Hesse says sometimes "the models used in physics are purely mathematical in character, and this is why the word analogue is generally

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.136.
   She has an interesting and very relevant footnote here quoting from Locke's Essay Concerning the Human Understanding, IV, xvi, 12.:
   "We see animals are generated, nourished, and move; the loadstone draws iron; and the parts of a candle, successively melting, turn into flame, and give us both light and heat. These and like effects we see and know: but the causes that operate, and the manner they are produced in, we can only guess and probably conjecture. ANALOGY in these matters is the only help we have, and it is from that alone we draw all our grounds of probability. Thus observing that the bare rubbing of two bodies violently one upon another produces heat, and very often fire itself, we have reason to think, that what we call HEAT and FIRE consists in a violent agitation of the imperceptible minute parts of the burning matter...A wary reasoning from analogy leads us often into the discovery of truths and useful productions, which would otherwise lie concealed."

2. Ibid., p.137.

preferable to model"[1] as the latter may suggest something mechanical or picture -like. Satisfactory analogies may not ony explain a theory but "give grounds for predictions and extensions of the theory."[2] She describes two extreme types of analogy as used in science...minor ones used merely as heuristic devices and later discarded, not appearing in a finished work. A historical example she cites is a 'mistake' such as that of Kepler's model of the sun and planets as a wheel hub with spoke and rim. Major ones are particle theory or an analogy which becomes generalised into a view of the universe and which may become as it were a public property. Weiner has suggested that human beings have been described similarly...as machines of their time, for example seventeenth and eighteenth century clockwork mechanisms described by analogies from dynamics, nineteenth century heat engine analogies based on thermodynamics, and currently communication devices from electronics: "Analogies like these determine the phenomena to be taken into account, and therefore the direction of research, and the whole framework of a theory."[3]

Hesse maintains that some scientists see all analogies simply at the level of aids to discovery. Hutten thinks that " this usage of models never gives a reliable interpretation because they carry surplus meaning from crude attempts to understand the world and may therefore seriously impede the improvement of knowledge."[4] [This sounds familiarly like the criticisms of metaphor in other areas of knowledge] But as Hesse

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954, p.138.

2. Ibid., p.139.

3. Ibid., p.140.

4. Ibid., p.141.

says all the implications of an analogy as for example in models are not always fully appreciated when they are first used. To her mind "the heuristic function of analogies must be regarded an essential part of scientific theories."[1] She examines the meaning of the word analogy and says that in logic since the seventeenth century it has meant identity of some of the characters of the things related by the analogy or observed characters stored in common. "Thus if analogues have properties P1, P2,...Pn, in common, and some other properties different, we can argue to possession of another common property Pn+1 with some degree of probability if the possession of P1,...Pn is relevant to the possession of Pn+1 but not otherwise."[2] But it is difficult sometimes to say how one property is relevant to another--when the properties of things may be so similar in some respects and not others, for example things may share common properties of size, colour and weight but only one may be edible-- "so an analogy is not reducible to a list of resemblances and differences, but involves an element of direct recognition of association of properties, and a valid argument from analogy must ultimately rest upon this recognition."[3] Therefore induction from past experience to future experience, or from particular observation to general laws is rather problematic in modern logic. " In modern logic then it would generally be agreed that an analogy in science means simply an identity of logical or mathematical structure between certain parts of a theory and the experimental results."[4]
Hesse says that we cannot simply get rid of analogies by use of abstract

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p. 141.

2. and 3. Ibid., p. 142.

4. Ibid., p. 143.

mathematics "mere identity of some aspects of structure does not indicate why an analogy is useful in predicting future experience."[1] This study should make it clear that the use of analogy and metaphor is a a time-honoured way of building up human experience.

Hesse finds that Mediaeval scholars had greater insight into use of analogical use of language than those of the seventeenth century. Modern logic only recognizes two types of relation, identity and difference, they recognized three, one of these being analogy. "Put in terms of their subject-attribute logic, this meant that qualities could be predicated of a subject in three ways: univocally, analogically and equivocally."[2] Her example is 'rabbit' as a name of species of animal i.e. predicated univocally of all instances of this animal. If we use this word to describe a person this is analogical. If we use it as in 'Welsh rabbit" it is to equivocate. Because the person described as rabbit could be described in other ways than as 'rabbit' this is not a good analogy she reflects and has 'degenerated' [strange choice of word] into metaphor. She distinguishes between metaphor and analogy by the use of the word 'anger' which can be univocally predicated of human beings, but can also be used to describe 'an angry sky' i.e. a metaphor which need not be used if we describe e.g. the weather conditions indicating a storm; but to describe a dog as angry she believes we are using something more than analogy [this is in fact anthropomorphism of which more later] in giving the dog a human attribute. God is also sometimes spoken of as 'angry' in the same sense that people are angry. But as she says Mediaeval philosophers did not have to cope with our problem of using analogical language to describe unfamiliar

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1. and 2. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p. 144.

structures in nature as produced by scientific experiments. To use mathematics in describing nature is always analogical

What Hesse observes is a swing in philosophy from viewing theories as univocal descriptions e.g. 'billiard-ball atoms' to now regarding them as pure equivocation and this leads to more enquiry as to how we use language. To her, "scientific theories when verified ARE regular PATTERNS [my emphasis] of natural phenomena, which may of course include the mind and body of the observer himself."[1] This is an important comment, the acknowledgement that the person involved is as it were part of the process and has enormous implications for science and for language study. What philosophers seek to discover says Hesse is whether these patterns are part of the objective structure of the world which we discover--or are they something we impose on what may in fact be chaos. In summary these are the realist standpoint and the positivist. Both imply different assumptions and Hesse sees both as correct. What created difficulties in earlier times with the naive realist or the mechanistic view was the fact that the way the world was explained was seen as the only way--until physics refused to conform.

> But if we abandon such a restricted conception of existence ...we leave the way open for an interpretation of experience which asserts the real existence of all patterns in nature which are expressed by scientific concepts correctly used. We do actually recognize patterns in observable nature which are as much 'there' as the more easily distinguished physical objects which are components of the patterns. Not only that but there seems also to be a kind of continuity between our perception of ordinary objects and our inference to such scientific concepts as the fundamental particles.[2]

As Hesse concludes we may doubt our own faith in scientific laws yet we

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954. p.146.

2. Ibid., p.151.

have faith that every day will be to a degree predictable and that our own microcosmic world will not disintegrate before our eyes. These are inductive conclusions about the future:

> And such descriptions of experience is all that metaphysics can hope to achieve. Exactly the same considerations apply to scientific laws and theories. They are regular PATTERNS [my emphasis] having continuous existence, which are discerned in present awareness. When they are discerned clearly and expressed precisely [perhaps here she might have added..given the constraints of human language, logic and linear thinking] we have exactly the same faith in their continued functioning that we have in the continuity of physical objects, and for the same reasons. 1

Analogies in science, whether mechanical, mathematical or historical can be considered says Hesse more or less adequate--as long as we realise they are descriptions-there will always be room to criticise them not only scientifically but also concerning the religious and metaphysical nature of the universe. To try to divide scientific and religious descriptions of experience is to Hesse impossible. They may both deal with different ways of looking at the same experience but they inevitably overlap. "Problems about 'reality' or'existence' would not worry us if we had not for so long been used to thinking of reality and existence in terms of hard material particles--the sort of existence a stone has, or one of Galileo's smooth balls rolling down an inclined plane."[2] Whitehead has told us that "our difficulty in understanding the PATTERNS of activity disclosed in modern science is due to our preoccupation with sense perception to the exclusion of other aspects of experience--those of emotions, purpose and so on."[3] Others also think that analogies of machines have dominated science

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1. Mary B. Hesse, <u>Science And The Human Imagination</u>, SCM Press Ltd., London, 1954. p. 152.

2. Ibid., p. 156.

3. Ibid., p. 157.

for too long and that comparing the workings of the brain to particles in motion or even to electronic computing machines may be misleading. There is a tendency to believe that we should look for analogies in human society itself and there is says Hesse "a recognition that science itself needs some of the resources of poetry in order to express its insights into human nature, and that poetry and imagination are ways of attaining to the truth as well as logic and mathematics."[1]

Hesse has sought to prove that science is inextricably linked with culture and religion. In the light of her obvious Christian faith she see a fusion between science and religion rather than a division. She sees analogies as essential to scientific descriptions and so the work of science is to her a meld of rigorous analytical research imbued with faith and imagination. Former times when there was less division between art and science seem to her to have been more humane.

It is interesting to see that twenty years later in another work Hesse gives an interesting definition of science saying "it is essentially a learning device, and all the models of the structure of science describe what are essentially mechanisms of learning."[2] She also gives more specific consideration to the role of metaphor and its explanatory function in science, adopting Black's interaction theory of metaphor[3] which she believes gives a satisfactory conception of scientific theories as metaphors. The following diagram will perhaps illustrate how she appears to me to relate

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1. Mary B. Hesse, Science And The Human Imagination, SCM Press Ltd., London, 1954.p.162.

2. Mary Hesse, Revolutions and Reconstructions in the Philosophy of Science, The Harvester Press, Britain, 1980.p.125.

3. Max Black, Models and Metaphors, Cornell University Press, New York 1962.

this to science:

Black	FOCUS		FRAME
Hesse	SITUATIONS or REFERENTS		
Hesse	PRIMARY SYSTEM		SECONDARY SYSTEM
e.g. Black	man	is	a wolf
	Hell	is	a lake of ice
In Science Hesse	The Domain of the EPLANANDUM(to be explained) describable in observation language		the EXPLANANS (explanation) described in observation language or the language of a familiar theory from which the model is taken
e.g. Hesse	sound	is	propagated by wave motion
	gases	are	collections of randomly moving mass particles

Metaphors according to Hesse usually depend on a shared or common language with shared assumptions or beliefs termed 'meaning' which are not fixed, and in scientific contexts the primary and secondary systems may both be highly organised by networks of natural laws. What connects the two systems may be what other people have described as 'analogy','intimations of similarity', 'a programme for explanation', 'a framework through which the primary is seen'. As Hesse says this does not mean that ANY secondary can be a source of models for any primary. Random or unusual connections can be made in art or poetry. Hesse agrees with Black that metaphors are not simply comparisons. She interprets metaphors as working by "transferring the associated ideas and implications of the secondary to the primary systems. These select, emphasise, or suppress features of the primary; new slants on the primary are illuminated; the primary is 'seen through' the frame of the secondary."[1] In the fusion of the two, original meanings sometimes shift and

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2. Mary Hesse, Revolutions and Reconstructions in the Philosophy of Science, The Harvester Press, Britain, 1980. p.114.

merge. As she accepts the consequences of this interaction view for theoretical models she see "some incompatibility with assumptions generally made in the deductive account of explanation [something she delves into in detail in her book] namely that descriptions and descriptive laws in the domain of the explanandum remain empirically acceptable and invariant in meaning to all changes of explanatory theory."[1]

A metaphor used for the first time is intended to be understood, otherwise it is nonsense and does not communicate. Accepting this is a rejection therefore of "all views which make metaphor a wholly non-cognitive, subjective, emotive or stylistic use of language."[2] Both literal uses of language and metaphoric she says follow linguistic rules. Rather than drawing a line between the two Hesse sees a need to trace out the various mechanisms of meaning-shift and their interactions. She asks what is the REFERENT of a model or metaphor and finds that it seems to be the primary system.

Critics have said that if we take metaphor literally it becomes myth. Hesse concludes that metaphoric use is not replaceable by any literal expression. A theoretical concept may fail because it is meaningless or false; she gives as an example 'heat is a fluid'. A feature of poetic metaphor is its initial impact and novelty. Scientific metaphors differ in that they may be unexpected but they are

> ... meant to be exploited energetically and often in extreme quantitative detail in quite novel observational domains; and if two models of the same primary system are found to be mutually inconsistent, this is not taken (PACE the complementarity interpretation of quantum physics) to enhance their effectiveness, but rather as a

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1. Mary Hesse, _Revolutions and Reconstructions in the Philosophy of Science_, The Harvester Press, Britain, 1980, p.115.

2. Ibid., p.116.

> challenge to reconcile them by mutual modification or to refute one of them. Thus their truth criteria, although not rigorously formalizable, are at least much clearer than in the case of poetic metaphor. 1

Scientists in her view may be looking for perfect metaphors whose referent is the domain of the explanandum whereas literary metaphors can be acceptably imperfect. It has occurred to me that in literature far from the same metaphor having shared or similar meanings to all readers even though the focus may have a generally shared understanding the final interpretation is often not public but personal and depending on ones experiences.e.g. metaphors in English poetry particularly older poems set in English countryside with associations peculiar to that country are not recognised immediately by all English speaking people, but they can be learned. This is seen when New Zealand children read such poetry e.g. Keats' "black purgatorial rails" in The Eve of Saint Agnes are strange to them, partly because the mediaeval style of tombs is not known to most of them nor the religious allusion to purgatory; another example might be the seasonal differences and references assumed to be known.

Hesse believes that "the deductive model of explanation should be MODIFIED and SUPPLEMENTED by a view of theoretical explanation as metaphoric redescription of the domain of the explanandum."[2] Not all explanations are metaphoric, nor is metaphoric terminology in itself explanatory but the essence of a theoretical explanation is that it introduces into the explanans new vocabulary or even new language. Having argued that the metaphoric view can satisfy the orthodox criteria for a scientific explanation she concludes that:

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1. Mary Hesse, Revolutions and Reconstructions in the Philosophy of Science, The Harvester Press, Britain, 1980. p.119.

2. Ibid., p.120.

> There is ONE language, the observation language, which like all natural languages is continually being extended by metaphoric uses, and hence yields the terminology of the explanans. There is no problem about connecting explanans and explanandum other than the general problem of understanding how metaphors are introduced and applied and exploited in their primary systems.[1]

This is a process that we as yet do not understand but to examine the problem of the 'meaning of theoretical concepts' is a move towards solving this. Finally she says " In the metaphoric view...since the 'domain of the explanandum' is described in terminology transferred from the secondary system"[2] the original language of observation must shift in meaning and extend vocabulary and there will be more likelihood of prediction even if not true but it will be rational because "rationality consists just in the continuous adaptation of our language to our continually expanding world, and metaphor is one of the chief means by which this is accomplished."[3]

The essential element that links art and science is I believe metaphor. The area where, as I said in my introduction humans are at their most creative. If we look at how primitive people and children observe and understand the world or how we often interpret it for them we will see that it is deeply metaphoric--though it may appear in the guise of animism (possibly totemism) and anthropomorphism.

Anthropomorphism figures quite widely in children's literature. Janke and Norton say "There is no consensus that all anthropomorphism should be avoided in children's literature, but science educators generally agree that non-fiction science books should not attribute human thoughts,

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1. Mary Hesse, Revolutions and Reconstructions in the Philosophy of Science, The Harvester Press, Britain,1980,p.122.

2. Ibid.,p.123.

3. Ibid.,p.123.

motives, or emotions to animals or plants."[1] Yet these same authors in a recommended book The Amazing Dandelion suggest a list of activities and one of these is 'Pretend you are an ant and describe a dandelion plant from that perspective. How might the plant be useful to you? So the reverse process is obviously approved of!

Our attitude to animals is confusing and it is considered by Austin Hughes that "overemphasising the appealing or unappealing aspects of animals may detract from our appreciating serious study and description."[2] Furthermore " The question of whether or not we are justified in attributing a purpose to an animal's actions is one that is still being debated by biologists, psychologists and philosophers of science. The consensus seems to be that it is better to speak of the function of a bit of animal behaviour rather than its purpose."[3] We have always had apparently a tendency to personify nature or natural forces but this can cause real problems in teaching science. For instance problematic statements involving the attribution of purpose go beyond anthropomorphosizing other animals to in effect anthropomorphosizing all of nature. Along these lines teachers can sometimes make careless statements such as 'A hummingbird has a long bill so that it can reach into flowers and suck out nectar.' " What is wrong is the implication that the hummingbird has a long bill for a purpose. Essentially such a statement embodies an incorrect interpretation of the nature of adaptation."[4]

Hughes is criticised in a later article by Sharefkin and Ruchlis who

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1. Dalmar Janke and Donna Norton,'Good Tales For Teachers',Science and Children, Vol.20 No.6 March 1983.

2. Austin Hughes,Science and Children,April 1973,pp10-11.

3.and 4. Ibid.

believe that "there is a conceptual level for young children below which it is irrelevant."[1] Nor do they believe that teachers of young children should have to avoid "any hint of anthropomorphism and personification in their attempts to communicate ideas... [because] children in the lower primary grades are generally at the pre-operational or concrete operational stage of thinking"[2] and anthropomorphism can help them to learn about their observed world. Which supports my earlier contention that much learning for children involves unlearning what they already know. They say that new ideas have to be linked to concepts a child already has and in their view these are often related to anthropomorphism and personification e.g. children relate easily to real or imagined feelings of animals such as 'the dog is happy to see you.' What they do stress is that it is probably more useful for the teacher to be attuned to the child's individual cognitive level as manifested by his comments and responses than to be overly concerned with the precise scientific formulation. With good teaching that is sensitive as well as sound, no dichotomy needs to exist. As they say we can be scientifically precise and turn people off science. Where I agree particularly with these writers is in their final comment "We need more discussion of formulation of concepts so that teachers may become expert in reconciling the needs of subject matter in the light of what we know about child development and the usage of words."[3]

In a study reported by Jay Blanchard and George McNinch kindergarten children were more successful learning dissimilar groups of words from cue cards with anthropomorphic cues than from picture cards or plain word cards. Their conclusion was "Perhaps anthropomorphism cues are superior to

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1. 2. and 3. Belle D. Sharefkin and Hy Ruchlis, Anthropomorphism in the Lower Grades, Science and Children, March 1974.

explicative-illustrated and no-picture cue conditions because as attentional cues, they do just that: focus attention...[because of the]...misdirected tendency in young learners to ascribe humanness to non humans. This process focuses consciousness and attention while probably engaging imagery or organization processes that can contribute to the active elaboration of words in memory. The elaboration affects depth of processing as well as storage and recall."[1] They believe it is a transient phenomenon and would be abandoned in most children as anthropomorphism gives way to a more naturalistic view of life. Thus it is the type and content of the picture that controls the effects which suggests that it does not harm word-learning in young learners. Perhaps what we are seeing here is also the beginnings of the later capacity to construct metaphors.

Podendorf says to be wary of oversimplifying science for children and avoid using the words 'all', 'always' and 'never'--because "Children need to become familiar with the idea that the natural environment is an orderly one and that there are definite PATTERNS, [my emphasis] but that there are also constant and newly found exceptions to almost all of the rules and/or laws which make up the patterns." She also criticises anthropomorphism and teleology in children's science books, because they lead to wrong ideas and oversimplified ways of thinking e.g.'squirrels bury acorns in the ground so they will have food in winter.'

Osborne and Gilbert discussing students' conceptions which they bring to science also mention the anthropocentric and egocentric views of children for example their use of the word 'force' and the prevalence of

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1. Jay Blanchard and George Mc Ninch, The Effects of Anthropomorphism On Word Learning, JNLCF Educ.Research, Vol.78,No.2.

2. Illa Podendorf, Characteristics of Good Science Materials For Young Readers, Library Trends, April 1974 pp.425-431.

animism i.e. a tendency to endow objects with feeling and will or a purpose.[1] This is an area which needs much more research. Whilst we are developing and encouraging imaginative and creative ways of thinking, seeing and speaking particularly through reading we are laying down patterns of thinking which have to be broken up or reformulated in the child's mind in order to accommodate mathematical and scientific thinking. Could this in fact be one reason why some people become literate but not numerate and vice versa.

Piaget was one of the first to study animism systematically. He referred to it as "the tendency among children to consider things as living and conscious" and to be part of the development of the concept and of life. Huang questioned the prevalence of animism and considered that it was an illusion and Safier suggested that ideas of animism had been fed to children. Klinberg likewise thought it difficult to prove in young children.

Studies seem inconclusive except for Piaget's original work which suggests that children do not differentiate at first between living and inert bodies as they do not have the criteria to make such distinctions. Bowd says that Susan Isaacs was one of the first to comment on the "extraordinarily confusing and conflicting information" which we give children about animals and "There is probably no moral field in which the child sees so many puzzling inconsistencies" in our attitudes to animals as pets and as a food source.[2] It would appear that this entire area may need careful consideration and we need to critically examine what messages we are conveying to children right from their earliest days.

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1. Roger J.Osborne and John K. Gilbert,A Technique For Exploring Students' Views of the World,Phys.Educ., Vol.15 1980 U.K.

2. Alan D.Bowd.The Development of Beliefs about Animals, Educational Research in the 1980's,Vol.2,Collected Papers AARE.

Metaphor is a way of thinking, a way of looking, a way of learning and a way of teaching. For this reason it has to be important in any human activity but perhaps especially to science. For the child coming to formal science lessons there is a body of knowledge already discovered and many laws to be learned. From infancy however this child has been scientifically exploring the world data around him or her, probing, touching and tasting initially. Later there are the endless questions which perceptive (or perhaps trained) parents patiently try to answer. There is also the 'scientific' play with water, sand, building blocks, trucks and trains etc. Learning has been mainly experimental experience. Good teachers try to continue this process, adding more and more experience to extend concepts. For the science teacher however this creates a mixed blessing for his/her students come with minds full of ideas and beliefs which are firmly embedded and which do not always accept or fit into the body of scientific knowledge which the teacher believes he/she is there to share with them and pass on. Roger Osborne and Peter Freyberg discovered in their study[1] that even several years of teaching would often fail to change students' beliefs and attitudes e.g. that human animals ARE animals in biological terms. Many pupils cannot accept such a term because socially and aesthetically it goes against their beliefs about people even though as we know very young children identify people and animals in the same category.

"Little empirical work has been done on the role of explanation in the teaching and learning of science" according to Pope and Gilbert.[1]

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1. Roger Osborne and Peter Freyberg, Learning in Science ,Heinemann, New Zealand,1985.

1. Maureen L. Pope and John K. Gilbert,Explanation and Metaphor:Some empirical questions in science education. European Journal of Science Education,1983,Vol.5.No.3.

They believe that if the function of metaphor is as described by Petrie to "provide a rational bridge from the known to the radically unknown" then it must be important to explanation in science. They find little evidence of empirical research in this area, apart from that done by Hesse. Such studies they feel must consider theories of knowledge, processes of teaching and learning, and the role of metaphor. Theories of knowledge adopt two polar positions, the realist and the constructivist. To the first reality is a stable arrangement of subdivisions of objective facts whereas to the second reality is personally negotiated and each enquirer perceives a different world, factual knowledge is therefore negotiable.

The teaching of science they say, is also affected by one's view of the nature of man and associated epistemology. Here they refer to the findings of Pope and Keen, the first model is the 'cultural transmission' view where the teacher is the 'engineer' and the student the 'machine'. The romanticist view as they call it stresses personal development, intrinsic goodness with emphasis on health, growth and emotional development. The 'progressivist' view they perceive as one in which the student's environment encourages active thinking and:

> The acquisition of knowledge is seen as an act of change in patterns of thinking brought about by experiential problem-solving situations. Reality is the interaction of human beings with their environment- the emphasis is on an active person reaching out to make sense of a universe by engaging in the reconstruction and interpretation of experiences. The dialectical nature of 'conversation' could be taken as an appropriate metaphor here.2

Finally there is the 'deschooling' view that knowledge should not be seen as

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1. Petrie,H.G.,Metaphor and Learning.In Metaphor and Thought , edited by A.Ortony,Cambridge University Press,1979, pp.438-61.

2. Maureen L. Pope and John K. Gilbert,Explanation and Metaphor:Some empirical questions in science education. European Journal of Science Education,1983,Vol.5.No.3.p.250.

purely an intellectual concern. Relevance and the emotional as well as intellectual life of the student are the key themes here.

Black said that every metaphor is the tip of a submerged model and this Pope and Gilbert agree with. Furthermore teaching styles will reflect the dominant model of that person's view of his/her role. This will be indicated by the style of questioning and of explanations. All of the models can be discerned in analyses of teachers at work but more evidence is required. "The teacher will have a perspective or frame on the nature of knowledge and its development,i.e., they will have a personal epistemology."[1] Those with a realist view will put the emphasis on facts and may view pupils as tabulae rasae. The realist will also concentrate on literal language forms, the 'constructivist' on 'the language of the possible'. "Of the latter, the metaphor is the most highly developed form."[2] Here also the use of metaphor will be influenced by the teachers' perceptions of their uses and as Pope and Gilbert declare:

> We have no information on WHAT metaphors are included in science teachers' explanations, HOW OFTEN they are used, and WHY they are included. We should know more, and be able to relate the information to the theory of knowledge held by an individual teacher. 3

We need to know where teachers stand on the realist/constructivist dimension. Edge has said that metaphors from scientific or technological achievements can result in dehumanisation. I have referred elsewhere to the current objectionable phrase 'human resources'. We need to know, say Pope and Gilbert, what view or model is being projected towards students for their

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1. Maureen L. Pope and John K. Gilbert,Explanation and Metaphor:Some empirical questions in science education. European Journal of Science Education,1983,Vol.5.No.3.p.251.

2. Ibid.,p.253.

3. Ibid.,p.254.

own thinking will undoubtedly be influenced by the language used in teaching. Petrie's point that students will interpret metaphor according to their own existing structure of conceptions has already been referred to. They would like to see more research into the use of metaphor in science teaching and obviously favour the constructivist approach and consider Kell's metaphor of 'man-as-scientist' a good starting place to break down the supposed division between the 'experimenter and subject' in research. My own view would be that each model they have described has its uses at some point in the school curriculum and that by developing only one view even in a single subject area we once again constrict learning styles. What is more important is that teachers especially trainees should understand just how they are using language, what effects it has in the classroom on their students, themselves and the subject under consideration.

Osborne and Freyberg found in their study that the word 'living' caused much confusion for science students. Many thought that fire, clouds and sun were 'living' because e.g. fire 'consumes' wood--the sun 'dies':

> We say the fire is living because it behaves AS IF it were living. We talk of a 'live' wire and the 'living' bible. Like the word ANIMAL, the word LIVING has two common meanings--a scientific one and one used in everyday language. The problem for pupils in science classrooms is to learn to tell which of these meanings is intended on a particular occasion.[1]

Problems arise in classroom situations also where teachers and students do not share the same meanings and where "Pupils simply fail to construct meanings from the teacher's flow of words."[2] As Barnes[3] has shown children often learn to play the teacher's game and give an air of knowing

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1. Roger Osborne and Peter Freyberg, Learning in Science, Heinemann, New Zealand, 1985. p.32.

2. Ibid., p.33.

3. Barnes, D., Language The Learner and The School, Penguin, U.K. 1969.

by using familiar but improperly understood terms. Bernstein's learning 'codes'[1] and Corson's 'lexical bar'[2] also operate in this situation.

Osborne and Freyberg say:

> Children exposed to scientific explanations can only generate meanings from their own view of the world and their own meanings for the words used in explanations. Appreciation of viewpoints based on our scientific history and technological culture can only develop slowly. As Gibran so eloquently expressed it no man can reveal to you ought but that which lies half asleep in the dawning of your knowledge'.3

Adults they say have learned to cope with multiple meanings "often by utilising linguistic or other contextual clues. Pre-adolescent children , however, usually have difficulty in recognising when a metaphorical rather than a literal meaning is intended. Analogies, too, can lead to unanticipated 'meanings' being acquired--not only verbal analogies but those implied in diagrammatic representations."[4] Their answer is to suggest that teachers confront the realities of classroom learning; appreciate the importance of children's existing ideas; try to understand these ideas and to realise how children's ideas compare with the view of scientists. It is obvious that an important factor in this approach would be to raise teacher's awareness of the complexities of language including an appreciation of the nature and functions of metaphor.

Beverley Bell says that learning in science is conceptual change from the non--scientific ideas of the world which the child brings to the classroom, it is about constructing new ideas by generating the links

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1. Basil Bernstein,'On the Classification and Framing of Educational Knowledge', in Knowledge and Control,ed.M.F.D.Young, Collier Macmillan,London,1971.

2. David Corson,The Lexical Bar,Pergamon Press,1985.

3. Roger Osborne and Peter Freyberg,Learning in Science , Heinemann, New Zealand, 1985,p.56,citing Gibran,K. The Prophet,Heinemann, London,1926.

between existing knowledge and incoming stimuli and accepting new ideas as part of one's belief system. She thinks we have probably neglected the role of feelings in this area and not only are the questions teachers ask important but how they ask them. Also how often she wonders do we include the special interests and experiences of girls who often enter science because of social issues and concerns.[1] Similar concerns are voiced by Janet Burns who sees science teaching as:

> ...a type of teaching that is based on a science governed by facts and rules, stemming from the science of Newton and Galileo. It's an objective, value-neutral, detached, dispassionate pursuit... 2

And which she believes most women are not interested in. Its nature is such that it draws predominantly convergent thinkers in her view, and this results in a dogmatic, fact-oriented discipline, a science based on the idea of one absolute answer and from which divergent thinking is excluded. Divergence however is rewarded at the highest levels "because ultimately it is divergence that is essential for breaking new ground and making new discoveries."[3] An acknowledgment of the value of metaphor and an appreciation of the uses of language in science teaching particularly could help to break down rigid attitudes that have made science a male-dominated area for so long. An acknowledgement that science teaching needs revision was highlighted by a report in Britain which recognized that "the factual and theoretical content of many existing courses will need to be sharply

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1. Beverley Bell, Curriculum Officer Dept. Education N.Z., speaking at a W.I.E.R. meeting Wellington on Science Education: Current Issues and Concerns June 25 1987.

2. Janet Burns, Science Research Officer, Victoria University Wellington, quoted by Marita Vandenberg in Science with Sex-Appeal, N.Z. Listener January 30, 1988, p.23.

3. Ibid.

pruned"[1] without losing any of the discipline's rigour. The document also testifies to the perceived need for science to bear relation to practical, social, economic and political issues of our times. This is ratified by Ferguson who says that "an educational system that pushes 'right answers' is scientifically and psychologically unsound."[2] She sees an increasing need for divergence, creativity and holistic attitudes.

Clive Sutton says that in our attitude to science teaching we could learn from earlier scientists for apparently Thomas Huxley in his public lectures discussed the origins of words such as yeast, leaven, spirit and alcohol, and "In so doing he showed science as a human endeavour, a struggle to make sense of and describe aspects of the world and he avoided isolating it from other areas of knowledge."[3] Sutton is convinced that metaphor is important to science for "it is indeed through figures of speech that those who generate new ideas are able to bring order to their perceptions, the phenomenon of how they are used deserves the close attention of anyone who is interested in the development of thought."[4] Teachers help learners to 'see' by using similes and analogies..."they are acts of persuasion...[for] metaphorical language, and the imagery behind it, is a major cognitive aid, a means by which new thoughts are begun."[5] He says that the partial

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1. Marcus Chown, School science for all--but who pays?,New Scientist March 1985,p.8

2. Marilyn Ferguson,The Aquarian Conspiracy,Granada,Great Britain, 1982,p.331.

3. Clive Sutton,'Metaphorical Imagery:A Means of Coping With Complex And Unfamiliar Information in Science',Durham and Newcastle Research Review, Vol.IX,No.467,Spring 1981,p.218.

4. Ibid.,p.216.

5. Ibid.,p.219.

recognition of the importance of this is a part of the constructivist approach and the implications for teaching are not yet worked out. We are now concerned with "knowledge re-creation by individual learners...each learner has to rebuild it for himself"[1], as the Bullock report reminded us.

One could make a comparison between religion and faith as an analogy for old science teaching and the new. The former tries to indoctrinate by precept, training and what some would call indoctrination, the latter by trying to convert by models, personal searching and practice. Sutton believes as I do that rhetoric and teaching are not far apart "at least part of the teacher's job seems to be to persuade the learner into certain ways of seeing things.'[2] others view it more as induction into established concepts. One problem now as he sees it is to balance both views. Pursuing both at once he thinks could lead to over-guided discovery and pseudo-open questions. To my mind one has to be eclectic, using an amalgam of the best of old methods and the new.

How children see things says Sutton can be the growth points for learning even if they have to be changed or abandoned later. Figurative language as he says, teases the mind into action and rather than being wary of analogies we should push them to their limits

Petrie argues that metaphors are heuristic necessities in teaching science especially when students are faced with the difficulty of understanding complex problems and metaphor would be used to bring about conceptual change--by creating anomalies for the student. By working out such anomalies students would find their own way to the truth, that is

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1. Clive Sutton,'Metaphorical Imagery:A Means of Coping With Complex And Unfamiliar Information in Science',Durham and Newcastle Research Review, Vol.IX,No.467,Spring 1981,p.219.

2. Ibid.,p.220.

construct their own experience in order to create a new paradigm. Green on the other hand believes that metaphor is not a vital part of the pedagogic process although it could be used as a teaching device. He sees learning something as akin to finding the missing premiss in a joke and where learners come to a problem difficult to solve they are similar to those who do not see a joke. In this case it is not just metaphors which they need, what they are really faced with is not an anomaly but a paradox or apparent contradiction. "What we want is to lead students to see a way of holding to the truth of both propositions...without thinking they are in opposition."[1] The tension experienced by the student is not created by a metaphor as Petrie believes but what Green calls "a paradox in the mind of the student on the basis of premisses he already accepts"[1] and which require use of his imagination. The point both Green and Petrie make is that the student is working out his own explanation and making metaphors in his own mind, and both are aware of the need for imagination. The metaphor, or exemplar as Petrie calls it, does not have to be offered by the teacher; the metaphoric process can be going on in the student's own head until he finds something to link with the new information.

As Green says, what we have going on [unfortunately] in many classrooms is not a true learning situation but one where "Truth passes from the professor's notes to the students wihout going through the head of either."[3] The teacher or textbook might use metaphor, model or analogy to give clues, to demonstrate a theory or law, but the student must bring his or her

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1. Thomas F.Green,'Learning without Metaphor',<u>Metaphor and Thought</u>, ed.A.Ortony, Cambridge University Press,New York,1979,p.468.

2. Ibid.

3. Ibid.,p.472.

own mind to bear on the issue and sort out the new information, possibly constructing personal metaphors to do so. If there is no 'dialogue' in his/her head or no discussion or active participation in the classroom then the new knowledge may not be assimilated or accommodated adequately but be merely another item of stored information which is held or borrowed but not personally owned or in Green's view it is like a joke which is neither understood nor appreciated.

So scientists observe the world, they formulate theories, they examine phenomena and describe and classify within the constraints of language conventions. Where a word does not exist they invent one generally falling back on the ancient languages of Greece and Rome or they put an old word to new use, catachresis. In formulating theories they often have recourse to metaphor, in fact there is some basis for saying they think in metaphor. They certainly use it to describe and explain and also use closely related models and analogies. Children and primitives tend to interpret nature anthropomorphically. Laymen and students learn their science partly through the process of metaphor which helps to bridge and fuse old and new knowledge. Where scientific knowledge was once considered a fixed body of data, of facts and truths it is now more generally perceived as an evolving 'view' rather than simply a growing 'body'. It has in some respects become simplified even though fragmented and specialised. As one science writer said we no longer have to record and notice every falling apple, but it is also acknowledged that some 'truths' are almost unavailable, incomprehensible or at least beyond our linear thinking to fully comprehend. Truly pure thinking which is not dependent on sense data is probably only possible in the area of mathematics.

For children we create an unbelievably complex scenario for them to

operate in. Consider for instance the stories of Father Christmas, the tooth fairy and bogeymen of Victorian times who still exist for many children. Then the myths, legends and fairy stories and fables and stories of animals who speak and have teaparties. This is without the religious myths which Geering claims we all believe in. Moreover the modern child is assaulted every day with a barrage of metaphors and symbols from television films and advertising. It would be interesting to know how much confusion is created in a child's mind and how much or if any of this is helping to establish and nurture his or her own creativity and imagination.

One interesting area of potential research would be finding out how children develop a scientific or mathematical bent as opposed to a literary one. We need to know whether this is something to do with brain function and development of patterns of thinking (left-brain right-brain differences perhaps) or is it as I suspect a fault in our ways of teaching and learning, that is, in our education system. There is a scarcity of information in this area. People are often channelled into arts or science at the later stages of schooling but any bias to one or the other is probably developed much earlier. Hudson studied the stereotyping of artists and scientists and came to the conclusion that:

> ...we are bound to envisage the intellectual growth of the individual, the evolution of his characteristic frame of mind as the product not only of his genetic endowment and hormonal secretions, but of a continual traffic with his context--with parents and teachers, examinations and curricula, prejudices and myths. 1

The metaphors we live by as Lakoff and Johnson called them would no doubt be an important part of this background.

Before beginning this study I believed that metaphor was important to science mainly for teaching purposes that is as a heuristic device for

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1. Liam Hudson, _Frames of Mind_, Penguin, 1968, p.103.

transmitting knowledge particularly for 'bridging' from the known to the unknown. I had little appreciation of how much it is involved in the making of science i.e. in theory formulation--nor did I realise that the area was such a contentious one. Scientists appear to be divided in their own opinion as to how to describe science and what constitutes meaning and truth. To set the context for my research I found Hogben and Hesse useful as they gave me an overview of science which as a non-scientist I needed. Hesse found that our struggle to articulate science is part of our nature and closely linked to our awareness of our spiritual relationship with the earth and our time on it. Hogben deals mainly with terminology but this helps one to appreciate that science has to draw on the common language stock or semantic field to which we all have a claim. In doing so it gives old words new meanings and creates new words from old. Because language can never be precise enough, these 'labels' have an in-built capacity for misinterpration and misuse. They are also subject to change (e.g. spelling, pronunciation, use and interpretation) and to redundancy as they are replaced or rejected in the light of new theories. The language of science therefore is not fixed but in constant flux. Hesse gave me a sense of historical perspective also, though she manipulates her ideas on science to make a statement about Christianity rather than leaving us to our own conclusions. There is no doubt even from my brief glimpse into the world of science that many scientists speak of 'religious' experiences. Also as Hesse points out, our thinking, which influences our language and vice versa is also influenced in turn by the social, political and religious climate in which we live. Changes of attitude and belief can be detected in the metaphors of science just as in art or literature.

The tools that have been used in science have increasingly developed sophisticated techniques and extended thereby the parameters of scientific

investigations thus creating more problems in description and analysis. Logic, maths and artificial languages have all been used to summarise such findings but even these have to be 'translated' eventually into conventional predicate structures and percolate down to the lay level and the public view of science to give us a general understanding of the universe and our position in it even if as Green said the scientists themselves are always a step or leap ahead of us. Ortony makes a comment on metaphor in science education which puts the whole issue into perspective:

> I have suggested that the transmission of new scientific ideas and theories is but a special case of purveying ideas that are new (for the intended audience). We have a word for this general activity "teaching". 1

There is no doubt that the practitioners of science and of art must inevitably, eventually, come closer together. For this we need a fuller understanding of the human mind and an increased awareness and appreciation of the finer nuances of language and I believe that Korzybski makes the clearest statement about this:

> The main difficulties ahead are neuro-semantic and neuro-linguistic because for more than 2,000 years our nervous systems have been canalized in the inadequate, intensional, often delusional, aristotelian orientations, which are reflected even in the STRUCTURE OF THE LANGUAGE we habitually use. 2

Everything created in nature is a work of art fashioned by some superhuman force to a design or pattern which scientists attempt to understand. This is difficult because the scope is so vast and never static and even apparently inanimate objects are active in an atomic sense. To comprehend the grand design the scientist can only examine those parts of it available

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1. A. Ortony,ed.Metaphor and Thought, Cambridge University Press, 1979, p.15.

2. Alfred Korzybski, Science and Sanity, The International Non-Aristotelian Library Publishing Co., Pennsylvania,1933, p.xviii.

to his senses and theorize imaginatively about the rest. The work is like that of one doing a giant jigsaw where the pieces have no clearcut edges or colours. Artists on the other hand appear to fashion pieces of their own and thereby capture something of the essence of creation itself in their own creative acts. They imitate as it were the patterns of the pattern-maker. Like scientists they combine the use of all their human faculties both physical and spiritual.

The link between art and science appears to be made by metaphor and pattern. Scientists cannot escape metaphor any more than artists can. Metaphoric expression seems to be an inherent part of our complex make-up, far from being superfluous or merely stylistic as once thought, it has proved to be both rational and necessary even in science.

Benjamin Lee Whorf has said that scientific words are often conveniently vague, markedly under the sway of patterns in which they occur. That in fact science and poetry are alike, for they rise above literal reference and mundane details "lifting towards Arupa (the pattern world par excellence), towards the world of infinite harmony, sympathy and order, of unchanging truths and eternal things."[1] A term like stardust, he says, has no reference of its own but "reference is the lesser part of meaning, patternment the greater. Science, the quest for truth, is a sort of divine madness like love."[2]

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1. Benjamin Lee Whorf, quoted in Semantics, ed.K.Thurman,Houghton Mifflin Co.,Boston,p.12.

2. Ibid.

CHAPTER VIII

METAPHOR IN PSYCHOLOGY

And how could a psychoanalyst of today not realize that his realm of truth is in fact the word...[1]

If we wonder at all how and why language studies relate to psychology we have only to examine the work of Jacques Lacan. Jan Miel writing of him says that the object of psychoanalysis is as Freud discovered --the unconscious, and this is observed and studied in dreams and free association. Lacan reminds us, says Miel "that all the material available to the analyst is verbal: what is analyzed in the psychoanalytic interview is not the patient's dreams but the patient's report of his dreams."[2] Which is the reason why Freud spent so much time analyzing patients' language. As Miel says "linguistic analysis is in fact the method appropriate to the study of the unconscious."[3] Freud had to invent his own terms, says Miel, because Linguistics was not established as a discipline but Lacan has shown that they are virtually interchangeable with those of structural

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1. Jacques Lacan 'The insistence of the letter in the unconscious' in Structuralism ed. Jacques Ehrmann, Anchor Books U.S.A., 1970,p.103.

2. Jan Miel 'Jacques Lacan and the structure of the unconscious', in Structuralism ed. Jacques Ehrmann, Anchor Books U.S.A., 1970,p.98.

3. Ibid.,p.98

linguistics, which has led him to the conclusion that "The structure of the unconscious is the structure of language."[1] Moreover, "our theory of the personality must be revised to account for the peculiar dominance of language and linguistic structures in it."[2] In Freud's theories of the ego the child is noted in early development as being fascinated by his own image--"This represents for the child, usually for the first time, the image of itself as a unified controllable body."[3] This leads presumably to the ability to imagine oneself as another. [Children and adults are also getting feedback from others as to what their 'image'is] Language develops likewise: "The abstractive nature of language, which in fact makes human knowledge possible, amounts to a similar denial of reality."[4] We understand our environment by naming and describing it but even when not engaged in dialogue we still enjoy denying reality. I take this to mean that we 'play' with ideas and words even when not engaged in using them for communication and these uses are in a sense artificial because words are artificial they have no reality in the world we observe--any functions they have are what we ascribe to them or are in the very nature of language, which we do not fully understand. In discourse with others we have to observe conventions such as grammatical correctness, courtesies , rituals etc. but in our own minds language has free rein.

This language within us is what Miel describes as the "forgotten language" of the unconscious "an archaic language lurking beneath our

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1. Jan Miel 'Jacques Lacan and the structure of the unconscious', in Structuralism ed. Jacques Ehrmann, Anchor Books U.S.A., 1970,p.98.

2. Ibid.,p.99.

3. Ibid.,p.99.

4. Ibid.,p.99.

supposedly objective discourse, just as our primal narcissism lurks beneath all our relations to others."[1] Miel says that we have an illusion of autonomy, objectivity and stability where we should recognize inter-subjectivity and becoming.

In psychoanalysis normal dialogue is suppressed and the language of the patient "recovers the archaic language."[2] Lacan says "that what the psychoanalytic experience discovers is the unconscious in the whole structure of language."[3] [Which makes me wonder what relevance this must have to literature where presumably writers indulge in just such language i.e. it has no practical purposeful function except usually for pleasure.]

Language and its structure exist before any individual makes his entry into it. Sufferers from aphasia have language difficulties "which divide naturally between the two poles of the signifying effect of what we call here 'the letter' in the creation of meaning."[4] A speaker is therefore "a slave of language" whose being is in nature, society and culture which latter Lacan says could well be equated with language. Lacan therefore sees linguistics as being at the centre of all scientific studies and as having created a revolution in knowledge.[5] The essence

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1. Jan Miel, Jacques Lacan and the structure of the unconscious', in Structuralism ed. Jacques Ehrmann, Anchor Books U.S.A., 1970,p.99.

2. Jacques Lacan, 'The insistence of the letter in the unconscious', in Structuralism ed. Jacques Ehrmann, Anchor Books U.S.A., 1970, p. 103.

3. Ibid.,p.103.

4. Ibid.,p.103.

5. In a footnote he gives his definition of "linguistics" as the study of existing languages in their structure and in the laws related therein excluding communication and information theories.

of this is described in the formula he gives us:

$$\frac{S}{s}$$

i.e. the signifier over the signified. Which idea he attributes to Saussure.

The signifier and signified are seen as "distinct orders separated initially by a barrier resisting signification."[1] The mystery of language lies in the way we can use a word "in order to say something quite other than what it says." That is to say that the signifier does not answer to the function of representing the signified. One amusing example he uses to illustrate his point is the use of the words 'Ladies' and 'Gentlemen' as used to designate public toilets. Even in sentences, correct grammar and linear structure are not in themselves sufficient to make sense. The clue he says to this mystery lies in Metonymy. "We shall designate as metonymy then, the one slope of the effective field of the signifier in the constitution of meaning...the other, it is metaphor."[2]

Modern poetry, he says, has "taken us quite far in this domain by showing that any conjunction of two signifiers would be equally sufficient to constitute a metaphor."[3] In his mocking tone he adds that these two have of course to be as disparate as possible to constitute 'poetic spark' or 'metaphoric creation'. But, says Lacan:

> The creative spark of the metaphor does not spring from the conjunction of two images, that is of two signifiers equally actualized. It springs from two signifiers one of which has taken

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1. Jacques Lacan 'The insistence of the letter in the unconscious' in Structuralism ed. Jacques Ehrmann, Anchor Books U.S.A., 1970,p.105.

2. Ibid.,p.114.

3. Ibid.,p.115.

> the place of the other in the signifying chain, the hidden signifier then remaining present through its (metonymic) relation to the rest of the chain...One word for another: that is the formula for the metaphor.. 1

Furthermore:

> We see, then, that metaphor occurs at the precise point at which sense comes out of non-sense, that is, at that frontier which Freud discovered, when crossed the other way produces what we generally call "wit'(Witz).. 2

So, as Lacan expressses it, we follow the letter in search of the truth we call Freudian. Freud's work is replete with philological references and "everywhere the apprehension of experience is dialectical, with the proportion of linguistic analysis increasing just insofar as the unconscious is directly concerned."[3] This is why Lacan believes that the "letter of the discourse" is where we need to look for an understanding of the unconscious.

Freud affirms this, says Lacan, when he insists that the dream is a rebus and must be understood literally. Dream images are signifiers--"they allow us to spell out the 'proverb' presented by the rebus of the dream."[4] However "the image's value as signifier has nothing whatever to do with what it signifies..."[4] which is presumably the same as saying that a name is not a person or a word is not the thing that it signifies. Lacan says that the reality of this has confused psychoanalyts who lack linguistic training.

Enstellung, translated as distortion, is what Freud shows to be the

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1. Jacques Lacan,'The insistence of the letter in the unconscious', in <u>Structuralism</u>, ed. Jacques Ehrmann, Anchor Books U.S.A.,1970, p.115.

2. Ibid.,p.116.

3. Ibid.,p.116.

4. Ibid.,p.118.

> general precondition for the functioning of dreams... described, following Saussure, as the sliding of the signified under the signifier which is always active in speech (its action...is unconscious).[1]

What connection does metaphor have with this?

> The Verdichtung, or condensation, is the structure of the superimposition of signifiers which is the field of metaphor, and its very name, condensing in itself the word Dichtung, shows how the process is connatural with the mechanism of poetry to the point that it actually envelops its properly traditional function.[2]

Metonymy, according to Freud is the main method by which the unconscious gets around censorship. Lacan likens the dream to the party game of miming charades where the onlookers have to guess the meaning from the mime. Words in a dream are only one element of the performance.

There is much ignorance, says Lacan, regarding this conception of the unconscious and he believes that we need to define the locus of the unconscious. He reduces this to a formula:

$$f\ (S)\frac{1}{s}$$

This shows the effects "not only of the elements of the horizontal signifying chain, but also of its vertical dependencies, divided into two fundamental structures called metonymy and metaphor."[3] This is further symbolized by:

$$f(S...S')\ S \sim S\ (-)s$$

Which I can only explain by quoting exactly what Lacan gives as explanation:

> that is, the metonymic structure, indicating that it is the connection between signifier and signifier which alone permits the elision in which the signifier inserts the lack of being into

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1. Jacques Lacan, 'The insistence of the letter in the unconscious', in Structuralism, ed. Jacques Ehrmann, Anchor Books U.S.A., 1970, p.119.

2. Ibid., p.119.

3. Ibid., p.123.

> the object relation, using the reverbrating character of meaning to invest it with the desire aimed at the very lack it supports. The sign - placed between ( ) represents here the retention of the line - which in the original formula marked the irreducibility in which, in the relations between the signifier and signified, the resistance of meaning is constituted.
> (In a footnote he adds that the sign ≅ represents congruence) 1

Presumably the 'resistance he speaks of here is what other writers have described as 'tension'. Then secondly:

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     S'
f (-) S≅S (+)s
     S
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> the metaphoric structure, indicates that it is in the substitution of signifier for signifier that an effect of signification is produced which is creative or poetic, in other words which is the advent of the signification in question. The sign + between ( ) represents here the leap over the line- and the constitutive value of the leap for the emergence of meaning. 2
> (footnote S' i.e. prime)

Lacan speaks of the Freudian universe, as people have spoken of the Copernican universe, for his discovery also helps, to assign man to his place at the centre of the universe. The question for each of us is whether 'I am' the same that I speak of or is my thought separate from myself:

> ...it is no less true if I take myself to the other, metaphorical pole in my quest for meaning, and if I dedicate myself to becoming what I am, to coming into being, I cannot doubt that even if I lose myself in the process, in that process, I am. 3

Lacan seems to be asking whether we can discover ourselves, our being, through words. What we ought to say, he says, is "I am not, wherever I am the plaything of my thought; I think of what I am wherever I don't think I

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1. Jacques Lacan,'The insistence of the letter in the unconscious', in*Structuralism*,ed. Jacques Ehrmann, Anchor Books U.S.A.,1970, p.123.

2. Ibid.,p.124.

3. Ibid.,p.125.

am thinking."[1] This seems to be an essential mystery for:

> This two-faced mystery is linked to the fact that the truth can be evoked only in that dimension of alibi in which all "realism" in creative works takes its virtue from metonymy; it is likewise linked to this other facet that we accede to meaning only through the double twist of metaphor when we have the unique key: the S and the s of the Saussurian formula are not on the same level, and man only deludes himself when he believes his true place is at their axis, which is nowhere. 2

At least, says Lacan, until Freud discovered it; the unconscious, whose reality is immediate and whose force comes from the truth and in the dimension of being. "The double-triggered mechanism of metaphor is in fact the very mechanism by which the symptom, in the analytic sense , is determined."[3] Metaphor is in fact the bridge, the connection or 'spark' as Lacan calls it linking the trauma and its signifier. We hold a memory, says Lacan, in which is found "that chain which insists on reproducing itself [body metaphors for metaphor again] in the process of transference, and which is the chain of dead desire."[4] For the true nature of neurosis is a question which being poses for the subject " from the place where it was before the subject came into the world,"[5](Freud's words)

This 'being' is "that which appears in a lightning moment in the void of the verb 'to be'." Freud's doctrine of the ego is reduced to a narcissistic relation--"And he grouped within it the synthesis of the perceptive functions in which the sensori-motor selections are integrated

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1. Jacques Lacan,'The insistence of the letter in the unconscious', in Structuralism,ed. Jacques Ehrmann, Anchor Books U.S.A.,1970, p.126.

2. Ibid.,p.126.

3. Ibid.,p.126.

4. Ibid.,p.127.

5. Ibid.,p.128.

which determine for man what he calls reality."[1]

The resistances which obstruct the message of the unconscious are mechanisms of defence. Among them are:

> Periphrasis, hyperbaton, ellipsis, suspension, anticipation, retraction, denial, digression, irony, these are the figures of style (Quintilian's figurae sententiarum); as catachresis, litotes, antonomasia, hypotyposis are the tropes, whose terms impose themselves as the most proper labelling of these mechanisms. [2]

Lacan asks whether we can really see these as mere figures of speech "when it is the figures themselves which are the active principle of the rhetoric of the discourse which the patient in fact utters."[3] He believes that we have resisted Freud's discovery because we get used to reality and repress truth to avoid bestirring ourselves. We must face the fact, he says, that "The unconscious is neither primordial nor instinctual; what it knows about the elementary is no more than the elements of the signifier."[4]

The end for man--to Freud--was "Wo es war, soll Ich werden. I must come to the place where that (id) was." A goal of reintegration, harmony and reconciliation.[5] His discovery, says Lacan, shows a radical heteronomy in man. Others have said 'Know thyself' but what Freud says we can attain is not the object of knowledge but "that which creates our being" which can be seen in our whims, aberrations, phobias and fetishes as well as in our ordinary behaviour.

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1. Jacques Lacan, 'The insistence of the letter in the unconscious', in Structuralism, ed. Jacques Ehrmann, Anchor Books U.S.A., 1970, p.129.

2. Ibid., p.129.

3. Ibid., p.129.

4. Ibid., p.130

5. Ibid., p.132.

To Lacan Freud has made tremendous impact on our times and he accounts for such by saying that : "the slightest alteration to the relation between man and the signifier...changes the whole course of history by modifying the lines which anchor his being."[1] Which is why, in his estimation, Freud "founded an intangible but radical revolution." Unfortunately, says Lacan, mere psychological categorizers, such as many practitioners have become are not following the path he cleared, for "Freud by his discovery, brought within the circle of science the boundary between being and the object which seemed before to mark its outer limit."[2]

Lacan wishes us to understand that:

> If the symptom is a metaphor, it is not a metaphor to say so, no more than than to say that man's desire is a metonymy. For the symptom IS a metaphor whether one likes it or not, as desire IS a metonymy for all that men mock the idea.3

We have yet to discover, says Lacan, what links metaphor to the question of being and metonymy to its lack.

Lacan's interpretation of Freud puts metaphor at the very centre of our being. Whatever Aristotle told us about metaphor came eventually to be related to artificial uses of language for rhetoric, inflated, persuasive speech, as though figures of speech were something added to natural native language. Lacan's arguments, based on Freud's findings, presuppose a facility for such language within us all. It has been said that the eyes mirror the soul but from what Lacan has said it is language which gives the clue to our nature. We are what we say and think, and dream, and we say

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1. Jacques Lacan, 'The insistence of the letter in the unconscious', Structuralism, ed. Jacques Ehrmann,Anchor Boooks U.S.A.,1970, p.135.

2. Ibid.,p.136.

3. Ibid.,p.137.

and think more than we know or understand.

What Lacan wrote in 1957 is interesting because he foresees the importance of the close study of language in areas where formerly it might never have been considered important. It is true, as he says, that it is not the world which changes but our vision and understanding of it and people like Freud have enlarged this. Lacan's own work drew much criticism in France from some of his scientific colleagues. Freud's advice to mankind is not unlike some of the more mystical maxims given to us by religious leaders, one is reminded also once again of those mysterious words "In the beginning was the Word." The search for truth embraces all disciplines--especially Linguistics--Lacan would no doubt say.

Liam Hudson says that when he first studied psychology ordinary language was ignored. His only awareness of metaphors was of those which were dominant at that time, such as the brain as a telephone exchange, man studied as though he were a rat and one's career path perceived as a series of hurdles or progress up ladders. He became gradually aware that the mind might in fact be organised not like a mechanism but like a culture, and that the metaphors one lives by are not always appropriate. He also found himself trapped into a mental set which assumed people were stereotypes.

Research methods were also set into established patterns of action. It gradually became the task of psychologists to 'illuminate'or explain the workings of institutions, but metaphor was still an awkward topic even among linguists:

> Although we were shaking ourselves free from certain patently maladaptive metaphors, arbitrary or even positively obstructive in their effects, we were still not free to tell ourselves what we were doing. Oddly, metaphor remained a taboo topic.1

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1. Liam Hudson 'The Role of Metaphor in Psychological Research', in Metaphors of Education ed.W.Taylor,Heinemann,London 1984,pp.68-78.

A heightened awareness of metaphor came to Hudson after reading On Being Blue by William Glass (1976) which describes how an author writes sexual or erotic material. Metaphor is the key to this "the secret lies in seeing sentences as containers of consciousness, as constructions whose purpose is to create conceptual perceptions." (Glass p.86) He writes of writing as though one gave birth to a work. Once again we see that words take on humanlike connotations.

Hudson was also impressed by Lakoff and Johnson's Metaphors We Live By (1980) for they too claim that our ideas are grounded in terms of our ideas about the physical and that we can discuss meanings just as we can discuss grammar. As a consequence Hudson felt free to discuss and examine metaphors in Psychology. To do this, he found one often has to ignore traditional boundaries between subjects.

In his work of fiction The Nympholets(1978) he was not totally satisfied with it as a novel but experienced the strange feelings one has as an author, a 'creator' of fictional people who do in fact seem to him very real, yet the narrator seems:

> An uncommitted, slightly unpleasant figure, he seems to stand for the voyeurism of psychology; our tendency to pry into the lives of others, rather than living wholeheartedly for ourselves. He is an EMPTY man; the embodiment, perhaps, of the emptiness that lies at the heart of empiricism itself.1

In his book on images in works of art Bodies of Knowledge(1982) he has explored, as a psychologist, the "curious network of relationships between artist, model, image and spectator " that arise when we choose to make a picture as an artist or photographer. It is in photography that he finds more perception of the nature of metaphor for " certain psychologically

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1. Liam Hudson'The Role of metaphor in Psychological Research',in Metaphor in Education ed.W. Taylor,Heinemann,London 1984,p.73.

significant metaphors recur: fields, paths, thresholds, defensive barriers abound." We assume, says Hudson, that metaphors are VAGUE but in photography this is not true. A 'field' is a specific field with identifiable formal properties. Psychologists, he believes, have neglected such detail:

> We can easily be more precise, photography suggests; and it is important that we should be so, because it is in detail and nuance that the dialectical dance between theory and evidence acquires whatever value it possesses. 1

There is a danger in psychology, says Hudson that we treat people too simplistically. There are subtle complexities to be considered which transgress the boundaries of individual subject areas. We tend to focus he thinks on the simple and "An excessively tidy or reductive psychology could distort those events it is supposed to explain." It is as we reflect on the subject itself that he thinks we become enthralled by metaphor. A rigid adherence to a particular metaphor in research perhaps can be successful but misleading. On the contrary says Hudson

> By analogy, I see no reason why psychology and the social sciences should not serve as a 'laboratory of metaphor'; one in which we test and taxonomize, becoming knowledgeable about the points where metaphors and models, theories and heuristic devices, fuse. Rather than living unwittingly, unreflectively, in the grip of certain metaphors, we could learn to pick and choose.2

One pervasive metaphor or myth which concerns him is the polarity seen between for instance hermeneutics , study of 'texts', and science. One is seen as 'soft' the other 'hard', one seeking 'illumination' the other 'control'. They create a tension and ambivalence which he perceives as desirable rather than unhealthy for people are inconsistent or bifurcated in nature, he sees this in himself, and believes that it is exactly this kind of puzzle that psychology should seek to understand.

1. Liam Hudson 'The Role of Metaphor in Psychological Research'in _Metaphor in Education_, Heinemann, London,1984, p.75.

2. Ibid.,p.76.

The business world also exploits the psychological insights afforded by an understanding of metaphor, and training manuals for business managers give many instances of this. Julius Eitington's work is typical. In this he describes the heuristic uses of analogy and metaphor. He cites industrial psychologist Harry Levinson using a spider-web metaphor to explain man's necessity for communication with other people: "In sum, the images, thoughts, fantasies that we constantly create in our heads can only be understood and thus managed by interaction with others."[1]

A metaphor indicating resistance to change is known as the "Wallenda Complex" after a high-wire artist who probably could have prevented a fatal fall if he had not been so conditioned to relying on his ablity to keep his balance with a pole only. According to Eitington this same metaphor has been used by an international peace advocate.

In the training situation personnel work out metaphors to simulate their situations or problem e.g, to describe a style of management. Metaphors are considered more potent than analogies "because they encourage (demand) a greater change of perspective".[2] Success has even been found in problem-solving when groups assume the problem is solved and work backwards from the solution: "The imaging process lets us create our own panoramic view of the situation, with the helpful option of tracing causes/events backward and thus understanding more objectively the forces and factors at work."[3]

Another related problem-generating and solving approach is

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1. Julius E. Eitington, The Winning Trainer, Gulf Publishing Co., Texas 1986.p.136.

2. Ibid.,p.138.

3. Ibid.,p.138. This idea is attributed to Dr Warren H.Schmidt of U.C.L.A.

morphological analysis where attributes and elements are combined in a matrix to break the fixed views and ideas we generally have. The purpose of most of these techniques is to force creative and lateral thinking, to use both sides of the brain rather than relying on traditional modes of operation. William Gordon of Synectics, Inc., Cambridge, Massachusetts is quoted as saying that one has to make the strange familiar and this is where analogies are useful to build new ideas onto old and break down natural conservatism. In such situations sometimes people are even asked to imagine themselves as inanimate objects. It is said that creating symbolic analogies can aid materially in creative problem solving, just as the phrase " protoplasmic kiss" is said to have inspired the neurologist Ramon Y Cajal.[1]

Psychologists, says Roger Tourangeau have concentrated mainly on two problems; how metaphors are recognized and how they are interpreted. He sees metaphors as asking us to project one system onto another. Presumably rather like putting a grid over a map or one O.H.P. on top of another. The notion of things falling into 'natural categories' or domains is, he says, a popular one in psychology, and metaphors "involve two systems, often drawn from different domains of experience. Despite their fundamental incompatibility, the two systems can stay married because the one serves as the model for the other."[2]

Metaphors do not always create semantic anomaly says Turangeau and literal interpretaton of metaphor does not always violate the rules for

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1. Julius E.Eitington, The Winning Trainer, Gulf Publishing Co., Texas 1986.p.151.

2. Roger Tourangeau 'Metaphor and Cognitive Structure', in Metaphor: Problems and Perspectives ed. David S.Miall,Harvester Press,Great Britain 1982, p.18.

sentences to be 'sincere and relevant in context'. Suggested tests for metaphor therefore often fail because a metaphor often deals with two apparent incompatibles. Yet "not just any two subjects can join to make a metaphor."[1] [perhaps he should have said 'meaningful' metaphor for the juxtaposition alone surely creates technically a metaphor]

We project our own system of beliefs on to our interpretation of metaphor, says Turangeau "Comparison is...the last and least important step in interpreting a metaphor."[2]

In his own research Tourangeau found that readers infer some larger context for a metaphor. In one test, subjects were given sixty-four metaphors that exhibited different combinations of congruence and agreement. Another group rated them for preference. Ratings indicated a negative relationship between congruence and liking and a positive one between agreement and liking. On the whole they preferred metaphors whose two subjects were drawn from distant domains and those which confirmed their picture of the principal subject. This seems to indicate that we like ideas which ratify what we already know and believe and yet we also appreciate novelty. Says Tourangeau "Novelty is one of the important determinants of our response to a metaphor."[3] A finding which would not have surprised Aristotle. Understanding a metaphor takes several stages :"During the main one we recognize the metaphor, infer its subjects, create parallel beliefs about the principal subject and compare these beliefs to our old beliefs."[4]

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1. Roger Tourangeau 'Metaphor and Cognitive Structure', in Metaphor: Problems and Perspectives ed. David S.Miall,Harvester Press,Great Britain 1982, p.22.

2. Ibid.,p.27.

3. Ibid.,p.32.

4. Ibid.,p.33.

Like other writers Tourangeau is forced to use metaphor to describe metaphor, he calls it a system of belief which "gets new life in a foreign land and takes root among the alien corn."[1] To Tourangeau metaphor 'tests' what we already believe or think we 'know'. As he says more research needs to be done on the use of metaphor. It would be interesting to know just how and why a mind takes flight into metaphor, why some do this constantly or frequently and some rarely or never, and at what age one first recognizes metaphors or consciously uses them in speech and in writing. We could probably also profit from knowing more about how a translator's mind works when translating idiom from one language into another which must be a similarly complicated task of matching ideas, descriptions and concepts. Translators such as those of Lacan whom I mentioned earlier and of Derrida bemoan in their introductions the difficulties of translating such expressions as e.g. French word 'propre' with a suitable English synonym. With Lacan the translator even advises readers that they really ought to see the original to get the true sense of the work.

Furthermore, metaphor is so bound up with our selves, our ways of thinking and expression that it takes on almost human characteristics--something Fontanier recognized in his treatise on metaphor (Les Figures du Discourse 1830) He said "Even though it is not a body but an act of mind, discourse...has nevertheless, in its different ways of signifying and expressing, something analogous to the differences of form and characteristics that are found in real bodies."[2]

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1. Roger Tourangeau,'Metaphor and Cognitive Structure',in Metaphor Problems and Perspectives,ed. David S.Miall,Harvester Press, Great Britain,1982,p.34

2. Pierre Fontanier, quoted in The Rule of Metaphor,Paul Ricoeur, University of Toronto Press,1977,p.52.

In his studies of mind control Jose Silva found that the brain is more energetic when it is less active. At lower 'Alpha wave' frequencies, similar to our half-awake state before sleep, the brain receives and stores more information but it is hard to keep alert at these frequencies. The exercises he has developed call for relaxed concentration and vivid mental visualization.

Training in meditation techniques allows a person to tap in to this source of creative thinking. Silva claims that anything 'forgotten' is associated with experience that is never truly forgotten. For this reason tag associations are memory aids deliberately created to help remember information. He says " all experiences leave memories firmly imprinted in the brain."[1] He also believes that dreams can be deliberately 'programmed' to help solve problems. These dreams he speaks of are not the same as those subjected to Freudian interpretation. His idea tends to fit in with my own belief, unproven, that dreams, rather than coming from the unconscious begin in the conscious state and then become embedded in the unconscious from which sleep arouses them in higgledy-piggledy fashion. Silva believes that we underestimate the power of words and often dull our appetite for life with negative words.

There are two basic principles to his theory of mind control. The fact that we can only think one thought at a time and our concentration transforms it into action. This has led him to believe in the power of self-healing, or mind over matter by the projection of positive images. He describes mind control as the state such as Brahms allegedly went into when creating compositions, and described by Sigmund Freud, in a paper on

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1. Jose Silva and Philip Miele, The Silva Mind Control Method, Pocket Books, Simon and Schuster, New York, 1977,p.43.

Listening. Other artists and scientists have described the same. I believe Keats called it a state of 'yeastiness'. What I begin to wonder is whether the power to produce metaphors is symptomatic of a similar 'instant' state of creativity.

At normal working levels, says Silva, the mind is bombarded with various stimuli. At the relaxed level more concentration and focus is possible. It is a type of self-hypnosis which we may often experience without fully realising what it is or how useful or important it can be.

Silva's findings evolved from his knowledge of electricity and a perception that the human brain might work in a similar fashion. In studies of his techniques with mentally disturbed patients they seemed to show that relaxation diminishes their anxieties simply because in a relaxed state they are not possible. Greater feelings of warmth and love seemed to be aroused which led him to wonder if the state we call 'love' or its energy is a factor to be considered, as "Perception is improved at the relaxed level of mind and body, and clear thought and judgment are enhanced."[1] It may therefore be true, as Freud has suggested, says Silva, that a therapy of the future might depend primarily on the mobilization of energy.

Perhaps we have not taken enough account of this need for relaxation in learning situations, and one wonders if school environments and some teaching methods are in fact not fully conducive to learning and mind enhancement. As Silva says:

> The left hemisphere consciousness dominates most of our everyday living and is favoured by the educational system as well as by the societal attitudes of the Western World. It is objectively

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1. Jose Silva and Philip Miele, The Silva Mind Control Method, Pocket Books Simon and Schuster, New York,1977, p.194.

oriented, and usually associated with the generation of much Beta brain wave activity. Right hemisphere consciousness seems to be primarily subjective, receives secondary consideration in our education, and finds its greatest expression in the arts. It is generally accompanied by Alpha or Theta brain-wave emanations. 1

Methods such as those advocated by Silva effectively encourage more use of the brain's potential and encourage right-brain function.

Betty Edwards confirms this neglect of right-brain potential in her work on developing innate artistic ability which she claims we all have:

> The object of drawing is not only to show what you are trying to portray, but also to show YOU. Paradoxically, the more clearly you can perceive and draw what you see in the external world, the more clearly the viewer can see YOU, and the more you can know about yourself. Thus ...drawing becomes a metaphor for the artist. 2

She summarises the characteristic functions of both sides of the brain and in the right mode she places 'Analogic', that is, seeing likenesses between things; understanding metaphoric relationships. Drawing she describes as a way to quieten the ceaseless hum of activity around us. It is similar in effect to what Silva spoke of. She also says that the "school world is mainly a verbal, symbolic world" where some learning styles e.g. the visual are not catered for.[3] New knowledge about the brain will she believes help us to develop teaching and learning styles which

> ...will enhance children's intuitive and creative powers, thus preparing students to meet new challenges with flexibility, inventiveness and imagination and with the ability to grasp complex arrays of interconnected ideas and facts, to perceive underlying patterns of events, and to see old problems in new ways.4

Metaphor-making must surely be one of these creative forms of thinking

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1. Jose Silva and Philip Miele, Silva Mind Control Method, Pocket Books, Simon and Schuster, New York,1977,p.214.

2. Betty Edwards,Drawing on the Right Side of the Brain,Fontana/ Collins,U.S.A.,1979,p.23.

3. Ibid.,p.195.

4. Ibid.,p.196.

which we need to develop and encourage. Which is all the more reason why we need to understand how and why they work. Edwards has another idea which seems excellent. She says that when we teach young children new words, rather than simply giving them names or 'labels' to learn we should explore the concepts. For instance in naming a tree one could encourage imaginative ideas about the nature of the tree, its structure and function in the environment. In this way we teach them that a name is only a part of the object and we hopefully keep alive a sense of wonder. As in drawing practice the desire should be to see ever more deeply.

Allan Paivio is aware of the complexity of this phenomenon of linguistic creativity particularly. As he says

> ...semantic productivity must be regarded as a salient design of metaphorical language, just as syntactic productivity is of language in general, despite the repititiousness of specific grammatical constructions in everyday speech. However we know even less about the psychology of semantic creativity than we do about syntactic creativity, and the former must be counted among the most challenging theoretical problems that confront those who are interested in a scientific understanding of language behaviour.1

He quotes research on proverbs which failed to provide any adequate theory to describe the semantic relationship between a proverb and its interpretations. He believes that recent studies of memory and cognition do throw some light in this area. The perceptual basis of metaphor has been explored, he says, by such people as Susanne Langer(1948) and Arnheim (1969), also by Roger W.Brown (1958), Asch (1958), Osgood (1953) and Werner and Kaplan (1963). None however "explain how perceptual processes and images achieve their abstract functions, nor how they become linked to language, but they do emphasise the primacy of such processes in the origins of

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1. Allan Paivio,'Psychological Processes in the Comprehension of Metaphor', Metaphor and Thought,ed. Andrew Ortony,Cambridge University Press,New York,1979,p.150.

metaphor."[1]

Other research shows that imagery is somehow involved in the comprehension and recall of some metaphors but it is not clear why this is so. As Paivio says metaphorical imagery may be quite different from literal imagery. It appears, says Paivio, to be of a symbolic or abstract nature. Malgady and Johnson came to the conclusion in their studies that when we interpret a metaphor the constituents are encoded into a single feature representation. Verbrugge and McCarrell(1977) "concluded that metaphor processing involves the recognition of an abstract resemblance, or abstract relationship, between the vehicle and the topic domains, which is more than the sum of the attributes of each constituent."[2] They could not however, say what was the precise nature of this abstract perceptual relation nor how it arises from the separate parts.

Paivio discovered that there is no comprehensive theory to explain the workings of metaphor based on studies of imagery. He believes research into memory may be more fruitful for it has been found that "pictures are recalled better than words, and concrete words that readily evoke images are recalled better than abstract, low-imagery words."[3] When subjects were required to learn pairs of abstract nouns sometimes they blended the two into one image e.g.'boy scout' represented 'chance' and 'deed'. This is significant says Paivio because "the metaphorical connectiomn was constructed by the subject himself, in a manner analogous to the discovery of the

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1. Allan Paivio,'Psychological processes in the Comprehension of Metaphor', _Metaphor and Thought_, ed.Andrew Ortony,Cambridge University Press, New York, 1979,p.157.

2. Ibid.,p.162.

3. Ibid.,p.164.

common ground between the vehicle and topic of a novel metaphor."[1] Similar findings came from Paivio's own reseach with Katz(1975) where subjects had to learn pairs including some nonsense words associated with instances of several concepts, some low and some high in imagery value. The subjects had to learn the concepts and the results showed that the imagery value of the conceptual categories, as well as imagery instructions, facilitated concept acquisition. As Paivio says " The study is relevant to metaphor interpretation because such interpretation is analogous to concept discovery. The subject must discover what the vehicle and topic have in common in a semantic, conceptual sense."[2]

There is also considerable evidence according to Paivio that imagery contributes to the comprehensibility of sentences because it provides an additional (subjective) referential context for the interpretation of a sentence; so it seems reasonable to assume that it also contributes to the comprehension of metaphorical expressions. However the the context could be inappropriate if it draws attention to literal aspects says Paivio. He makes no mention of the age of the subjects, presumably adults, because children often have difficulties with metaphor and there is also evidence such as that referred to by Colin Rose that there are people who have poor powers of imagery, depending on whether their neurolinguistic learning style is predominantly visual, aural or kinesthetic.[3]

Paivio asked some of his students to comment on his own statement that metaphor is a solar eclipse in that it both obscures and enlightens.

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1. Allan Paivio, Psychological Processes in the Comprehension of Metaphor',Metaphor and Thought, ed. Andrew Ortony,Cambridge University Press, New York, 1979,p.164

2. Ibid.,p.165.

3. Colin Rose,Accelerated Learning, Topaz, England, 1986.

He found that most focussed on the vehicle and only one on the topic, suggesting that both strategies are possible but one may be preferred.

The most relevant of his findings are that dual coding enhances the possibility of finding a ground in long-term memory; that integrated images make for efficient information storage; imagery ensures processing flexibility; and topic and vehicle can both be retrieval cues for relevant information; also that verbal processes keep search and retrieval on track by suggesting images which may help to select 'appropriate' data from our memory banks.

Relevant research findings are scarce says Paivio, mainly because comprehension itself is not fully understood. Further study of metaphor can add to this because both " 'ordinary language' and metaphor are continuous phenomena, involving common cognitive and linguistic processes."[1] It seems we cannot understand how and why people use language in the ways that they do, if we do not understand how they think, how they acquire language, and how the two are connected. When we examine metaphor,its creation, use and interpretation we are looking at only one complicated part of an obviously complex field.

Some of the more recent findings on learning are described by Colin Rose, previously referred to. His interest is in memory , particularly how it relates to language acquisition and as it is exemplified in the work especially of Georgi Lazanov and his Accelerated Learning Programmes. What Rose has to say is relevant because he stresses the importance of visualization and association as memory aids. There are fundamental techniques the brain uses, recognizing patterns and connections, sorting

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1. Allan Paivio,'Psychological processes in the Comprehension of Metaphor', Metaphor and Thought, ed.Andrew Ortony,Cambridge University Press, New York, 1979,p.171.

and linking, which is of course what metaphor does. My own conclusion is that how metaphor works is probably illustrative of one way the brain works. A metaphor encapsulates thought in a condensed form in a memorable 'chunk'. We may have been deceived by our pleasure in metaphor into not taking it seriously until quite recently and there is obviously a long way to go. "Play is central to learning "[1] says Rose. Playing with words is something we all enjoy. It is a step further in this 'game' to link words and ideas and to create associations--the basis of metaphor. Such child-like play can be stifled he believes by schooling.

It must be obvious to teachers that a rich fund of ideas, images and words has therefore to be made available to young learners. The fascination children naturally have for words and ideas is corroborated by Joy Cowley, celebrated New Zealand author, in a talk she gave world-wide in 1987. She said a child brings to a book three gifts which few adults have, a sense of wonder, a readiness to accept new experiences and "Then there is the feeling for the quirkiness of words: rhyme, rhythm, alliteration, nonsense language, doggerel, animal sounds--they are all appetising to the early reader. She is keen to explore all the fun that language has to offer."[2] Metaphor-making is an extension of this aptitude, interest and facility.

Rose says "We remember things that have powerful associations for us."[3] It is considered likely that we use only about ten per cent of our brain, maybe less and the measure of its potential is the number of

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1. Colin Rose, Accelerated Learning, Topaz, England, 1986,p.92.

2. Joy Cowley,'The Healing Power Of Language', New Zealand Listener, January 16-22, 1988. p.35.

3. Colin Rose,p.1.

connections it can make:

> The brain is the only organ that expands through use. The more it is used either to acquire facts or in the process of creativity, the more memory associations are formed. The more associations are formed, the easier it is to remember previously acquired information, and also to form new associations,i.e. create new ideas and concepts. This is a vitally important 'virtuous circle', and reading is the key to forming it. 1

Man has so far in his history concentrated on material problems says Rose, and has achieved much in this area but philosophical problems have still to be resolved. To do this requires that we develop both sides of our brains for:

> We are trained to think in a pattern we call logical...and this seems to involve one side of the brain--the left side. Learning methods are generally not designed to stimulate the development of the side of the brain that processes concepts--the right side.2

The left deals mainly with language and mathematical processes, logical thought, sequences, analysis--'academic pursuits', whereas the right deals in music and visual impressions, pictures, spatial patterns, and colour recognition, also conceptual thought and abstract concepts. He dispels many of the 'myths' about the brain, such as that those who are artistic must be poor at maths and that the brain can become overloaded or deteriorates with age. Novelty aids memory says Rose and most novel experiences are encountered in one's youth. Other aspects such as relaxation, exercise and nourishment are also important to its functioning. An interesting conclusion with which Katherine Mansfield would have concurred is that every normal child is born a potential genius but needs a rich environment and plenty of learning opportunities.

There is no learning without memory says Rose, and no agreement on

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1. Colin Rose,<u>Accelerated Learning</u>,Topaz, England,1986,p.10.

2. Ibid.,p.11

how it works. We have short and long-term memory which may be likened to the random access memory of computers and storage or read-only memory. It is known that reading aloud helps to register (encode) material also that short term memory has a fifteen second span which has been proved by observation of translators and court reporters. The time taken to learn something is also shortened if it is spaced out and active involvement enhances memory rather than passive learning. Interference or distraction affects our memory and causes us to forget. People think of memory as if it were a jug of limited capacity, says Rose, in fact it is illimitable and more like a branching tree with potential for adding branches.

Stories are good memory aids says Rose and the more elaborate the story the better because a story links words to be remembered and causes us to build up visualisations and "the plot provides an associative thread"[1] so that one has only to recall a theme to trigger recall of the material. Rose says "If you create a powerful visual image between two words [this is what a metaphor can do] remembering one will trigger recall for the other."[2] Also a list of items learned in picture form is more easily learned than an equivalent printed list. This requires dual encoding, which is what Paivio referred to also. The ideal says Rose is not just dual but multiple encoding. He refers to Reber(1967)[3] as saying that shared relationships between words are often subconsciously recognized and when some grand chess masters play blindfold it is not each piece they recall but the overall patterns involved. Emotive , abstract words are the hardest to remember because one cannot 'see' them so easily. One secret of

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1. Colin Rose,Accelerated Learning, Topaz,England,1986,p.45.

2. Ibid.,p.45.

3. Ibid.,p.46.

memorising is to absorb the principles involved and get an overall view just as in a new place you would look at landmarks first "This is a spontaneous and natural mapping principle."[1] Which is similar to how we cope with a jigsaw when we have no picture guide and apparently this mapping instinct was vital to primitive man and even today some African tribes evidence a higher degree of visual or eidectic memory than most Westerners. It is a fact says Rose that the single most important factor in memory is visual memory. [Which leads me to wonder if cartoonists have this visual capacity highly developed. Are cartoons a kind of metaphor?]

The experiences of the day, says Rose, are reviewed during sleep and assimilated into new patterns of thought, belief, and future behaviour during dreams. It has been said by Chris Evans that "we sleep in order to dream" and by Patricia Garfield "Dreams continue work begun during consciousness."[2]

Another memory aid is 'chunking' or breaking new material into assimilable parts just as we remember the alphabet or phone numbers deliberately limited to a particular length. Sentences are normally of a length for us to cope with, as are phrases in music, and rhythm also assists memorising, as praying monks discovered. In fact when one considers many of the aspects of church rituals they seem to have exploited much of the psychology we are now learning to use for teaching. One thinks of candles and windows and music and rosary beads, all aids to concentratrion on the topic in hand, and in Mediaeval times it was in churches that drama had its beginnings. Motivation, repetition, mnemonics all help also but highly visual association between words or objects is the strongest memory factor

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1. Colin Rose, Accelerated Learning,Topaz,England,1986,p.48.

2. ibid.,pp.50-51.

and it is believed that we are capable of perfect visual memory for as Rose says the brain is not a sponge but a vast networking system.

> Every new fact or concept you learn adds to and links up with the existing network. So when you encode something new; it not only forms a link to the existing network, it also provides yet another hook onto which still more associations can be hung or connected. So the more you remember the greater is your capacity for future learning and remembering. 1

Association therefore is a vital factor in human memory. It is not surprising then that humans express themselves in metaphors which make use of this vast network of stored associations to create new and unique expressions.

Furthermore says Rose the brain does not process thought in a straight line logical sequence (the left brain might but the right brain does not) but connections are sparked and associations triggered. One word sets off others in response and this can be shown in picture form. Thus if information is presented in this form it accurately reflects how the brain works with its memory maps. It is interesting when one reflects how children are captivated by picture books and comics even when their word knowledge is limited and these often lead into reading. Our eidectic memory is called hyperamnesia or super memory and appears to be a right brain capability which is more obvious in children up to age ten.

> There is evidence that our educational attitude, with its emphasis on logic and 'hard' facts, rather than frivolous images, may have educated eidectic memory out of us.2

E.R. Jaensch found more evidence of it in schools where sensory activities were encouraged and Professor Key said that anyone who wanted to make greater use of his brain-stored information "must learn how to move

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1. Colin Rose, Accelerated Learning, Topaz, England, 1986,p.63.

2. Ibid.,p.67.

information from the unconscious into the conscious level of cognition."[1] The Ancients apparently understood the importance of rhythm and memory and could chant entire stories such as the Iliad "to the heart-beat rhythm of a softly-playing lyre"[2] many parts of which were remembered by the listeners. Confucius also deemed music necessary to the superior man. It is believed that rhythm is at the heart of the Universe and the Natural World. Even plants have proved susceptible to music. All of which says Rose fits in with the ideas of those Baroque composers who always believed that there was a sacred geometry to the Universe, and artists who discovered the Golden Mean.

Many of these ideas have been implemented in the language classses of Georgi Lozanov whose work Rose describes. Essentially he creates a learning environment designed to encourage more balanced left and right brain activity. Consequently the atmosphere is relaxed, students are encouraged to be confident of their learning ability, a holistic view of the material to be learned is presented rather than going fron easy steps to harder. The most unusual aspect is that music is used to implement learning so that not only is language heard and seen and spoken, sometimes in unison, but music plays in the background so that all senses are involved and a rhythmic pattern matched to the learning process. Dr Budzynski has written:

> Apparently the right hemisphere processes verbal material better if it is coded in rhythm or emotion. When someone speaks in a monotone, only the verbal, dominant hemisphere is activated. If the speaker adds intonation, the non-verbal side starts to pay attention. 3

1.Colin Rose, Accelerated Learning, Topaz, England, 1986,p.69.

2. Ibid.,p.97.

3. Ibid.,p.89.

All that Rose says supports a new approach particularly effective for teachers of language where memory plays such a large part. It is not concerned with metaphor as such but nevertheless there are attributes of metaphor such as the linking and association of ideas that fit in to these same ideas about the importance of association and how our minds are now thought to work, something more than an electrical circuit or a computer.

Music, says Peter Kline, makes you familiar with the language you are studying --its patterns and rhythms. The other aspect that the accelerated learning programmes emphasise is 'play', that is the fun aspect of learning which most of us lose after going to school. It might even be, says Rose the daytime equivalent of dreaming. Emotional involvement or a high state of arousal encourages learning. Many writers on metaphor have pointed to the pleasure we take in metaphor because of its novelty. Words can excite us because of their associative powers.

Patterning is central to our human nature. Rose says that as Science delves into the nature of matter we are finding that all matter is in a state of vibration. He quotes Dr Donald Hatch who says "We are finding that the universe is composed not of matter, but of music."[1] Different notes in music create patterns. Stephen Halpern has written "the forms of snow crystals, the mandala faces of the flowers, actually resonate to the harmony of nature. Crystals, plants and human beings can be seen as music which has taken on form."[2]

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1. Colin Rose, Accelerated Learning, Topaz, England, 1986, p.100.

2. Ibid., p.101.

3. All of the above suggestions for ease of learning, music, rhythm, drama etc. are combined in musical drama such as opera.

When we create images in words, in poetry we are likewise creating patterns or looking for them. Metaphors balance two ideas creating harmony where it did not appear to previously exist, because there are connections throughout nature that we have yet to discover. A physicist Robert Beck has said "The earth itself has a brain wave. There is no longer any question that man is a bio-cosmic resonator."[1] We receive and send forth the energy patterns of our environment. As Rose says we need to tune in.

Even one's individual personality can be seen as a pattern according to Rose because the body virtually recreates every seven years therefore what you are is what you have created irrespective of the body you once had. He says that Socrates knew so long ago that the essence of teaching is to help people to articulate. Once you articulate, memory is captured. As much as eighty per cent of the brain's function is visual thinks Win Wenger.[2] Articulation is important because it involves whole brain activity.

The conclusion of all of these findings is that children will learn best if all the learning modes are involved, auditory, visual and kinesthetic. What we seem to have lost sight of in schools is the fact that the brain can cope with a vast amount of information. We attempt to help children by breaking knowledge up into what we consider assimilable parts and in so doing we destroy the necessary global or holistic view that humans need to make sense of incoming information: "Being exposed to a lot of material, but picking out parts in a planned sequence and seeing how those parts fit into the whole."[3] The last part of this statement is the most important.

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1. Colin Rose, Accelerated Learning, Topaz, England,p.104.

2. Ibid.,p.151.

3. Ibid.,p.220.

As teachers we think we have learning well under control when we are well organised, knowledgeable and enthusiastic, but as teachers we tend to forget to see things from the students view and in his or her life context. The whole process is mirrored I believe in the phenomena of metaphor which is a process of association, visualisation, transfer of ideas and creative thinking. To encourage creative, imaginative and independent thinking is one of our main goals.

Lacan draws our attention to the fact that language, both conscious and subconscious, is at the heart of the psychoanalyst's work and that language gives man only a metaphorical sense of meaning and of his own being. Hudson likewise draws attention to our need to examine language and particularly metaphors because they are more complex and more powerful than we have previously assumed, often controlling us and leading for example into rigid thinking such as produced the traditional dichotomy between arts and science.

Those who have most to gain from such understanding have been quick to latch on to uses of the new information. Thus industrial psychology explores new ways of changing behaviour and imoproving performance in the workplace. Tourangeau adds little that is new but is aware that metaphor is linked to our ability to enlarge and add to our personal mental field. Jose Silva almost stumbled on his information in his study of the mind as if it were an electrical circuit. His beliefs tie in also with traditional techniques for mind control as employed in yoga.

The importance of meditation, concentration, visualisation, relaxation, and activity are emphasised by Silva, Edwards and Rose. Paivio supports the importance of visualisation in perception, understanding and formation of concepts. Rose finds that research on accelerated learning shows memory to be at the centre of learning. It is difficult to believe his statement

that we are capable of remembering everything we learn, if we wish. So far it would seem that we have underestimated our own capacity for learning and for creative thinking. Geniuses of the past appear to have coordinated both right and left brain activity and if we attempt to do this in schools we may revolutionize education. It seems to me that religious leaders have used and understood many of these techniques without our perceiving them as such. Celebrated yogis, such as Paramahansa Yogananda have demonstrated the almost superhuman powers we are capable of if we learn to concentrate and tune in to our subconscious which may be in fact our greatest source of knowledge.[1]

Howard Gardner and Ellen Winner summarised at a Chicago conference some of the research on metaphor.[2] Children were tested on their competence in selecting paraphrases of metaphors and it was found that until middle childhood children tend to interpret metaphors literally. They were decoded more successfully if encountered in a situational context. In another simile-production test where children had to add an appropriate ending to a short story there was a paucity of appropriate metaphoric productions at every age but the highest number of appropriate metaphors came from the youngest children which supports those who believe in the natural creativity of childhood. However this same group produced a large number of inappropriate metaphors. It is difficult from their findings to decide whether the younger children have a special capacity or whether it is a symptom of the way their thinking is organized.

The researchers were also puzzled by the literalness of middle

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1. Paramahansa Yogananda, Autobiography of a Yogi, California, 1979.

2. Howard Gardner and Ellen Winner, 'The Development of Metaphoric Competence: Implications for Humanistic Disciplines.' in On Metaphor, Sheldon Sacks, University of Chicago Press, 1978, pp.121-139

childhood respondents and wondered whether this was a cultural influence or a developmental 'stage'. They were also intrigued by the right-brain left-brain controversies and subjected brain-injured patients to tests. The left-hemisphere patients with language difficulties all had trouble paraphrasing the metaphors and the right-brain patients were reluctant but usually offered an appropriate response. With response to pictures depicting the metaphors the results were surprising. The aphasics made the right selection and the right-brain group in contrast to aphasics and normal control group chose the literal depictions. Which led the researchers to conclude that "metaphoric competence is not of a single piece."[1] What the aphasics seemed to be able to do was to 'map' a particular figure of speech onto a situation where it was likely to be uttered, even though they could not put into words the precise lexical meaning of that utterance.

More recently Jerre Levy has reminded us that we should not think in terms of the brain working as two separate halves for their activities are integrated:

> When a person reads a story, the right hemisphere may play a special role in decoding visual information, maintaining an integrated story structure, appreciating humour and emotional content, deriving meanings from past associations and understanding metaphor. At the same time, the left hemisphere plays a special role in understanding syntax, translating written words into their phonetic representations and deriving meaning from complex relationships among word concepts and syntax. But there is no activity in which only one hemisphere makes a contribution...real creativity and intuition, whatever they may entail, almost certainly depend on an intimate collaboration between hemispheres ...and it is quite impossible to educate one hemisphere at a time in a normal brain.3

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1. Howard Gardner and Ellen Winner,'The Development of Metaphoric Competence:Implications for Humanistic Disciplines.' in On Metaphor,Sheldon Sacks,University of Chicago Press,1978,p.136.

2. Jerre Levy,'Right Brain,Left Brain:Fact and Fiction', Psychology Today,May 1985,p.44.

Buky has noted that in a psychotic state a high number of metaphors may be used and can be symptomatic of anxiety. They are either used with too great a connotation gap or more often are considered a reality as in paranoia.[1]

Metaphor is a problem area for psychology as it is for other disciplines not only because the phenomenon itself is not fully understood and has special relevance to psychology, but because it is endemic in the language here as everywhere else. "Metaphorical language has crept into scientific discourse " warned Hartmann, Kris and Loewenstein.[2] A problem Freud was aware of when he said that "the perception of our thought processes occurs only with the help of words" and it is common knowledge that "the language of inner experience is first and foremost metaphorical."[3] His own models were metaphoric. He had what is claimed to be an anthropomorphic model of the mind and states that "it is the task of scientific psychology to translate back into intrapsychic terms the language of events found in myths, delusions, and religions, and to 'transform metaphysics into metapsychology.'"[4]

Whether anthropomorphism can or should be removed from psychology is debatable say Grossman and Simon, for "The physical metaphor implies a physical model."[5] However they find that it is not necessary to 'purge'

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1. Bela Buky,'The System of Metaphors Semiotically Considered',in Semiotics Unfolding,Tasso Borbe,Mouton, 1983,p.789.

2. William I.Grossman and Bennett Simon M.D.(New York),'ANTHROPOMORPHISM, Motive Meaning and Causality in Psychoanalytic Theory, published by The Division of Psychiatry, Montefiore Hospital, Albert Einstein College of Medicine,in Psychoanalytic Study of the Child, Vol.24,1989,p.81.

3. Ibid.,p.84.

4. Ibid.,p.94.

5. Ibid.,p.100.

the clinical theory of anthropomorphic language, for, "Anthropomorphic language is in no way incompatible with systematic study of individual cases...[it] is not unscientific. It serves a number of useful purposes... there is no other language available."[1]

One could criticise research such as that described by Gardner and Winner as telling us more perhaps about strategies used to cope with metaphor than about metaphor itself or about how people create them and why. As Paivio has said there needs to be more reseach in this area which would not only lead to an understanding of imagery and verbal processes but would shed light on "the processes underlying the discovery of new metaphors"[2] and also of the creative processes involved in art and science.

Vygotsky for whom "A word is a microcosm of human consciousness"[3] and his studies of children's formation of concepts and the nature of language and thought are exactly the type of research that will assist teachers in understanding how children learn and thus enable them to be more skilled in teaching.

At present we are not much further on than when Shakespeare asked "O tell me where is fancy bred or in the heart or in the head?"

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1. William I.Grossman and Bennett Simon M.D.(New York),'ANTHROPOMORPHISM Motive, Meaning and Causality in Psychoanalytic Theory, published by The Division of Psychiatry , Montefiore Hospital, Albert Einstein College of Medicine, in Psychoanalytic Study of the Child, Vol.24, 1969,p.108.

2. Allan Paivio, Imagery and Verbal Processes,Holt, Rinehart and Winston,U.S.A.,p.531.

3. Lev Vygotsky, Thought and Language, MIT Press Cambridge, Massachusetts, 1987, p.256.

CONCLUSION

A word is dead unless it's in your head.

A consideration of the nature of metaphor reveals a wide range of beliefs and attitudes towards this aspect of language, ranging from Aristotle's assertion that it is a sign of genius through those who disapprove of it as a distortion of language and truth to more recent claims that it cultivates intimacy and is not only unavoidable but necessary to human thought and worthy of academic study. It appears to have evolved from recognition as a clever rhetorical device used to entertain and persuade, to a realisation that our perception of the world and ourselves is closely related to our use of language and metaphor in particular so that one sees a preoccupation in earlier times with classification and more recently an interest in theories of language. No ultimate definition of metaphor emerges but dominant or root metaphors are recognized as playing a powerful role in the structuring of social identity. There appear to be no rules for metaphor but patterns emerge which are quite distinctive such as those evident in politics or literature or education. The most extreme view is taken by Nietzsche who sees language as completely metaphoric and imposing meaning on the world but not truth.

From a literary point of view metaphor is seen as a vital life force and a power found particularly in myths and poetry, songs, folktales and

fairy tales. Many metaphors, especially religious ones, have been taken very seriously as in the Christian view dominant in the Middle Ages where the world was viewed as a book of God's metaphors. The metaphors in literature reflect the preoccupations of each age as we see in the discernible shifts from Classical times to the influence of Christianity on the Middle Ages particularly, through to the Romantic view and the pervasive effects of a rising industrialism and scientific viewpoint. The earlier the language that is examined the more evidence there is that there is a strong link between language and religious awareness. Many writers testify to the essential mystery of poetic power which appears to be both visionary and primitive. When ordinary language fails to express the deepest human feelings it is metaphor which enables us to express ourselves at least partially. Religious writings such as the Bible display the complex process of human endeavour to express the conviction that life has a purpose and that one needs to become attuned to those revelations claimed by prophets and leaders of the past. Truth is variously described as unveiling or enlightenment, a metaphor which pervades our language and is the most puzzling and mysterious of all of those encountered in this study. It is this sometimes metaphysical aspect of metaphor rather than its structure which makes it difficult to describe and define.

The metaphors describing children reveal a human dilemma, which is, how to prepare young people for adulthood when adults are often childish and ignorant themselves or overridden by concerns such as those of economics and uncertain of the nature or purpose of their own lives trammelled as we are with legacies of our forbears. Our attitudes have varied therefore from considering children as animals and receptacles of sin to tender plants or precious possessions, and in the process often denying them the autonomy or authenticity which some have claimed is their right. The

metaphors of childhood are inextricably linked with those of education, and history shows us that the wielding of power over children has often been a dominant concern of parents and society. The institutions of education reflect both the power structures of national politics and the more recent dominance of industrial organizations and bureaucratic management styles. All of these are further complicated by the insights and influences of the modern social sciences so that an examination of the metaphors in any area such as education or educational administration reflects the diversity of opinion in society and the dominant influences of certain leaders or groups who are able to impose their metaphors on others.

What emerges is the idea that the world is constructed through the meanings which we impose. These meanings are individually realised but many of them are shared, so that in human groups there are common metaphors for which we have a general agreement as to meaning. Nevertheless meaning is always individual and it is the development of this faculty of creating this meaning or personal understanding which is the main concern of teachers. This is where metaphor has a particular value for it has been demonstrated that it can form the vital link in helping to transform what one might call public meaning into personal knowledge. Teachers play a crucial role in establishing an appreciation of those meanings, evidenced in language and thought, both those which their pupils bring with them into the school situation, and introducing them to more particularized meanings and metaphors of for example the various subject disciplines. For this reason teachers need an appreciation of the complexity of language and its psychological nature as well as its use as a communication tool. A study of metaphor could help them to develop this necessary insight and enable them to be more critically aware of the nature of language, its importance in the

development of children, and to realise the rich diversity of metaphors in all areas of knowledge and aspects of human life, not just in literature where it has traditionally been thought to belong fairly exclusively.

From the foregoing chapters it is evident that there is a sense in which all language is metaphor as Nietzsche said and that the Bible is one large and rather glorious metaphor. Dead metaphors we give scant attention to they are the everyday tools of communication their original references almost forgotten, their more subtle inferences lost unless they become entangled in a new metaphor. For wit, charm, and insight we look particularly to the poets whose facility with metaphor is almost unquestioned. We realize that there are others who manipulate words and metaphors for less worthy aims, the clever use of the poet's art in advertising is prominent. Just one recent example will illustrate this, the advertisement in question shows a secretary, woman naturally, attending to a photocopying machine with the caption 'My Hero'. This is a complex distortion of facts not only by suggesting that the machine is a person but also of the traditional notion of hero, for the heroes alluded to here are those of eminence in sport, rugby in particular which has been described by a New Zealand headmaster as the dominant metaphor in New Zealand.[1] The idea of the machine as something to be venerated and the notion that sporting prowess and health and fitnes of the male particularly is something to be worshipped are also incorporated. So the advertisement cleverly encapsulates a whole range of modern thought including sexist attitudes to women in the work force yet at the same time suggesting that technology is supportive by making routine work easier.

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1. Peter Quin,The National Metaphor,Te Awa Iti, New Zealand,8th July 1988.

We also see that metaphors of a distinctive type often occur in patterns. Politics for instance has traditionally been described with body metaphors for we have always spoken of the 'body' politic and diseases affecting it. There has been a tendency to think of metaphor as a literary art or skill which writers particularly exercised but that the ordinary persons rarely practised. The reification of literature has had this effect. Psychoanalysis has done much to encourage self expression and introspection and as has already been noted autobiography is a modern genre.

The school curriculum has more than a share of the blame for the attitude towards metaphor treating it mainly as a literary technique unaware that it is a basic mode of human thinking but general information on how the mind works is a fairly recent phenomenon encouraged greatly by the modern interest in the computer as a brain and vice versa, also enriched by modern medical knowledge of the brain's structure and chemistry. The emphasis traditionally has also been on what to teach and sometimes how to teach rather than on how people learn. Undue emphasis has been given to memory and not enough to the process of thinking.

There is general agreement especially among futurists that we are living with outmoded metaphors inherited from previous generations. These have led to the exploitation of the earth's riches and a concept of man himself as a kind of machine or an extension of one. The metaphors of power and politics in organization reflect this quite clearly. The schools also reflect the society in which they exist so they too have treated what seemed the more important or useful skills as priorities thus neglecting those areas which actually enhance our natural advantage over animals, mainly our artistic capacities in language and in art and a knowledge of our story, particularly those myths and metaphors through which our ancestors made sense of primal concerns which we still work to understand.

If the Tower of Babel divided us originally, wars have also done much to fragment the people of the earth. Even religion designed like the myths to help us live in the world have often merely served to fossilize ideas which divide us further. Perhaps a realisation that language is at the very centre of our being and that metaphors particularly have great power over us even though they are self-constructed or inflicted may go some way to a realization that many of our perceived differences are semantic only.

The metaphors of today reveal our collective psyche or unconscious. Some of the more interesting ones and very easy to discern are in the language of sports. Armed warfare has its own distinctive language and metaphors. Many of these have now transferred to the sporting scene. The notion of sport as a competition or contest encourages the use of terms normally associated with battle. One only has to look quickly over the sports section of a daily newspaper to prove this. In one day for instance the following words and phrases surfaced from a New Zealand Sunday paper:

> Barry blitzes experienced opposition
> McKenzie blitzes rival
> Belliss pledges loyalty to home
> Champion New Zealand bowler Peter Belliss last night knocked suggestions that he would be deserting New Zealand...(Ian Gault)
> Edgar's reign sagged...Rod Latham...the most gallant contributor
> Wood wins nailbiter shootout to qualify (Tennis)
> ...six victims caught...(Cricket)
> Graeme Allen won't defend his No 1 plate this year
> The match was becoming a virtual benefit for veterans (Cricket)
> Harvey is renowned for his victory over Norman...Norman narrowly escaped defeat...swept his opponent aside...mercilessly trounced his best friend and third-seeded compatriot...(Squash) 1

These few samples indicate the tone of much sports reporting, for international sport particularly seems to represent a kind of war and players fight their way through competitions at many levels to represent

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1. Dominion Sunday Times,New Zealand,1st February 1988.

their countries. I have underlined 'reign,''gallant' and 'veterans' because the first two suggest overtones of royal or knightly behaviour such as the crusaders displayed and for which they won favours and honours. Likewise sports representatives win medals and cups rather like the spoils of war. We speak of old soldiers as veterans and now aged sportspersons are so labelled. Strange as it may seem on reflection sportspeople are also often knighted for their services to sport but in reality this is for the glory they have brought to their country in the eyes of other countries. The fever with which we greet the Olympics is symptomatic of our attitude. Patriotic fervour rises in a spirit akin to that experienced under the siege of international war. It is not only in male sports that this aggressive competitive language predominates. It is just as endemic in reports on women's sports also.

The epitome of this martial aspect of sports is portrayed in an article from the same paper in which Simon Barnes describes the intense aggression which seems like pure hatred as displayed by boxing champion Mike Tyson towards his opponents in the ring. "With such men as Tyson violence is sanctified."[1] Barnes says boxing creates its own legends, building people up as idols and heroes especially with a person like Tyson who seems to represent escape from poverty and a racial ghetto. But more pertinent perhaps is what he says about the sport itself in comparison to others:

> Most man-to-man sports are a form of stylized duelling--with a racket and a ball, or whatever. The enmity, the attacking, the defending are all metaphorical.
> There is no metaphor in boxing; it is the real thing. Boxing is real fighting, perfectly genuine violence, a pastime whose perfectly genuine aim is to cause brain damage in the opponent...no wonder the contestants are awesome mythic men.

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1. Simon Barnes, Dominion Sunday Times, New Zealand, 1st February 1988.

To Barnes, and many would agree with him, boxing is therefore not a sport. It is in fact open war, one man against another. As he says the other sports make a pretence of battle. I am not so sure that boxing is the only one worth reflecting on, some of the behaviour of players and spectators seems remarkably savage at times in other sports also, soccer hooliganism in Europe is a particular example, and concerned like some warriors with gratuitous glory, which has even been labelled as patriotism by the participants.

It is hard to imagine such fervour being applied to medical or educational issues although with the present Aids crisis the world may unite in a 'war' on this as it has managed to do on diseases lke smallpox. Some other areas also reflect this strong competitive element in their nature, the business world is particularly prone to using a similar kind of language. It will be interesting to see if medical language takes on more belligerent tones.

Cartoons are really metaphors because they seem to have many of the features of metaphor in their distortion of reality, the tension they create and the 'truths' they attempt to portray. Most writers on metaphor assume it is a verbal event but Sol Worth finds that caricatures do display a metaphoric mode and the same is true of films also. I always think of Vincent Ward's film Vigil as a metaphor of New Zealand with its sense of primal desolation and I am sure everyone has their own particular one which captures many of the elements of a place.

Worth thinks of metaphor as a structure rather than an artifact or chunk of speech or writing. "Metaphor is a communicational code depending upon the recognition of structure and the assumption of intention on the part of the 'articulator', 'artist', 'producer', or 'creator' of the form

we are to treat as metaphor."[1] What Gombrich has spoken of relating to visual metaphors are the same "aspects of metaphor that are richly manipulated by filmmakers and painters."[2] All are concerned with interpretation and communication and within bounds of social knowledge and personal beliefs.

> A caricature, like a picture, is neither true nor false but, like a metaphor, is a structure that reveals a set of meanings intended to communicate a certain set of relationships within some understood or understandable context or bounds.3

If we consider a political cartoon for instance, it has little effect if we are unaware of the political sphere within which those caricatures operate or cannot recognize the exaggerated features of those prominent politicians there exposed. When Ricoeur speaks of opposition, clash, and shift of context in regard to metaphor Worth can recognize these as features of cartoon art. The shots of a film [or the frames of a cartoon] create a similar effect "From this collision of ideas comes a synthesis--a new idea, depending on the previous shots but not being merely additive."[4]

The nature of metaphor, metonymy, cliche and symbolism in film is very well explained and illustrated in a work by Barrie McMahon and Robyn Quin. They point out that television commercials communicate the unknown in terms of the known. Sometimes a displacement occurs as when a food or drink is represented by analogy with a healthy or recreational aspect of life. We know that the two things are a mismatch but the displacement gives a different emphasis to the values by stressing the healthy or happy

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1. Sol Worth, Seeing Metaphor as Caricature, New Literary History, Vol. VI, No.1, Autumn 1974, p. 200.

2. Ibid.,p.197.

3. Ibid.,p.204.

4. Ibid.,p.200.

elements. As Wayne C. Booth has expressed it advertisers sell us happiness.[1] McCahon and Quin liken this to a conjuror's trick, for it is in this way that we are unable to accuse them of false advertising. News items are metonymic because they take snippets of news and present them as if that were the whole event.[2]

What Worth says about metaphor in general is something schools need to be aware of: "Knowing about metaphor means knowing how to organize the universe within our minds, knowing systems of myth, of grammar, of behaviour, value and art as they are defined by our group now, and have been in the past.[3] Cultural knowledge says Worth helps us to use this marvellous structure of human thought. It is my contention that if we do not bring this awareness to our pupils we are depriving them of a full understanding of themselves and the world in which they find themselves. Marilyn Ferguson believes that formal education has shattered our ability to ponder and think and make creative connections "good art and good science."[4] She also thinks that we are all born with creative capacities, they are not the "franchise of a favoured minority."[5] For her, meanings emerge from context and connectedness so we need people to help synthesize and pull things together. 'Context' in her view is "that which is braided together"[6] and "Content is relatively easy to grasp once it has been given a

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1. Wayne C. Booth, On Metaphor, ed. Sheldon Sacks, University of Chicago Press, Chicago, 1979, p. 66.

2. Barrie McMahon and Robyn Quin, Real Images, Macmillan, Australia, 1986, p.195.

3. Sol Worth, Seeing Metaphor as Caricature, New Literary History, Vol. VI, No.1, Autumn 1974, p.208.

4. and 5. Marilyn Ferguson, The Aquarian Conspiracy, Granada, London, 1982, p.332.

6. Ibid., p.333.

framework."[1] She cites a programme designed to help culturally deprived children which taught them to make connections "in effect how to think metaphorically."[2] Impressive improvements occured and were sustained. The originator of this approach J.J. Gordon "believes that learning is based on making connections that relate the new to the familiar, an ability that has been discouraged in many people."[3] Ferguson has decided that "Demystification, decentralization, and despecialisation are the order of the day."[4]

Patrick Creber speaks of this need to encourage children to appreciate figurative language, not just in traditional exercises of recognition of types of tropes and translation of what he terms ossified language but to see "the distincton between figurative language that is now purely literal (the face of the clock or the legs of a chair) ...and figurative language which is merely stale and outworn..."[5] They should be led he thinks to "compare the relative inadequacy of literal language with what Ted Hughes has called the 'explosive compression' of poetry or poetic prose."[6] Not to admire it but to appreciate it and they should be encouraged to search for figurative language in their own writing "They must think, not admire; they must see why such language is used and in what way it is interesting to the reader."[7] What Creber says about poetry is true about all art, for as Picasso has told us "Art is a lie which makes us realize the truth."[8]

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1. Marilyn Ferguson, The Aquarian Conspiracy, Granada, London, p.333.

2. Ibid., p.2. and 3.p.334

4. Ibid., p.350.

5. and 6. J.W. Patrick Creber, Sense and Sensitivity, University of London Press Ltd., 1967, p.125.

7. Ibid., p.127.

8. quoted in Chaim Potok, My Name is Asher Lev, Penguin, England, 1972.

The Opies have pointed out to us says Creber that much of children's oral tradition is "part of an essentially primitive private world--and we need to respect this."[1] What we need he says is to create opportunities for enjoyable, wide, vigorous experiment. He even speaks of letting them 'wallow' in metaphor.

The Logans have also said that we should dispel the idea that the creative person is odd or eccentric and recognize that creativity "is a characteristic not alone of the artist but also of the scientist."[2] They found that there IS a high level of correlation between I.Q. and creativity just as Getzels and Jackson found, but creativity is not assured by this alone. What are more important are such factors as relative absence of repression, lack of self-defensiveness, and awareness of people and phenomena in the environment. They tend to define creativity in terms of originality as opposed to conformity. A new definition I would propose relates to the ability to make links between experiences and information, to recognize patterns, to create patterns, to see unity in disunity and harmony where none existed before. Novelty or newness is still a criteria. It is a process and product of recognition. Nearer to my definition would be Spearman who defines creative thinking as a process of seeing or creating relationships with both conscious and subconscious processes operating.

> He believes that when two or more ideas are presented, a person may perceive them to be in various ways related (near, after, the cause of, the result of, a part of, etc.) He also holds that when any item and a relation to it are cognized, then the mind can generate in itself another item so related.3

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1. J.W.Patrick Creber, Sense and Sensitivity , University of London Press Ltd.,1967, p.133.

2. Lillian M.Logan and Virgil G. Logan Design for Creative Teaching McGraw-Hill Company of Canada, Toronto, 1971, p.2.

3. Ibid.,p.5.

He might have been describing exactly how a metaphor is constructed and why and how it works which is essentially the crux of my thesis that an ability not only to recognize metaphor but to develop a facility in making them is a desirable aim of education and part of what has loosely been termed the encouragement of creativity, which has often become merely self-expression--when sometimes by a process more like serendipity real art or real new knowledge is created.

Barchillon say the Logans saw the thinking process as involved in creation into two kinds: COGIT, to shake and throw things together and INTELLIGO, to choose and discriminate from many alternatives and then synthesize and bind together elements in new and original ways. I have stated previously that most human 'creations' are a synthesis of already existing elements. I agree with the authors statement that adults have to realize that "creative performance is the prerogative of every child." I nevertheless when I observe as I have done recently the style in which state nurseries entertain rather than teach youngsters makes me wonder at what points we leave children to be creative and whether we don't sometimes need to be more involved with them, perhaps they need to see more artists and craftstmen actually at work. There are few children now who are able to actually observe their parents working as was possible when artisans worked from their own homes. Work rather than being an integral part of life is a separate activity, perhaps we need new metaphors for work also. Each time I see the children producing 'works of art' by pasting onto paper various detritus from suburban homes I wonder if this is truly creative play. The need to create has to come from within so that only the

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2. Lillian M.Logan and Virgil G. Logan <u>Design for Creative Teaching</u> McGraw-Hill Company of Canada, Toronto, 1971, p.8.

right circumstances need to be provided and sometimes the right stimulus as from music or a story.

Children need to learn to recognize and appreciate patterns. The creative act says Koestler "does not create out of nothing, like the God of the Old Testament; it combines, reshuffles and relates already existing but hitherto separate ideas, facts, frames of perception, associative contexts."[1] This activity is at the basis of learning and at the crucible stage of science. And culture is pattern also:

> Culture is not merely a common code or even a common catalogue of answers to recurring problems; it is a common set of previously assimilated master patterns from which, by an 'art of invention' similar to that involved in the writing of music, an infinite number of individual patterns directly applicable to specific situations are generated.2

Margaret Mead speaks of the importance of pattern in her studies of universal cultural patterns and complains that there are few people who are able to work in this mode of pattern recognition, for "the separation of the arts and sciences has been accentuated, and fewer students of semiotics are aspirant poets or painters or musicians, playwrights or dancers."[3] For which she blames the changes in education where:

> no pattern has been crystalllised by literary and artistic selectivity, and ideological interpretations of history, and where there are no adult guides through the confusing maze, with rare exceptions, the young anthropologist, linguist, semioticist, today does not yet have in his or her own person the kind of sense of pattern which the previous pattern-seeking generation had.4

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1. Arthur Koestler, The Ghost in the Machine, Picador, London, 1967,p.184,

2. Pierre Bourdieu,Systems of Education and Systems of Thought,in Knowledge and Control, ed. Michael F.D.Young,Collier Macmillan, London,1971,p.192.

3. Margaret Mead, From Intuition to Analysis in Communication Research, Semiotica, Journal of the International Association for Semiotic Studies, VolI,1969, Mouton, The Hague,p.19.

4. Ibid.,p.19.

Ironically one aid they now have is the technology to record and analyse and synthesize patterns that can be clearly documented. Rather than seeing larger patterns they are working from the micrososm as it were to the macrocosm or struggling as she says "to find new personal integration within this kaleidoscopic and fragmented world."[1] It is only when we recognize structures that we can challenge them says Colin Evans.[2] And Terence Hawkes is convinced that it is metaphor which binds the culture together, in a rough unity of experience, and "in the long run the 'truth' does not matter because the only access to it is by means of metaphor. The metaphors matter: they are the truth."[3] Metaphor said Patricia Parker is a structuring principle.[4] Fundamental intellectual patterns we acquire says Bourdieu, have much of their basis in schooling, which interiorizes master-patterns, and :

> the Sapir-Whorf hypothesis is perhaps never so satisfactorily applicable as to intellectual life; words, and especially the figures of speech and figures of thought that are characteristic of a school of thought, mould thought as much as they express it.5

One of our basic problems is that the various schools of thought are not always in agreement, science versus arts being symptomatic of such divergence.

Martin Green writing from a humanist standpoint examines the prevalent

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1. Margaret Mead, From Intuition to Analysis in Communication Research, Semiotica, Journal of the International Association for Semiotic Studies, VolI,1969, Mouton, The Hague,p.20.

2. Colin Evans,Authority, Knowledge, and The Academic Conference, Quinquereme,Vol.8,No.1,1985,p.80.

3. Terence Hawkes,Metaphor, Methuen and Co.Ltd.,1972,p.91.

4. Patricia Parker,The Metaphorical Plot, in Metaphor: Problems and Perspectives, ed. David Miall, Humanities Press, New Jersey, 1982,p.155.

5. Pierre Bourdieu,Systems of Education and Systems of Thought,in Knowledge and Control, ed. Michael F.D.Young,Collier Macmillan, London,1971,p.195.

traditional and insidious dichotomy between the Sciences and the Arts. Auden said of scientists "Unfortunately, poetry cannot celebrate them, because their deeds are concerned with things, not persons and are, therefore speechless."[1] It is in fact language which they both share. Every scientific theory and action begins with thought which develops into an articulated spoken or written form, is developed further by linguistic acts shared with others, passed on (Bergland's 'memes') to future generations--embodied sometimes in scientific 'things' e.g. drugs etc. for human use. This supposed division like the left/brain right/brain paradigm is blinding us to fundamental truths about human nature and potential. Schools are often the worst perpetrators of this schism, splitting the arts and sciences quite rigidly.

Green writes in defence of C.P.Snow's Rede lecture on 'The Two Cultures' a reply to Leavis who accused Snow of being ignorant of culture and of literature. Green sees this 'battle' between the two men as symbolic of how far apart the two cultures believe themselves to be, and says only a few writers try to bridge this gap including Stephen Toulmin and Jane Goodfield. We need he thinks someone who can do this for literature. As Green says the saddest aspect of this debate is the absence of appreciation on each side for their respective intellectual abilities. He believes that training in science needs to be made broader and literature narrower:

> There is much more humility and realism about their educational problems among scientists than among humanists. Literary students must be made to see that they are not merely acquiring taste, but reasoning....It is too easy to get through literature examinations by mere sensitiveness, just as it is by mere mechanicalness in science examinations...both sides need to move towards a middle mode, a more generally intellectual mode. 1

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964. Citing W.H. Auden, The Dyer's Hand, 1963.

2. Ibid., p.28.

It would not take long he thinks to make science a more humane discipline if teachers were so trained and syllabuses changed. Exactly just such changes are apparent in the current revision of the form 1-5 science syllabus in New Zealand. Research (e.g. Learning in Science Project) showed that "many students including the most able and senior students may not have learnt the scientific ideas as intended; that much of the learning has been rote and not meaningful learning...it is not just a matter of reviewing WHAT is taught but HOW it is taught."[1] What was being taught also often seemed divorced from students' own interests concerns and experiences. It is also now realised that a knowledge of the kinds of ideas students have is important to the teaching process for:

> Before they begin formal science education, students have constructed for themselves understanding of phenomena in their biological, physical and technological worlds. These tend not to be the currently accepted scientific ideas and explanations. For example, many secondary students think of matter as continuous and non-particulate; that light does not travel far from its source; or that plants obtain ready-made food from the soil... Students are active in making sense of their world. They are active in making links between new information and what they already know, in order to construct an understanding for themselves. These understandings may not be the ones anticipated by the teacher. 2

Snow believes the PATTERN of British education must be broken because the Western world is still managed by a literary culture. Green believes that it is prejudice which hinders progress, but that "humanely taught, science trains the mind,'prepares one for life', as fully as literature....not that it can...serve the instinct for conduct as fully as literature...but...the instinct for truth is probably bettter served (better satisfied, disciplined, toughened) by science."[3]

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1. and 2. Report of the Second Meeting of the Form 1-5 Science Revision Committee,Auckland July 1986.p.1.

3. Martin Green,Science and the Shabby Curate of Poetry,Greenwood Press,Connecticut,1964.p.28.

Another tendency Green notes is for people to define their culture in terms of their country and that perhaps we need a more universal meaning. He says that some people despise popularisation of science because they believe truth can only be conveyed in esoteric language which needs to be specially learned for each subject. [This might be called an exclusive or elitist model of education] But in Green's view the world we now live in, threatened by disaster, is one where we have a responsiblity to inform and be informed for "we hardly know what it is we stand for, fight for, or are threatened for."[1] He believes that thinking people need to believe in something, moreover "It is only when they [people] travel from one area of thought to another and participate imaginatively, that they get a feeling of exhilaration and community."[2]

William Stanley affirms this, saying that "science has failed to fill the gap left by the decline of metaphysical and theological traditions."[3] He believes that the pursuit of excellence has become a mere catchphrase--a slogan based on a technocratic conception of society, and would like to see a return to the Classical concept of character formation and civil involvement, for we seem to have lost the original purpose of education and he speaks of a metaphor of cultural crisis. We need more than physical travel perhaps to broaden our minds.

Green says that Fontanelle managed to make science amusing and fashionable and cites Fred Hoyle's book on the stars as a good example of what we need. Green is concerned that " The imagination of the modern

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964, p.36.

2. Ibid., p.37.

3. William Stanley, Christopher Lasch as Social Educator, Educational Theory, Vol. 37, No.3, p.235.

intelligentsia, in its most highly developed forms, is unbalanced, misshapen; it is over-literary..."[1] Science for the layman has to remedy this deficiency. He describes Polanyi's Personal Knowledge and his philosophy of science to support his argument:

> Empirical evidence alone [says Polanyi] has never constituted scientific proof; the beliefs in astrology or witchcraft had a great deal of evidence to support them...The Copernican revolution satified people's reason, not their senses; indeed it went against their senses. Einstein, too, had no new facts, no observations to offer, but a new rational scheme...Evidence alone, outside a structure of belief is of small value scientifically....even science has its own passions; lives by them. Both the heuristic and the controversial passions are essential components of science, and researchers do not work simply by doubting their own or other people's propositions. Doubt can, of course be a heuristic principle, but so can faith. Max von Laue discovered the diffraction of X-ray crystals because he believed more completely, more concretely, than other people in the theoretical picture of crystals and rays they all shared...We must accept a different and more metaphysical idea of truth. We can only explain the validity of even scientific theories by admitting the idea that they make contact with a hidden reality...Simplicity, SYMMETRY [my emphasis] economy, are the marks of rationality, not the marks of truth as a whole, even scientific truth. We cannot account for our acceptance of scientific theories without acknowledging our response also to their beauty and their profundity, two other categories of reality, and not objectively knowable. 2

Polanyi believes that acts of comprehension cannot be measured by purely objective standards "that skilful knowing is like skilful doing; both are performed by subordinating a set of particulars, either as clues or tools, to the shaping of a skilful achievement, whether theoretical or practical. Green elaborates on this:

> What manifests itself within the work of art [speaking of literary writings] in skills of imitation, invention, formal patterning, etc, manifests itself in the other books in other skills--of definition, of generalization, of argument...It is all one mode of intelligence, theoretically unsystematized, but organically very unified."3

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964. p.40.

2. Ibid., p.43.

3. Ibid., pp.44-45.

Green sees the newer literature as saying more about what constitutes the happiness and holiness of persons, yet at the same time becoming more inaccessible to scientists and vice versa. He claims that Voltaire created the broadly intelligent layman of the eighteenth century and that George Eliot spoke for the educated mind of her day and that the main scientific ideas of today are no more difficult for us to grasp than Newton's were in his time. He believes there is a growing belief that art yields more truth than any other intellectual activity and that the literary mind has unique power to influence people. Generally, literary minds, he thinks, tend to get hysterical in tone, which he sees even in himself, but he believes that "the really intense and pure imagination ...has a way of transcending its own limitations."[1] Science he thinks can moderate the literary mind and arrest its impulsiveness for "Science is the power and magic of today; literature is the sense of inspiration and prophecy."[2] The best writers he believes, employ some scientific precision and " If our imaginations are to work on the stars, the sea, the flowers, in any vigorous way, we must know things about them. He is convinced that the literay mind "cannot grasp the idea of ten thousand people. It can hardly count above two or three."[3] I am sure many would not agree with him. There are writers e.g. Tolstoy whose canvas can take in a whole country, a war or a revolution, and paintings such as Picasso's Guernica which can embody the horror and pathos of a large scale human drama. Solzhenitsyn's Nobel speech in defence of literature immediately comes to mind where he speaks of the great and blessed property of Art:

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964. p.50.

2. and 3. Ibid., p.51.

> Art and literature can perform the miracle of overcoming man's characteristic weakness of learning only by his own experience...Art re-creates in the flesh all experience lived by other men, so that each man can make this his own. 1

Speaking of National culture: "Nations are the wealth of mankind, they are its generalised personalities: the smallest of them has its own particular colours, and embodies a particular facet of God's design."[2] He also defends the artist's right as apparently Camus did, to express nothing but his personal experience and his introspective reflections, because his gift is inborn. So the artist is seemingly driven by forces he cannot ultimately fully understand or control but uses merely to serve.

Far from seeing scientists as potential saviours for mankind Sozhenitsyn says "the scientists have made no positive attempt to become an important, independently motivated force among mankind. They shy away in whole congress-loads from the suffering of others: it is more comfortable to remain within the frontiers of science."[3] However he believes we each share in the responsibility for evil in the world--even the writers-- but he sees literature as a unifying force "a single great heart beating in response to the cares and sorrows of the world."[4] And finally what is true for science and art "Mankind can only be saved if all men are concerned about everything"[5] then we will be able to see more clearly and fight against lies for " One word of truth outweighs the whole world."[6]

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1. Alexander Solzhenitsyn,'One Word Of Truth',The Bodley Head, London 1972.p.14.

2. Ibid.,p.16.

3. Ibid.,p.21.

4. Ibid.,p.23.

5. Ibid.,p.25.

6. Ibid.,p.27.

So Green sees a need for science and art to work together as does Hesse and Solzhenitsyn. How this is to be achieved they do not say. Some unifying force has to be generated. Traditionally the study of philosophy has attempted to be this synthesiser. We seem to need something at school level and at early adult level. The study of education and sociology attempts to be overseers in this sense but for children we need to think of something new, and I am inclined to think it will be in the area of language that we will need to re-consider how it is learned and applied. An early understanding of metaphor in all subject areas could possibly be the catalyst that helps us to make sense of what is often disparate knowledge. If we use words automatically without seriously considering their multiple levels of meaning then we are merely mechanical.

Green's criticism of the literary mind has some truth, for all art is circumscribed by frames and perhaps "our culture now lacks any integrated body of intellectual experience that includes both the really powerful categories--the scientific and the literary."[1] McCulloch is aware of this too, the piecemeal nature of research in education for instance and the lack of an overview which he believes history of education can help to furnish, and which must be aware of, and critical of change, especially of control of knowledge: "Education is concerned only partly with the dissemination of knowledge. It is also about transmitting values, to the young and throughout life. So in our historical study we will be involved in distinguishing the knowledge and values of societies, and how they account for continuity and change in power, authority and social organisation."[2]

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964. p.53.

2. Gary McCulloch, Education in the Forming of New Zealand Society: Needs and Opportunities for Study, NZARE, Monograph No1, June1986, p.27

Green also sees the unfortunate sexual polarity ascribed to science and art and which Hudson described in Frames of Mind. This is exacerbated by the predominant military bias in much science. He quotes physics texts for example as being full of references to explosives, bridge-building etc. However one of the effects Green sees is that scientists assume an air of personal aridity and the literary persons suffer a sense of impotence and consequently hysteria. Perhaps as Capra says we need to think more androgynously because our perceptions of reality are inadequate for the times we live in dominated as they have been by outmoded and patriarchal styles of thinking and a mechanistic Cartesian world-view.[1]

Green says that science does contain the kind of truth most non-scientists are unaware of. As an illustration he describes what happens when mathematical and physical or chemical facts come together with simplicity of style fusing with "the beauty of the largest kind of pattern."[2] We each need he says to work out our own relationship to science and decide what culture is. Ferguson afffirms this same idea:

> We are duty-bound to search, question, open our minds...[for] the most powerful transformative ideas from modern science connect like parts of a puzzle. They support each other; together they form the scaffolding for a wider world view.
>
> Each of these major ideas is a whole in itself, a system for understanding a spectrum of phenomena in our lives and in society. Each also has uncanny parallels to ancient poetic and mystical descriptions of nature. Science is only now verifying what humankind has known intuitively since the dawn of history. 3

She is aware of the overlap of poetry and science. Green speaks of Professor Oppenheimer and his book Science and the Common Understanding as

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1. Fritjof Capra, The Turning Point, Fontana, Great Britain, 1982.

2. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964.p.55.

3. Marilyn Ferguson, The Aquarian Conspiracy, Granada, Great Britain, 1982, p.163

being effective in a similar way. Green says the responsibility for healing the two cultures lies with the literary person because theirs is the language of more general discourse. To him physics appears to have a similar role in science to the modern novel in literature "it has presented itself as the ultimate achievement of the impersonal mode of knowledge"[1] and is just as 'pure' as modern literature and although its consequences are social its purposes are not. He also believes that scientists tend to be insulated from others by their roles, and the nature of the institutions in which they work, and this is further compounded by their language and methods and isolation in their work. He believes university teachers should be humanist but he does not define the term, except to say that they must be committed to the whole scope of modern knowledge, and feel responsible for teaching others, not believing for instance that it has to be obscure like Eliot's description of poetry. Science fiction he says was excoriated by Scrutiny which is symptomatic of current patronising attitudes to things scientific. Polanyi he says has described Marxism as believing that all knowledge must try to be purely scientific and objective but he (Polanyi) believes that " Only a society which shares a faith can make individual faith possible."[2] Therefore literature world-wide must be free. The same thought as Solzhenitsyn to whom I referred earlier.

To be socially responsible says Green one has to be sensitive to language and literature and therefore a literary training is a vital part of one's education, not necessarily to be an artist but simply a craftsman is sufficient. Modern style he says is not 'literary' in the traditional

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964. p.69.

2. Ibid., p.76.

sense as it can be passionate, angry, critical, distrustful of human nature, rebellious against traditional standards. For every citizen literary sensibility he believes could assist them to see through propaganda, to judge logic. It can also foster a concern for culture as a whole and a concern for education which leads one to a concern for the whole life of an individual in society. Thus we value uniqueness and people do not become statistics even if that is how they are represented and one develops scepticism about political and economic remedies. This development of sensitivity to people then is special to literature and creates in some writers themselves too much sensitivity to cope as we have witnessed and in others it produces eccentricity or violent extremism. Others have "a deep intuition of the sources of evil in the individual and of disorder in society."[1] Some give us allegories of personal experience. Green questions why it is that we look to such people for social wisdom when they cannot really deal with more than one or a few people in their view. Scientists he believes also contribute to our understanding of what it is to be human and show evidence of insight, humour,idealism and sensitivity of the same order.

One factor which keeps the two cultures apart says Green is that the context in which the scientist works is one where much government money is spent. "The research scientist finds himself in contexts of power, and sometimes in positions of power, utterly alien to the research scholar in literature."[1] On the other hand the literary person has little appreciation of the humour, idealism and common sense which Green says forms the nucleus of sensibility in science: "Hostility to science...is a form of stupidity, which teachers of literature everywhere should be actively

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1. Martin Green,<u>Science and the Shabby Curate of Poetry</u>,Greenwood Press,Connecticut,1964.p.99.

stamping out."[1] Green himself whilst teaching liberal studies at a College of Advanced Technology 1962-3 tried to put his ideas into practice. He found that generally speaking, in such institutions, literature and language studies are divorced from each other. Language is reduced to exercises in mechanical application of rules and practice in these. Ideas are not involved yet it is literature that needs to be taught so that the students realise that it is "a mode of knowledge, a truth discipline, just as much as their own."[2] Green reflects that few of us learn new attitudes except as a result of acquiring new information. What he considered these students needed was in fact the last thing they or their tutors considered necessary, for they could only perceive of English as a technical subject.

One might imagine that perhaps Science Fiction could prove to be the magic link between science and language arts but not according to Green. He has already said that "The scientific sensibility is oriented towards the species, the literary towards the individual."[3] The scientific mind is not interested either, he says, in the ways in which individuals differ but in the large features of whole societies and although the best of these novels might excite the imagination he says they are rarely satisfying. He claims that it is not a genre but a sub-genre and is anti-literary.

Religious sensibility can also be fostered by science, says Green.

> Much scientific work leads the mind up and out to those enormous distances of size before which reason quails; or to those recurrent glimpses of being itself; to half the sources of all religious feeling. Moreover, it leads one out of those complexities of self -interrogation, those orgies of metaphor-making, in which so much

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964.p.101.

2. Ibid., p.113.

3. Ibid., p.126.

potential religious feeling gets dissipated amongst literary people.[1] According to Green the average cultured mind finds the idea of progress crude and tends to a cyclic view of history. The literary person for example has people like Homer and Shakespeare as measures of worth, not expecting anyone to transcend them. Yet in science and maths for example we are all more knowledgeable than people of the past. More importantly "Teachers of science don't make a point of demonstrating their subject's interactions with other modes of intelligence, as teachers of literature do."[2] He reminds us that "science is an exercise for the whole mind, including the imagination, just as history and literature are--in fact it is one of the humanities."[3] Even textbooks can be liberally conceived and he cites Gerald Holton's introductory physics course as an example. He discusses other similarly laudable works and says that they explain science as the expression of human personality in the same sense as art, politics, history and philosophy do. Koestler's biography of Kepler for instance illustrates that it is only the whole man's successful self-discipline that can be called the scientific method. He believes also that it is not in pointing out irrationalities that we prove the fact that science is one of the humanities for "The real romance of science is its rationalizing power."[4]

Colin Evans also believes that we must become more skilful at communicating across boundaries with people who do not share our preconceptions: "We must find better ways of talking, better ways of

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1. Martin Green, Science and the Shabby Curate of Poetry, Greenwood Press, Connecticut, 1964. p.137.

2. Ibid., p.138.

3. Ibid., p.142.

4. Ibid., p.153.

writing, better ways of integrating our talking with our writing."[1]

The age of nihilism said Nietzsche would give way eventually to "an age which will carry heroism into the field of knowledge and wage wars for the sake of principles."[2] Truth as Raymond Wilson says "is located in the psychology of those who subscribe to it and has no independent existence of its own."[3]

David Pratt tells us that in opinion polls in the U.S. the arts are always accorded the lowest status. Yet as he says there is basic human need to express oneself in this medium, and "these artistic impulses atrophy in most children after they start school."[4] One reason he thinks is that artistic creativity is still seen as "a 'gift' received by an elite"[5]

> The prevailing ethos of the school is above all one of "left brain reductionism," where only rational, numerical, propositional, and verbal activities are valued. The intuitive, creative, spatial, appositional, and artistic qualities (right brain) are regarded as frills, peripheral to the serious business of school.6

The evidence here has suggested that both science and the arts can profitably use both sides of the brain. The scientist uses intuition and the artist needs discipline. How can we hope for unity in a world where we ourselves are lopsided in our thinking, literally. For too long we have failed to integrate the dual activities of the brain and the consequent multiple aspects of learning. How much human misery and confusion we may

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1. Colin Evans, Authority, Knowledge, and the Academic Conference, Quinquereme, Vol.8,No.1, Jan. 1985, p.85.

2. David E.Cooper, Authenticity and Learning, R.K.Paul, London 1983,p.1.

3. Raymond Wilson, Metaphors in some Nineteenth and Twentieth century Fiction,Metaphors of Education, ed.W.Taylor et al.,Heinemann, University of London, 1984,p.117.

4. 5. and 6. David Pratt, Curriculum for the 21st Century,Education Canada, Winter, 1983, p.43.

have caused by failing to develop whole people is incalculable. This is probably what Katherine Mansfield felt intuitively when she said;

> It seems to me that what one aims at is to work with one's mind and one's soul TOGETHER. By soul I mean the 'thing' that makes the mind really important. I always picture it like this. My mind is a very complicated, capable instrument. But the interior is dark. It CAN work in the dark and throw off all kinds of things. But behind that instrument like a very steady gentle light is the soul. And it's only when the soul IRRADIATES the mind that what one does matters.[1]

The question for teachers is how we are to enable students to achieve this integration in their own personalities. As Katherine said at the end of this letter "It's awfully, terribly difficult to get at." Perhaps if we make sure that people understand the part that metaphor plays in their own makeup and how the world about them is organized then we may move some way in the right direction. The essential element that links art and science is I believe metaphor. The area where, as I said in my introduction, humans are at their most creative. If we look at how primitive people and children observe and understand the world or how we often interpret it for them we will see that it is deeply metaphoric--though it may appear in the guise of animism (possibly totemism) and anthropomorphism.

Kathleen Raine goes so far as to say that in our materialist secular society "We are simply not educated in these things which above all make us human.....To recreate a common language for the communication of knowledge of spiritual realities, and of the invisible order of the psyche, is the problem now for any serious artist or poet, as it should be for educators."[2] She makes the point that the goldsmiths, painters and sculptors

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1. Katherine Mansfield, The Letters and Journals of Katherine Mansfield, ed. John Middleton Murry, Hutchinson, New Zealand, 1984, p.261.

2. Kathleen Raine, The Inner Journey of a Poet, George Braziller, New York, 1982, p.13.

of the past whose work we admire were not simply indulging in 'creativity' or 'self-expression' nor were they breaking with the past or going against tradition but were in fact fed by it. "They were making use of the shared knowledge of a spiritual tradition that illuminates their work, as it illuminated the iner lives of those who participated in its unity of culture."[1] Once again the notion that we need that link with the past.

The poet may write from inspiration or intuition but his imagination is fed, as that of Yeats, by forays into other cultures and wide experience. This kind of knowledge is, she believes, "no less essential to the production of works of imagination than is the knowledge of, and respect for, the 'laws of nature' essential to those who launch space missiles."[2] Such knowledge she realizes cannot be quantified. Such knowledge of course has little appeal to those who want everything to be accountable or subject to rigorous testing. Pratt says that we need teachers who above all else have the personal attributes of "Warmth, openness, concern, commitment, and responsiveness"[3] for they will cultivate the personal and social qualities of their students. But there is more needed than this. Even the warmest, most open, committed, and responsive person can be misguided. Each of us carries in our heads a metaphor of what it is to be, and to be a teacher, and to teach. If we never examine these models then we fail not merely to be current but also to be dynamic self-renewing open systems. As Bertalanffy says we need to seek not equilibrium but homeostasis, self-renewal, re-energizing. We need to be aware of the outmoded cliches in education and

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1. Kathleen Raine, The Inner Journey of a Poet, George Braziller, New York, 1982, p.13.

2. Ibid., p.23.

3. David Pratt, Curriculum for the 21st Century, Education Canada, Winter, 1983, p.46.

in society for as Kenneth Burke said "men's modes of symbolic action are simultaneously entanglings and entanglements."[1] We need to know how to help our students to untangle them. We also need to know more about how the mind works and current studies of the brain are enabling us to do just that. Those who organize the schools for us, likewise need to be aware of the metaphors they rule with, and are ruled by. They need to explore the larger concepts such as democracy and equity, etc. so that each of us knows whether we are being aided or exploited. Paulo Freire saw the need for literacy as a path to true democracy but perhaps we have not sufficiently considered just what it is to be literate. The word is in fact ironic because perhaps we have been too literate and need to be, not illiterate, but to coin a word metaliterate, that is being able to appreciate the intricate nature of the language we use and developing consummate skill in using it. Before we reach this utopia it might be necessary as Marshall Gregory thinks to fight for the liberal arts, for "Those of us who fight for the liberal arts are fighting for the life of the mind in society, for the freedom of our students' intellects, and for the vision of a better world they might want to create."[2] Trends are going against us he thinks.

We have seen how scientific or rational thought came to be the dominant mode of thinking, epitomized I believe by people such as Robert Thouless who believed that analogies have been useful in science only up to the point where theories could be expressed as mathematical equations. To him only the scientific method has value because it is based on facts, but

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1. Kenneth Burke, Language as Symbolic Action, University of California Press, 1966,p.viii.

2. Marshall Gregory, If Education is a Feast, Why Do We Restrict the Menu? A critique of pedagogical Metaphors., College Teaching, Vol.35,part 3, 1987.

as we have seen even science changes its course as the paradigms and metaphors shift. Thouless saw our only hope for universal understanding to come from a more rational approach to problems. An efficient democracy, to him, would be one based on dispassionate reason "Its members would be educated to distrust emotional language and the rest of the stock in trade of the exploiters of crooked thinking."[1] But now there are voices in this rational desert which science has led us into. Geraldine McDonald for instance is aware of how resources have been deployed in the areas of science and technology to the detriment of aesthetics and the humanities. We need a more balanced view she thinks or, in her words, "a description of successful constellations of procedures, places and people."[2] She hopes that "By the end of the century it will be the turn of aesthetics and the humanities."[3]

Jerome Bruner also thinks that we need to help make the schools "a suitable metaphor for life,"[4] for he finds that they now reflect the dominant greed of society. He wants to design school environments that make people clever, and he speaks of networks that allow people to help themselves, and uses a scaffold metaphor to illustrate the development of learning. He says that giving children material is not enough, they need toys that challenge them, structured materials. He is adamant that "language is our best model of tutoring...Human knowledge and its acquisition are

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1. Robert H. Thouless, <u>Straight and Crooked Thinking</u>, Hodder and Stoughton, London, 1974, p.191.

2. and 3. Geraldine McDonald, Educational Research in a Science and Technology Future, <u>New Zealand Journal of Educational Studies</u>, Vol 20, No.2, November 1985, pp. 138-9.

4. Jerome Bruner, Schooling Children in a Nasty Climate, <u>Psychology Today</u>, January 1982, p. 58.

social, dependent on language, on stored culture, on social modes of transmission."[1] But we have not examined these closely enough he thinks for we have been too busily occupied with individual achievement.

I am not trying to argue for a curriculum that would be only arts based, on the contrary what we seem to need is an integrated arts science model to combat the dominance of science and technology as at present and and to combat an apparent decline in appreciation of the humanities. In a more recent article Pratt speaks convincingly of the need for new curriculum. The Greek story-tellers he said understood the power of symbols. They recognized that living requires two complementary kinds of resource: "technical weapons for aggressive resolution of immediate obstacles, as well as the gentle means of guidance to ultimate goals."[2] Now we have what he calls "the technologists with their systematic procedures, military metaphors, and their behavioural and positivistic language. On the other hand, there are the humanists, with their intuitive thinking, poetic language, and their subjective and interpersonal priorities."[3] They both as he says speak different languages. "Conventional curriculum technology can deal with knowledge and skills, but it cannot provide useful guidance to teachers seeking to develop in their pupils attitudes, values, intuition or intrinsically valuable experiences."[4] Their instrumentalism which pays attention to means and ignores ultimate ends also leads to a tendency to treat everything including people as a commodity. Their writing purveys a

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1. Jerome Bruner, Schooling Children in a Nasty Climate, Psychology Today, January 1982, p.63.

2. David Pratt, Curriculum Design as Humanistic Technology, Journal of Curriculum Studies, 1987, Vol.19, No.2, p.149.

3. Ibid., p.150.

4. Ibid., p.153.

sense of moral vacuity even if this is not a personal attribute. The humanist view is not without its critics also and he details some of these but the question is how to profit from the best of both. His suggestion is to return to Maslow's hierarchy of needs which focusses on the client.

Peter Abbs reminds us that an aesthetic and creative education has not generally been understood but is often seen as a mode of therapy and free self-expression when in fact it it is a training in various forms of discipline for "all education whether it be in the natural sciences or the humanities should be aesthetically conceived."[1] He stresses the importance of pattern, of harmony, of rhythm in all of one's activities. To achieve teaching which embraces these ideas is he says absorbing, demanding, severe and relentless.

Robert Dearden in speaking of curriculum planning shows at the same time how deceptive metaphors can be. He cites the instance of the 'National need' as a claim to justify the intervention of the Secretary of State in defining the schools curriculum in the U.K.. Also in various surveys released at the time of his writing he searched for fundamental curricular principles in these documents and found instead, that terms such as'balance' and 'coherence', were frequently used. He questions their usefulness, for one can speak of balance with regard to almost anything. When speaking of food values for example it does not necessarily mean equal weights of food as he points out. An inspectors' report on the B.Ed. is one he gives as an instance where it was said that "education studies should be more coherently built round a unifying thread of vocational relevance."[2] The same word

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1. Peter Abbs,Proposal for a New College, Heinemann, London,1977, p.56.

2. Robert Dearden,Balance and Coherence: Some curricular principles in recent reports. Cambridge Journal of Education Vol.11 Pt.2, 1981, p.112.

'coherence' is also used of the school curriculum. The metaphors assume that we know what 'balance' and 'coherence' really mean in this sphere but they are as Dearden says 'vapid'. And the notion of 'national need' is he think merely a euphemism to disguise the facts of economic life:

> Thus The School Curriculum affirms in its second paragraph the apparently child-centred principle of developing individual potential to the full. In the following paragraph it defines that potential with references to the realities of adult life and, in the paragraph next after that, adult life is defined in terms of a technology-based economy.1

What Dearden illustrates here is the complexity of metaphors with which we can become bamboozled particularly by policy documents and not only in education. Each person reading such a document brings to the reading his or her own concepts of such things as 'balance' and 'coherence', and cleverly written statements can deceive us by appealing to all parties concerned, unless thay are aware of the language traps within them. Dearden's concern in this instance is not to discuss the metaphors particularly but to point out the pragmatic current approach to curriculum planning from a mainly economic point of view, but his comments speak also in my view of the dangers of inappropriate or inadequate metaphors, something we need to be ever alert to.

The richest repository of metaphor is our heritage of folk tales fairy tales, myths, legends and Biblical stories, and in our cultural store of prose, poetry and drama. Young Toki in Potiki by Patricia Grace had his own stories to explain his being and Grace says that our stories are given to us but many people never receive this gift. Although they have never

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1. Robert Dearden,Balance and Coherence: Some curricular principles in recent reports. Cambridge Journal of Education Vol.11 Pt.2, 1981, p.116.

been totally neglected they have suffered from the taint of doubt cast over them since classical times when metaphor gradually began to be viewed as ornamental rather than elemental. This led to a treatment of literary language as something esoteric, highly refined, 'precious' and above ordinary mortals. Now that we are more aware of the true nature of metaphor we can apreciate the fact that it is a normal aspect of language and indeed of thinking. It is not only a literary skill to create a metaphor it is part of the creative process through which ideas are expressed to convey new ideas as in science and to enliven ordinary language for we all appreciate wit, novelty and humour. In our own times particularly we have become more conscious also that it can be put to less desirable purposes such as lies, propaganda and deceitful advertising but the realisation of the power of language can transform one's thinking and one's outlook as in _Portnoy's Complaint_ when he suddenly realised that words are more than 'bullets' of communcation fired at people, they are "little gifts, containing meanings."[1] The difference between old and new metaphors is like the difference between fresh and preserved food, both sustain life but we know which we prefer when it is available.

Language is also like music. There are infinite patterns of music yet to be discovered just as there must be of language. We are pattern-makers recognizing even in our limited linear fashion associations, structures, opposites, links, similarities and with the ability to create meaning for ourselves. It has been said that metaphor is "an instrument for the act of creation which God forgetfully left...in the inside of one of his creatures, as an absentminded surgeon sews up one of his instruments in the belly of

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1. Philip Roth, _Portnoy's Complaint_, Guild Publishing, London, 1982, p.221.

his patient."[1] It is just as well he did for imagine how dull the world would be without it. We would have to cope with a restricted vocabulary of dead metaphors and there would be no incentive to be creative or imaginative.

In recent years the English syllabus in New Zealand has attempted to raise consciousness about language with the study of various registers as a part of its work. However there is still a legacy of reverential attitudes to literature and a treatment of metaphor merely as a literary technique to be understood in terms of other people's writing. In a recent survey of children's writing metaphor was scarcely mentioned.[2] The new emphasis on journal or process writing encouraged particularly by Donald Graves has gone some way to encouraging creative self-expression in children which goes further than the free and easy imaginative or creative writing that was once part of the week's roster of English work, for now proof reading and editing techniques are also explored. The ideal is for everyone to be a confident critic of both his or her own work and that of others. We also need to be convinced that every person is a writer as much as they are a speaker, just as Betty Edwards tries to convince us that we are all natural artists, if we would only use both sides of our brain.

One task for teachers and administrators must be to create the necessary integration of science and art across the curriculum so that new metaphors of meaning arise and make learning the pleasure that it can and should be. There is also need for more reflective examination of the power of figurative language in educational discourse. Metaphors are bridges and teachers especially are bridge-builders.

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1. J.David Sapir, The Anatomy of Metaphor, in The Social Use of Metaphor, eds. J.D.Sapir, and J.C. Crocker, University of Pensylvannia Press, 1977. Attributed to Ortega Gasset. p.32.

2. IEA Study of Written Composition, Dept. of Educ.Wellington, 1987.

Eisner is convinced of the importance of metaphor:

> Metaphor breaks the bonds of conventional usage to exploit the power of connotation and analogy. It capitalises on surprise by putting meanings into new combinations and through such combinations awakens our senses. Metaphor is the arch enemy of the stock response...What is ironic is that in the professional socalization of educational researchers, the use of metaphor is regarded as a sign of imprecision; yet nothing is more precise than the artistic use of language. metaphoric precision is the central vehicle for revealing the qualitative aspects of life.1

Ernesto Grassi describes Rhetorical language as preeminent for it deals with our most urgent problems concerning the nature of man. Insight into relations is basically not possible through a process of inference he says, but through IN-SIGHT as invention. Vico continually emphasises this as primary over that which he calls "critical" i.e. purely rational thought.

> The metaphor is, therefore, the original form of the interpretative act itself, which raises itself from the particular to the general through representation in an image, but, of course, always with regard to its importance for human beings. The Herculean act is always a metaphorical one and every genuine metaphor is in this sense Herculean work.2

And Cicero thought we surpassed ourselves he says in this ingenious activity.

The universal question we all ponder is the meaning of life and we have looked in the past to enlightenment from spiritual advisers, guides and prophets who have often spoken in mysterious metaphors. We still look to these but consciousness of life as a pattern helps us to understand that we are perhaps only a thread in an intricate life tapestry, only one mover in the dance, one voice in the song. As Raymond Wilson says there is simply no way of distinguishing the dancer from the dance and if we assume that there is, this may simply be a reflection of the way our language, as opposed

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1. Elliot W. Eisner, The Educated Imagination, Stanford University, 1979, p.200.

2. Ernesto Grassi, Rhetoric as Philosophy, The Pennsylvania State University Press, 1980, p.7.

to others, organizes our thinking.[1]

The more universal the individual consciousness becomes the more we are one with other people and our past, then we can feel at one with nature also, but unless we can see and understand such a metaphor we are constantly misled and confused. And if the sceptic or more 'scientific' reader doubts the relevance of this metaphor for understanding the world we live in and the way we live in it then I draw his or her attention to what Fritjof Capra has found:

> The PATTERNS scientists observe IN NATURE ARE INTIMATELY CONNECTED WITH THE PATTERNS OF THEIR MINDS; with their concepts, thoughts and values. Thus the scientific results they obtain and the technological applications they investigate will be conditioned by their frame of mind. Although much of their detailed research will not depend explicitly on their value system, the larger paradigm within which this research is pursued will never be value-free.2

It is impossible for a human being to be completely objective even about the material world about him/her. I have stressed the word pattern here as I have done throughout this work because every area of research has thrown up the same idea that we organise our conception of the world in terms of patterns, that we recognize patterns, seek them out and create them, because they are so much a part of nature and are even reflected in the way we appear to think. Bergland says "It is no accident that mankind's first paradigms involved patterns; it is difficult to conceive of models for thought that do not involve patterns in one way or another."[2] And further on when discussing the brain as a gland he says "The mechanisms that drive thought are found all over the body and, wherever they live, they

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1. Raymond Wilson, Metaphors in some Nineteenth and Twentieth Century Fiction, Metaphors of Education, eds.W.Taylor et al, Heinemann, London, 1984,p. 117.

2. Fritjof Capra, The Turning Point, Fontana, London,1982,p.77.

3. Richard Bergland, The Fabric of Mind,Penguin,Australia,1985,p.15.

function at their highest level by recognizing the molecular patterns of the combination of hormones that modulate thought.... The mind is made pattern dependent and comes to share in the ubiquitous secret of evolutionary survival: pattern recognition."[1] Capra asserts that:

> The conception of THE UNIVERSE AS AN INTERCONNECTED WEB OF RELATIONS is one of two major themes that recur throughout modern physics.77... Modern physics thus pictures matter not at all as passive and inert but as being in a continuous DANCING and vibrating motion whose RHYTHMIC PATTERNS are determined by the molecular, atomic and nuclear configurations.2

This same weblike structure is also seen in language where time and again reference is made to almost human aspects of speech. Words are born, die, have families are related to other words, are constructed as 'figures' of speech. We spend a great deal of our thinking time making connections or relations between them, making associations as Jung recognized is one of our main tasks and he used word associations as a way into the human mind. We perhaps need to remember what Richards said that "words are not a medium in which to copy life. Their true work is to restore life itself to order."[3]

What we can see in the history of education and in writings on education are recurring metaphors which give us an insight into the main tenets on which the theory ,philosophy and practice of education have become based. Two of the recurring key metaphors are 'growth ' and light. The 'growth' metaphor has been well analysed and explored but I have found very little on the 'light' metaphor which is even more prevalent and not only in writings on education but other spheres also, particularly religious.

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1. Richard Bergland, The Fabric of Mind,Penguin,Australia,1985,p.109.

2. Fritjof Capra, The Turning Point, Fontana, London,1982,p.79.

3. I.A. Richards, The Philosophy of Rhetoric, Oxford University Press, New York, 1936,p.125.

Light as Fritjof Capra points out is a difficult concept for it is both a particle and a wave, or at least these were the concepts originally used, until it was realized that these properties depended on the experimental situation it was in or on the interaction it was forced to make with apparatus. This is a peculiarity says Capra which is met continually, that two terms which seem opposite are used of one phenomena. He calls this notion one of complementarity which Bohr has suggested might equally well serve other areas than science. The classical notion of solid objects has been demolished "Subatomic particles, then, are not 'things', in turn, are interconnections between other 'things' and so on."[1] This is how modern physics represents the unity of the universe. Heisenberg is quoted as expressing it thus: "The world thus appears as a complicated tissue of events, in which connections of different kinds alternate or overlap or combine and thereby determine the texture of the whole."[2]

If this has far-reaching implications for science then it must also apply to teaching. Gregory Bateson, says Capra, has argued that it should be used as a basis for ALL definitions, and that this should be taught to our children in elementary school. Anything, he believed, should be defined not by what it is in itself, but by its relations to other things. He might well have been talking about metaphor for this is exactly what this consummately skilful verbal 'creature' does, enables us to make abstract connections which help us to recognize wholes where before we perhaps only dimly saw parts. Maybe we need to know more about the nature of light itself to understand the many references to illumination as a source of or route to wisdom. In Colin McCahon's painting Gate III 1970 there is what

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1. Fritjof Capra, _The Turning Point_, Fontana, London,1982,p.69.

2. Ibid.,p.70.

might be a prophetic message "As there is a constant flow of light we are born into a pure land."

It is the artist of course who recognizes truths before the rest of us. Keri Hulme for instance says that she has been writing about herself in the hope of "making a pattern" but what she has created instead, to her mind, is "an old spiderweb."[1] So to make sense of it all we need the spider. She ends a collection of stories with the following observation on the term Windeater:

> There isn't such a word, eh. There's a lot of us around though.
> I came across the term as a gift, if you like, a sort of found gift. For instance, you break up a perfectly respectable word, happily married in all its component parts: you know it means several things, like a loafer or a braggart. Or a woman who takes part in certain rites. Or it can mean the acquisition of property without any return being made, as well as a spell that is cast to punish somebody behaving in such an unmannerly fashion. That's when its a whole unbroken word, but if you split it, a power leaks out and becomes a woman trying to make sense of herself and her living and her world.
> Which all goes to show the charming naivety of us humans. Sense of a world indeed.

Any attempt to define the world or a word is pretentious indeed. But if all we have is language then we need as teachers to share the power over it.

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1. Keri Hulme, Te Kaihau The Windeater, Victoria University Press, New Zealand, 1986, p.237, p.235.

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