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The role of metalinguistic awareness in the development of a semiotic apprenticeship

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Abstract

The current thesis explores the role played by metalinguistic awareness in language acquisition/learning and seeks to develop a theoretical framework in which the integration of 'knowledge about language' [KAL] in the school curriculum can be clarified in terms of curriculum planning and pedagogic practice.

Chapter 1 unravels the confusion surrounding terms such as metalinguistic 'awareness' and/or 'consciousness' by relating them to the discussion on metacognition currently in vogue in cognitive psychology. A taxonomy of theoretical models is considered.

Chapter 2 relates differences in the definition of metalinguistic awareness and its function in language acquisition/learning to the theoretical models outlined in Chapter 1. A socio-cultural viewpoint, it is argued, which views metalinguistic awareness arising out of the progressive decontextualisation of functional variants, is the most useful in interpreting existing data.

Chapter 3 seeks to build on Chapter 2 by developing a more elaborated model of the role of metalinguistic awareness in the emergence of 'parasitic' language skills within a socio-cultural paradigm. The model examines the interdependence of skill and knowledge in the child's expanding linguistic repertoire and suggests a taxonomy of 'meta' processes facilitating such an expansion.

Chapter 4 addresses the variability of metalinguistic skills among children in terms of their semiotic experience and, largely through a reconsideration of Bernstein's theory of codes, explores the implications of such variability for educational development.

After a critical review of past practice, Chapter 5 proposes guidelines for the integration of KAL into the curriculum based upon the notion of the learner as 'reflective practitioner'. Chapter 6 concretises this approach by seeking to link differences in pedagogy between L1 and L2, and within L2 between second and foreign language learning, with differences in the extent of 'reflective practice' required.

In conclusion, tentative suggestions are considered regarding the implications of such an approach for Initial Teacher Education.

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Contents

Introduction

Metalinguistic awareness, according to Cazden (1975: 603), can be defined as "the ability to make language forms opaque and attend to them in and for themselves ...". [1] Interest in young children's ability to attend to such forms -- rather than to the meaning they convey -- has long been a leitmotif of the literature devoted to first/second language acquisition. It can be detected in the case studies of Jespersen (1922) to Slobin (1984), the pre-sleep monologues recorded by Weir (1962, 1966) to Kuzcaj (1983), the self-repair strategies analysed by Clark (1978) and the observations on children's apparent eagerness to 'play' with language at all levels as noted by writers from Chao (1951) to Chukovsky (1963) or P. and A. de Villiers (1979). Perhaps not surprisingly, considering the largely anecdotal nature of the evidence available, attempts to explain children's ability to focus on the medium of language as opposed to the message it encodes have varied dramatically over the years. Differences have emerged, in particular, as to whether such behaviour is conscious and/or volitional in nature and -- depending upon the answers to such questions -- as to whether it plays a functional role in the child's ongoing linguistic and cognitive development. [2] It has undoubtedly been the uncertainty regarding the cognitive status of such behaviour which prompted Dore *et al* (1988: 11), in their review of the literature relating to 'crib speech', to note that metalinguistic awareness "... has often been observed, although never satisfactorily explained, in the language development literature". Perhaps the most useful attempt to establish a taxonomy of the various forms such awareness has assumed in anecdotal sources is to be found in Clark (1978) and Clark and Anderson (1979) although, it should be noted, their tentative interpretation of the findings is considered controversial in several respects.

If earlier references to children's metalinguistic behaviour have been largely anecdotal in nature, more recent ones have been based on a systematically experimental approach. [3] As Bowey (1988) suggests, this is probably due to the growing interest in cognitive psychology in young children's ability to reflect upon and monitor their own mental processes that has pivoted around the notion of 'metacognition'. Studies in the field of metacognition have been seen to have a bearing on children's developing sense of metalinguistic awareness and, conversely, children's ability to reflect on and control their own use of language -- as revealed in experiments designed to elicit their

appreciation of phonological, morphological and syntactic patterns -- have been seen to have a bearing on the emergence of general metacognitive processing. Valuable reviews of the research findings and of the links between metalinguistic and metacognitive processing can be found in Tunmer *et al* (1984), Bowey (1988) and Gombert (1992). While such research has added considerably to the earlier data, however, it has tended to compound rather than overcome existing disagreements. Differences have emerged not only in the interpretation of the research findings but also in the attempt to reconcile such findings with those of the anecdotal literature to create more comprehensive theoretical models. In addition to the ongoing problem of the cognitive 'status' of metalinguistic behaviour, there would appear to be three principal sources of controversy:

- what processes give rise to metalinguistic awareness, i.e. are they domain-specific or are they related to general metacognitive strategies which, it is widely accepted, tend to emerge only in middle childhood;[4]
- what function does metalinguistic awareness play, i.e. is it simply a by-product of first language acquisition or, on the contrary, does it play a functional role in the child's linguistic and cognitive development; and
- what aspects of language do children become aware of, to what degree and in what order, i.e. is there a natural sequencing (or patterning) in the aspects of language children attend to?

Answers to such questions concerning the origins, function and development of metalinguistic behaviour are hardly unimportant in that they have a direct bearing on our understanding of the language acquisition process. As Clark (op. cit.) suggests, evidence to the effect that children's early metalinguistic behaviour is conscious and/or plays a functional role in the internal reorganisation of linguistic data, for example, would appear to strongly challenge current nativist views on the tacit nature of linguistic competence. [5]

Answers to the above questions would not only aid our understanding of pre-school language acquisition but also of the value of integrating strategies to develop metalinguistic awareness in the school curriculum. Traditionally, as James and Garrett (1991) have pointed out, attempts to

integrate knowledge about language [hereafter KAL] into the curriculum have been the source of considerable controversy. This can largely be explained by the fact that, in the absence of any clarity regarding the role of metalinguistic awareness in the extension of learner competence, the discussion has tended to shift away from a socio-cognitive towards a socio-political focus. As Cameron and Bourne (1989) were to note, this was already implicit in the Newbolt Report (1921) which sought to motivate the study of Standard English [SE] on the basis of its potential for overcoming social antagonisms and creating what Sampson referred to as a 'common culture'. [6] Naturally enough, the debate as to whether KAL aided skill development was rapidly subsumed into a wider and more acrimonious debate about the relative value of standard and non-standard dialects in which the former was associated with anti-pluralist notions of hegemony. As Cameron and Bourne (ibid. 10) were to continue, [SE] grammar became inextricably linked with "... concepts such as authority, hierarchy, tradition, order and rules" and hostility to it was seen to fuel "... anxieties about the breakdown of law and tradition, not just in language but in society at large". Perhaps the most recent example of the tendency to subsume what should be a socio-cognitive discussion about the value of KAL into a socio-political one can be seen in the Kingman Committee report (1988) and responses to it. The 'model' of the English language recommended by the report for study in UK schools was motivated less in terms of its potential benefit for pupils' linguistic development and more in terms of its value as a symbol of national identity. As Cameron and Bourne (ibid. 13) were again to suggest, such a model appeared -- like the Newbolt Report before it -- to

> ... take an authoritarian position by advocating cohesion around one variety of one language (Standard English, hereafter SE) whilst at the same time trying to contain diversity by downplaying minority languages and non-standard dialects. [7]

The fact that KAL was identified with imposing a monolingual and monodialectal straightjacket explains the hostile reaction to the proposals summed up so eloquently by, among others, Rosen. [8]

As proponents of the Critical Language Awareness [CLA] movement have more recently suggested, it is impossible to avoid the socio-political issues involved in teaching KAL. The choice of what aspects of language to draw children's attention to, from what perspective and how cannot be wished away, and there is some truth in Fairclough's (1992: 15) critique of the 'language

awareness' movement pioneered by Hawkins (1981, 1984) for "... passing on prestigious practices and values such as those of Standard English *without* developing a critical awareness of them". [9] While it is true that attempts to integrate KAL into the curriculum have a socio-political dimension, however, it may also be argued that it is self-defeating to prioritise this to the extent that the crucially important socio-cognitive issues involved -- that is, the extent to which metalinguistic processing facilitates the extension of linguistic competence -- is sidelined or even ignored. The latter issue may be, as James and Garrett (1991: 17) argue, the "... most contentious and certainly the most crucial issue in LA philosophy", but it is only by addressing it directly that the socio-political controversy can be resolved or, at least, judged against a meaningful benchmark. In other words, it is only by clarifying the theoretical issues raised earlier in the research literature that it will be possible to determine accurately what children may need to 'know' at any stage in the extension of their linguistic repertoire and what methods may most usefully be employed for developing such 'knowledge'. Such an approach would have implications not only for the development of skills within a given modality (i.e. personal to impersonal discourse modes) but between modalities (i.e. spoken and written forms) and between languages (i.e. L1 and L2). Seeking to determine what children may need to 'know' about language in relation to such a process of functional differentiation would, in this sense, require a cross-curricular language policy similar to the notion of a 'semiotic apprenticeship' developed by Wells (1994, 1997) in which linguistic knowledge and skill are seen as symbiotically related. [10]

It is true, of course, that there still exists considerable controversy in the way in which competing theoretical approaches seek to deal with the issues raised by the research data. While such controversy exists, however, there would appear to be growing evidence that only a socio-cultural approach has the necessary 'explanatory power' to tease out the ways in which metalinguistic processing interacts with linguistic competence. Such a view is certainly the one adopted by the current thesis. Starting with a critical review of the main theoretical approaches that exist in the area of metacognitive processing, it seeks to highlight those aspects of a socio-cultural approach which allow it to plausibly explain the origins, function and development of metalinguistic awareness. By seeking to refine and elaborate the analysis by writers such as Vygotsky in the light of new theoretical developments in relevant fields, it further seeks to outline a model which can be

flexibly applied to the pedagogic process. Crucial to such a model is the notion that metalinguistic awareness functions as both a by-product of, and pre-requisite for, the child's expanding linguistic repertoire of secondary (or 'parasitic') skills. As such, it can serve to inform the elaboration of a 'language curriculum' which includes:

- guidelines for the incorporation of KAL into a process of diatypic and dialectal variation based on contrastive analysis procedures;
- guidelines for the development of an appropriate pedagogy based upon the changing relationship between metalinguistic awareness and linguistic skill in differing contexts, i.e. both between first [L1] and second [L2] language acquisition/learning and within L2.

Such an approach necessarily involves an historical critique of previous attempts at incorporating KAL into the curriculum and the resultant pedagogic practices in both L1and L2.

For reasons of economy and style, the masculine pronoun has been used throughout the thesis to refer to students/teachers of either gender.

Notes

1. It is to be noted, however, that Cazden stresses the unequal distribution of metalinguistic awareness which is related to specific cognitive functions. As he puts it (ibid. 603), "Meta-linguistic awareness, the ability to make language forms opaque and attend to them in and for themselves, is a special kind of language performance, one which makes special cognitive demands, and seems to be less easily and less universally acquired than the language performances of speaking and listening".
2. Bowey (1988: 17-21) provides a useful account of the debate on the extent to which early examples of metalinguistic behaviour can be seen as conscious and/or volitional in character and the implications of this for its functional role.
3. Franklin and Barten (1988: 300-301) highlight the variety of research paths followed in recent years. "The investigation of metalinguistic functioning has followed several distinct paths since the field was delineated as an area of inquiry about ten years ago. Much of the early work was concerned with the child's ability to detect semantic and syntactic anomalies in sentences and to supply corrections. Other research was concerned specifically with the child's ability to analyse the flow of speech into syllables or words. Many verbal explication tasks have been interpreted as involving metalinguistic functioning. In addition, some researchers have seen the child's early play with language as related to awareness of language as a medium".
4. As Titone (1997: 10) points out, the ongoing theoretical confusion is reflected at a terminological level where cognitively 'loaded' terms such as metalinguistic or epilinguistic 'awareness' rub shoulders with more cognitively neutral terms such as metalinguistic 'functioning', 'behaviour' or 'activity'. As he continues, "... writers frequently fall into ambiguities or haziness in using these terms, with great damage to the definition of research objectives and to the interpretation of results".
5. Clark's (1978) view, for example, that early repair strategies involve conscious monitoring of language input and output, and that such strategies are crucial in the development of linguistic competence, would appear to challenge the nativist hypothesis advanced by writers such as Chomsky that competence is based upon tacit knowledge.
6. Cameron and Bourne (1989: 23) quote Sampson, one of the Newbolt commissioners, as writing in his essay *English for the English* (1921): "There is no class in this country that does not need a full education in English. Possibly a common basis of education might do much to mitigate the class antagonism that is dangerously keen at the moment and shows no sign of losing its edge ... If we want that class antagonism to be mitigated, we must abandon our system of class education and find some kind of education common to the schools of all classes. A common school is, at present, quite impracticable .. But a common basis in education is not. The common basis of the common culture is the common tongue".
7. As Roberts (1991: 7-8) was also to put it, "If standard English is seen as a symbol for what binds us together as a nation, then this implies that other languages spoken in Britain are 'alien'. While Welsh is omitted from this category because of the territorial base on which such a model of nationalism rests, community languages spoken in our inner city areas clearly are not".
8. Cf. Rosen, H. 'Struck by a particular gap' in *Learning me your language*, Jones, M. and West, A. (eds.), Mary Glasgow Publications, 1988.
9. It is interesting to note that, even when criticising the attempted socio-political neutrality of the 'language awareness' movement led by figures such as Hawkins, Fairclough (1992: 13) endorses, albeit reluctantly, such aims as "... making up for the lack of 'verbal learning tools' in the home, extending access to standard English to children whose homes do not give it to them" etc.
10. While James and Garrett apparently question the functional role of metalinguistic awareness, it is noticeable that Fairclough (1992: 15-16) expresses the agreement that exists "... between LA and CLA that, as Hawkins puts it (1984: 73-4), 'awareness' affects 'competence' -- or as I would prefer to put it, awareness affects language capabilities".

Chapter 1

Metacognitive and metalinguistic processing

Chapter 1

1.0. Metalinguistic awareness: terminological considerations

The term 'metalinguistic', as Gombert (1992: 1) suggests, is a relatively recent one which can probably be traced back to Jakobson's (1963) definition of one of the secondary functions of language, that is, the need to develop a language to 'talk about' language.[1] Jakobson's definition of the term did not necessarily imply knowledge of a complex (or technical) metalanguage but, rather, of what Gombert refers to as a "... reflexive attitude with regard to language objects and their manipulation", i.e. a capacity to switch attention from the communicative goals of language to the formal means of their expression. It is this distinction between the primary linguistic ability of 'knowing' a language and the secondary (or 'metalinguistic') ability of 'knowing that one knows' it which is common to the literature devoted to the topic and which, as Gombert (1992) has stressed, gives it its coherence as a field of study. It is expressed most graphically, perhaps, in the well-known transparent-opaque metaphor used initially by Luria (1988/1946), when comparing language to a pane of glass, and reformulated and refined more recently by writers such as Hakes (1980), Garton and Pratt (1989) and, most succinctly, Bowey (1988: 3): [2]

> When language is used for comprehension and production of speech, attention is focused on meaning, on the goal of the communicative act, and the language system is 'transparent' (Cazden, 1975), with tacit knowledge being used to generate or comprehend utterances. In metalinguistic activity, however, language itself becomes the object of thought. This requires that the language become opaque, requiring meaning to be separated from, or subordinated to, the contemplation of language structure or form.

Apart from the implication in such a metaphor that switching attention from the goals to the means of expression may be a function of communication failure -- a source of controversy in the literature -- Bowey's description of what constitutes the object of study in the domain of metalinguistic awareness would be shared by most in the field.[3] It highlights the same notions of 'reflexivity' and 'control' that can be detected in Cazden (1975:607), who describes metalinguistic behaviour as that which enables us to "... treat [language] as an object of analysis and evaluation" or, somewhat earlier, in Benveniste (cit. Gombert, 1992: 2) who regarded it as affording "... the possibility of raising ourselves above language, of abstracting ourselves from it, contemplating it whilst making use of it in our reasoning and our observations".

If there would appear to be considerable agreement that metalinguistic awareness implies an ability to stand back and focus on language as a formal system, however, beyond this point consensus breaks down. Two broad areas of controversy have emerged. The first would appear to centre around what aspects of language (as a system) might legitimately be considered the object of metalinguistic awareness and the order in which they appear. One example of this is that of metapragmatics (or metacommunication) which, as Pratt and Nesdale (1984: 105) suggest, may be said to include awareness of both "... the relationships which obtain *within* the linguistic system... and the relationships that obtain *between* the linguistic system and the context in which the language is embedded". If Pratt and Nesdale are prepared to consider awareness of both linguistic and extra-linguistic features as constituting metapragmatic awareness, however, others such as Bruner and Hickmann (1983: 287) have argued strongly that only " ... an act of reference and representation which has as its object the use of signs themselves" should be allowed. They distinguish carefully, therefore, between intralinguistic and deictic relations and limit the study of metapragmatic awareness to the former. Controversy over what aspects of language may be said to constitute the object of study has been paralleled by a second, and even more far-reaching, debate over the cognitive processes involved in the ability to focus on the medium of language rather than the message it conveys. While most would agree that metalinguistic awareness implies a capacity to attend to the "nature and functions of language", as Pratt and Grieve (1984: 2) put it, considerable disagreement exists as to the extent to which such attention is conscious and/or intentional in nature, particularly in the case of young children. At one extreme, writers such as Levelt (1978) and Bowey (1988) include under the term 'metalinguistic' a continuum of activities spanning the cognitive divide from implicit, spontaneous self-monitoring in early childhood -- as in the case of self-repair strategies -- to explicit reflection on language. At the other extreme, writers such as Brédart and Rondel (1982), Chaudron (1983) and Gombert (1992) argue strongly for the need to differentiate between implicit and explicit processes which, they suggest, involve different degrees of consciousness and intentionality. As Gombert (1992: 9) points out:

> ... we are of the opinion that it is necessary to distinguish between the skills observed in spontaneous behaviour on the one hand and, on the other, the abilities which are based on systematically represented knowledge and can be intentionally applied. More than a difference of degree, this is a qualitative difference in cognitive activity itself which

seems to us to delimit these two groups of behaviour.

Almost inevitably, such differences in evaluation of the cognitive processes which are involved in metalinguistic awareness -- and the implications of such differences in terms of self-monitoring and self-regulating strategies -- find a reflection at the terminological level. It is no accident, for example, that Gombert seeks to retain the notion of 'metalinguistic awareness' only for consciously volitional activities whereas Bowey, in line with her acceptance of a continuum between sponanteous and deliberate activities, argues in favour of the more cognitively neutral term 'metalinguistic functioning'.[4]

Differences relating to what constitutes metalinguistic awareness and to the epistemological status of that awareness have inevitably created uncertainty as to what role it plays in terms of children's ongoing linguistic and/or cognitive development. Whereas writers such as Clark (1978) or Bowey (1988) tend to see children's early (albeit spontaneous) ability to focus on language as playing an important functional role in their developing competence, others such as Hakes (1980), Tunmer *et al* (1984) and Gombert (1992) view metalinguistic awareness as arising much later and playing a role only in relation to 'secondary' (or 'parasitic') skills such as reading and writing. Moreover, as James and Garrett (1991) point out, this confusion as to when metalinguistic processing 'kicks in' -- and whether or not it benefits skill development -- has been, in turn, reflected in the educational sphere where there has been considerable interest in recent years in 'knowledge about language' [KAL], as reflected in the Kingman (1988), Cox (1989) and Harris (1990) reports for the National Curriculum.[5] Reasons advanced for the study of language vary considerably and reflect the same radically different concepts of the nature and function of metalinguistic awareness that can be found in the theoretical literature. Tinkel's (1984: 1) view that the study of language should seek to "... lead the students to a greater awareness of what they intuitively know already" would appear, like the recommendations of the Kingman Report, to involve quite different cognitive processes than those indicated by a writer such as Nicholas (1991: 78) who, in the specific area of second language acquisition, seeks to utilize the "... awareness that learners have of language *independently of conscious reflection*", that is, implicit as opposed to explicit awareness. In the past, of course, both Sinclair (1984) and Rosen (1988), supporters of the

'language awareness' movement pioneered by the NCLE, sought to justify differences in the aims and content of KAL by suggesting it should meet the differentiated needs of learners. [6] While there may be some validity in this view, more often than not the differences observed seem to reflect an underlying uncertainty at the epistemological level as to what exactly is meant by the term metalinguistic (or linguistic) awareness and the function it serves.

2. 0. Metacognitive strategies

In many ways, the fact that there has been a blur surrounding the definition of metalinguistic awareness, at both the theoretical and applied levels, is hardly surprising. As Pratt and Grieve (1984: 2) point out, this is almost certainly a direct result of the fact that "... psychology, in common with other disciplines, has not been able to provide a well-articulated account of concepts such as 'awareness' and 'consciousness' which are involved in the study of metalinguistic awareness". Valtin (1984: 208), in common with others such as Sinclair (1986: 611-2), echoes such a view although, he stresses, the blur arises not so much from a lack of precision in defining the term as from a lack of a wider theoretical framework in which to situate and make sense of it. It would, he argues,

> ... be of little help in clarifying the vague concept of language awareness to offer a new definition for it in the absence of a theoretical framework that allows one to specify aspects of language awareness and to establish a developmental sequence.

Such a theoretical framework, if it were to be useful, would clearly have to examine the notion of 'awareness' as an integral part of cognitive growth, the different levels of awareness that arise and -- perhaps most importantly -- the functional, or potentially self-regulating, role that the latter play in skill development. [7] Unfortunately, as Mandler (1985) has pointed out, behaviourist traditions in psychology have long tended to dismiss phenomena such as 'awareness' or 'consciousness' as, in Watson's (1924) eloquent if misguided phrase, the "soul of theology". It has only been in recent years, largely within the information-processing paradigm of cognitive psychology, that such phenomena have once again begun to be considered worthy of analysis, largely in terms of their function as metacognitive (or executive control) mechanisms. Writers such as Tallis (1991) or Lethbridge (1992: 9) are probably correct to draw attention to the bias implicit in this re-interest

which, in its treatment of cognitive functions, is "... at least as mechanistic as behaviourism despite its emphasis upon internal processes". [8] Insofar as such a re-interest has helped to identify many of the issues involved, however, it may be useful to review the broad consensus that has emerged in the literature in relation to three questions: what can be defined as 'awareness' (and how may it differ, if at all, from related notions such as 'consciousness'), what processes give rise to it and what relation does it have with self-monitoring and self-regulating strategies. Such questions, which involve the relationship between cognition and control mechanisms, tend to pivot around the notion of metacognition which, as Gombert (1992: 4-5) suggests, is centrally concerned with "... all knowledge which has as its object, or regulates any aspect of, any cognitive task"

2. 1. 'awareness 1' and 'awareness 2'

Part of the problem with seeking to explain the various ways in which we may be said to 'know' the world (and ourselves) is the terminology available. As writers such as Schmidt (1990) or Chalmers (1996: 6) suggest, terms such as 'awareness' or 'consciousness' can often serve to blur, rather than clarify, our understanding insofar as they can be defined in relation to a variety of factors such as cognitive capacity, introspection, attention and/or voluntary control mechanisms. Perhaps the most useful way of teasing out the potential ambiguity in their use is by exploring their shifting relationship with each other. In one sense, as Chalmers (1996) or Gennaro (1995: 5-6) point out, 'awareness' and 'consciousness' can appear synonymous in everyday speech, as in such statements as 'I am aware/conscious that he is ill'. In both examples, it may be argued, the terms converge in implying not only *that* we know something but that we are able to explicitly represent to ourselves *what* we know. While there is an evident overlap in their use, however, Fromm (1993: 37) is not alone in detecting in the use of the term 'awareness' what he calls a greater sense of 'attention' or 'mindfulness' (*aufmerksamkeit*) than in 'consciousness'. Fromm's view that "... awareness is knowing or consciousness in a state of close attention" -- a view which he saw as applicable at both the individual and social class level -- is echoed by others writing in the field.[9] Dennett (1986: 115), in his discussion on the epistemological distinction between 'awareness' and 'consciousness', was likewise to detect in the former a greater sense of 'intentionality' than in the latter as, indeed, was Nunn (1996) or Tulving (1993: 290) who defined consciousness as a "*general capacity* that an

individual possesses" and awareness as a "*particular manifestation* of this general capacity", that is, as consciousness directed towards a given goal. [10] The notion that 'awareness' implies consciousness 'of something' is taken slightly further by writers such as Dewart (1989) or Chalmers (1996) who perceive in its more active quality a behaviour-directing capacity. Whereas consciousness does not necessarily imply self-regulation, Chalmers (ibid. 28) was to suggest that awareness

> ... can be broadly analyzed as a state wherein we have some information, and can use this information in the control of behaviour .... Awareness of information normally brings with it the ability to knowingly direct behaviour depending on that information.

The idea that 'awareness' implies a more purposeful state than consciousness, i.e. that it is a metacognitive mechanism which utilizes information for regulating behaviour, would appear to be widespread in the literature.

If awareness can be tentatively defined as the focused application of consciousness, one might be tempted to concur with Tulving (ibid. 291) that "... awareness presumes consciousness, but consciousness does not imply awareness". As Gennaro (1995) among others has pointed out, however, the converse is more likely to be true. The fact that awareness tends to be identified with a more active mechanism for regulating behaviour means that it can often be ambiguous in the extent to which it implies we are able to explicitly represent to ourselves what we might implicitly know. [11] It is quite possible, for example, to say in everyday speech, in relation to driving from point A to point B, that 'I was not conscious of the bends en route but I must, *in some sense,* have been aware of them'. In other words, the term 'awareness' can be used to refer to non-reflective as well as reflective responses to events in a range of domain-specific skills as part of an ongoing process of self-regulation. Vygotsky (1962: 91) was to express this difference some time earlier as that between awareness of the world and what he called awareness "... of the activities of the mind" or the "consciousness of being conscious". In both cases, awareness may be described as an active, behaviour-regulating response to the environment but, in the latter, such behaviour is reportable ('awareness of being aware') whereas, in the former, it is often non-reportable or automatic. It is because of this ambiguity in the everyday use the term that writers such as Dewart (1989: 41) have argued that qualified expressions such as 'conscious awareness' (or 'unconscious awareness') are by no means tautological but necessary as, indeed, has Gennaro (1995: 5):

> It is not contradictory to speak of being 'nonconsciously aware' of something. Similarly, the expression 'consciously aware' is not redundant. We can and do make room for nonconscious awareness.

Others, such as Reber (1993) or Donaldson (1993), equally concerned by the epistemological ambiguity at the heart of such terms, have argued somewhat more radically in favour of developing a new terminology to demarcate the different levels of explicitness with which we represent what we 'know' to ourselves. [12]

The essential point made by writers such as Dewart or Chalmers -- that is, that 'behavioural awareness' does not entail 'conscious awareness' -- has been explored most explicitly perhaps in White's (1982: 7) distinction between what he refers to as the 'experiential' and 'epistemological' dimensions of 'knowing' or 'being aware'. While, he argues, it may be correct to assume that knowing something experientially implies knowing it epistemologically, it is incorrect to assume that the converse is true, that is, that knowing something epistemologically involves "knowing that one knows it". Indeed, he continues, referring to a wide range of domain-specific skills that we carry out without conscious self-monitoring, "... knowledge and concrete experience are logically discrete" A useful example of the latter is our use of language whose underlying generative system we know epistemologically without being fully aware of what we know, i.e. without being able to formulate aspects of it to ourselves experientially. The fact, White concludes, that terms such as 'conscious' (or 'unconscious') awareness' are increasingly employed in the literature represents an attempt -- somewhat misguided in his view -- to overcome the ambiguity embodied in terms such as to 'know' or 'to be aware' which can be used in either an experiential or epistemological way. An identical point is made by Dennett (1986: 118-119) who was likewise concerned that the behaviour-regulating connotations of the term 'awareness' -- unlike 'consciousness' -- allowed it to be interpreted either implicitly or explicitly. Dennett's solution to the problem was to argue in favour of dividing the term into two distinct categories, 'awareness 1' and 'awareness 2', the first referring to reportable (i.e. explicit) knowledge and the second to non-reportable (i.e. implicit) knowledge.[13] Interestingly enough, an almost identical terminological distinction can be found in Rubin and McNeil (1983) or Reber (1993: 86) whose research into implicit learning processes likewise led him to draw a division between 'consciousness 1' and 'consciousness 2', between "...

consciousness that consists essentially of an 'awareness' of an external world and that is not one itself and a consciousness that carries an 'awareness' of, and the capacity to play a causal role in, the inner workings of oneself".

2. 1. 1. Cognition and metacognition

Dennett's distinction at the philosophical level between 'awareness 1' and 'awareness 2' -- like Gennaro's between 'conscious' and 'nonconscious' awareness -- has become well-established in the skills-based literature, albeit within an information-processing paradigm. [14] It maps relatively well, for example, onto Anderson's (1982, 1986) distinction between 'procedural' and 'declarative' processes or, somewhat earlier, onto Flavell's (1976, 1977) more influential one between 'cognitive' and 'metacognitive' strategies. The term 'metacognition' arose initially, of course, in the domain-specific area of memory retrieval systems ('metamemory') and has only gradually been extended to other domains of cognitive investigation, such as 'meta-attention', 'meta-learning' (and 'meta-linguistics'). While the term still suffers from a certain ambiguity, what is crucial to its use in all such domains is the notion of 'reflectivity', that is, the individual's ability to consciously introspect, monitor and review the cognitive processes and products of those processes that are used in the resolution of any problem-solving activity. [15] Robinson (1983:106) was to put it somewhat differently when suggesting that metacognitive -- as opposed to cognitive -- strategies involve not simply using what we implicitly know but explicitly reflecting on what we know and what we do not know in order to successfully negotiate a task. In the area of metamemory, for example, this "knowing about knowing", as Brown (1978) put it, involves our ability to consciously and intentionally attend to the selection, control and co-ordination of the various strategies that we use to retrieve knowledge in pursuit of a given goal and to provide 'feedback' on the success or failure of such strategies. Indeed, as Underwood (1982: 130) points out, it is probably its role as an internal feedback mechanism which is one of its most important functions insofar as the conscious monitoring of our cognitive strategies is " ... an integral part of operant learning"

To the extent that metacognition implies conscious feedback regarding one's own cognitive functions, it closely resembles Dennett's 'awareness 1' in also assuming a behaviour-regulating function. Feedback involves not simply monitoring or overseeing performance but also controlling

that performance. Indeed, the link between reflective thought and executive control processing was already implicit in Flavell (1976: 232) who defined metacognition as "...one's knowledge concerning one's own cognitive processes and products" insofar as it is relevant to the "... active monitoring and consequently regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear ...". This dual nature of metacognition -- the ability to consciously monitor one's own cognitive strategies in order to be able to orchestrate them more effectively in pursuit of a given objective -- has since become central to the literature devoted to the topic. Brown's (1980: 453) research into metacognition, for example, has pivoted around its role as "deliberate conscious control of one's own cognitive actions" and a similar approach can be detected in Meichenbaum *et al*'s (1985) treatment of it as an "executive decision-making process" or Robinson's (1983: 106) influential study of it as "awareness and ability to control" one's own cognitive processes. It is precisely this notion of awareness used *in the service of* control processing which informs the various taxonomies of metacognitive strategies that have emerged and which are typified by that of Brown and Deloache (1978: 14-15):

> The basic skills of metacognition include *predicting* the consequences of an action or event, *checking* the results of one's own action (did it work?), *monitoring* one's ongoing activity (how am I doing?), *reality testing* (does this make sense?), and a variety of other behaviours for *co-ordinating* and *controlling* deliberate attempts to learn and solve problems.

Such strategies are particularly important in the area of deliberate learning -- that is, the accessing of new knowledge and/or skills -- because, as Brown and Deloache continue, "... conscious executive control of the routines available is the essence of intelligent activity".

In his review of the literature, Gombert (1992: 6) was to question whether the cognitive-metacognitive distinction, insofar as it seeks to distinguish between differing levels of reflectivity and control, offers any new insights or whether, on the contrary, it simply reformulates more traditional distinctions such as that of Ryle (1949) between 'knowing how' and 'knowing that'. [16] The question is partly disingenuous in that, as Gombert himself points out, a major advantage of the more recent formulation is that it tends to avoid the ambiguity implicit in traditional terms such as to 'know' or 'be aware'. Insofar as the formulation seeks to distinguish 'knowing something' from 'knowing that one knows it', however, there are obvious parallels with

Ryle's distinction between a practical knowledge that is known implicitly and a more theoretical knowledge that is known explicitly.[17] Indeed, if there is a weakness in the more recent formulation, it may well stem from the somewhat over-restrictive view of the cognitive spectrum which it seems to inherit from earlier distinctions. Such a view may well have prompted more recent writers, such as Kitchener (1983), to seek to extend the two-stage model into a three-stage one which has many similarities with the more developmental approach of Bruner (1962) or, more specifically, Piaget. [18] Within Kitchener's model, the ability to reflect upon our own cognitive processes is sub-divided into metacognitive functions, which are seen to correspond to the level of reflectivity implicit in concrete operational thinking, and meta-metacognitive processes (classified as 'epistemic') which are seen to correspond to the more deliberate and disembedded reflectivity implicit in formal operational thinking. A similar attempt to refine the nature of reflectivity -- our "awareness of being aware" -- can be found in Armstrong's (1988) distinction between 'reflex consciousness' and 'introspection', Gennaro's (1995) between 'momentary focused' and 'deliberate introspection' or that of Schmidt (1990) between 'noticing' (selective attention) and 'understanding' (figure 1):

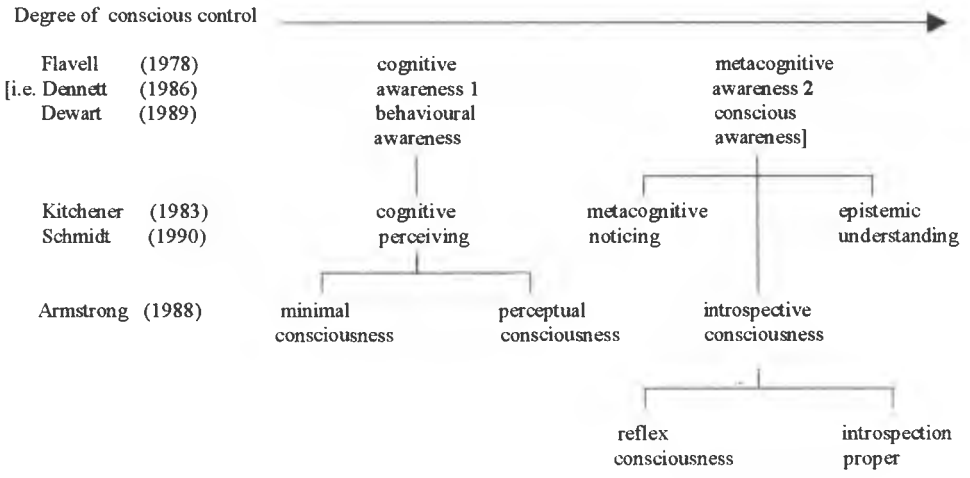

Figure 1

While important nuances can be found between such models, both in the way the cognitive spectrum is divided and in the terminology used to describe such a division, they all tend to view metacognitive processes as the highest point of a continuum of control mechanisms which, as Reber (1993: 133) put it, " . has elements that are utterly opaque to consciousness at one end and elements that are utterly transparent at the other".

2. 2. Awareness and 'contextual orientation predictions'

If what we 'know' is embodied in a "spectrum of cognitive functions" which differ in the extent to which they are open to conscious introspection, what exactly are the advantages of metacognitive over cognitive ones (Dennett's 'awareness 1' over 'awareness 2')? The question is hardly rhetorical in that many writers have noted that lower-order (or 'primary') processes -- that is, those which usually lie outside of conscious awareness and which seem more activated by stimuli in the environment than by conscious intent -- are much more efficient than higher-order (or 'secondary') ones. Neisser (1967), in particular, was to draw attention to the advantages of the former over the latter in his comparison of cognitive functions with computer programmes. To the extent that primary processes are automatic, he argued, they tend to be 'parallel' rather than 'serial' in nature and are, as a result, faster and capable of multi-tasking. As Greene (1975: 14) was to put it, when we rely upon automated responses to external stimuli, we can afford to engage in a range of activities simultaneously whereas ". . only one can be the focus of our conscious attention at any one time". Other writers, such as Schneider and Fisk (1983) or Shiffrin and Dumais (1981), concerned particularly with the transfer of declarative into procedural knowledge, argue in a similar way when suggesting that declarative processes are "slow, effortful, generally serial in nature" precisely because they are conscious whereas procedural processes are "fast, parallel, obligatory" and make "low demands upon processing capacity" because they are unconscious or automated 'action schema'.[19] Given the generally accepted greater efficiency of cognitive over metacognitive processes, what might be the value of the latter and what factors might help to activate them?

Perhaps the most useful answer to such questions has been provided by Baars (1988) in his attempt to draw up a taxonomy of the functions carried out by metacognitive self-monitoring. The most important of these, he suggests, is the way in which our ability to consciously regulate our cognitive processes helps us adapt to new (and unfamiliar) situations where what he calls our "contextual orientation predictions" are no longer operable. What Baars refers to as 'predictions' are reminiscent of Kelly's (1955) 'constructs', Brandford's (1979) 'activated knowledge structures' or Mandler's (1985) 'action schemas', that is, largely procedural knowledge that has been developed through the automatization of declarative knowledge and which allows us to operate efficiently in familiar situations.[20] If a new situation arises which makes demands upon us which

our 'contextual orientation predictions' cannot meet, that is, which require an alteration in our behavioural pattern, Baars continues, the resolution of the problem is passed up from primary to secondary processes or from what he calls domain-specific processes to the "global workstation". The task of the latter -- which is similar in function to Shallice's (1976) 'dominant action system' -- is to consciously examine and *make choices* among the range of behavioural schemas available for the solution of a given problem since, as Mandler (1985: 59) stresses, the " .. construction of complex action sequences and the acquisition and restructuring of knowledge requires conscious participation". An interesting example of the shift from cognitive to metacognitive processing as a function of contextual changes can be seen in our use of language. Language is, Baars suggests, inherently ambiguous at various levels -- from the phonological to the syntactic -- and our ability to resolve such ambiguity in our everyday interpretation of utterances depends upon the use of a range of extra-linguistic (contextual) clues including the assumptions that we, as speaker or hearer, bring to the communicative act.[21] When the context becomes unfamiliar, however, or when contextual clues generally tend to diminish, as in the case of reading, we are compelled to consciously consider the alternative meanings that are embodied in the language structure itself and make a deliberate choice. For Baars, metacognitive processing -- of which metalinguistic processing would be viewed as a domain-specific variant -- can be defined as the conscious evaluation of different behaviour potentials occasioned by the need to adapt existing behaviour to new contexts of use.

The essentially adaptive role of metacognition. its use as a " .. solution of *problems of a non-routine kind",* as Popper (1985: 281) noted, makes its role in learning particularly important. [22] This is hardly surprising in that, as Baars argues, reflective processes tend to 'kick in' precisely when the individual is faced with choosing between different behavioural strategies for dealing with the 'unexpected' or 'unpredictable'. Learning is, he continues, essentially an ongoing process of adaptation to the unexpected in which the individual is continually required to monitor his performance and to make choices about which strategies will be the most effective in the mastering of a given skill or the resolution of a given problem. He himself proposes a three-stage model of the way in which metacognitive processes are applied to the learning process which he refers to as an 'adaptation cycle'. The first stage ('context creation') involves passing from a state of uncertainty to

one which allows the individual to 'make sense' of the data; the second ('conscious information') involves narrowing down and selecting the strategies deemed most likely to achieve success, and the third ('redundancy') automatizing what has been learnt. What is interesting in Baars' model is the way in which, as Mandler (1985: 81) earlier noted, the integration of new knowledge into existing knowledge is seen as an ongoing process of self-monitoring and self-regulation in which conscious 'feedback' plays a crucial role. Those without such a conscious feedback mechanism are, Mandler insists, controlled by, rather than in control of, the learning process in that they are inevitably more reliant on "trial and error behaviour". Baars' underlying assumption -- that knowledge of one's performance is required for successful learning -- has, of course, become widespread in the literature devoted to the study of metacognitive strategies in the learning process. It can be found in Flavell and Wellman's (1977) assertion that "... good learners monitor their own progress" to Tubb's (1980: 122) description of such strategies as a "valuable impetus to self-improvement". Within such a perspective, numerous taxonomies have arisen as to what constitutes an effective learner, ranging from that of Brown and Deloache (1978) to that of Meadows (1993: 78-79) which seeks to elaborate a stage-related generic pattern for the solution of new problems:

> ... analyzing and defining the character of the problem at hand; reflecting on one's own knowledge (and lack of knowledge) that may be required to solve the problem; devising a plan for attacking the problem; checking and monitoring how the plan helps in the problem-solving; revising plan (and perhaps the analysis of the problem) in the light of the monitoring; checking any solution reached ...

Such taxonomies, it might be noted, also include domain-specific studies which, particularly in the USA, have centred, as in the work of Pressley *et al* (1992), around the development of literacy skills.

2. 2. 1. Procedural and declarative knowledge

Baars' view that conscious control processing emerges from the need to adapt behaviour to new contexts of use is echoed, albeit from a somewhat different perspective, in the work of Meadows (1993). Unlike Fitt (1964) or Anderson (1982, 1986), who are concerned with the process whereby declarative knowledge takes on procedural form, Meadows is more interested in the reverse process, that is, the way in which our initially implicit 'action-based' knowledge gradually becomes more explicit in nature. The thrust of her argument parallels that of Baars' in its focus upon the gradual

disembedding of 'action schemas'. When we use a skill, she suggests, it is intimately connected to the original context(s) in which it was acquired and can be seen as a formulaic response to a set of environmental stimuli. In order for such a skill to become more accessible to conscious scrutiny and control, it has to be disembedded from its familiar context(s) of use, that is, its "salient features" have to be identified, generalized and recombined in novel ways. As Brown *et al* (1983: 142) had put it somewhat earlier, when writing from within a similar perspective, "... development consists in part of going from a context-dependent state where resources are welded to the original learning situation to a *relatively* context-independent state where the learner extends the ways in which initially highly-constrained knowledge procedures are used" In other words, for Meadows as for Brown, 'knowing how' can become 'knowing that' through the transfer, generalization and novel combination of salient aspects of a given skill outside of its original context of use. Such a process tends to occur most clearly in the shift from the pre-school to the school context and it is no accident that Bruner (1975: 54-5), for example, was to adopt an identical stance to that of Meadows in his polemic with Dewey over the value of declarative (as opposed to procedural) knowledge in the educational sphere. It is, Bruner argued, precisely the " .. process of reorganizing knowledge into formal systems" that frees it of its "functional fixedness" and allows the learner to achieve greater flexibility and choice in dealing with the new and unexpected. [23]

There are considerable differences between the respective viewpoints of writers such as Baars and Meadows in that they see the relation between implicit and explicit -- or procedural and declarative -- knowledge proceeding in opposite directions. [24] While this may be true, however, what they share in common is an emphasis upon the relationship between metacognitive processing and what might be called 'choice'. As already suggested, metacognitive strategies are seen to 'set in' when the novel features of a context invalidate routine 'action schemas' and necessitate the conscious interrogation of a range of behavioural strategies in order to select the most appropriate for the achievement of a given task. What is crucial in this process is the notion of 'selection', what Mandler (1985: 62) calls the running through of " potential actions and choices, the coexistence of alternative outcomes, the changing of weightings of currently active schemas in the direction of one that promises greater likelihood of success .. " This emphasis upon selection (or choice) is important in that it tends to view metacognitive processes emerging, not only as a function of the

failure of existing action schemas to deal with the novel or unexpected, but also as a function of the greater freedom of action the range of alternative behaviour potentials opens up. Underwood (1982: 111), in his study of the function of awareness in skill development, makes an identical point when stressing that:

> Consciousness ... is available for us to make choices, and if no decisions are to be made, we do not need to use feedback to help the assessment of alternatives, and we do not need to be aware of our performance.

The freedom that is gained from the opportunity to select between differing behavioural strategies is manifested most clearly, perhaps, in the ability to elaborate more complex action-outcome possibilities or, as Mandler (1975: 59) was to put it, to "modify and interrogate long-term plans rather than immediate action alternatives" and to monitor the implementation of such plans in order to adapt them as and when necessary.

2. 3. Awareness, intention and control

The view that metacognitive strategies come into operation when automatic action schemas are no longer adequate in navigating new contexts has important implications in terms of 'intentional' or 'purposeful' behaviour. As Underwood (op.cit.) suggests, what we attend to is usually determined by environmental stimuli that activate automated domain-specific behavioural responses. When we are compelled to choose between alternative behavioural responses, however, what we attend to becomes less a function of external than of internal factors. Put another way, making choices means being able to direct our attention, which was previously involuntary (i.e. spontaneous), in a voluntary (i.e. deliberate) way which is less subject to environmental constraints and which is consequently more conducive to long-term planning. It is the important role played by voluntary ('focal' or 'selective') attention in the development of metacognitive processes which explains Mandler's (1985: 55) comment that what all theoretical models of the latter ".. have in common is some implication of identity or overlap between consciousness and (focal) attention". Neisser (1967), for example, tended to see the shift from primary to secondary processes as being defined by the shift from what he called 'pre-attentive' to 'focal attentive' processes and Baars (1988: 301) is even more explicit. For him, it is the role of selective attention which transforms what he calls the

passive 'state' of consciousness into an active, goal-directed activity; a transformation which he argues is mirrored in the counterposition of a number of pairs of verbs, such as *looking* versus *seeing, listening* versus *hearing* or *touching* versus *feeling*. As he was to suggest, " ... in each case the primary sense of the first verb is more active, purposeful and attentional, while the second verb refers to the conscious experience itself". The notion in Baars that metacognition is consciousness directed by voluntary attention towards a chosen goal is, of course, almost identical to Dennett's or Chalmer's view of 'conscious awareness'. In both cases, it is the ability to reflect upon, monitor and choose (i.e. selectively attend to and regulate) the strategies needed to achieve a given goal which allow the individual to deal with what Baars calls unexpected emergencies and opportunities.

Insofar as metacognitive processing can be seen as consciousness directed towards some goal, of course, it tends to presuppose the notion of 'intention' or 'purpose', that is, of a course of action decided upon and planned in advance. It was Ceci and Howe (1982: 152), in their interesting study of the mechanics of metamemory, who were among the first to explore the relationship between intention and attention in metacognitive activity when suggesting that "... a person must *intend* to *attend* to an event, and be aware that memory of the event is the goal and deliberately, wilfully and voluntarily implement a plan of action to accomplish this goal".[25] This emphasis upon the purposeful nature of metacognitive activities recalls Miller *et al*'s (1960) notion of 'planfulness', Smirnov's (1973) of 'voluntary behaviour' or Chi's (1976) of 'strategic processing'. In all such cases, insofar as attention is voluntarily applied in accordance with a prior plan of action, the individual is seen as engaged in a process of intentional decision-making involving options at each stage of his interaction with his environment. Perhaps it was Atkinson (1993: 205) who, in his study of the various functions of consciousness, was to capture most acutely the sense of intentionality and purpose underlying metacognitive activity when suggesting that the latter allows the individual above all to represent "events that have not yet occurred" in the mind as "future possibilities" and, in seeking to achieve any one of these possibilities, to "envisage alternative 'scenarios', make choices and initiate appropriate activities". The ability to conceive of varying action-outcome scenarios as a series of unrealized possibilities is, as others from Bruner (1975) to Donaldson (1993) have noted, crucial in terms of allowing the individual to move from environment-regulated to self-regulated behaviour. [26] An individual who is able to conceive of a

series of possible action-outcome scenarios, select the most appropriate, devise a plan to achieve it and monitor and revise that plan as and when needed is clearly, as Meadows (1993) suggests, a self-directing and self-determining being.

To the extent that cognitive (or primary) processes are engaged by events in the environment and not by intentions, it is difficult, as Baars (1988) suggests, to talk of self-regulation in any serious way. The latter only arises when we are seeking to make our behaviour conform to a preconceived objective which, in turn, requires the conscious processing of a range of possible cognitive strategies. It would, of course, be incorrect to suggest that such a view of metacognitive processes as combining both consciousness and intentionality is universally accepted in the literature. Steinberg (1985: 33-4), in his review of Meichenbaum *et al*'s (1985) work on the problems involved in assessing metacognitive processing, argues that the term is unstable insofar as those studying it may be studying "... completely different things, for example, knowledge about knowledge on the one hand and control strategy on the other". There would appear to be some justification for this view in that writers, even as early as Flavell (1976), have occasionally been ambiguous in their definition of the term. Flavell was to describe metacognition as " .. knowledge that takes as its object *or* regulates any aspect of cognitive behaviour" (emphasis added), for example, and others such as Brown and Deloache (1978: 13) have occasionally theorized this distinction:

> Most theories of human cognition and artificial intelligence also make a distinction between the knowledge and routines available to its system and the executive that monitors and controls the use of these data.

The most well-known model in the area of metacognitive processing which attempts to treat representational and control processes as separate is, of course, that of Bialystock. Although that model has passed through successive reformulations and refinements (Bialystock, 1982, 1986, 1996; Bialystock and Ryan, 1985a, 1985b), it essentially views cognitive processing -- particularly that related to first and second language acquisition -- as proceeding along two distinct, if related, axes: those of 'analysis' and 'control'. The first axis refers to the individual's degree of self-consciousness in terms of his ability to explicitly represent to himself what he 'knows' linguistically and the second refers to the degree of intentionality in the use of that knowledge for linguistic processing. While it may be argued, as does Bialystock, that consciousness and control

mechanisms are logically discrete, may have differing origins and undergo separate paths of evolution, however, it would seem difficult to deny that they are inevitably inter-related at a given stage in the child's development when a conscious control of strategies is required to adapt (linguistic) behaviour to new and unfamiliar contexts of use. Writers such as Menyuk (1985) or Hulstijn (1990) may err in seeking to criticize Bialystock from a narrow information-processing point of view, but their assertion that consciousness and intentionality (i.e. selective attention) are inseparably related in goal-directed behaviour would seem difficult to refute. [27] Awareness of the structural properties of (a) language, for example, would appear to be a pre-requisite for their intentional application in language-processing activities or, as Menyuk (1985: 256) was to succinctly put it, "we cannot use knowledge that we do not have".

3.0. Paradigmatic approaches

While there is by no means unanimity in the relevant literature, current views on the nature and purpose of metacognitive processing reveal a surprising degree of consensus. The latter is widely seen to emerge out of the need to adapt behaviour to new (and unfamiliar) contexts of use and – insofar as such adaptation is based on the selection of relevant cognitive strategies and the monitoring of their implementation in pursuit of a given goal – involve both consciousness and

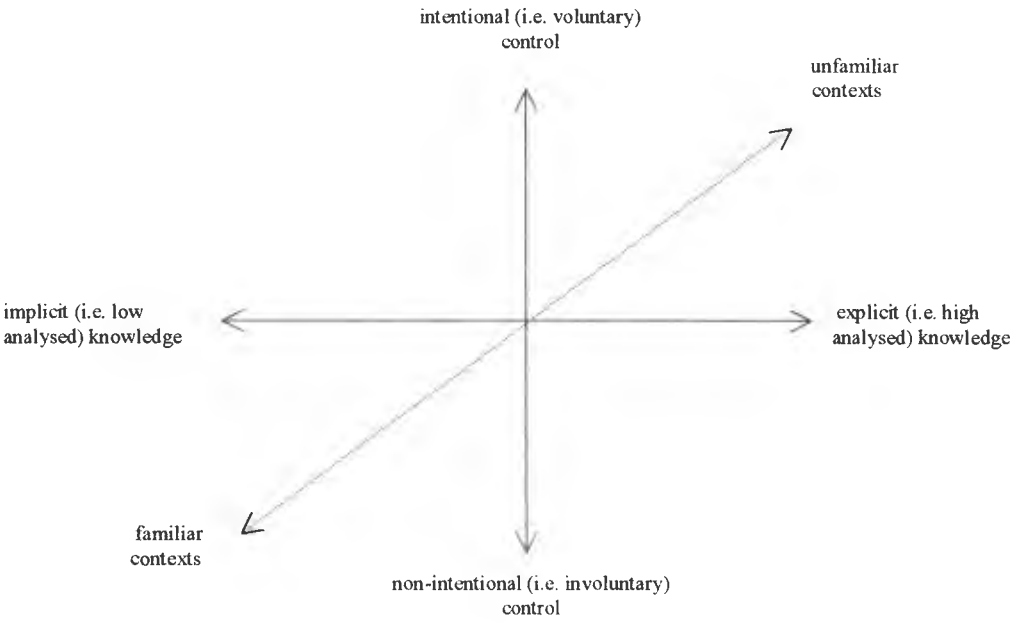

Figure 2: metacognitive processing as a behaviour-regulating mechanism

intentionality. The principal features of this consensus can be seen in figure 2 -- a modified version of Bialystock's (1985) model -- where the 'implicit-explicit' axis refers to the extent to which the child is able to consciously treat his cognitive strategies as a range of behaviour potentials and the 'non-intentional-intentional' axis refers to the extent to which the child is able to deliberately assign attentional resources to these strategies in the service of a particular goal.

Within such a framework, it might appear reasonable to view metalinguistic awareness as simply the concrete application of metacognitive control processing in the domain-specific area of language acquisition/use, that is, the conscious selection and monitoring of language as a medium in order to regulate its use in novel (or more decontextualized) settings. While such a view is possible and, indeed, advocated by writers such as Hakes (1980) or Tunmer *et al* (1984), it fails to address a range of important and, as yet, unresolved theoretical issues concerning the relationship between cognitive and metacognitive processes which can be summarized as follows:

- does metacognitive/metalinguistic processing emerge gradually out of an ongoing process of cognitive restructuring or, on the contrary, does it play an important functional role in that restructuring from a relatively early stage;
- whenever metacognitive/metalinguistic processing 'sets in', does it emerge as a general, stage-related phenomenon or does the ability to reflect upon and regulate cognitive processes emerge differentially in domain-specific areas; and
- does metacognitive/metalinguistic processing, whether it operates at a global or domain-specific level, emerge as a result of maturational development or socio-cognitive interaction.

Such questions are hardly unimportant. On the contrary, it is only by teasing out answers to them that it is possible to develop a framework in which the relationship between metacognitive and metalinguistic activities and, equally important, the functional role that metalinguistic activities may (or may not) play in the development of linguistic competence, can be understood. Within the field of psychology, three broad approaches to these questions can be detected which merit close analysis insofar as they have determined the shape and focus of the debate on metalinguistic awareness, both

in terms of theoretical assumptions and interpretation of available data, that will be analyzed in Chapter 2.

3. 1. Linear models

As already suggested, cognitive psychology has largely developed within an information-processing paradigm which is instinctively hostile to the developmental approach of a Piaget or Vygotsky where children's competence is viewed as emerging out of a complex process of cognitive restructuring. Within this paradigm, as Meadows (1993: 218) notes, basic cognitive capacities such as the ability to scan for information, to co-ordinate different modalities, to integrate information and, above all, to categorize are seen as part of the child's 'hard wiring' and hardly expected to change. All, she points out, can be observed in young children and, over the years, merely show "... experience-related changes in speed, exhaustiveness and flexibility". The non-developmental approach of the information-processing paradigm has meant that those writing within it have been particularly susceptible to the influence of nativist ideas, such as those emerging from within the sphere of linguistics, which have tended to see young children as 'preset' with severe restrictions on what can (and cannot) be learnt.[28] As Chomsky (1968: 91) was to suggest, in relation to the language acquisition process:

> Corresponding to the present case, it seems that knowledge of a language -- a grammar -- can be acquired only by an organism that is 'preset' with a severe restriction on the form of grammar. This innate restriction is a precondition, in the Kantian sense, for linguistic experience and it appears to be the critical factor in determining the course and result of language learning.

Chomsky's approach, as Sincoff and Steinberg (1989) note, has played an important role in furthering non-developmental views within the field of cognitive psychology, particularly in those models seeking to deal with metacognitive processing, such as Keil's (1988: 85) 'early competence model' -- which explicitly admits its debt to Chomsky in its "constraints-oriented view of cognitive development" -- or Chi's (1978) slightly earlier and highly influential 'novice-expert' model.[29] While such models share with the others the general view that metacognitive processes aid the child in adapting behaviour to new contexts of use, the timing of their emergence, their relationship with cognitive processes and their domain-specific nature imply a strong nativist hypothesis. There are

three aspects of this approach which it may be useful to explore.

3.1.1. Implications of the 'novice-expert' continuum

In the first place, as indicated, cognitive capacities in these models are seen to be limited by a priori constraints which serve to undermine any sense of development or, as Keil (1988: 91) was to put it, the "... basic properties of knowledge are the same throughout development" What this means in practice can be seen in, for example, Quinn and Eimas' (1987: 152) treatment of the notions of categorization in children which, as in Fodor (1981), are described as "... quite similar in their functional characteristics to those processes that serve the categorization of information in maturity". [30] In other words, children do not undergo any conceptual development, as argued in the work of a Piaget or Vygotsky, but are viewed as being 'preset' with the same conceptual framework as the adult. A similar approach can be found in Light's (1988) treatment of 'reasoning' or Bullock *et al*'s (1982: 251) study of causal understanding in young children which likewise argues that the difference between the child and adult is "... more a process of learning where, when and how to apply the rules of reasoning than figuring out what these rules might be". What changes in the development of the child into an adult, such writers would claim, is not so much the child's mental representation as the efficiency with which such representation can be applied in the achievement of a given task. As Brown and Deloache (1988: 139-140) were to put it, in their evaluation of Chi's novice-expert model, any changes that occur seem to take place not in the *cognitive* but in the *metacognitive* (i.e. conscious control) processing which is seen to become increasingly efficient through use:

> Novices often fail to perform efficiently, not only because they may lack certain skills but because they are deficient in terms of self-conscious participation and intelligent self-regulation of their actions. The novice tends to know much less about either his capabilities on a new task or the techniques necessary to perform efficiently; he may even have have difficulty determining what goals are desirable, let alone what steps are required to get there.

Insofar as cognitive processes are seen to remain static, Brown and Deloache continue, what differentiates the child-novice from the adult-expert is the degree of sophisticated metacognitive processing which allows him to reflect upon, monitor and evaluate his performance in an increasingly efficient and systematic way.

In the second place, if the link between novice and expert is a linear one in which what changes is not the cognitive structures themselves but merely the degree of efficient self-regulation in their use, development is inevitably viewed as quantitative rather than qualitative in nature. This helps to explain the emphasis within such models on the notion of 'experience' as typified by a writer such as Wood (1988: 72-73) who can note that, if younger children appear more limited than older ones in terms of their ability to attend, memorize and regulate their behaviour, this is " .. not because they lack 'logic' but because they do not possess the necessary experience and expertise". The notion of experience plays a crucial role in the development of the child-novice into the adult-expert because it is only through familiarity with a given task that the child can gain the efficiency necessary to regulate his own behaviour, that is, to refine and automate the metacognitive processes which -- in the initial stages -- tend to be slow and laborious. Brown and Deloache (1978; 14), interestingly enough, were to divide the novice-expert continuum into three stages whereby increases in intelligent self-regulation are seen to correspond to the movement from conscious to unconscious (i.e. automated) control processing. In the first stage, the novice is seen as showing "little or no intelligent self-regulation" but, as he becomes familiar with the "necessary rules and sub-processes", he moves to the second stage which is defined as an "active period of self-regulation". The third stage, that of the expert, is seen as the most efficient insofar as the sub-processes " .. have been overlearned to the point where they are relatively automatic". What is interesting in such an approach is its similarity with other skill-based models, such as those of Fitt (1964) or Anderson (1982, 1986) which, likewise, describe the transfer from declarative to procedural knowledge as a function of the automatization of initially conscious cognitive processes. In both, the child-novice's initial approach to a task is, as Reber (op. cit.) puts it, "slow, laborious, conscious and overtly-controlled" and only gives way to the "smooth, unconscious and covertly-controlled" approach of the adult-expert through experience. An interesting domain-specific application of such an approach can be found in Campbell's (1986: 46-8) view of language acquisition in which initially phenic (i.e. conscious) representation of linguistic units become cryptic (i.e. unconscious) as a result of frequent use.[31]

In the third place, if development is seen to consist of a process of more efficient self-regulation, this is less likely to occur as a function of general 'stages' than as a function of the experience

within domain-specific areas. The idea that metacognitive processes develop differentially within domains rather than globally across domains was already implicit, of course, in Flavell's (1976) pioneering work in the area of metamemory. It received growing support, however, as the influence of Chomsky's nativist assumptions, particularly those concerning the discrete nature of linguistic competence, became more widespread and were incorporated into the work of writers such as Keil (1988) or Carey (1988). [32] Keil (1988: 98), in particular, does not deny that there exists a range of cognitive features, such as short-term memory or limitations in the concept-forming process, which are common to and underpin all knowledge domains. While accepting this, however, he stresses that any major development in behaviour "... is always restricted to specific knowledge domains" since " ... there are no general stages in cognitive development constituting across-the-board shifts in representation or manner of thinking". In other words, the ability to progress in any domain (e.g. the development of literacy skills) is not dependent upon a general level of cognitive growth but only upon the specific level of knowledge within that domain and a corresponding level of intelligent regulation in the service of a given task. Such a notion implies, as Wood (1988: 34) notes, that children's development can vary considerably from domain to domain depending upon the experience respective to each:

> Children's ability in one area may not reflect their abilities in others if their expertise in different subjects and activities varies. This view makes no use of concepts of stages of development...

Carey (1988: 123) was to provide an interesting example of this in relation to the development of literacy skills. In order to access written texts, she suggests, children need to have developed some rudimentary concepts such as the term 'word'. Developing such a metalinguistic concept, however, she continues, is not related to (or dependent upon) the development of generalized metacognitive skills but is "... garden-variety domain-specific learning where the domain is in this case language". Carey does not deny that the development of metaconcepts such as 'word' can have an impact upon related domains -- such as that of logic -- but, she insists (ibid. 133), even if some domains of knowledge do interact with others, "... the acquisition and reorganization of strictly domain-specific knowledge ... probably accounts for most of the cognitive differences between 3-year olds and adults".

The implications of nativist-inspired models, such as those of Keil or Chi, for the development of metacognitive processes, and for the relation of such processes to metalinguistic ones, are far-reaching in three respects:

- First, if metacognitive processes tend to develop on a domain-specific basis, i.e. are not related to global changes in cognitive development, there will be no necessary link between metalinguistic and other metacognitive processes which may develop differentially
- Second, if metacognitive processes are seen to play a crucial functional role in skill development from an early age, metalinguistic processes are likely to play an equally crucial role in the development of (domain-specific) linguistic competence;
- Third, metalinguistic and metacognitive processes will develop in a linear way (from less to more efficient) as a function of the experience specific to a given domain.

All of these implications do, indeed, permeate a considerable body of the literature devoted to metalinguistic awareness, particularly the work of Clark (1978) and Bowey (1988). The latter tend to see metalinguistic awareness as playing an important functional role in the development of linguistic competence from a very early stage as, indeed, Keil and Chi generally tend to see metacognitive processes playing a similar role in the child's cognitive development.

3. 2. Cognitive construct models

The nativist views of a Keil or Carey tended to emerge, in many ways, as part of a reaction against the stage-related nature of Piaget's earlier 'cognitive construct' model. The notion in Piaget that cognition is, as Meadows (1983: 10-11) put it, 'constructed' rather than 'given' as part of the child's hard wiring and passes through a series of well-defined global stages, was the target of increasingly sharp criticism. "[Y]oung children", Keil (1988: 83-84) was to write, "are not qualitatively different from older ones" and there is, therefore, no need for a model that posits "qualitative changes in either mode of representation or of processing". There is a sense in which such criticism is justified in that, as Bruner (1986: 67) was to note, there would appear to be an incompatibility between the notion of 'global stages' in cognitive growth and, for example, the data relating to metacognition which suggests that the latter is "... very unevenly distributed, varies

according to cultural background, and perhaps most important, can be taught successfully as a skill". While Bruner is no doubt correct to raise the difficulty of reconciling the inbuilt maturational logic of Piaget's model with the differentiation in metacognitive skills that exists between children, the latter's model is somewhat more sophisticated than that of his nativist critics in addressing the complex questions of the relationship between metacognitive and cognitive processes. There are perhaps three aspects of such a model which warrant particular attention.

3.2.1. Decentering and self-regulation

In the first place, as Piatelli-Palmarini (1980: 3) suggests, the guiding ontological principle (*l'hypothèse directrice*) of Piaget's work concerns the relation between cognitive processes and self-regulation. Piaget (1980: 4) was himself to stress this relation in his well-known polemic with Chomsky when arguing that cognitive processes can be seen at one and the same time as "... the outcome of organic auto-regulation" and "... the most highly differentiated organs of this regulation at the core of interactions with the environment". Implicit in such a view is a highly dynamic concept of cognitive development which proceeds according to the well-known principles of 'assimilation' and 'accommodation'. It is by the constant restructuring of the internal system of representation to reach a new stage of 'equilibrium' -- what Meadows (1983: 10) was to refer to as a new "system of knowledge" -- that the child gradually learns to decentre his thinking and subject his interaction with his surroundings to ever more conscious and voluntary control. This link between cognitive restructuring and cognitive decentering is crucial to Piaget's model and is reflected most obviously, perhaps, in the child's changing use of language. As Hickmann (1986; 17) suggests, decentering underlies a

> ... decontextualisation of children's speech, allowing them, for example, to speak of displaced entities, events and relations among them which are not part of the here-and-now and/or to take into account the perspective of their listeners

It is as part of this process of decentering on the child's part -- that is, the disembedding of thinking as it passes from simple 'action schemas' to 'representational schemas', using symbols and words -- that metacognitive processes have to be understood. Conscious control processing is not viewed, as in the nativist models of writers such as Keil, as playing a functional role in the early cognitive

development of the child but, on the contrary, as emerging only gradually out of a long process of cognitive restructuring in which the child's thought becomes increasingly reflective and able to be directed inwardly, as well as outwardly, as a regulative tool. Although Piaget himself did not use the term 'metacognitive', it would appear to correspond reasonably closely, as Gombert (1992; 6) suggests, to his definition of 'operational knowledge' which develops in middle childhood, that is, with children's ability to ".. transform their own knowledge to conform to the requirements of the task with which they are confronted". [33]

In the second place, Piaget's model contains within it a clear mechanism for explaining changes in the process of cognitive decentering the child passes through which emphasizes their qualitative rather than quantitative nature. Meadows (1983: 12), it is true, suggests that Piaget's notion of 'equilibrium' is inadequate in that it doesn't clarify the degree of *dis*equilibrium that is required to prompt the child at any stage to set into motion once again the assimilation-accommodation mechanism. There may be some validity in this but the criticism is somewhat disingenuous in that, for Piaget, the need for a new "system of knowledge" arises clearly out of 'negative feedback', that is, out of the inadequacy of the existing one to resolve a given range of problem-solving tasks. As Boden (1982: 9) was to put it, it is the "... failure of the system in its earlier form" to make appropriate (assimilatory and/or accommodatory) adjustments that initiates self-development. This is true for the movement between all the stages (macro and micro) in the Piagetian model and, in particular, for that between pre-operational and operational thinking where, it is suggested, metacognitive processing 'sets in'. As Robinson (1983: 130-2) points out, in reviewing the research carried out by Marshall and Morton (1978), the development of conscious control processing at this stage would appear to be as an error-detecting and error-correcting device, that is, as a device which emerges out of the inadequacy of implicit strategies to achieve a given outcome and out of the need to substitute alternative strategies based on an explicit review of behaviour potential. As she was to put it:

> ... children first become aware of the intended outcome of their actions, and of discrepancies between that and actual outcomes. Subsequently, children become increasingly aware of the actions themselves, and also of the ways their actions react with the physical world. At this stage, actions can be the result of prior hypotheses, and themselves lead to subsequent hypotheses ...

Such a view, in which the occurrence of errors is seen as providing the incentive for deliberate planning, tends to reverse the relationship between metacognitive and cognitive processes in nativist models. In the latter, as indicated, intelligent self-regulation is seen to emerge out of the automatization of initially conscious cognitive processes which set in very early in the child's development. In Piaget, however, it is not conscious that give way to unconscious processes but, on the contrary, initially unconscious (implicit) processes that become ever more conscious (explicit) as their inability to achieve desired outcomes becomes more evident and they become more subject to critical review. As Robinson (op. cit.) was to suggest, it is the growing need to switch attention from the goals of behaviour to behaviour itself which is the source of metacognitive processing. [34]

In the third place, the cognitive decentering which is at the heart of Piaget's model, and which reaches its climax in what Meadows (1993: 79) describes as "'reflective abstraction', a sort of pondering about cognition", operates at a general rather than a domain-specific level. The movement from the internalization of simple 'action schemas' to the development of operational thinking takes place, in Piaget, as a series of sharply-defined *global* stages (and sub-stages), each of which heralds a major restructuring of the representational system. This is particularly true in the transfer from pre-operational (or 'intuitive') to operational thinking where, as Beard (1969: 98) confirms, the young child begins to be able to make assumptions and form testable hypotheses, thereby becoming " ... conscious of his own thinking, reflecting on it to provide logical justification for judgments he makes" An interesting example of the child's ability to attend to his own cognitive processes can be seen in the development of literacy skills which, it is widely accepted, coincide with the onset of concrete operational thinking. Brown (1980: 457), for example, seeks to draw up a taxonomy of those 'debugging' strategies which are crucial for accessing written texts and which include, among others, the ability to direct attention towards major 'content areas' rather than towards 'trivia', to monitor one's own activity to ensure comprehension is occurring, to review one's strategies in order to achieve maximum efficiency and to take corrective action when it is not. What is interesting about such metacognitive processes, however, is that within a Piagetian as opposed to a nativist framework, they are seen as by no means unique to literacy skill development but as a domain-specific application of broader stage-related processes that operate on a cross- domain basis.

As Brown was to show, such strategies are closely related to those identified in the problem-solving literature which include, for example,

- selectively attending to given aspects of a task in order to predict the outcome of a chosen strategy utilization (Brown and Lawton, 1977);
- monitoring the implementation of a given strategy in order to assess its relative degree of success/failure (Brown and Campione, 1977);
- recognizing the need to change processing strategies in relation to an increase in difficulty of the task posed (Brown 1975). [35]

The fact that the strategies applied in any given area are merely a domain-specific application of global strategies has important implications, of course, for the relationship between metacognitive and metalinguistic processing. In nativist models, where metacognitive processes develop on a domain-specific basis according to the degree of 'familiarity' with the tasks at hand, it is possible that metalinguistic and metacognitive process can emerge and develop differentially. In Piaget's model, however, where metacognitive processes arise as global stage-related phenomena, metalinguistic processing is inevitably conceived as dependent on, and a domain-specific application of, such phenomena.

Both Piagetian and nativist models concur in viewing metacognition as arising out of the need to adapt behaviour to new contexts of use. While sharing this common perspective, however, the insistence in Piaget's model that metacognition arises out of a long process of cognitive restructuring, which passes through global stages, has a number of important implications both for the relationship between metacognitive and metalinguistic processing and for the role of the latter in the development of linguistic competence:

- First, if metacognitive processes arise out of a global restructuring of cognitive processes in middle childhood, metalinguistic awareness will tend to represent little more than a domain-specific application of them and will have no autonomy in development or use;
- Second, if metalinguistic processing arises as a sub-domain of metacognitive processing, it is unlikely that it will play any functional role in the development of (primary) linguistic

competence insofar as the latter is generally recognized to be complete by the concrete operational stage; and

- Third, if metalinguistic processing is a domain-specific application of metacognitive processes, changes in the latter -- as between concrete and formal operational thinking -- may well be reflected in the nature of metalinguistic processing and the aspects of language the child is able to attend to.

Such implications have had an important impact, within the literature devoted to metalinguistic awareness, on the Australian school represented by writers such as Hakes (1980) or Tunmer *et al* (1984) and, in a more complex way, Bredart and Rondel (1982), Chaudron (1983) and Gombert (1992). The former, in particular, have sought to analyze the general links between concrete operational thinking and the onset of metalinguistic processing and the way in which changes in such thinking can be detected in the shifts from metaphonological to metasyntactic and metapragmatic processing.

3. 3. Socio-cultural models

The third influential current of thought on the development of metacognitive and metalinguistic processes can be found in the work of social psychologists such as Vygotsky (1962, 1978) and his followers. Vygotsky (1988: 62), it should be stressed, shared Piaget's opposition to nativist approaches to cognitive development which he dismissed as a "... regrettable vestige of pre-scientific thought".[36] He empathized with Piaget's more dynamic approach which viewed higher (i.e. meta-) cognitive functions as arising out of an ongoing process of cognitive restructuring as the child seeks to refine his interaction with his surroundings. As Brown (1980: 453) notes, for Vygotsky as for Piaget, the development of knowledge appears to have two stages, its "automatic, unconscious acquisition" being followed by "gradual increases in conscious control over that knowledge" or, as Vygotsky (1962: 90) was himself to put it, "... consciousness and control appear only at a late stage in the development of a function, after it has been used and practised unconsciously and spontaneously. In order to subject a function to intellectual and volitional control, we must first possess it". While sharing Piaget's developmental approach, however, Vygotsky argued strongly that the Achilles' heel of the latter lay in the fact that it ignored the essentially *social* roots of this

shift from the first to second stage, from implicit to explicit processing. In particular, he argued, insofar as it viewed cognitive development as essentially maturational in nature, it tended to downplay (or ignore) the crucial role played by language (as a form of social semiotic) in the transfer from lower to higher mental processes. It is around the role played by language in the emergence of what he calls the "awareness of the activity of the mind" that differences between the two approaches are most clearly defined.

As Hickmann (1986: 10-11) argues, for Piaget, the dynamic mechanisms that move cognitive development forward are the processes of 'adaptation' which are clearly independent of language and which constitute explanatory principles ultimately defined in biological terms. These processes -- namely those of assimilation and accommodation -- allow the child to interact with his environment by an ongoing process of adjustment of his cognitive organization and result in a gradual 'decentering' of thought. The emergence of language is, she points out, "... relatively peripheral to this theory, both as a content area in its own right ... and in terms of the principal explanatory mechanisms from which cognitive development emerges". At most, language is seen as one semiotic form among others which is useful for expressing the development of abstract (i.e. disembedded) thought but which is subordinate to the cognitive processes giving rise to that thought. While Vygotsky gives a complementary account of child development during the sensori-motor stage, however, the emergence of language in his work is treated as a major source of discontinuity, rather than continuity, in the child's cognitive growth. [37] It is at this time, Vygotsky argues, that the biological line of development converges with the social -- insofar as language is a social semiotic -- and this convergence holds the potential for radically reshaping the child's cognitive development and laying the basis for the emergence of higher metacognitive processes. [38] As Hickmann (ibid. 11) was to continue, if language is relatively peripheral for Piaget, for Vygotsky it is

> ... the principal motor of development, as it mediates the child's participation in both the intellectual and social life surrounding him. That is, the principles and mechanisms of cognitive development are not independent from the signs, particularly the linguistic signs, which the child confronts in his interaction with the world.

The emphasis placed by Hickmann on the role of semiotic mediation in Vygotsky's approach to cognitive development is crucial. In internalizing language, the child is seen to internalize a system

of signs which allows him to re-organize his behaviour according to a social (as opposed to a natural) type, that is, which allows him to transform a direct response to environmental stimuli into a more complex, indirect and reflective one. Moreover, as Lethbridge (1992: 71) points out, if language increasingly acts to mediate the child's "interaction with the world", it also acts to restructure his cognitive processes and thereby becomes "... the objective force that gave rise to consciousness".

The difference between Piaget's and Vygotsky's attitude to the role that semiotic mediation plays in the development of cognitive processes can be seen most fruitfully, of course, in their respective views on the role and nature of egocentric speech. Piaget's study of the latter had led him to conclude that such speech could best be defined as a transitional stage between what Zivin (1979: 19) was to call 'a-communicative' and 'communicative' speech and simply mirrored the general process of cognitive decentering underway in the child. [39] For Vygotsky, on the other hand, what was generally termed 'egocentric' speech represented a transitional phenomenon moving in the opposite direction, that is, social speech that was gradually becoming internalized as 'inner speech' (or 'verbal thought'). It was, he suggested, the internalization of social speech, which was the main impetus in the restructuring of the child's cognitive system and in developing what Lethbridge (1992: 78) defines as a "... new form of mind, a qualitatively distinct form of mentality specific to social humanity", that is, "self-aware volitional consciousness". For Vygotsky, the ability of language to have such a revolutionary impact upon the child's cognitive growth resides in its dual function as both a 'referential' and 'regulatory' tool. It is the interaction between these two functions, as language is internalized, that gives rise to the possibility of metacognitive (i.e. conscious self-regulating) activity.

- *Referential function*

In the first place, as Sapir (1963) noted, the fact that words have generalized meanings -- that is, refer not to an object or event but to classes of objects or events -- has a powerful disembedding effect on children's thought. [40] It allows them to move rapidly beyond the immediacy of the environment, to talk about, reflect on and draw comparisons between objects and events distant in time and space. Moreover, the fact that word meanings can be defined not only by relating a given

sign to its referent but to other signs, within a wider network of signs, has important long-term implications for conceptual thought. As Wertsch (1985: 103) points out, if a child can define a 'table', a 'chair' or 'furniture' not only by relating the sign to the object to which it refers but to other signs, this would suggest that he can begin to ". .operate on statements of logical equivalence, nonequivalence, entailment and the like, such as 'All tables are furniture'." In other words, the generalization embodied in word meanings -- and the fact that such meanings "organize things into systems", as Luria (1981: 31) put it -- allows the child gradually to disembed his thinking and develop a more abstract and logical view of his environment. Such a process does not occur overnight, of course, but undergoes a complex evolution. While there may be agreement early on between child and adult on the referent of a given word -- a necessary precondition for communication -- there is no such agreement on word meaning. On the contrary, for the young child the meaning of a word undergoes an ongoing process of redefinition as it becomes more and more disembedded from its context, that is, as it passes from a 'complex' to a true 'concept'. As Vygotsky (1962: 83) himself expressed it:

> ... word meanings evolve. When a new word has been learned by the child, its development is barely starting; the word at first is a generalization of the most primitive type; as the child's intellect develops, it is replaced by generalizations of a higher and higher type – a process that leads in the end to the formation of true concepts.

Such a process only reaches its conclusion, as Vygotsky suggests, in the scientific concepts of formal schooling which are mediated through other concepts with their internal hierarchical system of interrelationships. Interestingly enough, Volosinov (1973: 13) was to echo Vygotsky's view on the relationship between the development of higher cognitive functions and the evolution of word meaning when he insisted that "The individual consciousness is nurtured on signs; it derives its growth from them; it reflects their laws and logic".

- *Regulatory function*

In the second place, if the referential function of language allows the child to gradually disembed his thinking, the regulatory function allows him to direct this thinking towards himself and to develop new dimensions of intelligent self-control. Initially, as Vygotsky pointed out, children's behaviour is regulated largely through others' use of language. As the child internalizes social

speech, however, he is increasingly able to apply to himself the method of behaviour that was previously applied to him, thus organizing his own behaviour according to a social type. As Lethbridge (1992: 73) was to put it, "Language, once internalized as inner speech, is a system which permits the control and organization of one's own activities as language exteriorized as vocal speech permits the control and organization of others". [41] It is important to remember, however, that the ability of the child to consciously regulate his own behaviour is enmeshed with, and dependent upon, the development of conceptual thought. The more the child is able to move beyond the confines of the here-and-now, the more he is able to develop goals for the future which require planning, hypothesis-formation, monitoring and evaluation of the strategies adopted. [42] In other words, it is the disembedding of thinking which allows the child's behaviour to change from being a spontaneous reaction to the regulation of others to a deliberate form of self-regulation. "The internalization of social speech", Lethbridge (ibid. 73) continues, "permits the individual to plan behaviour before it occurs, to examine it from a multiplicity of points of view, to inhibit behaviour or to encourage it, in short to treat it objectively". If inner speech gives rise to higher mental functions (i.e. consciousness), it also gives rise to those mechanisms which allow that consciousness to be directed towards one's own behaviour in order to regulate it more effectively.

3.3.1. 'decontextualisation of mediational means'

For Vygotsky, it is the convergence between the referential and regulatory functions of social speech, as the latter becomes internalized as inner speech, which creates the potential for metacognitive activity. Within such a perspective, there is no divorce between consciousness and control processing since it is precisely the inter-relation between the two which is seen to constitute higher mental functions. It is important to note, however, that the development of metacognitive activity is by no means seen as automatic but dependent upon what Wertsch (1985: 32-3) was to pertinently term the "decontextualisation of mediational means" Language may have inbuilt into it the potential to develop conscious self-regulation but the ability of the child to realize this potential depends ultimately upon the extent to which he has been aided to disembed language from its initial "... dependence on the perceived conditions under which it is uttered and heard, and from the behaviour which accompanies it", as Bruner (1975: 107) put it. In other words, it is only insofar as

the child has been encouraged to realize that meaning is dependent more upon intra- than extralinguistic relationships, that is, when language is treated as a self-referring system of signs, that he can truly develop what Vygotsky (ibid. 91) called "self-reflective awareness" [43] Hickmann (1986: 25), in her comparative study of Piaget and Vygotsky, was to express this somewhat differently when pointing out that the more the child is able to disembed language, the more he is able to disembed his thinking which is so crucial to problem solving activities. It is, she suggests,

> . . the ability to use language as its *own* context, minimally, the ability to establish relationships among the utterances of continuing discourse ... [which] should have a great impact on both the cognitive and the social competence of children.

The idea that metalinguistic awareness -- the ability to reflect upon language as a symbolic system in its own right -- precedes metacognitive growth is central to Vygotsky's approach. It represents a fundamental reversal of Piaget's viewpoint insofar as the latter tends to view metalinguistic awareness as simply a domain-specific application of general metacognitive processes that emerge at a given stage in cognitive development. For Vygotsky, on the contrary, the ability to attend to language is not a by-product of metacognitive growth but a pre-requisite for it.

The importance of the 'decontextualisation of mediational means' in the child's cognitive restructuring has featured extensively in the literature developed within the Vygotskyan tradition. Writers such as Wells (1981, 1986) or Donaldson (1978, 1992), for example, have long argued that the ability of the child to disembed language from its role as an accompaniment to action is crucial in terms of enabling him to deal with the cognitive (i.e. problem-solving) demands of formal schooling. The first step the child has to take in dealing with these demands, Donaldson (1978: 89) suggests, is ". . the step of conceptualizing language" that is, "becoming aware of it as a separate structure, freeing it from its embededness in events" For Donaldson, as for Goody and Watt (1972), Olsen and Torrence (1983) or Olsen (1984), the major opportunity for the child to 'disembed' language occurs during the acquisition of literacy skills and it is no accident that, at both the ontogenetic and phylogenetic levels, the symbiotic relationship between literacy skills and cognitive functioning has been observed. Olsen and Torrence (1983: 145), for example, argue strongly that the onset of literacy skills heralds a "conceptual transformation" in the child based upon a new orientation to language, that is, an "... attention to and competence with the structure of

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language per se as opposed to competence with the contents, intentions and messages expressed by language". [44] What Olsen and Torrence note at the ontogenetic level had already been explored at the phylogenetic level by writers such as Goody and Watt (1972) or Wells (1981: 243), who stresses that

> ... with the acquisition of literacy comes a more detached and reflective attitude to experience and this, in turn, promotes higher levels of cognitive functioning that are not readily available in cultures that are restricted to purely oral communication.

Attempts to provide such assertions with an empirical basis had already led Vygotsky and his colleague Luria (1976) to conduct experiments, in the USSR of the 1930s, among the collectivized and non-collectivized rural population of Uzbekistan. [45] It is true that the positive correlation they found between literacy and higher mental functioning in such studies has been questioned more recently by, among others, Scribner and Cole (1981,1988) whose own research among the Vai in Africa convinced them that there is no evidence for the view " ... that reading and writing entail 'cognitive restructuring' that controls intellectual performance in other domains". What Scribner and Cole seem to be suggesting, however, is that it is not literacy skills *per se* that promote reflective awareness but only literacy skills within a culture which, itself, values and encourages disembedded thinking. [46]

A major advantage of Vygotsky's attempt to view higher mental processes as a function of semiotic mediation is that it highlights the socio-cultural roots of the former. As already suggested, one of the weaknesses of Piaget's approach was that, in arguing in favour of 'global' stages of cognitive development which operate cross-culturally, it is unable to explain the uneven distribution of metacognitive (and metalinguistic) processing in children between different socio-cultural groups and between individuals within the same socio-cultural group. Vygotsky's view that higher mental processes emerge as a function of semiotic mediation helps to offset this weakness precisely because it denies the possibility of 'global stages'. As Sincoff and Steinberg (1989: 22) point out, for Vygotsky "... such universality is impossible because development reflects the dynamic relations between the child and his or her particular environment or culture, which varies among individuals as well as across time for the same individual". In particular, as in the case of literacy skill development, it will be the extent to which a given culture (or sub-culture) values and encourages

the decontextualized use of language that will determine the child's access to it and success with it. Such a view, of course, has important implications for the relationship between metalinguistic and metacognitive functioning which can be summarized as follows:

- First, if cognitive development is a function of what Wertsch calls the "decontextualisation of mediational means", metalinguistic awareness will play a functional role in the development of metacognitive processes and not vice versa, as suggested by Piaget;
- Second, if the valorization of and access to given language activities are culturally determined, there can be no 'general stages' in the development of metalinguistic awareness which will be unevenly distributed between and within socio-cultural groups;
- Third, if metalinguistic awareness emerges as a function of disembedded language use, it will tend to play a role less in the acquisition of context-embedded social speech and more in the learning of context-independent written language.

Such implications have played an important -- if, possibly, less coherent -- role in the work of writers from Donaldson (1978, 1992) to Hickmann (1986) or Karmiloff-Smith (1979) as a third viewpoint in the debate on metalinguistic awareness.

4.0. Summary

While there is a consensus that metalinguistic awareness involves the ability to switch attention from language function to form, considerable disagreement exists around (a) those aspects of language that might be considered the object of such reflection, and (b) the cognitive status of the 'awareness' involved. Such a blur stems largely from the fact that behaviourist traditions in psychology have tended to marginalize the study of notions such as 'awareness' or 'consciousness'. More recent work in the area of metacognition, while limited within an information-processing paradigm, has been useful in re-examining these notions and developing a consensus as to their function as tools to aid the adaptation of behaviour to new contexts of use via a process of conscious and purposeful self-regulation. While a consensus exists around the definition and function of metacognitive skills, however, considerable differences continue to exist as to the relationship between metacognitive and metalinguistic processes, whether such processes are maturational or

socially interactive in origin and whether they are domain-specific or general. Nativist, 'cognitive construct' and socio-cognitive traditions provide radically different answers to these questions which are crucial for situating the debate on metalinguistic awareness explored in Chapter 2.

Notes

1. As Gombert notes (1992: 2), Jakobson's primary function concerned the exchange of meaning between speaker/listener and the secondary functions included the phatic, the ludic and poetic and finally the metalinguistic "... which is concerned with the activity of speaking about words, the linguistic activity which takes language itself as its object".

2 As Luria (1988/1946: 61) suggests: "The first major step in children's development is characterized by the fact that, while they actually use grammatical speech and designate objects and actions by the corresponding words, they still cannot focus attention on the word and verbal relations themselves. During this period, the word may be likened to a pane of glass, through which the child views the surrounding world. He or she is not conscious of the word itself; nor does he or she suspect that it has a life of its own or a characteristic structure".

3. Bowey herself (1988: 4-5) is particularly useful in exploring the issues raised by writers such as Clark (1978), Clark and Anderson (1979), Kaserman and Foppa (1981) and Tunmer and Herriman (1984) as to whether the child's early correction procedures represent conscious metalinguistic self-monitoring or, on the contrary, an 'automatic monitoring device'.

4. Because of the association of 'awareness' with notions of intentionality, Bowey (1988: 19) argues, "... it might be appropriate to abandon the term *linguistic awareness* altogether and instead to use the terms *metalinguistic functioning* (Franklin, 1979) and *metalinguistic performance*. Such terminology retains the notion that attention must focus on form rather than on meaning but avoids any reference to notions like 'consciousness' and 'intentionality' ...".

5. As Candlin (1991: xii) points out, uncertainty regarding what is meant by linguistic awareness and its role in child development, raises a range of questions that have scarcely been answered, such as "How can one relate being aware about language to improvements in language performance? How can one relate awareness of language to a greater understanding of the determining role of language in social life? Does being more aware about language translate into ameliorating many of the interpersonal conflicts that have language issues at their roots? What is the role of learning strategy to awareness gains?".

6. Sinclair (1984: 33) was to stress that the "... creative untidiness of the actual content of language awareness courses is in fact unrelated to the fuzziness of the cover term" and due primarily to the different needs of different groups of pupils. Rosen (1988: 8), in his polemic with the Kingman Committee Report, was to unfavourably contrast its advocacy of a 'single model of language' with the diversity of language awareness courses that Sinclair had already noted.

7. As Pratt and Grieve (1984: 2-11) argue, the debate is primarily around the role of consciousness in skill acquisition. If consciousness does help in the accessing of new skills, then metalinguistic awareness will tend to be central in the development of linguistic competence from the start.

8. As Tallis (1991: 141) suggests, "The biological (causal) and computational theories of consciousness have the common outcome of reducing mind to a set of input/output relations ...".

9. Fromm's view of the "liberating effects of awareness" was linked to Marx's notion that social emancipation required the working class to overcome false consciousness and " ... become aware of itself " as a class with specific interests as a class.

10. Nunn (1996: 1) pointed out that "... intentionality, which simply means that consciousness is always about something, probably is inseparable from awareness even if the content in question may very occasionally be nothing more than awareness of being aware".

11. Because of the ambiguity embedded in the term 'awareness', Chalmers (1996: 28-29) draws the opposite conclusion from Tulving when he argues that "Consciousness is always accompanied by awareness, but awareness ... need not be accompanied by consciousness. One can be aware of a fact without any particular associated phenomenal experience, for example".

12. Interestingly enough, in her study of the various ways of 'knowing' the world, Donaldson (1992: 23) argues that the distinction made in Middle English between 'acknowledge' (implying explicit knowledge) and 'knowledge' (implying implicit knowledge) might usefully be reintroduced as a way of overcoming the current ambiguity in the term 'knowledge' which oscillates confusingly between the two.

13. As Dennett (1986: 118) suggests, "These two notions of awareness are entirely distinct in spite of their customary merger; what one can report directly, infallibly, and without speculation or interference is one thing, and what serves, or is relied upon, to direct behavioural responses is another".

14. Meadows (1993: 215) is quite explicit in arguing that most of the two-stage models that have emerged in cognitive psychology have their roots in the division, in information-processing, between "automatic processing" which is seen to be fast and makes little demand upon resources, and "controlled processing" which is slower and "uses up many more attentional resources ...". She fails, however, to make any value judgement on such a comparison.

15. As Livingstone (*Metacognition: an overview*, 1997: 1) suggests, although the term has long been in use in educational psychology in particular, "... there is much debate over exactly what metacognition is. One reason for this confusion is the fact that there are several terms currently used to describe the same basic phenomenon

(e.g. self-regulation, executive control), or an aspect of that phenomenon (e.g. meta-memory), and these terms are often used interchangeably in the literature".

16. After comparing the term metacognition with Piaget's notion of 'operational knowledge', he asks "... is the concept of metacognition of any real use ... or is it simply a change in terminology without any heuristic import?".

17. Reber (1993:16), it might be noted, drew a clear parallel between Anderson's (1982) distinction and that of Ryle (1949) when writing that "... Anderson's key distinction is that between declarative knowledge which is knowledge that we are aware of and can articulate, and procedural knowledge, which is knowledge that guides action and decision-making but typically lies outside the scope of consciousness"

18. It is interesting to note the extent to which a more differentiated approach, such as that of Kitchener, maps onto a range of traditional three-stage models, such as that of Bruner (enactive, iconic and symbolic), Piaget (sensori-motor, concrete and formal operational) and Pavlov (unconditioned reflex, conditioned reflex and mediation).

19. Cf. Colley, A. M. and Beech, J. R. (eds.) *Acquisition and performance of cognitive skills,* 1988: 5, John Wiley and Sons.

20. As Mandler (1985: 45) puts it: "The distinction between action schemas and their secondary representation maps directly onto the distinction between procedural and declarative knowledge alluded to earlier. Actions are, by definition, procedures and procedural knowledge, just like an action system, is frequently not accessible to conscious knowledge ...".

21. Typical examples, according to Baars (1988: 147) operate at the syntactic level, as in the case of the surface-deep structure ambiguities of Chomskyan theory, eg.'Flying planes can be dangerous' or 'They are eating apples'.

22. As Popper was to continue (1985: 282), "... the role of consciousness is perhaps clearest when an aim or purpose ... can be achieved by *alternative means*, and when two or more means are tried out, after deliberation".

23. Dewey, it should be remembered, had criticized the emphasis upon declarative as opposed to procedural knowledge (i.e. 'knowing that' as opposed to 'knowing how') in schools in that it tended to penalise underprivileged children whose "cultural deprivation" was seen as an impediment to achievement. Bruner (1975: 54-5) responded that such an approach was " ... too simple, for in fact there is a great power inherent in decontextualised knowledge -- knowledge represented in a form that is relatively free from the uses to which it is to be put or has been put in the past. It is not too serious an oversimplification to say that it is precisely such a process of reorganising knowledge into formal systems that frees it of its functional fixedness".

24. Baars' approach is largely within an information-processing paradigm which sees skill development as a function of initially declarative knowledge becoming procedural, whereas Meadows, operating within a neo-Piagetian tradition, is more concerned with the opposite process.

25. "Metamemory skills," they were to add (ibid. 148), "are present whenever someone consciously and intentionally controls and executes the processing operations necessary for remembering" and, as such, are similar to Wellman's (1974) notion of 'executive routine' or Yussen and Bird's (1979) notion of 'voluntary behaviour'.

26. Donaldson (1992: 52), in particular, was to draw attention to the role of the 'possible' in helping the individual child to decontextualize his thinking. "A sense of options", she writes, "whether compatible or incompatible with one another, implies some ability to contemplate that which is not yet -- that which only may be. Since, by definition, that which is not yet presents no stimulus to the senses, it can be contemplated only by a mind capable of calling it up".

27. Hulstijn's critique addresses not only the separation of cognitive and control processes in Bialystock's model but, equally important, the problems inherent in the latter's treatment of the relationship between first language acquisition and second language learning, i.e. its tendency to see second language learning replicating first language acquisition in terms of starting with low analysed knowledge and low control processing, even in an instructed context.

28. As Reber (1993: 5) was to note, "Along with the de-emphasising of learning, there has been a clear resurgence in nativist theorizing exemplified most notably in the work of people such as Chomsky (1980, 1986) and Fodor (1983) ...".

29. While both Keil's and Chi's model reflect the influence of nativist ideas, Keil's is more forthright in admitting its ideological pedigree. "Throughout development", he (1988: 85) points out, "the child is guided by a set of constraints that represent a kind of competence that is always present, namely, the set of possible, or natural, knowledge structures in a domain".

30. It is interesting to note that the influence of nativist ideas within the area of cognitive psychology became so widespread that even 'developmentalists' such as Bruner began to accommodate to them. In his examination of the development of metacognitive skills, for example, Bruner (1988: 264) was to accept that the difference between the older and younger child was not due to qualitative differences in thinking but merely to the fact that "... the older child tends to be more explicit, has a better grasp of how to access and manipulate structures and routines in order to get a job done or a problem solved" whereas the younger child "...does not know explicitly enough what he knows, to tell whether he is being consistent or not in organising information".

31. Campbell (1986: 47) was not unaware of the unusual nature of his claim in regard to language acquisition but, he was to argue, "I can think of nothing that rules out the possibility that (a) in the early stages of acquisition, word selection and articulation are deliberate processes guided by the phenic contents of the concept associated with the word ... and that (b) in later stages, word selection and articulation become automatic processes guided cryptically, leaving the learner free to concentrate on higher-level tasks".
32. Smith and Wilson (1979: 33) outline most clearly, perhaps, the implications of a nativist case for the domain-specificity of language. "Language may", they say, "be sui generis different in kind from other cognitive systems, requiring different learning strategies and different genetic programming. The two claims reinforce each other: if linguistic knowledge is different in kind from non-linguistic knowledge, then it is more likely that we need special programming to learn it; and if we have special programming, then it is more likely that the results of language learning will be different in kind from other systems not so programmed".
33. As Brown (1988: 457) was to put it, in relation to Piaget, the latter might not have used the term 'metacognition' but "The problem of self awareness and conscious control of one's own activities is of central concern to those interested in any aspect of the child's problem-solving capacities (Piaget, 1928)".
34. It is interesting to note that, as Robinson (1983: 108) also points out, the notion of 'self-awareness' in Piaget has a social as well as cognitive origin. "There is one aspect of Piagetian theory in which it seems clear that awareness is held to play a significant role in development; that is, the account of how children are found to take into account other points of view through contact with peers (Piaget 1928, 1932)".
35. Brown does not suggest that these strategies are widespread among children at the concrete operational stage but that, as in the case of learning to read, they begin to become accessible in terms of the degree of decentering such a stage presupposes.
36. As he was to argue in The Genesis of Higher Mental Functions (in *The Concept of Activity in Soviet Psychology,* Wertsch, J. V. (ed.) 1981: 144), "In spite of the fact that we long ago rejected the view that children are distinguished from adults only by the properties of their bodies .. the idea continues to exist in subtle form in child psychology".
37. As Wertsch (1985: 44) points out, the fact that Vygotsky tends to accept Piaget's view of child development during the sensori-motor stage may constitute one of the weaknesses of his approach. By arguing that the 'natural' line becomes intersected by the 'social' line only at about the age of 2, Wertsch suggests, he ignores the social interaction that occurs before this date and which has been increasingly reflected in pragmatic accounts of early language acquisition.
38. Vygotsky (1962: 43) situated the crucial change from the 'natural' to 'social' line of development at the age of 2. "This crucial instant, when speech begins to serve intellect, and thought begins to be spoken, is indicated by two unmistakable objective symptoms: (1) the child's sudden, active curiosity about words, his questions about every new thing, 'What is this?', and (2) the resulting rapid, saccadic increases in his vocabulary".
39. As Zivin (1979: 20-23)) correctly points out, the disagreement between Piaget and Vygotsky on the notion of 'egocentric' speech stemmed from the fact that both examined it from differing theoretical perspectives. For Piaget she argues, it represented a speech form which mirrored the process of cognitive decentering whereas, for Vygotsky, it represented the internalisation of a tool for self-regulation whose primary role was in the planning function.
40. Vygotsky was highly influenced by Sapir (1963: 12-13) and by his view that "The world of experience must be enormously simplified and generalized before it is possible to make a symbolic inventory of all our experiences of things and relations, and this inventory is imperative before we can convey ideas. The elements of language, the symbols that ticket off experience, must therefore be associated with whole groups, delimited classes of experience rather than with the single experiences themselves ...".
41. As Vygotsky (1988: 73) was himself to express it when explaining the social roots of cognitive development: "Any function in the child's cultural development appears twice or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition".
42. The generalised nature of word meaning allows the child, as Luria (1956: 22) was to put it, to "... organize his behaviour, not according to the visually perceived situation but according to a deeper 'categorized' reflection of the world".
43. For Vygotsky (1962: 92) , of course, the ability of the child to treat language as a "self-referring system of signs" is synonymous with being able to handle scientific (as opposed to spontaneous) concepts. "Scientific concepts, with their hierarchical system of interrelationships, seem to be the medium through which awareness and mastery first develop ... Reflective consciousness comes to the child through the portals of scientific concepts".
44 Olsen (1984: 222-223) in particular, was to stress the cognitive implications of the written word. "Written language", he argues, "is often overlooked by the mistaken assumption that writing is merely speech 'put down'. Written language, by virtue of its demands for explicitness of meaning, its permanence as a visible artifact compatible with repeated scrutiny and reflection, and its realignment of social and logical functions,

serves the intellect in several ways. It is an essential means for the formation of abstract true statements that constitute objective knowledge; it is critical to the particular mental achievements we designate as conceptual intelligence; and it is the predominant instrument of formal learning".

45. Vygotsky and Luria's (1976: 77) experiment focused on illustrating the 'situational' (as opposed to 'conceptual') thinking of illiterate peasants in a number of problem-solving activities, such as grouping objects according to given categories. As they concluded, "... different psychological processes" determined their manner of grouping which "hinged on concrete, situational thinking rather than abstract operations which entail the generalising function of language".

46. As Wertsch (1985: 39) summarizes, the findings of Scribner and Cole do not invalidate the results of Vygotsky and Luria's experiment but merely show that the link between literacy skills and conceptual thought cannot be generalized to all societies. Higher mental functions probably do, he argues, depend upon the decontextualisation of mediational means but it is only insofar as literacy in a given culture promotes such decontextualisation that there is likely to be a link between it and cognition.

Chapter 2

Metalinguistic processing and language development

Chapter 2

1.0. The parameters of the debate

As Sinclair (1986: 612-613) suggests, the literature devoted to first/second language acquisition has long been rich in anecdotal evidence of young children's metalinguistic behaviour. From as early as 18 months, the latter have been known to correct their own articulation (spontaneous and prompted repairs, Clark 1978); to ask questions about word meanings (Barton 1986); to practise the articulation of difficult words and/or phrases in a seemingly conscious way (Slobin 1984); to comment spontaneously on aspects of their -- and others' -- performance (de Villiers and de Villiers 1979) and to delight in playing with language (Chukovsky 1963, Cazden 1975).[1] What is interesting in such anecdotal literature is the underlying assumption that the behaviour described is not gratuitous but plays a quasi-functional role in the development of linguistic competence. This can be seen most clearly, perhaps, in the attitude adopted towards the pre-sleep monologues recorded by writers from Weir (1962, 1966) to Kuczaj (1983). In pre-sleep monologues -- or 'crib speech' -- young children supposedly benefit from the release of communicative restraints to explore the sounds of the language and its capacity for 'rhythmic rhyming'. As Weir (1975/1962: 610) suggests, what appears to be random play, however, may in fact have a more serious function as a "systematic linguistic exercise", that is, as a form of practice useful in assimilating new linguistic data. Weir herself was to draw attention to the extent to which paradigmatic selection in such sound games seems to resemble the substitution exercises to be found in second language instruction programmes, as in the case of pronominal substitution below:

- I go up there (2x)
- I go
- She go up there

The notion that young children's play with language has a serious purpose -- that it facilitates the integration of new into existing linguistic knowledge -- would seem to suggest that it is, at least potentially, conscious in nature. Certainly, there is a widespread tendency in the literature to associate such practice with a conscious approach on the part of young children. Chao (1951), for example, was to suggest that there is an "occasional intentional playing with language" and a

similar view underpins a range of case studies from Jespersen (1922) [2] to von Raffler Essen (1973), [3] Slobin (1984) or Weir (1975/1962: 616) herself who describes her child's manipulation of verbal patterns in pre-sleep monologues as "... consciously practised, just as are other grammatical combinations and selections". [4]

1.1. Anecdotal and experimental data

The tendency in the anecdotal literature to view metalinguistic behaviour as playing a functional role in the acquisition of primary skills is based on the assumption that, as Barton (1986: 70) put it, ".. one cannot really disentangle language use and language awareness" insofar as the child is continually monitoring production to ensure comprehension. While such a view remains influential, however, it has increasingly been challenged by the findings of more systematic research into the early manifestations of what has been claimed as 'conscious' control processing. Such research, undertaken as part of a wider interest in meta-processes, has focused on testing children's ability to segment the flow of speech into words and/or phonemes, to gauge the syntactic or semantic appropriateness of utterances via acceptability judgements and to separate the linguistic sign from its referent. There is little doubt, as Nesdale and Tunmer (1984: 36) note, that differences in research techniques and the over-reliance on cross-sectional (as opposed to longitudinal) studies have resulted in conflicting findings regarding the 'onset' of metalinguistic processing, both within a domain (e.g. metaphonological) and between domains (e.g. metasyntactic and metasemantic).[5] While such conflicts exist, however, they pale in comparison with the challenge that such findings pose, at both the empirical and theoretical level, to those of the earlier anecdotal literature. Whereas the latter tend to assume that metalinguistic behaviour plays a functional role in language acquisition from a relatively early stage, the research data suggests that children's ability to consciously attend to language form is a process which only 'sets in' between the ages of 4 and 7, that is, between Piaget's pre-operational and concrete operational stages. Boutet *et al* (1983: 226) summarize the more recent evidence as follows:

> L'attitude métalinguistique, c'est-à-dire, la capacité de prendre de la distance par rapport à la langue, se confirme avec l'âge, en même temps que régresse une attitude non-métalinguistique par laquelle les sujets tendent à confondre les unités linguistiques avec les objets ou événements auxquels elles réfèrent.[6]

In other words, it is only very gradually that the child is able to divorce language from its referents and become aware of it -- whether at the phonological, lexical or syntactic level -- as an object in its own right.[7] Two examples of the disparity between anecdotal and experimental evidence are worth exploring as indicative of the problem.

1.1.1. Metaphonological awareness

Children's awareness of phonemes as units of speech has probably been the most studied aspect of metalinguistic awareness primarily because of its role in the development of literacy skills. As Content (1985: 73) suggests, it is important to distinguish here between children's early-acquired and unconscious ability to discriminate between sounds in order to communicate and their ability to attend to such sounds in order to consciously discriminate one from another. Although it is only the latter that can be called metaphonological, there are numerous examples in the anecdotal literature of such a process developing at an early age. Weir (1962: 612), for example, is not alone in recording the sound "substitution exercises" of her two and a half year old child in pre-sleep monologues. Chukovsky (1963) likewise provides numerous examples of children's obsession with 'rhythmic rhyming' and the case studies of a Clark (1978) or Slobin (1984) lay particular stress on the child's apparently intentional attempts at phonemic self-correction and/or correction of others. While such examples proliferate, they are sharply contradicted by reviews of the more recent experimental data in this area. As Gombert (1986: 88) was to put it, examples of children focusing on the sounds of language

> ... souvent attestés dans les observations du langage oral spontané, ne semblent pourtant pas pouvoir être provoqués, lorsque le formalisme de la situation oblige à la manipulation décontextualisée du seul language.

Gombert's observation was based on a review of a wide range of experimental findings, including Wallach *et al*'s (1977)[8] phoneme discrimination study, Liberman (1973) and Liberman *et al*'s (1974) 'tapping tests' for syllable and phoneme identification and, most recently in relation to literacy skill development, Bradley and Bryant's (1983) phonemic comparison tests.[9] While there are different emphases in these studies, what they all tend to suggest is that young children before the age of 4-7 seem unable to understand that words are made up of separate sounds let alone that

such sounds can be identified and/or consciously manipulated. Some writers, such as Hakes (1980: 34), dismiss the anecdotal literature as simply confusing unconscious with conscious processing mechanisms but others, such as de Villiers and de Villiers (1979: 90), seem genuinely perplexed that young children, who seem able to attend to the sounds of language in their play, are "... unable to bring those playful skills to bear on the task of reflecting about sounds".

1.1.2. Metasyntactic awareness

An even more pronounced disparity between the anecdotal and research data exists in the area of metasyntactic or metamorphological awareness, that is, the ability to make valid judgements regarding the appropriateness of sentence and/or word structure. As Bowey (1988: 17) stresses, anecdotal data suggest that children spontaneously reflect on, and comment about, language structure from a relatively early age. Clark (1978), Foppa (1978) and Kasermann and Foppa (1981), for example, see speech repairs as spontaneous grammaticality judgements and give numerous examples of children as young as 2 correcting the morphological and syntactic forms of their own utterances. Such evidence would seem to be corroborated even in experimental studies. Gleitman *et al* (1972: 93), in their attempt to assess two and a half year olds' appreciation of word order in imperatives (e.g. *'bring me the ball', 'ball the me bring'* etc), found that, even if "... the children's criteria for accepting sentences appeared to be more lax than those of adults", their scores were too high to be random. While the anecdotal evidence for an early ability to attend to language structure appears widespread, however, more recent research has again tended to query such findings and to assert that young children before the age of 5 have great difficulty switching attention from the meaning (whether semantic or pragmatic) of an utterance to its form. As Hamilton (1986: 82) was to put it:

> Young children up to the age of five or so are extremely poor at producing messages which can be unambiguously understood by a listener ... In other words, they are not good at sorting out what is useful to the listener from what is irrelevant or misleading.

Hamilton's point is reiterated by De Villiers and de Villiers (1979: 91) who, in their review of research findings, queried the results of Gleitman and Gleitman's earlier study and argued that "... awareness of grammatical rules is also a late skill" which, itself, passes through a number of

intermediary stages.[10] Tunmer and Grieve (1984: 99-100) were to suggest that three broad age-related stages can be distinguished. In the first stage (up to age 3), they argue, children's acceptability judgements depend simply on whether or not a given utterance makes sense to them (i.e. whether or not they can understand it). In the second stage (between 4 and 5 years), such judgements are oriented towards the content of the utterance and only in the third stage (between 6 and 7 years) are they based upon the separation of form and content There exist differences in the literature as to the relative length of each stage but a broad consensus on the underlying process of a gradual transfer of attention from the pragmatic meaning of an utterance via its semantic content to its structural form.

1.2. Theoretical issues

Differences between the anecdotal and research literature extend to all areas of metalinguistic processing, including the ability to segment utterances into words and the ability to separate words from their referents (metalexical awareness). Whereas the former tends to suggest that children are able to attend to language form from a relatively early age, the latter views such ability as a late skill which passes, as does metasyntactic processing, through various 'disembedding' stages. The difference between the two sets of data does not only concern the onset of metalinguistic processes, however, but raises much broader issues relating to the role such processes play in the development of linguistic competence and the order in which they appear. Whereas the anecdotal literature, for example, suggests that metalinguistic processing starts with a conscious focus on what Bowey (1988: 40) calls the "phonemic form of their [i.e. children's] own articulation", as in crib speech, the experimental literature adopts a radically different stance. As Rozin and Gleitman (1972: 194) were to suggest somewhat earlier, not only is it seen to occur later but

> ... the lower the level of language feature, the later its accessibility to the language learning child. Semantics is easier to access than syntax and syntax easier than phonology. With phonology, again, global syllables are easier to access than phonemes and phonetic features.

Confronted with such differences in the timing, function and order of metalinguistic processes, many have been tempted to resolve the problem simply by dismissing the anecdotal literature as 'pre-scientific'. As Bowey (1988: 7) has argued, however, in her critique of the approach of Hakes

(1980) and Tunmer *et al* (1984), ignoring such a well-established and widespread source of data is unhelpful since the latter can act as what she calls an "informed baseline" against which to measure the findings of more recent research.[11] Bowey's point is valid in that any serious model of metalinguistic awareness cannot afford to ignore important conflicts in the data, insofar as the latter imply quite different views as to what metalinguistic processing is. On the contrary, it has to grapple with these conflicts and tensions in an attempt to provide a comprehensive rather than one-sided approach to the issue.

If any theoretical model of metalinguistic awareness has to address the conflict between anecdotal and research data, it also has to address the highly uneven distribution of such awareness regardless of when it is seen to 'set in' and the relative order of the meta-processes involved. Sinclair (1986: 614), for example, was to note that many researchers have been struck by the "high inter-subject variability" of the results of empirical studies which are often "difficult to organise ... into phases or stages" and which, when the latter do emerge, "are not strongly related to age". Chaudron (1983: 370) was to make a similar point when suggesting that ". . metalinguistic judgements seem to be derived from linguistic development and experience in very idiosyncratic ways" as, indeed, were Simons and Murphy (1986: 193), Cazden (1975: 603) and, particularly in relation to literacy skill development, Mattingly and Kavanagh (1972: 140).[12] The "considerable individual variation" that the latter note in relation to beginning readers contrasts markedly, they stress, with the relative consistency from person to person with which primary linguistic activity is performed. If a theoretical model of metalinguistic awareness is to have any 'explanatory power', in this sense, it has to explain not only conflicts in the data concerning the onset of metalinguistic processing but also the high inter-subject variability of such processing at different age-related levels.

2.0. Alternative hypotheses

In her review of the literature, Sinclair (op. cit. 615) was to suggest that two basic theoretical approaches exist to the development of metalinguistic processing: that which assumes it plays a functional role in L1 acquisition (the 'interaction' hypothesis) and that which assumes, as Marshall and Morton (1978: 277) put it, that it is "... completely disconnected from the mechanisms responsible for the acquisition of linguistic skill" (the 'autonomy' hypothesis).[13] Tunmer and

Herriman (1984: 12-35), in their conceptual overview of the field, basically accept Sinclair's alternatives but add a third. The theoretical spectrum, they suggest, can more usefully be divided into three broad approaches: the first which sees metalinguistic awareness as playing a functional role in the development of linguistic competence, the second which views it as a domain-specific application of general metacognitive processes in middle childhood and the third which views it as stemming from the decontextualisation of language use itself, primarily through literacy skill development. Garton and Pratt (1989: 128), in their review of the literature, divide the theoretical spectrum in a similar way as, indeed, does Gombert (1992: 175-177). While differences exist between such writers as to the merits of the various approaches, what is interesting is the consensus that appears in the division of the theoretical spectrum and the extent to which such a division maps onto that examined in Chapter 1 regarding the emergence of metacognitive processes.

2.1. The 'interaction' hypothesis

The first approach, or what Sinclair refers to as the 'interaction' hypothesis, is most explicitly developed in the work of writers such as Marshall and Morton (1978), Clark (1978), Clark and Anderson (1979) and Bowey (1988). What tends to characterise this approach is the assumption that metalinguistic and linguistic processes are enmeshed from a very early age since, as Barton (1986: 70) puts it, "... part of using language as communication consists of using it appropriately, monitoring one's listener and making sure one is understood". In order to communicate, Barton argues, the speaker-hearer is constantly forced to reflect upon and adapt the language that he uses in order to match it to context, purpose and audience. If the young child is to become linguistically competent, he must therefore learn from his earliest communicative interaction not only to speak but to monitor his production in order to be able to use it in an ever more efficient way to realise his goals. This is not to suggest, Barton (ibid. 70) stresses, that very early monitoring is necessarily conscious but rather that there rapidly emerges a "... continuum from unconscious monitoring to explicit, reflective activity" within the communicative process itself. Metalinguistic awareness is not, in this sense, 'parasitical' on emerging competence but, as Smith and Tager-Flusberg (1982: 451) were to observe, evolves with it in a symbiotic relationship, influencing and in turn being influenced by the child's growing skill in speech production and reception.[14] The similarity between

such a view and the information- processing approach to skill development, as typified in Chi's 'novice-expert' model, would appear to be self-evident. As in the latter, the development of competence is seen as a process of ever-more efficient domain-specific self-regulation, that is, one in which the conscious mastery of lower-level skills gradually gives way to automated processing which, in turn, frees attention to focus upon higher level decision-making.

2.1.1. Restructuring of linguistic competence

For Barton. metalinguistic processing 'sets in' relatively early as a monitoring device helping the child to adapt language to new contexts of use. A similar approach can be found in the more influential work of Clark (1978) and Clark and Anderson (1979) who view it more as a form of 'negative feedback' from within the speech act itself. Communication, Clark suggests, is largely a matter of knowing what to say and when/where to say it and this is progressively clarified for the child through the errors -- and the correction of errors -- that he makes. It is when the child becomes aware of 'communication errors' that he is compelled to switch attention from function to form, detect and correct the 'error' in what is being said and, in so doing, lay the basis for reorganising his linguistic knowledge at a higher level. In the early stages, the child's attention may focus upon the phonemic form of his own articulation but this gradually gives way to more complex questions involving morphological and syntactic choices. As Clark (1978: 36) points out, children "... start out with a very..... elementary version of language and, to move to the next stage, must realise that it is inadequate or 'wrong'..". Language acquisition, within this perspective, can be seen largely as a two-fold process in which negative feedback from communicative interaction provides the impetus to expand and reorganise competence into a more complex representational system.

Perhaps the most controversial feature of this process can be seen in the treatment of early speech repairs, that is, young children's spontaneous attempts to correct their own output. Clark and Anderson (1979) single out three self-repair stratagems as illustrative of early self-monitoring: morphological (e.g. 'she *want* -- she *wants* to go out'), lexical (e.g. 'you have to *squeak* -- *squeak* -- *scrape* it') and syntactic ('*The kitty-cat* is .. de *de spider's* kissing the kitty-cat'). The fact that young children tend to correct their production in the interests of being better understood -- whether it be the pronunciation of words, word endings or the word order of an utterance -- is not, in itself,

controversial. Researchers such as Kaserman and Foppa (1981) have long shown that such self-repair processes, starting at the phonological and moving to the morphological and syntactic, are relatively systematic in children by the age of 18-24 months. What is controversial is Clark and Anderson's assertion that such early repairs are evidence of *conscious* control processing which represents a crucial feature of linguistic development. Contrary to the long established view that monitoring an utterance for errors is an automatic process, they were to argue (1979: 11-12) that

> .. for children in the early years of acquiring a language, to realise that their elementary version of language is inadequate, they must become aware of when their language fails. When such failure occurs, the child must reflect on his utterance in order to repair it... Without the ability to monitor, check and then repair one's utterances, it is unclear how children go about changing a rudimentary system into a more elaborate one.

It is true that, as Garton and Pratt (1989: 129) point out, Clark's views on the conscious nature of self-repair stratagems are sometimes more ambiguously formulated along the lines of those of Levelt (1978) who defines such stratagems as existing "at the border of awareness" [15] It is difficult to reconcile such ambiguity, however, with the notion that children must become, as she argues, 'aware' of linguistic failure and 'reflect' on it in order to overcome it.

The fact that Clark tends to see early self-repair stratagems as conscious would seem to confirm Gombert's (1992: 176) comment that metalinguistic processing in her model is "... contemporaneous with the emergence of language and constitutes an intentional management component within it". While there is no doubt that Clark sees such self-repair stratagems as crucial in promoting linguistic competence, however, she is only too aware that they constitute only one -- and the most simple -- source of conscious control processing. Her elaboration of a more complex taxonomy of the potential sources of such processing seeks to situate self-repairs within a hierarchical model based on differences in the level of analytic reflectivity involved:

1. monitoring of ongoing utterances (e.g. spontaneous correction of own pronunciation etc);
2. checking the results of an utterance (e.g. noticing the use of dialect, style, volume etc. on others);
3. testing for reality (e.g. checking whether a listener understands a given word or phrase);
4. deliberately trying to learn (e.g. practising new words and sounds);

5. predicting the consequences of an utterance; and

6. reflecting on production.

As indicated, it would be incorrect to see such categories -- which are similar to those outlined in the taxonomies of a Slobin (1984) or Barton (1986) -- as emerging synchronously or, indeed, as representing identical levels of reflectivity. [16] As Barton (ibid. 70) was to suggest, the categories can be seen to represent "increasing degrees of disengagement from the speech signal" and, to this extent, 'set in' at different stages in the development of linguistic competence and involve differing degrees of conscious self-monitoring. In particular, as Clark herself seems to suggest, categories 1-4 are more likely to accompany the mastery of speech, while categories 5-6 -- which might involve, for example, an acceptability judgement out of context and a justification for the use of a given phrase rather than another -- are related more specifically to literacy skill development. As Clark (1978: 37) was to admit, " .. judgements of appropriateness, complexity and form are next to impossible to elicit from very young children and therefore tell us too little too late".

Whereas, for Clark, metalinguistic processing arises out of the negative feedback in the communication process, for others writing within the 'interaction' hypothesis, such as Kuczaj (1983), it emerges more in situations where the child has the opportunity to focus on form free of communicative pressures, as in 'crib speech' (i.e. Clark's category 4). Kuczaj agrees with Clark that language acquisition can most usefully be seen as a two-fold process in which the child's linguistic competence is subject to continual expansion and reorganisation into a more complex representational system. The advantage of language practice implicit in such activities as 'crib speech', however, he argues, is that it allows "postinitial processing", that is, it affords the child the opportunity to focus on those aspects of language of his choice and particularly those where there might exist discrepancies between old and new linguistic information that might need to be resolved. As Bowey (1988: 39) was to suggest, in her evaluation of the Kuczaj model, crib speech is seen by the latter to allow children to "... engage in behaviours of their own choosing" and to "have complete control over what is said". Kuczaj's review of the anecdotal literature on 'crib speech' combined with his own quantitative study led him to suggest that the practice young children engage in can be divided into two kinds corresponding to the expansion/reorganisation hypothesis. The

first set of activities, which he labelled 'imitation/repetition', involve the partial reproduction of a preceding model utterance and the second set, which he labelled 'modification', involve the alteration of a model utterance via the 'substitution drills' already highlighted by Weir or via what he calls 'build ups' or 'breakdowns'. The latter, in particular, insofar as they imply the addition of linguistic elements to, or deletion from, a model utterance, were the most likely in Kuczaj's view to facilitate the reorganisation of linguistic knowledge. It should be pointed out that Kuczaj is not suggesting that the language practice implicit in pre-sleep monologues constitutes the sole form of intentional self-monitoring by the young child. The fact that it allows the child to focus on those aspects of language *of his own choice*, however, suggests that it is one of the earliest and most useful forms of metalinguistic processing.

2.1.2. The 'spontaneous-deliberate' continuum

According to Bowey (1988: ix), the views of writers such as Clark or Kuczaj have to be taken seriously since, if examples of early self-monitoring are not considered metalinguistic in nature, one is left with "... the default argument that metalinguistic activity has no role in language acquisition" One of the weaknesses of the work of such writers, however, is that it is restricted almost exclusively to data from anecdotal sources. Clark may assert, for example, that self-repair stratagems are conscious but makes no attempt to reconcile such an assertion with more recent research findings which suggest that young children before the ages of 4-7 are unaware that words can be segmented into sounds or that such sounds can be identified and/or manipulated. Partly in an attempt to overcome such a weakness, writers such as Garton and Pratt (1989: 133-135) have more recently tended to reject Clark's 'strong' version of the 'interaction' hypothesis in favour of a 'weak' one. While not disputing that young children are able to consciously switch attention from language function to form (as in speech repairs), they suggest that such attention is in the early stages largely *spontaneous* (i.e. involuntary) in nature and only becomes *deliberate* (i.e. voluntary) through experience. As in Chi's novice-expert model, they do not question the ability of the young child to consciously focus on language but, rather, the degree of intelligent self-regulation with which that consciousness is directed. The reason why young children in the anecdotal literature are seemingly able to focus on aspects of language form which they cannot do in more controlled tests, they

suggest, is simply a function of the fact that, in the latter, they have not yet mastered the degree of self-regulation required of them to operate deliberately in a decontextualised setting. [17]

An example of Garton and Pratt's (ibid. 134) more nuanced approach can be seen in their treatment of speech repairs. In the early stages, they suggest, such repairs probably occur unconsciously but, on occasion, it is possible that a given speech repair may itself give rise to spontaneous reflection on the aspect of language being corrected. What is important is to realise that, in the latter case, it is the speech error which has " .. triggered the reflection rather than the child deliberately focusing attention on the language for intrinsic interest". Other examples in which metalinguistic reflection may be seen to arise out of the intrinsic properties of language itself might be errors of mispronunciation in the speech of others, words that are difficult to pronounce, words that rhyme and/or unexpected uses of register. [18] The ability to reflect on language can, Garton and Pratt (ibid. 135) continue, emerge out of any of these activities and it is only gradually -- through experience -- that the child learns to regulate his behaviour so that the initially spontaneous attention to language forms becomes more deliberate and controlled. This process, they suggest alongside others such as Donaldson (1978), will largely be accelerated by the role played by literacy skills in the child's development:

> As the child further masters the different forms involved in language use, then increased levels of reflection will develop. The spontaneously triggered reflections will provide a basis for more controlled reflection. Consequently the child will make a gradual shift to reflecting deliberately on aspects of language [which] ... will be enhanced by the developing mastery of the written language ...

Garton and Pratt accept, as does Clark, that language acquisition can be defined as a process of expansion and reorganisation of linguistic knowledge in which metalinguistic processing plays a functional role from an early stage. Where they differ from the 'strong' version of the 'interaction' hypothesis is in their severance of the link, at least initially, between consciousness and intentionality. Whereas, for Clark, both appear evident in the early stages, Garton and Pratt are more circumspect in suggesting that it is only gradually that the involuntary transfer of attention from function to form becomes voluntary.

Garton and Pratt's distinction between spontaneous and deliberate monitoring of language on the part of the child is clearly designed to overcome the apparent contradiction between anecdotal and

research data. Concern with this conflict is equally central to the work of Bowey (1988) which offers an even more sophisticated solution within the interaction hypothesis. Bowey (ibid. 19) not only argues that "... there is clear evidence that children can reflect on language structure from an early age" but that it is possible to discern a clear succession of stages within the self-monitoring process. Building in particular on the work of Kuczaj on 'crib speech', she suggests that it is through the initial monitoring of his articulatory output that the child discovers those phonemic regularities onto which morphological and syntactic ones may be 'mapped' at a later stage in the expansion and reorganisation of linguistic knowledge. [19] Bowey is only too aware, however, that the notion that young children deliberately attend to their speech output is contradicted by later research findings and she, like Bialystock (1985a, 1985b), seeks to resolve the contradiction by severing consciousness from intentionality in metalinguistic processing. As she was to put it (ibid. 36-37), in her review of the literature on 'crib speech', there would appear to be clear evidence that the child is involved in sound substitution exercises in which his

> ... attention is focused on language form, rather than on language meaning. Since the central aspect of metalinguistic functioning is an attentional focus on form rather than meaning, such monologues come within the area or language function defined as metalinguistic. At the same time, we are not in any position to infer intention from the child's crib speech monologues; we cannot say that the child has *chosen* to focus on form rather than meaning ...

What changes for Bowey between early and later examples of metalinguistic processing is not so much the degree of consciousness involved as the extent to which such consciousness is subject to volitional control, i.e. the extent to which the child intends to attend. As she was to suggest, there is no doubt that the deliberate control processing which is widely recognised to emerge in middle childhood has an important role to play in such decontextualised activities as reading and/or second language learning. What is dangerous, she asserts, is to limit the definition of metalinguistic awareness to deliberate reflection upon language when this only serves to exclude earlier (i.e. spontaneous) reflection, as in crib speech, and downplay the continuity that exists between the two.[20]

Perhaps more than others writing within the 'interaction' paradigm, Bowey (1988: 19) has been highly critical in her evaluation of those who, like Karmiloff-Smith (1979, 1986) or Tunmer and Herriman (1984), have sought to define metalinguistic processing in terms of intentional self-monitoring within the Piagetian and/or Vygotskyan tradition. If, she argues, an 'intentionality

requirement' is insisted upon, it has to be accepted that metalinguistic processing plays no role in primary linguistic skills since there is no evidence that very young children do, as in 'crib speech', intend to attend to their output. In order to combat such a view -- and to stress the continuity between early and later forms of such processing -- she argues in favour of abandoning such terms as 'awareness' altogether, on account of their association with notions of 'volition' and 'intent', and adopting more cognitively neutral ones such as 'metalinguistic functioning'. Bowey's attempt to develop cognitively neutral terms to define metalinguistic activities, i.e. ones that downplay the changing relation between attention and intention, is partly indebted to Franklin's (1979) earlier model on metalinguistic functioning. The latter sought to adopt what Bowey (Ibid. 20) refers to as a strictly "performance-oriented" perspective on metalinguistic awareness that was defined as "... reflective performance in the sphere of language" Franklin's model, which sought to enumerate behaviourally the procedures that might make up such a performance, was if anything even more cognitively neutral than Bowey's in that it ignored, not only the question of intentionality, but also the differing degrees of analytic reflection involved.

2.1.3. Spontaneous and deliberate metaphor

The division between spontaneous and deliberate reflection on language, which underpins Garton and Pratt's or Bowey's approach to metalinguistic awareness, has become widespread among those writing within the 'interaction' hypothesis. Young children, it is assumed, are quite capable of reflecting spontaneously on various aspects of language form and, if they are unable to do so in 'decontextualised' tasks, it is because they lack the necessary self-regulation which develops only through experience. This view has assumed possibly its most controversial expression in the treatment of metaphor production and comprehension which, as Franklin and Barten (1988: 299) note, constitutes an important theme in more recent research. A metaphor, as Winner, Rosenstiel and Gardner (1988: 303) suggest, can be defined as " . a figure of speech that illuminates one dimension of a particular object by drawing attention to its similarity to an object from another realm of experience that normally is viewed as dissimilar". Producing (and understanding) a metaphor requires, in terms of such a definition, the ability to establish a relation between two objects otherwise regarded as dissimilar. Traditionally, as Billow (1988: 314-315) correctly argues,

this ability was seen to emerge relatively late in children's development since, as writers such as Vygotsky had pointed out, their early tendency to link dissimilar objects could be understood more easily in terms of over-extensions or category errors that transgress conceptual boundaries of which they are not aware. As Matters and Davies (1975: 322) were to put it:

> In early stages of language acquisition, children produce categorical errors and mistakes that can be taken as metaphorical expressions but are not. The child is in the process of learning to recognise and correct perceptual, cognitive and conceptual 'error' ...

Within such a framework, metaphor was seen as the intentional transgressing of boundaries only after such boundaries had been established as an integral part of cognitive growth. Even writers such as Chukovsky (1963: 25), who were to applaud children's inventive use of language, tended to see category transgressions as based on accident, unintentional errors in fact, word usage or (faulty) analogy, requiring not so much indulgence as correction. If, however, as is a central premise of the 'interaction' hypothesis, children's conceptual ability is viewed as 'preset' rather than as an ongoing process of development, early examples of category transgressions tend to be viewed in an entirely different light. They cease being errors to be corrected and become, rather, spontaneous examples of a figurative use of language which is to be welcomed.

Support for viewing children's early category transgressions as spontaneous metaphor can be found in writers such as Winner *et al* (1976, 1988). The latter's work is situated within a growing consensus of researchers, such as Pollio and Pollio (1974), Gardner (1974) and Billow (1975), who posit a broad three-stage approach in the development of mature metaphoric understanding. As Winner *et al* (1988: 313) were to put it, "... spontaneous production [of figurative language] occurs first, followed by comprehension and then by the ability to explain the rationale of a metaphor".[21] While such a model still retains a developmental framework, what is noticeable is that early category transgressions are seen not as semantic or grammatical overgeneralisations but, rather, as embryonic forms of later more mature metaphoric thinking. The difference between the two, within such a process, is limited to the fact that, whereas the former tend to be spontaneous in nature, that is, ".. most often visual comparisons prompted by stimuli in the environment", the latter are viewed as more deliberate or intentional. Writers such as Vosniardou *et al* (1988: 329) tend to adopt an even 'stronger' position when arguing against even the need to posit a stages theory to connect

initial (spontaneous) with later (deliberate) use of metaphor. The fact that young children are capable of producing figurative language, they argue, implies a degree of consciousness in its use which does not require comprehension -- or the ability to verbalise such comprehension -- to be retained to a later stage in the process. Other writers such as Billow (1988) are equally insistent that young children's production of figurative language is not only conscious but also deliberate in nature. As he points out (ibid. 324) in a review of more recent research findings, children between the ages of 3 and 6 appear able to make a "consistent use of metaphoric language" which cannot be explained away as the result of "linguistic accident, that is, by faulty or immature understanding of semantic or grammatical principles". On the contrary, he suggests, in a manner similar to a Barton or Clark, it would seem that

> ... the very young child deliberately rather than accidentally uses words and objects to stand for quite different objects, and that the use involves a dimension of similarity which is clear and fitting.

Billow's views may appear highly controversial but they are shared by others writing within the same paradigm, such as Gardner (1973: 145) who likewise asserts that over one half of his daughter's category transgressions can be interpreted as a "... deliberate effort to play with a word's sound or reference to achieve a desired meaning or effect"

2.1.4. Critique

There can be little doubt that the 'interaction' hypothesis, particularly in its 'weak' version, seeks to reconcile the potentially conflicting findings of the anecdotal and research literature in a coherent model of metalinguistic development. While comprehensive in scope, however, it suffers from a range of problems inherent in the non-developmental information-processing paradigm in which it is lodged. Three stand out.

In the first place, it asserts that metalinguistic processes 'set in' at an early stage -- as do metacognitive processes generally -- and play an important functional role in the development of primary linguistic skills. Such a view is problematic, however, in that even writers such as Bowey (1988: 39) admit that there exist "large individual differences" in the overt processing of linguistic data recorded between one child and another. Since it is generally accepted that most children, by

the age of 5, develop comparable levels of linguistic competence, there would seem to be no evidence directly relating metalinguistic processing with language acquisition. Sinclair (1986: 617) is quite adamant in this respect when arguing that, while self-monitoring may be useful in improving verbal performance, "... we have no direct evidence of some metalinguistic knowledge or capacity influencing performance (and/or vice versa) during early childhood".

In the second place, the view that early self-monitoring of linguistic performance is conscious is asserted rather than proven. Clark or Bowey may argue, for example, that speech repairs reflect a switch of attention from language function to form but there is little direct evidence that the young child is aware that *that* is what he is doing. As Tunmer and Herriman (1984: 20-22) have pointed out, in dealing with speech repair mechanisms, it may well be that the child becomes aware not so much of the errors in his production as of a failure to communicate -- based upon the listener's behavioural response -- which acts to set into motion 'error-detection mechanisms' which are largely automatic in character. The difference between awareness of communication failure and awareness of language failure is crucial to the viewpoint of Tunmer and Herriman who argue that it is automatic rather than conscious monitoring processes that are activated when the child's output "... fails to correspond to his intended meaning or fails to achieve the desired results". [22]

In the third place, the view that there is no qualitative difference -- except in the degree of control processing -- between early (spontaneous) and later (deliberate) reflection on language is highly problematic. Such a view seriously misinterprets Vygotsky's argument (1962: 92) from which the distinction was originally drawn. For Vygotsky, the transfer from spontaneous to deliberate involves a major change in conceptual thinking as well as intentional self-regulation since the second is not seen as autonomous from, but dependent upon, the first. If, in the interaction hypothesis, all that is involved is a change from involuntary to voluntary regulation of static cognitive structures, this tends to downplay the differences involved in accessing primary, as opposed to secondary, language skills. The emphasis, in such an approach, is upon the continuity between the two processes rather than, as in a Vygotskyan or a Piagetian framework, the radical discontinuity between them in terms of the level of conscious control processing involved. As such, of course, it would find difficulty in explaining the relative uniformity in competence achieved by children in primary skills, as opposed

to the variability in competence in secondary skills, as Mattingly (1972: 139-140), among others, has observed.

2.2. The 'autonomy' hypothesis

The second theoretical approach (the 'autonomy' hypothesis) is, according to Smith and Tager-Flusberg (1982: 450), one in which the child's "... initial acquisition of basic comprehension and production processes proceeds essentially independently of the development of metalinguistic awareness". Smith and Tager-Flusberg's definition is somewhat misleading in that the thrust of the second hypothesis is not that metalinguistic awareness plays no functional role in language development but that -- as a form of conscious self-monitoring -- it simply does not emerge until a general restructuring of cognitive processes in middle childhood. Such a view is strictly within the Piagetian paradigm in which the child's ability to consciously reflect upon and regulate behaviour -- including linguistic behaviour -- is seen as a function of the onset of concrete operational thinking. As Hakes (1980: 2) was to put it, "... metalinguistic abilities show their greatest development during middle childhood" and their emergence is "... the linguistic manifestation of the cognitive developmental change which Piaget has characterised as the emergence of concrete operational thought" Perhaps the foremost advocates of this approach can be found in the Australian school represented by Hakes (1980), Tunmer and Herriman (1984) and Grieve and Pratt (1984). While there are nuanced differences between such writers, Hakes (ibid. 26) being more prepared, for example, to admit that a "nascent metalinguistic ability" can be detected in the early years, what they share is agreement that metalinguistic awareness involves conscious control processing and that the latter emerges as a domain-specific application of general metacognitive processes in middle childhood.

2.2.1. 'decentering' and metalinguistic awareness

While Hakes views metalinguistic awareness as reflecting a general shift in cognitive processing, however, he is prepared to admit that this reflection is not so direct as at earlier stages. [23] For him, as for others, the central importance of the onset of concrete operational thinking lies in the more general decentering of attention and cognitive flexibility that this permits. Mastery of processes involving 'compensation', 'identity' and 'reversibility' allow the child to stand back and reflect

upon behaviour in a more analytical way than before and to develop correspondingly more efficient control processing. It is this ability to stand back, to "... act and think deliberately and, concomitantly, to place oneself mentally at a distance from a situation and to reflect on it" which, in his opinion (ibid. 38), characterises the child's new approach to language. In the first place, as Sinclair (1986: 612-613) observes, it allows the child to detach meaning (either the meaning of a particular word or of an utterance or a group of utterances) from the context in which it is embedded, thereby permitting synonymy judgements (Beilin and Spontak, 1969). In the second place, it allows the child not only to separate semantic from pragmatic meaning but to separate language, as a formal system, from both pragmatic *and* semantic meanings, thereby permitting acceptability judgements. The notion of reversibility, as van Kleeck (1982, 1984) observes, is held to play a particularly important role here in allowing the child to consider language as a separate structure in its own right as well as a means of communication. This has important implications, in turn, for children's ability to control linguistic input/output in situations where, as in learning to read and write, extra-linguistic clues to meaning are sharply reduced.

The notion that there is a correlation between the cognitive decentering that occurs in middle childhood and the gradual disembedding of language from its communicative context would seem to find considerable support in the research literature. Sinclair (ibid. 613) was to note, for example, that it is at this stage that the child "... begins to be able to examine the sound structure of phrases words and syllables" and, by separating sound and meaning, "... consider rhyme, manipulate sonoric language material, and make comparisons and conclusions concerning sound structure". Moreover, if the child begins to segment utterances on the basis of units of sound (metaphonological processing), he also -- as Tunmer and Grieve (1984: 103) suggest -- begins to be able to dissociate words from their referents (metalexical processing) and to judge the acceptability of a given utterance on grounds of form rather than meaning (metasyntactic processing). [24] Hakes (1980: 87), in particular, was to develop a useful three-stage model in which the child's ability to switch from pragmatic/semantic to linguistic criteria in judging the acceptability of utterances is clearly linked with the onset of concrete operational thinking:

- Stage 1: between the ages of 2-3, such judgements appear to be based solely on whether

or not the child has understood the utterance in question;

- Stage 2: between the ages of 4-5, the criteria shift from understanding the sentence to whether or not the content 'makes sense' in terms of the child's opinion and/or beliefs;
- Stage 3: between the ages of 6-7, the criteria shift again and the child begins to separate the form of a sentence from its content and base his judgement on linguistic criteria.

The shift in attention from the pragmatic meaning to the linguistic form of an utterance (via its semantic content) clearly reflects a gradual disembedding of language based upon changes in cognitive processing which many have sought to extend to all domains of metalinguistic processing..[25] It is interesting to note that the order of meta-processes involved in such a model corresponds closely to the views of Rozin and Gleitman (1977), who suggested that children's metalinguistic awareness would follow a fixed sequence as a function of the 'level' of linguistic representation involved. According to this view, as already indicated, 'deep' representations (i.e. pragmatic and semantic) would be easier to access than 'surface' representations (i.e. syntactic, lexical and phonological). [26]

The qualitative shift in the child's approach to language that begins with the onset of concrete operational thinking is seen, within the 'autonomy' hypothesis, as critical to the development of literacy skills. It is by standing back and reflecting upon the structural features of the spoken language that the child is able to negotiate the transition from context-dependent to context-independent uses of language which are characteristic of written texts. Tunmer and Bowey (1984: 152) were to stress this point when seeking to develop a taxonomy of metalinguistic skills -- including the detection of structural and lexical ambiguity -- which are involved in helping the child to access text-related uses of language. While they acknowledge that such skills may undergo a 'sequential ordering' during the reading process itself, however, they are clear that the development of a minimum level of metalinguistic processing is, in itself, a prerequisite for learning to read. As they were to put it:

> The metalinguistic ability to reflect on language should ... be an important prerequisite for being able to learn to read, since without this ability the child would not be able to discover the properties of spoken language that are central to a correspondences between its written and spoken forms.

Such a view is at odds with the 'interaction' approach of writers such as Wray (1994: 29) who, following Ehri (1979), argue that meta- skills such as phonological processing are as much a consequence as a prerequisite for learning to read. While Tunmer and Bowey do not deny the possibility that reading itself will contribute to the development of metalinguistic processing, their view is much closer to the 'reading readiness' approach popularised by Downing and Thackray (1975), that is, that a 'threshold' has to be reached in metalinguistic processing, as a domain-specific refraction of metacognitive processing, if the transfer from spoken to written word is to be successfully achieved. [27]

2.2.2. 'communicative' or 'linguistic' failure?

The notion that metalinguistic processing emerges only in middle childhood as a consequence of a wider cognitive reorganisation raises important questions about the status of anecdotal data. While a writer such as Hakes (1980: 105) is occasionally ambiguous in his attitude towards such data, he insists that "... it seems intuitively clear that children's early metalinguistic performances differ considerably from those of which they are capable later".[28] Indeed, what separates those writing within the 'autonomy' hypothesis from a Bowey or a Clark is precisely the view that the latter tend to confuse two cognitively distinct processes which may be related but which are qualitatively different. As Gombert (1992: 9) argues, the definition of metalinguistic processing given by Clark (1978) or Levelt (1978), based on a review of anecdotal sources, would appear to include

> ... both the phenomena they situate at the limits of consciousness (such as spontaneous self-repairs performed by the young child) and other phenomena which are clearly the result of real, explicit reflection on language.

Gombert does not deny that the young child, either in terms of self-repair stratagems or pre-sleep monologues, is involved in a process of self-monitoring as a basis for reorganising and extending his linguistic competence. What he does deny is the notion that such monitoring is conscious and/or intentional in character. A typical example of the confusion in 'interaction' accounts of early metalinguistic processing involves the sound 'substitution exercises' recorded in 'crib speech' by writers from Weir (1962) to Gleitman *et al* (1977). Such children, Gombert (ibid. 22) argues, may

well have been involved in phonological manipulation but "... there is nothing to show that this is not just a case of the simple manipulations of sounds comparable to other manipulations of a non-linguistic character". It was essentially to stress the discontinuity (rather than continuity) between earlier non-conscious and later conscious monitoring of linguistic form that was to prompt Gombert (ibid. 13), following the French linguist Culioli (1968), to argue for a distinction to be made between 'epilinguistic' and 'metalinguistic' processing. The former, he claims, involves automatic monitoring devices whereas the latter involves children's ability "... intentionally to monitor and plan their own methods of linguistic processing (in both comprehension and production)".

In seeking to explain the evidence provided by anecdotal sources, particular attention has been paid to the 'self-repair' stratagems in that the latter are claimed by Clark (1978) or Levelt (1978) to be the earliest examples of 'conscious' self-monitoring. Writers such as Tunmer and Herriman (1984: 20-22) do not dispute the fact that the child is involved in an ongoing process of self-monitoring during communicative interaction and that this monitoring leads to error detection and correction. The weakness in the interaction hypothesis, they stress, lies in an inability to distinguish between what they call the child's *awareness of communication failure* and *awareness of language failure*. For Tunmer and Herriman, writing self-consciously within the Piagetian tradition, awareness emerges in young children out of a clash between the aim and the result of any intended action. The child is deemed to become consciously 'aware' in terms of measuring the outcome of a given action (success, partial success or failure) against the intended goal. Insofar as young children's speech acts can be considered intentional, they contend, it is logical to assume that any 'awareness' that arises will be an awareness of the extent to which the meaning has been conveyed rather than an awareness of language *per se*. As they put it:

> ... since producing an utterance is an intentional act, the child is aware of the goal of the act, which is to convey an intended meaning. However, while young children are aware of the content of what they wish to convey in normal language production, they are not aware of the linguistic structures by which this content is conveyed. Only the latter type of awareness which emerges later in development, is metalinguistic.

The error committed by writers within the 'interaction' tradition in relation to speech repairs in particular, Tunmer and Herriman maintain, is that they confuse children's awareness of their failure

to communicate with their awareness of language. A child may become aware that he has not successfully conveyed a message, they continue, but the repair stratagems used to remedy that failure tend to be unconscious rather than conscious, that is, part of an automatic self-monitoring system. The difference between the younger and older child is not so much, therefore, a question of more efficient self-regulation, as claimed by writers such as Clark (1978) or Bowey (1988), as of a gradual shift of awareness from the message to the medium that conveys it, which is only achieved in middle childhood as part of a wider cognitive restructuring. [29] A similar viewpoint can, interestingly enough, be found in Bruner (1988:265) who argues that the earliest manifestation of metalinguistic processing is evoked not so much by errors in form as by errors in the behaviour produced by the incorrect speech act form, that is, when ".. we see through the other's actions that our message has failed to convey its intended meaning".

It is interesting to note that the distinction drawn by Tunmer and Herriman between awareness of communication failure and awareness of language is very similar to that of Bialystock and Ryan (1985a, 1985b) between 'metacommunicative' and 'metalinguistic' processing. In her response to

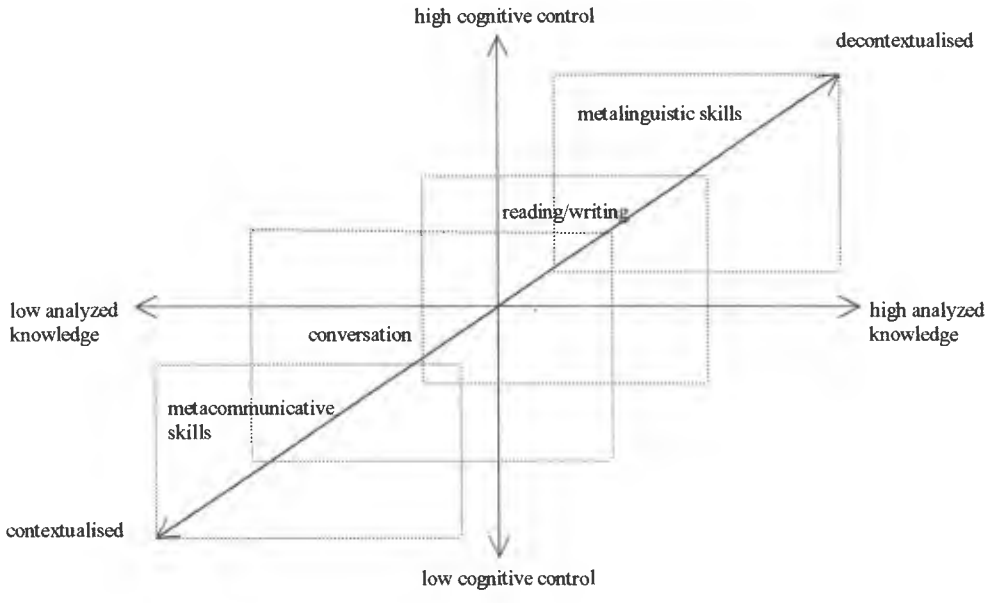


Figure 1: shift from metacommunicative to metalinguistic processing.

Hulstijn's (1990) critique of her model for its anti information-processing bias, Bialystock argued that her work should more logically be seen as a critique of Piaget's 'cognitive construct' approach. Such a view would seem to be supported by the fact that, whereas, in Piaget, consciousness and

control processing are seen as developing interdependently in a linear fashion, Bialystock posits them in her model as two separate axes (from unanalyzed to analyzed knowledge and from non-intentional to intentional processing) which interact in different ways in different contexts (figure 1). While such differences exist, however, Bialystock's model is similar to that of Piaget -- as interpreted by Tunmer and Herriman (1984) -- at least in the way in which it suggests that differing degrees of conscious control processing are required in context-embedded (mainly oral) as opposed to context-disembedded (mainly written) situations. In the former, Bialystock argues, the high level of contextual clues means that only low levels of analyzed knowledge and control are required, i.e. 'metacommunicative' processes which limit themselves to monitoring communicative intentions and their outcome. In the latter, however, where there are no contextual clues to meaning, high levels of analyzed knowledge and control are seen as necessary, i.e. 'metalinguistic' processes which involve a monitoring of the formal aspects of language itself. For Bialystock, as for Tunmer and Herriman, therefore, there is a transfer between the metacommunicative (i.e. awareness of communication failure) and metalinguistic (awareness of language failure), between younger and older children, which those writing within the 'interaction' paradigm are disinclined to take into account. [30]

For writers supporting the 'autonomy' hypothesis, it is important to stress, metalinguistic awareness arises out of a gradual process of linguistic disembedding that *begins* at the concrete operational stage. Beyond this point, what the child is able to attend to depends on ongoing changes in cognitive processing, particularly that between concrete and formal operational thinking. The relation between changes in cognitive processing and the expansion of metalinguistic awareness is illustrated most usefully, perhaps, in those models of reading which have sought to base themselves on Piaget's 'cognitive construct' approach, notably, Marsh's (1980) four stage and Frith's (1985) slightly modified three-stage model. Marsh's stage 3 and Frith's stage 2 both correspond to the concrete operations period and involve the ability, among others, to use 'combinatorial rules' in order to segment words into phonemes and to use grapheme-phoneme correspondences to decode new words. Marsh's stage 4 and Frith's stage 3, which correspond more to the formal operations period, involve 'higher order' rules which, as Goswami and Bryant (1990: 143) point out, include 'conditional' rules such as "the letter 'c' is pronounced /s/ when followed by

i, e and y" and the use of analogy which Piaget himself suggested involved a form of reasoning that only appeared after the age of 10.

2.2.3. (Meta-) linguistic humour

One of the areas where the Piagetian view on the relation between metacognitive and metalinguistic processing appears vindicated is in the area of linguistic humour. Many forms of humour, as is generally acknowledged, depend upon the perception of linguistic ambiguity which, in turn, implies an ability to disembed language from its communicative context and to reflect upon the potential meanings that a given structure might encode. The ability to appreciate linguistic humour, such as puns, riddles and verbal jokes, would therefore appear to imply a certain level of metalinguistic awareness. Writers such as Shultz and Pilon (1973), Fowles and Glanz (1977) or McGhee (1979), working within the Piagetian cognitive perspective, have indeed sought to place the appreciation of humour rooted in linguistic ambiguity within a developmental model in which the onset of concrete operational thinking is seen as critical. McGhee's model, in particular, can be divided into three stages which correspond to changes in cognitive development after the sensori-motor stage:

- Stage 1: between 1.5 and 2 years, children are able to represent things to themselves which leads to 'let's pretend' games (i.e. where the object is used to stand for another). A similar pattern of behaviour emerges, slightly later, in the sphere of language where inappropriate names are applied to objects/events;
- Stage 2: between 3 and 4 years, children become aware of conceptual incongruities, i.e. they deconstruct objects into their attributes (such as shapes and colours) and recombine them in a way which violates categories (e.g. a 'bike with square wheels' etc.). Again, a similar pattern of behaviour emerges in the sphere of language where the child takes pleasure in distorting the phonological pattern of words; and
- Stage 3: at approximately 7 years, adult humour develops whereby the child is able to laugh at what McGhee (op. cit. 115) calls the "deliberate manipulation of ambiguities" which is based upon the development of operational thought.

Shultz and Robillard (1980), in their review of the literature relating to child humour at stage 3, seem to confirm that it is based upon the ability to identify and explain violations of phonological, syllabic, lexical and/or syntactic patterns. Shultz and Pilon (1977: 732), in a well-known earlier study, concur and argue for a hierarchy of difficulty in such humour -- puns, riddles and verbal jokes based on the detection of phonological ambiguity appearing first, between the ages of 6 and 9; those based on lexical ambiguity following (e.g. the two meanings of the word *watch*), and those based on syntactic ambiguity (e.g. *The shooting of the hunters was atrocious*) not appearing until much later, often not until the age of 12.

De Villiers and de Villiers (1979: 92) were particularly concerned with the relation between the onset of metalinguistic skills in middle childhood and the appreciation of humour in that, as they were to argue, "... it stands to reason that if a child cannot reflect on language, he will fail to notice ambiguity". One of their areas of interest was, however, the recorded evidence of children's appreciation of puns and other verbal games in the anecdotal literature which appeared to contradict the hypothesis that it is linked to the onset of concrete operational thinking. Horgan (1988: 342-343), for example, draws up a typology of the sources of 'spontaneous humour' detected in her daughter between the ages of 1.4 and 4.0 years which includes such categories as violation of semantic categories (using a word inappropriately to refer to something else, implying an awareness of classes of objects if the violation is to be appreciated); phonetic pattern games (altering the sound pattern of a word to fit a rhyme, thereby implying a rudimentary understanding of the arbitrary nature of the sign); and riddle-like-questions (implying an ability to use 'stylised games with rules' as in the formula *How does a frog/cat/horse etc. go?*). Horgan admits that such categories are not dissimilar from those highlighted by McGhee but insists that they can, as in the case of her daughter, appear much earlier and are clear evidence of an early development of metalinguistic skills. As de Villiers and de Villiers (1979: 94) argue, however, in a similar way to Tunmer and Herriman, it is important to distinguish between children's awareness of the social context and their awareness of language. Children may laugh at verbal humour, they suggest, not because " . they see the distinction between ordinary language, for communicating messages, and play with language as in jokes and riddles" but because they realise that jokes are "socially valuable", that is, an important form of social interaction. Research shows, they claim, that children often cannot explain the

rationale behind a riddle they have laughed at and, if asked to repeat a joke, paraphrase it in a way that suggests that the ambiguity on which the verbal humour was built was simply unnoticed. [31] As they conclude, young children tend to see humour as residing in the situation rather than in the language and it is only gradually -- as they learn to switch attention from context to language -- that they begin to appreciate verbal ambiguity and/or incongruity.

2.2.4. Critique

Comparing the 'interaction' and the 'autonomy' hypothesis, Sinclair (1986: 617) notes that, while the former is theoretically more appealing, there is considerably less empirical evidence to support it than the latter. Indeed, while many have found the Piagetian explanation of the emergence of metalinguistic awareness oversimplified, it can in many ways be held to be both more complex and subtle than the 'interaction' hypothesis on account of its developmental nature. Whereas writers such as Bowey or Clark seek to blur the cognitive differences between earlier and later linguistic processing, for example, Gombert, Hakes or Tunmer and Herriman insist upon such differences as reflecting important shifts in the child's conception of language. It is by insisting on such differences that they are better placed to explain the difficulty children often experience in making a transition from context-embedded to context-disembedded situations, that is, from ones where, in Bialystock's terms, low levels of analyzed knowledge and control are needed to others where high levels of analyzed knowledge are control are required. While the 'autonomy' hypothesis has many advantages, however, it also embodies certain self-evident weaknesses.

In the first place, the view that metalinguistic awareness is merely a domain-specific application of stage-related cognitive changes is problematic. An important contradiction would appear to exist between the maturational way in which such stages are conceived and what is known regarding the highly variable distribution of metalinguistic skills among children of comparable ages. This is most evident, as Mattingly (1972) notes, in the problems that many children experience in seeking to develop literacy skills.

In the second place, as Garton and Pratt (1989: 133) suggest, the view of metalinguistic awareness as tied to a given stage in the development of cognitive processes renders the model too rigid and inflexible in its treatment of much of the anecdotal literature. It may well be correct to

argue that most early examples of linguistic monitoring, as in the case of speech repairs, are 'pre-conscious' rather than 'conscious' in nature and cannot therefore strictly be viewed as examples of metalinguistic processing. There are other examples, however, such as those recorded in case studies from a Jespersen (1922) to a Slobin (1984), which seem to provide clear evidence of conscious reflection on language form which simply do not fit easily into a such a stage-related model. [32]

In the third place, although it is widely accepted -- even by writers within the 'interaction' tradition -- that children's attitude to language does begin to change qualitatively in middle childhood, there would seem to be little research into the ways in which the features of concrete operational thinking are reflected in the different ways in which children attend to language or the order in which these features appear. As already indicated, Rozin and Gleitman (1977) tend to see metalinguistic processes arising a-synchronously (from the metapragmatic to metaphonological), which appears well suited to a Piagetian model of a transfer from context-embedded to context-disembedded thinking. As Tunmer and Herriman (1984) admit, however, little real research has been conducted in this area and suggestions are somewhat speculative.

2.3. The socio-cultural hypothesis

The third theoretical approach to the origins and function of metalinguistic processing is more complex than is often acknowledged. Tunmer and Herriman, for example, attribute it to writers such as Calfee (1973) or Donaldson (1978) who, they suggest, view such processing as arising out of the transfer from spoken to written word in the early years of schooling. The notion that the ability of the child to reflect on language is a by-product of learning to read is also attributed to Donaldson by Pratt and Grieve (1984), Garton and Pratt (1989) and, most recently, Gombert (1992). Largely because of the uni-directional relation between reading and reflection perceived in Donaldson's work, the latter has been widely criticised as being incompatible with what is known about preliterate children's ability to focus on language as an object of study. Tunmer *et al* (1984: 152), in particular, relying upon the research of Mattingly (1972), have argued that metalinguistic processing is considerably more likely to be a prerequisite of learning to read than a by-product of it since "... without this ability, the child would not be able to discover the properties of spoken

language that are central to the correspondence between the written and spoken form". [33] Such a criticism of Donaldson's view is, however, somewhat one-sided. While the causal relation between reading and reflection may be central to her argument -- as it was to that of Vygotsky -- it would be an error to see the latter emerging solely out of the former. On the contrary, as Donaldson herself implies, metalinguistic processing emerges out of a range of new functional uses to which language is put and which require, on the part of the child, an increasing ability to disembed the forms of semiotic mediation, that is, to treat meaning less as a function of extra-linguistic than of linguistic encoding. Reading, insofar as it requires the child to transfer attention from the pragmatic (context-embedded) to the semantic (context-reduced) dimension of language, may represent a crucially important new functional use but it is still only one such use in a process that can, and usually does, begin before formal schooling.

2.3.1. 'intended' meanings and 'sentence' meanings

A useful way of exploring Donaldson's views in more detail is by comparing them with those of writers within the Piagetian tradition, such as Tunmer *et al* (1984). Donaldson would appear to share the latter's rejection of the 'interaction' hypothesis in relation to the acquisition of primary linguistic skills. The child's gradual mastery of the production and comprehension of the spoken word is viewed largely as an unconscious process in which the conscious ability to focus on linguistic form plays little (or no) functional role. As Donaldson (1978: 88) was to point out, echoing Vygotsky, the child "... acquires these skills before he becomes aware of them. The child's awareness of what he talks about -- the things out there to which the language refers -- normally takes precedence over his awareness of what he talks with -- the words that he uses". This lack of awareness of language as a system in its own right is for Donaldson, as for Tunmer, a function of the context-embeddedness of early semiotic mediation. The spoken word, she suggests, emerges as an accompaniment to social interaction in which children are initially more concerned with making sense of what people mean when they talk, rather than with what their utterances, *qua* utterances, mean. [34] Indeed, she argues alongside others such as Bialystock (1985), the 'shared knowledge' that characterises most forms of interaction between child and adult -- and which includes the beliefs and intentions of the participants -- obviates to a considerable degree the need of the child to pay

attention to the explicitly linguistic formulation of the message. [35] In the early stages of child development, she points out (1978: 88)

> ... language is embedded for [the child] in the flow of events which accompany it. So long as this is the case, the child does not interpret words in isolation – he interprets situations. He is more concerned to make sense of what people do when they talk and act than to decide what words mean.

The fact that the young child uses a range of pragmatic procedures to interpret utterances implies that the focus of his attention is initially upon the communicative goals of interaction rather than on the linguistic means of achieving these goals. Moreover, as Tunmer *et al* (1984) suggest, the self-repair stratagems that he employs from a relatively early age are more likely than not to constitute, within this paradigm, evidence of his awareness of the failure to achieve these goals than an awareness of language *per se*.

While Donaldson would seem to share Tunmer's views that the 'shared knowledge' implicit in early communication obviates the need to attend to language form, she differs sharply from him on the origins and development of metalinguistic processing. As indicated, for those writing within the Piagetian tradition, the ability to separate speech from action -- and reflect consciously on the former -- develops as a domain-specific application of concrete operational thinking and plays an important facilitating role in the child's access to the spoken word. For Donaldson, however, it is not the emergence of general metacognitive processes which allow the child to disembed language but, rather, the new functional uses to which language is put which require, on his part, an ability to extract meaning less from the extra-linguistic context and more from the linguistic system itself. This progressive freeing of speech from the 'here and now', as Bruner (1975: 52) put it, involves the child in mastery of a range of intramodal discourse types that move from the context-embedded to context-disembedded along a number of taxonomic channels (such as structure, topic and function). It is, as Rubin (1980) in particular suggests, the child's production and understanding of increasingly decontextualised *intramodal* discourse types -- those where, for example, extralinguistic gives way to intralinguistic referencing -- that prepares him for the important *intermodal* transfer involved in accessing written texts. While there are important differences in changes at the intra- and intermodal levels, what underlies the general process is a growing

awareness that meaning is embodied less in the intentions and beliefs of people as they act and more in the structure of their utterances. Grice (1957: 148-149), interestingly enough, was to express the importance of this process some time earlier in what Olsen and Torrence (1983: 148) refer to as his 'intentionalist theory' of meaning, when suggesting that the child has to move from awareness of 'intended' to 'sentence' meanings:

> In a sense, children already implicitly know about sentences and meanings in that they successfully use the former in the service of the latter. What he or she apparently fails to do is to differentiate the two and pay attention to the latter. Alternatively expressed, the child uses sentence meanings to express or compute intended meanings but ... the sentence meaning remains implicit and, hence, transparent. What he or she begins to do .. is to become aware of, to make explicit, the sentence meaning.

It is interesting to note that Grice tended to see this transition occurring particularly in relation to the acquisition of literacy skills since, in written texts, meaning is embodied almost entirely in 'sentences' rather than in the 'intentions' of the speakers who utter them.

The distinction between 'sentence' and 'intended' meanings -- that is, between what a sentence means and what a speaker may mean by uttering it -- recalls that of Halliday (1978) between the 'mathetic' and 'pragmatic' function of language or that of Austin (1960) and Searle (1969), in speech act theory, between an utterance's 'propositional content' and its 'illocutionary force'. As Searle suggests, it is quite possible that a given utterance, which has only one propositional (i.e. semantic) content, has a range of quite distinct illocutionary (i.e. pragmatic) meanings depending upon the interplay between the intention of the speaker and the context in which the utterance occurs. [36] In the early years, Searle infers, when language is an accompaniment to (or replacement for) action, the child tends to use and interpret utterances more in terms of their illocutionary force because, as Halliday (1975: 10) was to put it, he "... knows what language is because he knows what language does". [37] It is only gradually, he continues, largely as a function of the decontextualisation of intramodal discourse types, that his attention begins to shift to the underlying propositional content, that is, that he becomes aware that, as Olsen and Torrence (1983: 152) put it, "... what sentences mean may both be discrepant from what we as speakers mean by them and what we as listeners expect others to mean by them". Such a transfer does not take place overnight but is, as already suggested, a prolonged process in which the child learns to disembed language, to become

aware that it is (explicit) choices made in the linguistic encoding of the message -- rather than the (implicit) intentions of the speaker or expectations of the listener -- that determine meaning. This process receives its most powerful impetus in the transfer from the spoken to written word since the intersubjectivity between reader and writer of a text is radically reduced and since interpretation of the latter can depend almost uniquely on attention to the ways in which the different levels of the language system encode meaning.

An interesting dimension of this shift from illocutionary to propositional meanings is the corresponding expansion of, and change in, the child's use of metalanguage. As Olsen and Torrence (1983) suggest, the process by which the child learns to treat language as an object -- to disembed it from the speaker's intentions and listener's expectations -- is accompanied by the development of a language to refer not to the world but to language itself. In this respect, they suggest, following Lucy (1993: 9), the child is fortunate in that language is intrinsically reflective in its capacity to "... use language to communicate about the activity of using language". The reflective potential of language encompasses a range of activities from reporting on language (e.g. *say, shout, whisper*), categorising various aspects of language structure (e.g. *syllable, word, sentence*) and genre (e.g. *speech, essay, letter*) to guiding listeners in the interpretation of meaning. [38] In the early years of child development, when language is still primarily an accompaniment to action, the use of metalanguage is inevitably limited and refers more to the speech act than to language itself. If the early use of metalanguage is more concerned with the pragmatic than semantic aspect of language, this is largely because, as Silverstein (1975, 1985) notes, young children are more concerned with the functional use of language in context than with its formal features. As the child begins to divorce language from action, however, he is increasingly compelled to expand his repertoire of metalinguistic terms and/or adapt his existing ones in order to talk about language itself and the way in which it encodes meaning. Olsen and Torrence (1983: 145) focus, in particular, on the way in which the development of literacy skills is reflected in, and consolidated by, corresponding changes in the child's use of metalanguage. Not only, they argue, does child metalanguage expand to encompass new forms (e.g. *syllable, word*) but existing terminology undergoes an internal transition from what might be called the metapragmatic to the metasemantic. This shift in awareness of what the speaker intends to say to awareness of what he actually does say is typified, they claim, in the

change in the use of a metalinguistic term such as *mean* which occurs in children between the ages of 4 and 7, as below:

(a) Teacher: what's a bicycle?

Pupil: bicycle's got three wheels, I mean, two wheels

(b) J: dads are supposed to be strong but my dad's puny. Do you know what puny means?

L. yes

J: it means scrawny.

In the case of (a), it is the child who 'means' whereas in the case of (b) it is the linguistic term itself which 'means' scrawny. This shift in the use of the term represents for Olsen and Torrence an important step forward by the child in being able to separate 'intended' from 'sentence' meanings and to attend exclusively to language as an object in its own right.

2.3.2. Intralingual referencing and metalinguistic processing

For Donaldson, as for Olsen and Torrence, the ability of the child to distinguish 'sentence' from 'intended' meanings receives its greatest impetus in the development of literacy skills. This is not to suggest -- as Tunmer hints -- that she downplays the earlier 'disembedding' process or fails to appreciate its importance in facilitating access to written texts. The fact, Donaldson (1978: 89) notes, that in some homes "... parents talk about words to their children", that is, develop with them a metalanguage for 'nominating' language, places these children at an "... enormous initial advantage" in the transition from the spoken to written word. [39] While the child's ability to disembed aspects of the spoken word is widely seen as a prerequisite for learning to read, however, it is even more true that, for writers such as Donaldson (1978) or Ehri (1979), it is the act of learning to read itself which, in turn, seems to provide a *qualitative* step forward in the process. As Sinclair (1986: 619) was to recognise, there would appear to be a wide consensus that

> . the child's conception of phonemes, words, and his ability to segment into or otherwise manipulate linguistic units undergo dramatic changes around the age of 6, once he begins instruction in reading and writing.

The crucial role played by literacy skills in the development of metalinguistic awareness can probably be attributed to two factors. In the first place, as Olsen and Torrence (1993: 146) remark,

written texts carry the disembedding process implicit in earlier intramodal changes to a higher level where language becomes almost exclusively its own context. The only way the child can 'make sense' of what he reads, at least in an alphabetic culture, is by mapping the written onto the spoken forms which, in turn, require analyzing the linguistic features common to both and developing a language to talk about them (e.g. *sound, letter*, *word* etc.). In the second place, as Wells (1998: 6) shrewdly observes, insofar as written texts embody what he calls a "permanent representation of meaning", that is, function as 'product' rather than 'process', as 'artefact' rather than 'tool', they thereby offer the child a unique opportunity for this "analysis and naming" activity which the more ephemeral and linear spoken word denies him. [40]

More recent research by writers such as Karmiloff-Smith (1979, 1981, 1986) and Hickmann (1982, 1985, 1986) has sought to analyze still further the impact of literacy on children's metalinguistic processing. What is interesting in their work is their concern less with what the written and spoken texts have in common and more with what distinguishes them particularly in terms of indexical referencing. For Karmiloff-Smith (1986), the distinctive quality of written texts lies precisely in the fact that -- as extended spans of discourse -- they inevitably involve a transfer on the child's part from extra- to intralinguistic referencing. Ordinarily, she argues, the meaning of a sign for the preliterate child (as in the case of determiners such as *a* and *the*) is a function of its relation to an item or event in the extra-linguistic context. As the child makes the transition from the sentence-referencing of speech to the discourse referencing of texts, however, the meaning of the sign is conveyed, less by its relation to the extralinguistic context, and more by its relation to other signs within a series of related systems. Her study of the use of French/English determiners by children aged between 4 and 8 years, that is, both preliterate and literate, tended to confirm the dramatic effects of the switch from extra- to intralinguistic referencing on metalinguistic awareness. [41] Preliterate children, when asked questions based on a narrative read to them, she points out (1986: 467), tended to answer using such terms deictically (i.e. in reference to the extralinguistic context):

8a. I knew you were talking to the boy because he's only got one book.

8b. There are no apples left because there was only one in the basket at the beginning.

whereas older, literate children tended to respond by using such terms anophorically (i.e. in reference to other linguistic terms):

8c. I know you're talking to the boy because you said 'lend me the book', and if you'd been talking to the girl, you would have said 'lend me a book'.

8d. In the story there was only one, because you were precise, you said 'the apple', and if there had been several of them you could have said 'one of the apples'.

The importance of intralinguistic referencing in the development of metalinguistic awareness -- or what Halliday (1986) was to refer to as endophoric, as opposed to exophoric, referencing -- is reflected not only in Karmiloff-Smith's work on determiners but also that on pronouns in terms of maintaining reference in extended narratives. [42] In both, the written text acts to prompt what she calls (1979: 226) an "essential linguistic development" in the child which allows him to make a "more abstract analysis" of language without the support of extralinguistic clues.

Interestingly enough, Hickmann has sought to carry the latter line of enquiry further in her research on a second form of intralinguistic referencing, that on pronominal use in the area of reported speech. As she suggests (1985:241), the use of speech in one situation to refer to speech uttered in another, is a prominent feature of written texts. Her research sought to establish how soon children aged between 4 and 10 years (i.e. preliterate and literate) were able to master this second form of intralingual referencing by asking them to narrate back a short filmstrip which involved the appropriate pronominal shift from first and second to third person use. Hickmann found that most young children before the age of 6 had considerable difficulty employing an appropriate linguistic (as opposed to extra-linguistic) frame of reference. This was evident both in the way they tended to focus on the filmstrip narrative rather than on the speech of the characters and, when they did attend to the latter's speech, in the way they tended to use an incorrect and/or inconsistent system of referencing in pronominal use (e.g. "The donkey is angry ... because 'I put my toys in the box'") What is interesting in Hickmann's work, as in that of Karmiloff-Smith, is that, not only did children appear to overcome such problems as inconsistent use of pronominal forms as they became older, but also that, when questioned about aspects of the filmstrip, they were able to consciously employ linguistic as opposed to extra-linguistic evidence to support their interpretation of the narrative. As

Wertsch (1985: 150) suggests, the results of her and Karmiloff-Smith's research would seem to indicate that "... mastery of pragmatic presupposition based on intralingual indexical referencing is a late developer" and directly related to literacy skill development.

2.3.3. Metalinguistic processing and cognition

The important role played by reading in the socio-cultural hypothesis cannot be limited, however, to the fact that it encourages the child, as Hickmann (1986: 25) puts it, to " ... use language as its *own* context" on the basis of establishing relations among the utterances of continuing discourse. [43] On the contrary, for Hickmann as for Karmiloff-Smith, it is the implications of this disembedding process on the child's cognitive development that are so important. As already indicated, within the Vygotskyan paradigm, it is the internalisation of language -- as the primary means of semiotic mediation -- which creates the potential for symbolic representation. If language is the tool of thought, however, the ability of the child to disembed language, reflect upon it and use it in a more controlled way in the achievement of intended goals, implies equally an ability to disembed his own thinking, reflect upon it and use it in a more deliberate fashion. Donaldson (1978: 95) was, of course, acutely aware of this when writing that "... those very features of the written word which encourage awareness of language may also encourage awareness of one's own thinking and be relevant to the development of intellectual self-control ...". Of particular interest for Donaldson, as for Hickmann and Karmiloff-Smith, was the importance of metalinguistic awareness in developing the type of disembedded (i.e. conceptual) thinking that tends to characterise formal learning. Understanding and using new (i.e. scientific) concepts cannot be achieved, she implies, by relating signs to their referents in the extra-linguistic context but only by relating them to, and interpreting them through, other concepts as part of an ever-expanding network of concepts. The ability of the child to handle such disembedded thinking in which concepts can only be understood in terms of other concepts, however, depends upon the ability to treat language as its own context, that is, to use signs in a context defined by language itself, as in the case of intralingual indexical referencing. Indeed, as Wertsch (1985: 153) was to point out, it is only by mastering the linguistic devices involved in intralingual indexical referencing that the child is able to take the "... first step in the development of sign-sign relationships that culminates in genuine concepts".

Wertsch's view that referentiality in discourse has important implications for conceptual development is shared to a large extent by Silverstein (1985) in his work on functional stratification in language development. [44] Both tend to view the development of endophoric to metasemantic referencing -- that is, the ability of the child to use signs to refer to, define and interpret other signs -- as a process whereby language becomes increasingly its own context. The point is not necessarily a new one as Caton (1993: 326) reminds us in his retrospective study of the social psychologist George Mead's analysis of the role of 'reflexivity' in language use at the turn of the century. According to Mead (1927), Caton argues, the ability to relate a sign to its referent in the extra-linguistic environment is never truly conceptual because the child treats it as an association rather than as a relationship to be reflected upon between sign and object. [45] As he was to put it:

> ... the word 'flame' is still not meaningful to the child until he can *say* what a flame is when asked by someone like his mother to 'define' it. In the first instance, the symbol is only in the consciousness of the child; there is an association between a sign and the idea of, or at the very least images of, an object. In the second instance, the child is *self-conscious* of the symbol -- that is, it is reflecting on the relationship between the object and the response it elicits.

The reason why literacy development is seen as so important in the socio-cultural approach is precisely because, in allowing the child to use language to refer to and define language on a more systematic basis, it helps him to move from what Caton refers to as 'associative' to 'conceptual' thinking.

2.3.4. Critique

The socio-cultural approach to the origins/function of metalinguistic awareness differs radically from both the 'interaction' and 'autonomy' hypotheses. In some ways, it may appear to be less 'cohesive' than the latter in that it sees such awareness arising out of the semiotic activity of the child which can differ dramatically both between socio-cultural groups and within the same socio-cultural group. It is, however, precisely this flexibility which allows it to avoid the dangers of schematicism implicit in the latter as they seek to reconcile the conflicting data from anecdotal and experimental sources. There are two main advantages in its approach.

In the first place, insofar as metalinguistic processing is seen as arising out of the disembedding of speech, such a process is likely to be a gradual one that passes through various stages. The

implications of such an approach are that, unlike the 'interaction' or 'autonomy' hypotheses which view early examples of linguistic self-monitoring as *either* conscious *or* unconscious, the socio-cultural approach tends to see them more as intermediary stages between pre-conceptual and conceptual thinking. [46] A useful example of this is the pre-sleep monologues, recorded by writers such as Weir (1962), as illustrated below:

- *Put on a blanket*
- *White blanket*
- *And yellow blanket*
- *Where's yellow blanket?* [47]

While it would appear simplistic to dismiss such examples, as do Tunmer *et al* (1984), as evidence of an 'automatic monitoring device', it would appear equally simplistic to view them, as does Clark (1978), as an early example of the young child's conscious practice of new linguistic items. A more balanced approach might well be to view such monologues as typical examples of what Vygotsky himself referred to as a 'chain complex', that is, as a pre-conceptual or 'associative' form of thinking in which "... the decisive attribute keeps changing" and in which "... there is no consistency in the type of bonds or the manner in which a link in the chain is joined with the one that precedes it or the one that follows it" It is interesting that Weir (1962: 617), commenting in a somewhat contradictory way upon 'crib speech', tended to see the notion of 'chain complexes' as "most descriptive of our data" as, indeed, did Chukovsky (1963: 24) somewhat earlier when noting that such inventive play with language could best be described as "... an association through simultaneity or an association through resemblance". [48] The notion that much preliterate attention to language can be viewed as illustrating various levels of pre-conceptual (and therefore 'spontaneous') thought seems more illustrative of the data than the somewhat schematic stances adopted by both the 'interaction' and 'autonomy' hypotheses.

In the second place, while writers such as Donaldson view metalinguistic awareness as passing through various stages, such a process is by no means automatic or uniform. On the contrary, for her as for others, the extent to which children are encouraged to attend to 'sentence' as opposed to 'intended' meanings can differ radically between socio-cultural groups and within the same group according to the discourse modes to which they are exposed. As Donaldson (1978: 91) herself was

to argue, whereas in some homes " ... parents talk about words with their children", in others they "... talk only with words" so that "... many children come to school not even aware that separate words exist -- that the flow of speech can be broken up into these units". Unlike the tendency in both 'interaction' and 'autonomy' hypotheses to posit global age-related stages in the development of metalinguistic processing, therefore, the emphasis in Donaldson is upon the considerable variability that exists between children often of the same age. Such an approach would certainly seem more in tune with the fact that, as Sinclair (1986: 614) points out, in reference to both the anecdotal and research findings, it is "... often difficult to organise the results into phases or stages ...". Moreover, the notion that metalinguistic awareness is a function of the pre-school child's semiotic experience would seem to explain the precocious way in which some children, as recorded in the anecdotal literature, are apparently able to disembed and reflect on language at a very early age. The ability of Slobin's (1984) daughter, for example, to ask explicit questions about speech implies a degree of conscious attention to linguistic form stemming from the specific bilingual context she was raised in which cannot adequately be explained within the 'autonomy' hypotheses of a Hakes or Tunmer.

3.0. Summary

While there exists a considerable amount of data relating to metalinguistic awareness, both anecdotal and experimental, its interpretation in terms of explaining the origins and function of young children's ability to 'disembed' language is hotly contested. Three main theoretical approaches exist which correspond to the broad schools in psychology outlined in Chapter 1. The 'interactive' hypothesis, which is highly indebted to information-processing models, views metalinguistic awareness as playing a crucial functional role in the acquisition of primary linguistic skills from an early age but has difficulties reconciling the variable distribution of such awareness among children with relatively uniform patterns of linguistic competence. The 'autonomy' hypothesis, which has its roots in the 'cognitive construct' tradition epitomised by Piaget, tends to view metalinguistic awareness as a domain-specific application of general metacognitive strategies which 'set in' in middle childhood. While more subtle than the 'interactive' hypothesis, it has similar difficulties in terms of reconciling its maturationist, stage-related approach to what is known

about the high inter-subject variability of metalinguistic awareness among children which is not related to age. The third, or 'socio-cultural' approach, which is rooted in the Vygotskyan paradigm, tends to see metalinguistic awareness arising out of the gradual decontextualisation of language which knows both micro (intra-modal) and macro (inter-modal) functional changes. Because it tends to see metalinguistic awareness as being dependent on the child's semiotic experience, it is more able to make sense of the existing data in terms of explaining the different levels at which such awareness operates and the variability that exists between socio-cultural groups and between individuals in the same group.

Notes

1. Sinclair was to stress the seemingly conscious nature of these activities, despite their heterogeneity, when pointing out that "Even very young children (aged 2, 3 and 4) may be said to be aware in some way (or of some of the aspects) of language, of verbal communication, and of their language performance".

2. Reflecting on his child's [2.9] practice of morphological patterns in pre-sleep monologues, Jespersen (1922: 131) was to note that "... now and then one notices something which shows that at an early age they [i.e. young children] think about points of grammar a good deal". Jespersen was, of course, to generalise from such examples and suggest that, as in any skill-based activity, the acquisition of language leads from conscious to unconscious (i.e. automated) routines.

3. Von Raffler Essen's study (1973: 156) concerns early examples of young children's conscious awareness of articulatory problems and focuses on the case of her own child learning Italian. "He would often pause briefly before a word containing an initial /r/ or before this phoneme in word medial position. When he was 3 years and 5 months old, I asked him to pronounce better the word 'ragazza' ('girl') which he had rendered as *lagatsa*. In response, first, he gave me a challenging look and then with an impish smile he said: *bambina* (another word for 'girl')".

4. While Slobin's (1984: 171) case study of his daughter Heida in a bilingual context is more cautious than others, it can still assert that her early questions [3.2] regarding the name of objects ".. at least suggest that a child at this age is able to reflect on the sound-meaning relationship".

5. As Tunmer and Nesdale (1984: 36-54) specify, one major source of contention is whether metalinguistic processes develop synchronously but differ in their rate of development (Tunmer and Herriman (1984), as in their relation to literacy skill development, or whether they arise a-synchronously (Rozin and Gleitman 1977, Flavell and Wellman 1977).

6. De Villiers and de Villiers (1979: 89) were similarly to stress the gradual development of metalinguistic abilities when writing that "Children learn language as a medium of communication, but as it becomes less and less bound by circumstances and more and more flexible, its properties seem to become available for conscious inspection. Language becomes an object of awareness instead of a transparent vehicle of meaning".

7. For Luria (1988/1944: 95), as for others writing within the Vygotskyan tradition, it is only through conscious schooling that young children make the transfer from viewing language as a means of communication to an object of study. "... children", he was to write, "experience considerable difficulty in making the grammatical structure of speech an object of awareness. This problem arises from the fact that, in the preschool stage, children's attention is chiefly concentrated on the objects named by the spoken words. But, when children start formal schooling, they are required to study grammar and the word itself as part of a system of language".

8. Wallach *et al's* (1977) study was based on the administration of two tests to two groups of children aged 5-6 years, the first involving phonemic discrimination skills only and the second requiring conscious identification of given phonemes in various word positions. While all children scored highly on the first test, less than 50% were successful on the second even though already involved in reading schemes.

9. Liberman (1973) and Liberman *et al's* (1974) studies involved children aged between 5 and 7 years tapping to identify the phonemes in a given set of words. The weak results prompted the researchers to conclude (1974: 21) that even the simple task of counting the number of phonemes "... seems to be possible only at a relatively late age".

10. De Villiers and de Villiers (1974: 94) responded to Gleitman and Gleitman's study with a similar, if more thorough, one of their own with children aged between 28 and 45 months. Their results led them to a radically different conclusion from that of the original study, viz. that "... semantic factors predominated in determining children's judgements, and that the young children could not make correct judgements of grammatical acceptability". Similar conclusions were reached by Bever (1970), de Villiers and de Villiers (1973) and Maratsos (1974).

11. For Bowey (1988: 17), the tendency of writers such as Tunmer and Herriman (1984) to dismiss the anecdotal literature as 'pre-scientific' is based upon an "... implicit assumption that experimental tasks were the best means of assessing metasyntactic abilities in children". As she points out, however, what is clear in the discrepancy between anecdotal and experimental sources is that "... different tasks produce varying estimates of the age in which children's ability to reflect on grammatical well-formedness first emerges". It is a valid point.

12. As Cazden (1975: 603) puts it, "Meta-linguistic awareness, the ability to make language forms opaque and attend to them in and for themselves, is a special kind of language performance, one which makes special cognitive demands, and seems to be less easily and less universally acquired than the language performance of speaking and listening".

13. It is important to note, as does Sinclair (ibid. 615), that this hypothesis concerns only the acquisition of oral (i.e. 'primary' linguistic) skills since it is widely accepted that some ability to attend to, and reflect upon, language plays an important role in the acquisition of written (or 'secondary' linguistic) skills.

14. As Smith and Tager-Flusberg (1982: 451) were to put it, "The child's acquisition of basic comprehension and production is influenced by the development of metalinguistic awareness, and, conversely, metalinguistic development is influenced by linguistic development".
15. Indeed, Bruner (1988: 265) seems to see Clark's review of the anecdotal literature as being somewhat inconclusive as to the level of conscious reflection that lies behind self-repair stratagems. As he puts it, "The literature has been reviewed recently by Clark (1978) and it is simply not clear as to what extent linguistic awareness is an accompaniment of or a factor in language acquisition".
16. Barton's (1986: 70) taxonomy was based upon a study of his own two and a half year old child who was recorded as: asking for names of objects; asking for clarification regarding word use; recognising different intonation patterns; complaining if spoken to in a foreign language; spontaneously correcting his own pronunciation and practising the pronunciation of new words; using specific registers, e.g. normal, a 'baby voice' to gain attention and a 'deep voice' to express anger; and role-playing.
17. As Garton and Pratt (1989: 134) put it, "This spontaneously triggered reflection on language, which is at a conscious level, will occur before deliberate reflection that requires high levels of control processing. The latter type, involving control processing, is required in the myriad of experimental tasks presented to children to determine their metalinguistic abilities. In these tasks, rather than some intrinsic property of a piece of language capturing the child's attention spontaneously, the experimenter expects the child to focus attention on a particular aspect at her request".
18. An example of spontaneous reflection by a child aged three and a half given by Garton and Pratt (1989: 134) is as follows: "Kate was sitting at the table when she said 'Can I have a bit of cheese, please? – *cheese please* – that's a rhyme'. Here the sounds of the words were sufficiently salient to lead Kate to comment on them. There is no doubt that underlying Kate's comment is a conscious reflection on one aspect of language. This did not require a deliberate and controlled focus of attention to bring it to a conscious level, though, as it arose spontaneously".
19. " . we have argued", writes Bowey (1988: 41), "that the earliest type of metalinguistic functioning that we can identify is children's monitoring of their articulatory output .. Reflections on the phonemic form of output might directly assist in the discovery of morphological and syntactic regularities".
20. "The ability to *control* metalinguistic functioning represents an important achievement", Bowey (1988: 19) notes. "Nevertheless, the extension of cognitive control processes to the metalinguistic domain should not be confused with the development of metalinguistic functioning per se. We have seen that there is clear evidence that children can reflect on language structure at an early age. What emerges in middle childhood is the ability to control that aspect of linguistic functioning".
21. Winner *et al* (1988: 313) were to explain the differences between the stages as shaped by cognitive growth. "The spontaneous metaphors produced by young children are most often visual counterparts prompted by stimuli in the environment. In contrast, the comprehension of another's metaphor typically demands not only that both terms be imagined but also that properties other than perceptual ones be taken into account. Finally, the ability to explicate the workings of a metaphor involve a distance from the processes of both metaphoric production and comprehension as well as that metalinguistic awareness that only arises in preadolescence".
22. As Tunmer and Herriman (1984) continue, to suggest (as does Clark) that it is conscious error-detection and correction that explains linguistic development is unlikely for an obvious reason: "When a child who is still in the process of acquiring language fails to comprehend an utterance addressed to him -- that is, when the goal of communication is not met -- the child relies on the context of the utterance to figure out what the speaker means, rather than reflecting on the structure of the utterance".
23. Hakes (1980: 15) traces, for example, the impact of sensori-motor and pre-operational cognitive stages on language development in some detail but notes, in relation to the onset of concrete operational thinking, that ". . it appears that there is no parallel change in children's use of language compared, say, with the way they approach conservation and other tasks".
24. As Tunmer and Herriman (1984: 30) were to put it, "The abilities to separate a word from its referent, dissociate the meaning of a sentence from its form, abstract oneself from normal uses of language in order to focus attention upon its structural features all sound very familiar to what Piaget calls the ability to 'decenter', or mentally stand back from a situation in order to think about the relationships involved"
25. Another example of this process might be the child's ability to separate the word from its referent, that is, to become aware of the arbitrary nature of the relationship, which has been the source of extensive research by Berthoud-Popandropolou (1978, 1980). What her work revealed was that young children seem initially (stage 1) to consider the word as an attribute of the object to which it refers and only gradually are able to detach it from its referent, first as a 'conventional' (stage 2) and secondly as an 'arbitrary' (stage 3) label.
26. Such a process assumes, of course, that 'metapragmatic' awareness is viewed as referring to the relationship between language and the extra-linguistic context of use rather than, as in Bruner and Hickmann (op. cit.) to the relationship between language items within an exclusively linguistic context.
27. Downing and Thackray's (1975: 50) definition of reading readiness encompasses a range of features -- intellectual, social and affective -- but tends to focus around "the development of new concepts of linguistic

elements, such as 'word', 'phoneme', 'letter' etc." and "reasoning and problem-solving operations in developing the skill of decoding the written form of language back onto its previously spoken form".

28. Hakes' observation is based upon a review, in particular, of the work of Brown and Bellugi (1964), Gleitman *et al* (1972), de Villiers and de Villiers (1972) and Bohannon *et al* (1975).

29. Tunmer and Herriman's (1984) argument that proponents of the 'interaction' hypothesis confuse awareness of communication failure with awareness of language is premised upon a highly developmental view of the 'stages' of awareness conceived within a Piagetian framework. As they point out (1984: 24), "According to Piaget's theory ... awareness of failure to achieve the goals of intentional acts (speech acts, in this instance) is only the first step in 'becoming aware'. Conscious awareness (and control) of other aspects of the language system should therefore not appear until later in development".

30. One of the problems with this model, however, is that the same process is described by Bialystock and Ryan (1985a: 208) as operating not only in first but also in second language learning: "The developmental characteristic of the framework manifests itself in the claim that first and second language learning develop unidirectionally along each dimension: from unanalyzed to analyzed knowledge, and from low to high control". As Hulstijn (1990: 42) suggests, however, in his critique of Bialystock's approach, in an instructed second language context, the process is necessary reversed and children will need to start with high analysed knowledge and control to overcome the 'poverty of the stimulus'.

31. De Villiers and de Villiers (1979: 93) give the interesting example of a child who was asked to retell the following joke he had laughed at: 'Why is the man in the fish market stingy?/Because his job makes him sell fish [selfish]'. The fact that he had utterly failed to appreciate the verbal ambiguity on which the joke was based could be detected in his rendition of it as 'Why is the man in the fish market stingy?/Because he sells fish'.

32. An interesting example is Slobin's (1984: 173) account of his daughter's question, after some confusion in the use of words such as *before* and *after*, 'What does *before* mean?' Even though only 3.3. years old, such questions would appear to indicate a conscious and intentional focus on language which the Piagetian approach has difficulty in explaining.

33. Pratt and Grieve (1984: 141) go even further in their criticism of the third approach when arguing that "If learning to read is seen as essential for the development of metalinguistic awareness, then presumably this would imply that preliterate children have no metalinguistic awareness; that illiterate adults have no metalinguistic awareness; and that nonliterate societies lack metalinguistic awareness"

34. Lee (1985: 80) was to echo this view, which he attributes directly to Vygotsky, when suggesting that ". . action and speech are, for the very young child, undifferentiated parts of the same psychological function that is directed towards fulfilling some ongoing and context-specific goal-related activity. Speech is a mere component of the means to instrumental ends".

35. According to Donaldson (1978: 63-64), the subordination of language to contextual expectations is what differentiates the child from the adult. "One way to describe the difference between the child and adult would then be to say that it lies in the amount of weight that is given to *sheer linguistic form*. The question seems to be whether the meaning of the language carries enough weight to over-ride the meaning of the situation".

36. Vygotsky (1962: 127) had noticed the discrepancy between sentence (grammatical) and intended (psychological) meaning some time before in examining the various interpretations of an utterance such as 'The clock fell': "Any part of a sentence may become the psychological predicate, the carrier of topical emphasis; on the other hand, entirely different meanings may lie hidden behind one grammatical structure. Accord between syntactical and psychological organisation is not as prevalent as we tend to assume -- rather, it is a requirement that is seldom met".

37. As Searle (1969: 24) was to note, it is the fact that language operates simultaneously at two levels which makes "... the formal study [of language] necessarily incomplete. It would be as if baseball were studied only as a formal system of rules and not as a game".

38. It is interesting to note that Reisenbach (1975: 9-17) suggests that the various forms of metalanguage can be organised into a hierarchy dependent on the degree of generality they embody. Within such a hierarchy, simple reported speech (e.g. *He said/agued/suggested* ...) would occupy the lowest rung while statements such as *'A noun is ....'* would occupy the higher ones. Such a hierarchy would also seem premised on the degree of conscious attention to language involved although Reisenbach does not explicitly motivate the hierarchy on cognitive considerations.

39. Ehri's (1979) research was likewise important in combating over-simplistic views in this area and suggesting the reciprocal relation between reading and metalinguistic reflectivity. As Barton (1990: 75) was to put it, "The two seemingly opposed views -- that awareness is a pre-requisite for literacy and that literacy provides awareness -- do not really conflict: one does not preclude the other. In fact, the position generally now taken ... is that learning to read and the development of awareness interact (see Ehri 1979, Barker 1985)".

40. Olsen and Torrence (1983: 146) suggest that writing in particular tends to "invite naming and analysis" largely because of its physical structure.

41. As Karmiloff-Smith (1979: 226) put it, "Small children ... rely more heavily on ex*tralinguistic* features to clarify reference. It is not until the second phase" (roughly from five to eight years) "that, in cases of

ambiguity, children endeavour to make use of *intralinguistic* means, first by overmarking and finally, in the third phase" (roughly from eight to twelve years)" by using the adult system".

42. See in particular Karmiloff-Smith, A. 'Language development after age 5' in Fletcher, P. and Garman, M. (eds.) *Language Acquisition*, Cambridge University Press, 1986.

43. As Hickmann (1985: 25) hypothesises, " ... even if we postulate some underlying cognitive competence which allows the development of this" [i.e. metalinguistic] "ability, once it is acquired, it should affect how the child plans and organises his own use of signs in problem-solving and/or social-interactive contexts"

44. Silverstein (1985: 229) was, like Wertsch, to see the metapragmatic dimension of language operating at three distinct if inter-related levels: that of intralinguistic indexical referencing, that of 'indexical denotation' (involving speech reporting on speech) and, finally, of metasemantics (involving the use of signs to explain, define and interpret other signs).

45. As Caton (1993: 326) was otherwise to put it, "Meaning means, according to Mead (1964/1927: 129), a self-conscious reflection upon the structure of the act, understood as a statement on the connection between a stimulus and a response".

46. An interesting example of this can be found in Donaldson's (1978: 92-93) treatment of two year old children's request for names of objects. Clearly, such requests cannot be dismissed as 'unconscious', as proponents of the 'autonomy' hypothesis suggest. On the other hand, however, they equally cannot be accepted as examples of a conscious ability to treat language as an object since, as Donaldson argues, the young child treats the names as mere attributes of the objects they refer to (like their colour or shape). A more useful approach, overcoming the schematicism of the earlier two, would be to view such activities as examples of pre-conceptual (or 'complex') thinking, as Vygotsky suggested.

47. See Weir, R. (1975/1962: 613).

48. Weir's account of her child's pre-sleep play with language is contradictory. On the one hand she appears to argue that the word play is "deliberate" (ibid. 610) and involves a range of syntagmatic substitution exercises that are "consciously practised". On the other hand she suggests that what is practised is governed either by sound or meaning associations in that it resembles the 'chain complex' described by Vygotsky as typical of non-conceptual (i.e. non-deliberate) thought.

Chapter 3

Towards a model of metalinguistic awareness

Chapter 3

1.0. Towards a model of metalinguistic awareness: theoretical considerations

The socio-cultural hypothesis, as indicated, appears more flexible than its alternatives in explaining differences in both the onset and distribution of metalinguistic skills among children, as reflected in the 'anecdotal' and 'experimental' literature. While it may be more useful in setting a framework in which the origin and function of metalinguistic awareness can be explored, however, it remains underdeveloped in several important respects. As Gombert (1992: 175) points out, apart from the work of Bialystock (1985a, 1985b) and Karmiloff-Smith (1979, 1986), which seeks to situate the development of such awareness as a function of intralingual referencing in extended discourse, the number of comprehensive models is 'low'.[1] Considerable attention, it is true, has been paid in recent years to the role played by metalinguistic awareness in discrete areas of language development, particularly that played by metaphonological processing in literacy skill development, but little attempt has been made to situate such studies within a longer-term developmental model which seeks to explain the interaction between metalinguistic awareness and the extension of the child's linguistic repertoire.[2] Vygotsky's work offers an invaluable paradigmatic framework for elaborating such a model, but needs to be enriched by taking into account more recent theoretical and empirical findings in a range of relevant fields, particularly that of metapragmatics. The integration of data from such sources might usefully seek to:

- explain the relationship between metalinguistic awareness and skill development in relation to functional differentiation in language acquisition/learning;
- establish a taxonomy of those metalinguistic skills relevant at given stages in skill development, notably the shift from spoken to written and from L1 to L2 learning; and
- analyze the interaction between cognitive and affective factors in the development and application of metalinguistic awareness and its implications for skill development.

Such a model would have important implications, of course, for the educational sphere since what Wells (1994) refers to as the child's "semiotic apprenticeship" consists precisely in widening his repertoire of linguistic skills, principally by negotiating a transfer from spoken to written texts --

including the new intramodal functions such texts embody -- and from first language acquisition to second language learning.

2. 0. Functional differentiation

As Hickmann (1986: 16-18) observes, unlike Piaget, Vygotsky tends to view language less as a formal system of signs in the Saussurian tradition than as a range of functions acquired in relation to given needs. Within this perspective, the child's mastery of the primary linguistic activity of speech is not so much mastery of a 'system of sounds' as of various ways of 'making meaning' which encompass ever more complex and differentiated forms of discourse related to changing contexts of use. As speech is used to mediate the solution of new problems, the cultural meaning potential of the language system is modified and developed to meet the new functional demands placed upon it. This emphasis upon the acquisition of speech in relation to socially determined functional goals is central, of course, to the views of writers such as Halliday (1975, 1986) or Wells (1981, 1986) who, likewise, tend to see the child's linguistic development in terms of an extension of a functional repertoire. It is, as Halliday (1975: 33) asserts, primarily

> ... through the gradual extension of his meaning potential into new functions that the child's linguistic horizons become enlarged... The social functions which language is serving in the life of the child determine both the options which he creates for himself and their realisation in structure.

The process of functional differentiation that both Wells and Halliday refer to operates not only intramodally, in terms of the way speech changes allow the child to 'realize' his intentions, but also intermodally. As Wood (1988: 162) points out, in her perceptive study on the relationship between metalinguistic awareness and literacy skills, the latter are not simply speech written down but "new *functions* of language", that is, ones which "... involve ways of communicating that transform the nature of children's knowledge of language and lead to more analytical ways of thinking" The development of literacy skills, within this framework, is not distinct from but adds a new dimension to the process of functional differentiation already underway, allowing new functions to develop, some of which are closely related to, and some quite distinct from, speech forms.

If language development can be seen largely as an extension of a functional repertoire, however, what tends to underpin such a process is what Wells (1981: 243) refers to as the "... detachment of

language from its context of immediate experience". As new linguistic functions are mastered in relation to new socially-determined needs, meaning becomes increasingly independent of the unique spatio-temporal context in which language is used. This 'decontextualisation of mediational means', as Wertsch (1985: 33) otherwise put it, would appear to 'set in' relatively early on. Bruner (1975: 52), following Vygotsky, argues that the process has its roots in the initial freeing of speech from the 'context of action', that is, the separation of the representational from the regulatory function.[3] It is this divorce between the two principal functions of language that opens up the possibility for the child -- as he 'bootstraps' himself up through the various levels of abstraction embedded in word meaning -- to represent experience (including linguistic experience) to himself in an ever more generalized way and to subject it to ever more reflective control.[4] The process of what might be termed 'representational disembedding' can, as de Villiers and de Villiers (1979: 84-94) imply, be plotted along three principal axes:

- first, a movement from the 'here and now' as the child learns to represent to himself objects and events displaced in space and time, that is, to 'remember', 'imagine', 'predict' etc.;
- second, a tendency to be more explicit in the encoding of messages as the child begins to rely less upon an assumption of 'shared knowledge' with other speakers/hearers in communicative interaction; and
- third, a tendency to make increasing use of metapragmatic and intralinguistic referencing as language is used more to refer to the linguistic rather than the extralinguistic context.

As the same writers suggest, these three axes -- freedom from the 'here and now' in the selection of topics, from an automatic assumption of 'shared knowledge' between speaker-hearer and from extra- to intralinguistic referencing -- may be logically discrete but are, in practice, inter-related. It is the socially-induced need of the child to talk about events/objects distant in space and time which prompts him to focus more on the way linguistic (rather than extra-linguistic) factors encode meaning and it is the latter which, in turn, encourages him to treat language as its own context and to develop a language for 'talking about' language. In other words, as Hickmann (1985: 25)

suggests, metalinguistic awareness emerges as a by-product of the shift from an undifferentiated to an ever more differentiated use of language from a functional point of view.

In more recent years, there has been considerable research undertaken into the relationship between changes in discourse modes characterized by a decrease in intersubjectivity and the corresponding changes at the linguistic level in such areas as ellipsis and anaphoric/cataphoric referencing. Snow's (1977, 1986) earlier studies of mother-child dialogues, for example, examined the impact of changes in the degree of 'shared knowledge' on the transfer from deictic to anaphoric referencing and related aspects of this process can be found in Dore (1977), Nelson and Guendel (1979) and/or Fine's (1978) study on cohesion maintenance in child conversation. Perhaps one of the more useful studies in this area can be found in Rubin (1980) who, in his critical review of the literature, has sought to develop a taxonomy of discourse modes at the intra- and intermodal levels which illustrate the relationship between contextual 'disembedding' and intralingual referencing. Rubin examines the relationship along a continuum in which the movement from, at one end, a casual conversation to, at the other end, the reading of fictional texts, may be graded according to a range of 'dimensions' such as modality, interaction, involvement, spatial communality, temporal communality, concreteness of reference and reparability of character (Cf. Appendix 1). While he views some speech activities (e.g. hearing the report of a conversation) as possibly being more 'disembedded' than some written activities (e.g. reading a story with pictures) -- that is, as requiring more extensive use of anaphoric referencing etc. -- in general his model would suggest that it is the gradual intramodal changes in speech which afford the child the necessary 'apprenticeship' for successfully coping with the transfer to what Olsen (1984: 222) refers to as the "explicitness of meaning" embedded in written texts.[5] Indeed, as Simons and Murphy (1986: 185) insist, in a similar taxonomy of the differences between the spoken and written word, however 'disembedded' speech may be, it always remains 'multi-channeled', i.e. uses interaction, paralinguistic and other non-verbal modes of transmission in addition to the lexical-semantic- syntactic one, whereas the written word is uniformly unimodal and relies exclusively on the latter.[6]

One of the interesting aspects of the literature devoted to functional differentiation in language use, as in the case of Rubin's model, is the assumption that the 'disembedding' of language at any given stage is both the by-product of earlier linguistic functions and the pre-requisite for the mastery

of new (and even more decontextualized) ones. Such an assumption would certainly seem to be shared by writers such as Halliday (1986) or Donaldson (1993: 126) who, in her more recent work, tends to view the axes defined by de Villiers and de Villiers as a sequence of temporal modes, ranging from the 'point' to the 'transcendent' mode, in which "... each mode achieves some new measure of disembedding, some reduction of contextual binding by comparison with its predecessor".[7] For Donaldson, it is the gradual disembedding of language through intra-modal changes in spoken discourse which prepares the child for the intermodal change from spoken to written word and it is the latter which, in turn, prepares him to handle the new and more reflexive forms of semiotic mediation associated with formal schooling. Within such a dialectical process, mastery of the written word assumes a pivotal role since it operates at the interface between the *implicit* disembedding of meaning in spoken discourse and the increasingly *explicit* disembedding of meaning that is required to handle extended texts and the internal relations and consistency between parts of such texts (what Fayol (1985) or Karmiloff-Smith (1985) refers to as suprasential 'coherence' and 'cohesion'). Wells (1981: 243) was to make the same point somewhat earlier when suggesting that

> ... the attempt to make the organisation of the written text act as the autonomous and explicit representation of intended meanings leads to the development of greater awareness of the abstract relationship between language and experience and a greater willingness to exploit the symbolic possibilities inherent in language.

The latter understanding is, of course, crucial for the child in terms of being able to monitor his linguistic input and output, to plan its use and to develop a language for talking about language, which is a pre-requisite for handling the new linguistic functions the child encounters in formal schooling, chief amongst which is, perhaps, that of second/foreign language learning.

The gradual disembedding of language through functional differentiation at both the micro (intramodal) and macro (intermodal) levels has been variously described by Bruner (1986) as a shift from the 'narrative' to 'paradigmatic', by Halliday (1993) as a shift from the 'dynamic' to the 'synoptic' and by Wells (1994), most recently, as a shift from the use of language as 'tool' to that as 'artifact'.[8] While the terminology may change from writer to writer, what is common to them all is an attempt to define a process whereby, as Vygotsky (1962: 100) put it, language moves through

adaptation to ever more decontextualised functions from a "spontaneous unconscious activity" to an "abstract, deliberate activity" which is characteristic, above all, of the written word (cf. Figure 1):

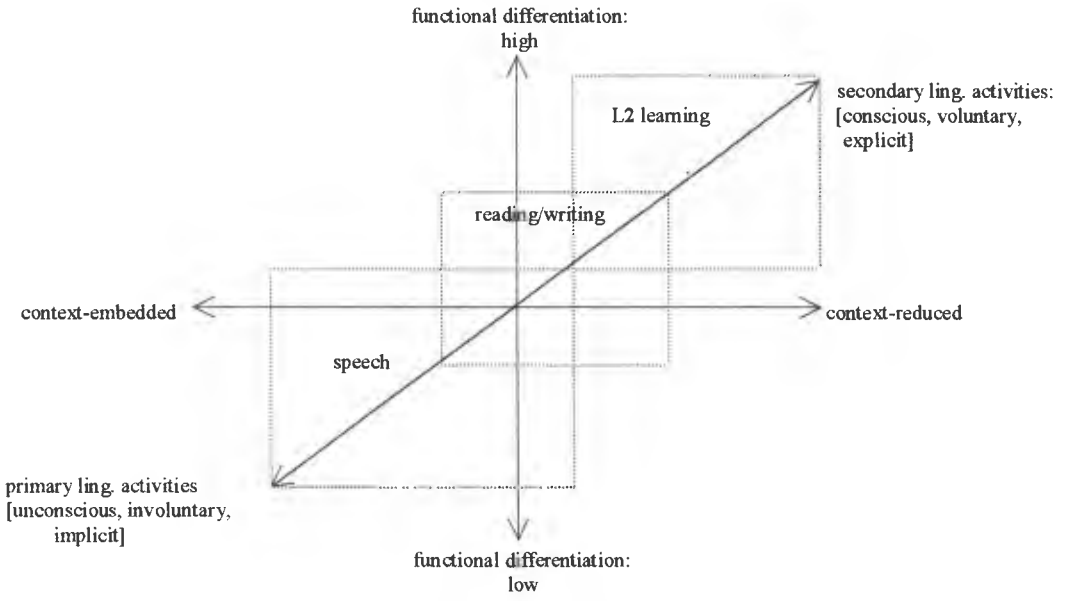


Figure 1: relationship between metalinguistic processing and functional differentiation.

Within this process, it is changes that occur at the level of spoken discourse -- the gradual ability to attend to 'sentence' as opposed to 'intended' meanings in the Gricean sense -- which prepares the child for the 'abstract' nature of written discourse and it is the latter which, in turn, prepares him for further 'parasitic' language activities which require an even more reflexive approach. Put another way, metalinguistic processing can most usefully be seen as the rendering explicit of implicit strategies used in communicative interaction as the pre-requisite for handling new, and more disembedded, linguistic functions. It may be useful to examine this particularly in terms of the relationship between reading and learning a foreign language which constitute the two major 'parasitic' functions the child is expected to master but which are usually treated as discrete processes.

2.1. situation and text-dependent uses of language

As Gombert (1992: 160) notes, following Barron (1986) and Content *et al* (1986), there has traditionally tended to be two approaches to the relationship between the spoken and the written word which have important pedagogic implications, the 'direct access' and 'indirect access'

procedures.[9] The first, represented by writers such as Goodman (1968) and Smith (1979), has tended to see reading as a 'psycholinguistic guessing game' in which the child supposedly uses the same 'top down' strategies to make sense of the written word as he did to make sense of the spoken word, that is, uses what Widdowson (1991) refers to as 'schematic' knowledge to form and test hypotheses about the meaning of a given text. Learning to read and learning to speak are, in this sense, treated as essentially similar processes since, as Smith (1979: 29) argues, "... many of the skills employed by a child in learning the regularities of spoken language may also be employed to learn reading". [1] If the first tradition stresses the continuity between the two processes, however, the second is more inclined to stress their discontinuity. As Mattingly (1972) has argued most forcefully, perhaps, the first tradition -- which is heavily influenced by information-processing models of learning -- is flawed in two major respects. In the first place, learning to read cannot be seen as simply learning to associate visual signals with meaning since -- at least in an alphabetic culture -- such an association is initially mediated through an already existing set of auditory signals. The written word does not constitute, in this sense, a symbolic system in its own right, as does speech, but a *secondary* symbolic system which is at one stage removed from meaning and which, in the early stages, requires the conscious mapping of one set of signals upon another to access that meaning. In the second place, the fact that reading/writing are secondary symbolic systems means that they are inevitably more 'decontextualized' than speech and that the use of top down strategies -- i.e. of various forms of extra-linguistic or 'real world' cues -- to access textual meaning is bound to be insufficient.

It is precisely the decontextualization of the written word -- as a "second degree of symbolization" -- that Vygotsky (1962: 99) was to draw attention to when exploring the impact of literacy skill development on the child's concept of language. The written word lacks not only what he refers to as the "sensory aspects of speech" but, even more importantly, a range of extra-linguistic clues to meaning that pivot around the intersubjectivity implicit in communicative interaction, that is, the 'shared expectations' of the participants. [10] In accessing the written word, the child is compelled, as Perfetti (1985: 7-8) recently put it, to pay much more attention to meaning as a function of the text rather than as a "... joint venture, with context providing as much information concerning message interpretation as speech itself". This decrease in the opportunity of the child to negotiate meaning

within a framework of shared knowledge is even more marked in the case of writing than reading. Unlike in face to face conversations, where responsibility for mutual understanding is shared between speaker and listener -- and where one can sympathetically 'scaffold' the other -- solitary writing requires that the child assumes all burden of responsibility for making what he is trying to say intelligible and accessible. The fact that he has to anticipate likely sources of misunderstanding when he may not know his potential audience makes his motives for writing, as Vygotsky (1962: 99) suggests, much "more abstract, more intellectualised" than speech and implies the need for a highly conscious and deliberate approach to language generally. As Vygotsky was to continue, writing -- unlike speech -- involves "deliberate analytic action on the part of the child" which operates from the very beginning at a variety of levels, from the most simple, such as reproducing the sound structure of words in alphabetic symbols, to the most complex, such as planning a text and monitoring its thematic cohesion.

2. 1. 1. Pre-reading awareness

If literacy skill development requires a shift in the perception of language from that of 'process' to 'product', as Wells (1997) put it, what processing strategies does the child need to negotiate the transfer between the two? Perhaps the most well-known (if controversial) attempt to define what the child needs to 'know' to access written texts is the 'cognitive clarity' hypothesis advanced by Downing (1979) and Downing and Thackray (1975). While such a hypothesis has both a 'strong' and 'weak' version, as Wray (1994: 86) implies, its basic premise is that children need to have developed a given 'threshold' in their ability to attend to language as a symbolic system in its own right.[11] Downing's model postulates two categories of such 'knowledge' as pre-requisites for reading success in an alphabetic culture: the first ('functional concepts') implies awareness of the communicative function of reading/writing, as single-channel modes of transmission, and the second ('featural concepts') implies a more practical awareness of the relation between the written and spoken form or, as Gough and Hillinger (1979: 17) put it, "... the child must recognize that the printed message is an encoded version of the spoken one". The division in the types of knowledge that the pre-reader needs to access written texts has more recently been reflected in a number of similar distinctions, such as that in the work of Perfetti (1985: 7) or Wood (1988: 162-166), between

'decontextualization' and 'decoding' strategies, that in Smith (1986: 475) and Gombert (1992: 152), between 'declarative' and 'procedural' knowledge and, more controversially, that in Bialystock and Ryan (1985a, 1985b) between 'analysis' and 'control' (i.e. selective attention).[12] While the terminology may vary from writer to writer, there would appear to be a wide consensus that, in order to make the transition from language as 'process' to 'product', the child needs to be able to 'make sense of' (i.e. conceptualize) the way meaning is conveyed in the new visual process and to practically decode the written form of language back onto the previously spoken form at a variety of levels. Moreover, insofar as reading is a metacognitive skill, such a consensus would also seem to imply a clear sequencing in these prior forms of knowledge since, as Anderson (1982, 1986) argued in his model of cognitive skill development, conceptualizing a task (i.e. declarative knowledge) usually acts as a pre-requisite for mastering and automating decoding strategies (i.e. procedural knowledge). It may be worthwhile examining each step in more detail.

2. 1. 1. 1. 'decontextualization strategies'

The notion that the child has first of all to 'make sense' of a task if he is to master it in practice, that is, to develop what Wray (1994: 20) calls 'task awareness', is a vital component of the 'cognitive clarity' hypothesis. [13] In the area of literacy skill development, this involves on his part an awareness of the greater 'autonomy' of written language compared with spoken language, a realization as Kay (1977) put it, that the former is

> ... minimally dependent upon simultaneous transmission over other channels, such as the paralinguistic, postural or gestural, and [that] it is minimally dependent on the contribution of background information on the part of the hearer"

The child who is to successfully negotiate the shift from spoken to written word has, in other words, to be at least implicitly aware from the outset that meaning can be encoded in the linguistic rather than extra-linguistic features of a message and that his task is to attend to the former rather than the latter. Simon and Murphy (1986: 188-9) argue that this ability to shift from 'situation-dependency' to 'text-dependency' -- or what Anderson and Lynch (1988: 13) refer to as 'schematic' to 'systemic' knowledge -- depends in large measure on the extent to which, in terms of normal communicative interaction, the child has been encouraged to adopt oral discourse styles which take into account

varying states of 'shared knowledge' between speaker and listener, i.e. which focus upon making the meaning more linguistically explicit than implicit when necessary. Such a process, they suggest, can often occur in the child's pre-school discourse modes or in the transfer from pre-school to school where he learns, as Collins and Michaels (1986: 207-208) put it, "... to shift from his or her home-based conversational discourse strategies, which depend on multi-level linguistic inference, to the more discursive strategies preparatory to written expository prose". It is problems in such a transition, such writers continue, which explain why the child can often, in the early stages of reading, fail to 'make sense' of what the activity is about and which leads him to remain beset by what Vernon (1957: 71) some time earlier referred to as "cognitive confusion"

In his study of the types of prior knowledge required for reading success, Smith (1986: 493) suggests that the child's ability to attend to the linguistic (rather than extra-linguistic) encoding of meaning is a "disappointingly imprecise concept" of linguistic maturity. As indicated in the work of Simons and Murphy, however, a body of evidence has been built up which tentatively supports the hypothesis that the ability of the child to transfer from what they call the "multi-channel signaling" of speech to the "single-channel signaling" of writing is rooted in his implicit ability to handle more decontextualized oral discourse modes. Simons and Murphy (1986: 205) themselves argue strongly, on the basis of their research, that children whose home experience is more situation-dependent than others can be locked into a 'verbal style' which makes them less able to profit from classroom-based discourse modes which are implicitly or explicitly designed to facilitate the transition to text-dependent language use. [14] Such children appear to have, they suggest (1986: 192), considerable difficulty handling the shift from exophoric to endophoric referencing in oral narratives, which is crucial for maintaining coherence in written texts.

> When learning to read, children must learn to create a context for reference when one is not provided in the narrative, and to interpret the text in terms of it. When a verbal context is created, as in quoted dialogue, children must learn to interpret deictic terms endophorically, from the perspective of the speaker of the quoted sentence. Both of these tasks require that children become less dependent upon the immediate situational context in their use of language.

An identical point is made by Michaels (1986: 102-3) who, although denying a direct relationship between discourse style and reading success, points to quantifiable differences between children who adopt what she calls a 'topic-centred' approach and those who adopt a 'topic-associating' approach.

The former, she argues, who engage in tightly structured discourse "centering on a single topic or a series of closely related topics, with thematic development accomplished through lexical cohesion", are more prepared to handle the explicit nature of meaning in expository prose than the latter whose style, on the contrary, consists more of "... a series of segments or episodes which are implicitly linked in highlighting some person or theme" The differences in the extent to which children are able to handle meaning explicitly in their discourse modes -- and the relation of these differences to reading success -- is also noted in the work of writers such as Brown (1982: 77) or Czerniewska (1992: 17).[15] While the latter is anxious, like Michaels, to avoid any notion that there is a direct link between discourse style and reading success, she does argue that children who are weak at information-giving, "a special and demanding form of narrative", i.e. those who fail to master what she refers to as the "bridge into literacy", are inevitably those who have problems learning to read.

2. 1. 1. 2. 'decoding strategies'

In addition to understanding that the written word is a single rather than multi-channel means of communication, the beginning reader also has to realize that accessing 'meaning' involves -- at least in the initial stages -- mapping the visual signals on the page onto the auditory ones that he already 'knows'. As Smith (1986: 475) was to put it, the first "key insight" for the child involves understanding that "... speech consists of units of various size ... and, second, that some of these units are in reasonably close correspondence with units in the writing system the child is attempting to read". In determining what units speech can be segmented into and at what levels, a crucial role will, of course, be played by the specific orthography that the child is seeking to master. Whereas in some orthographies the syllable (Japanese *kana*) or the word (Japanese *kanji*) is the central unit, in alphabetic systems it is the phoneme, that is, a unit of speech which matches a unit in the orthography (the letter) even though larger units, such as the word, are also identifiable. The close correlation that exists in alphabetic cultures between morphophonological segmentation skills and reading skills has long been noted.[16] Savin (1972: 321), for example, was to note in an early study that the inability to analyze syllables into phonemes was associated with poor reading skills and such a link has underpinned much of the research into under-achievement in literacy skill development, as in Liberman and Shankweiler (1975), Wallach and Wallach (1976), Rozin and

Gleitman (1977) and Venezky (1978).[17] In all such work, phonological segmentation skills are seen as a vital factor in extended reading achievement and Entwhisle (1979: 150)) is not alone in suggesting that they are not only predictive of success but a pre-requisite for it. To learn to read, she suggests, " ... the child must have some notion that different marks on a page have systematic relations with sounds he already knows." In a review of the more recent research of Bryant and Bradley (1985) and Goswami and Bryant (1990) into the relation between the child's conscious phonological segmentation skills and reading success, Meadows (1993: 12) points, even more firmly, to the consensus that appears to exist in the research literature on the "...causal association between insensitivity to phonemic differences and difficulties in learning to read".

While the ability of the child to segment words into phonemes may play a crucial role in reading success, however, this is not to suggest that it arises spontaneously in the course of normal communicative interaction, that is, prior to the reading process. On the contrary, as writers from Perfetti (1985) to Goswami and Bryant (1990: 26) have stressed, there is no evidence that pre-readers are consciously sensitive to phonemic discrimination since their spontaneous attempts to segment speech do not appear to coincide with units such as 'word' or 'phoneme'. "Children", the latter note

> ... are not particularly sensitive to the existence of phonemes in words at the time when they first begin to read, and if they do not learn an alphabetic script, they continue to be insensitive to those phonological forms for some time.

Support for the latter assertion would appear to stem from the fact that illiterate adults in an alphabetic culture do not develop phonemic segmentation skills any more than do those literate in a non-alphabetic (i.e. logographic) script, as revealed in cross-cultural studies of Chinese or Koreans learning to read.[18] Phonological awareness would appear, in this sense, to be a secondary (i.e. metalinguistic) activity which emerges out of the act of learning to read itself, that is, out of the training the child receives in consciously linking alphabetic symbols with their acoustic counterpart in order to access meaning. This is not to deny that such phonemic segmentation skills play a crucial role in the reading process but, rather, that they initially arise out of that process and enter subsequently into a symbiotic relationship with it. As Ehri (1979: 84) was to put it, in her pioneering critique of Ryan *et al*'s (1977) analysis of the role of phonemic (and lexical) awareness

in literacy skill development, the latter tends to "... *interact* with the reading acquisition process, existing both as a consequence of what has occurred and as a cause facilitating further progress".[19] Smith (1986: 479) was to put this in a somewhat different way when arguing that children's awareness of speech units and their ability to identify and exploit corresponding units in print is a reciprocal process in which "morphophonological awareness aids reading, and reading aids morphophonological awareness".

If morphophonological awareness arises out of the reading process in which it plays a crucial 'facilitating' role, however, what exactly are the processing skills which the child needs to have mastered in order to access what Smith (1986: 483-484) refers to as "knowledge about the segmental structure of language"? Increasing evidence would seem to suggest that mastery of phonemic segmentation skills is rooted in the aural discrimination skills that the child implicitly builds up in communicative interaction and, in particular, in the sensitivity the child develops towards syllable and intra-syllable (i.e.. onset and rime) recognition.[20] Goswami and Bryant (1990: 147), for example, suggest that it is children's implicit ability to break up syllables into onsets and rimes -- as in their experience of playing with contrasting sounds in nursery rhymes and pre-sleep monologues -- which provides the important apprenticeship for the emergence of phonemic awareness as a facilitating factor in reading achievement. As they suggest, children who are sensitive to intra-syllabic recognition seem eventually to do much better at reading than those who are not and this, in itself, would seem to suggest " .. a link between children's awareness of rhyme and alliteration and their progress in reading" (figure 2):

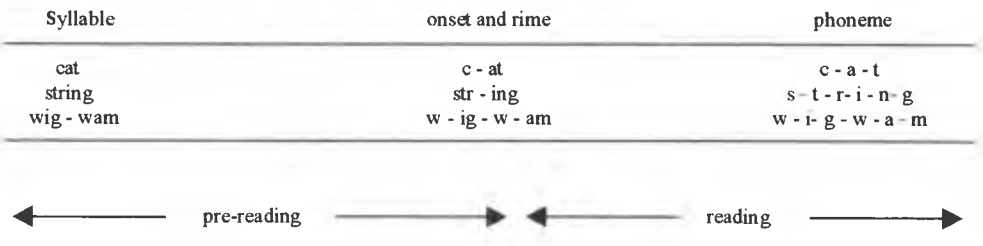


Figure 2: stages in the development of metaphonological processing.

A similar view is adopted by Morais *et al* (1987), Wood (1988) and Wray (1994: 35-6) who, in reviewing the recent literature, suggests that "phonemic awareness seems .. to develop through learning to read, but some awareness of onset and rime seems to be already present before reading

begins". It should be noted, however, that controversy continues to exist as to whether syllabic awareness feeds directly into phonemic awareness or whether, on the contrary, it feeds into reading itself which, in turn, promotes phonemic awareness as part of an interactive process. [21]

2. 1. 2. Post-reading or 'metatextual' awareness

If the metalinguistic awareness needed to make sense of and decode written texts is based upon rendering explicit skills built up implicitly in the pre-reading period -- such as those of aural discrimination -- the process of reading itself acts to deepen and extend such awareness. Becoming literate has, as Olsen and Torrence (1983), Bialystock (1991) or Donaldson (1993) observe, a profound effect upon the child's concept of language and his conscious control of it. In the initial stages, the act of mapping visual onto auditory symbols to access the meaning of written texts compels the child to become conscious of those units of speech which he had previously used unconsciously in the service of communicative interaction. The development of morphophonological awareness that results allows the child to develop concepts of language which -- in an alphabetic culture -- link the spoken and written forms and facilitate the transfer of the first to the second. As the child's mastery of the written word develops, however, and as the latter increasingly diverges both in function and structure from the former, the child's awareness of language gradually assumes new dimensions. Perhaps the most important of these operates at the level of syntax. Kroll and Vann (1981) and Kress (1982) have explored in detail, for example, how the "loosely co-ordinated causal complexes" of speech are increasingly replaced by the more "hierarchically structured sentences" of written discourse. [22] Perera (1986) is not alone in seeing in this shift from a less to more complex grammatical structure -- what Chafe (1982, 1985) was otherwise to call the greater 'integration' of written as opposed to oral discourse -- a growing awareness of the way in which syntax encodes meaning. [23] Moreover, to the extent that in written discourse language becomes increasingly its own context, metapragmatic awareness inevitably accompanies greater metasyntactic awareness. The child is compelled to operate 'metatextually', as Gombert (1992: 121) puts it, that is, not only with sentences but with sentences as part of extended discourse in which *cohesion* in the way linguistic markers refer to each other (i.e. organize and structure a text) facilitates *coherence* at the level of representation of ideas.

If literacy skill development gives rise to an expanding taxonomy of metalinguistic skills -- from the morphophonological to the syntactic or pragmatic -- such a process has an eminently functional role in facilitating the child's ability to deal with the new linguistic functions and/or registers that confront him. This is particularly true in terms of writing where the ability to plan, monitor and amend texts involves making complex linguistic decisions at various levels to meet the changing constraints of context, purpose and audience. As Wood (1988: 163) put it, to communicate through texts means being able to reflect on what one has written and amend it linguistically in order to maintain intelligibility and accessibility for the reader. Such amendments might include, for example, determining the appropriateness of lexical items in given registers (metamorphological processing); deciding upon the most effective way of signaling speech activity (metasyntactic processing); and/or 'chunking' information to highlight certain parts and background others and signaling topic shifts (metapragmatic processing). It is no accident that, within this framework, increasing attention has been placed upon the role played by 'editing' in the writing process as a stage which requires the most complex forms of metalinguistic awareness and control. As Nold (1979: 105-106) has pointed out, it is in the process of editing (or 'revising') what has been written that the child is forced to develop the most detached attitude towards the language used to express his ideas and towards those ideas themselves. Revision, he stresses, involves "... changing the meaning of a text in response to the realization that the original intended meaning is somehow faulty or weak" and such a change means making a number of conscious choices in terms of the language used at a variety of levels from the morphophonological to the pragmatic. A similar viewpoint has been expressed more recently in the influential work of Fayol (1986) or Bereiter and Scardomalia (1987: 87) on the role of revision in composition. "Conscious access seems to play a larger role in revision than in original composition", the latter claim, because the child has to deliberately bring alternatives to mind and make choices between them in relation to their intended goal.

2. 2. Metalinguistic awareness and L2

If literacy skill development gives rise to an expanding taxonomy of metalinguistic skills which are critical in processing new linguistic functions, this is nowhere more applicable than in the area

of foreign language learning. As Hawkins (1981, 1984) or Skehan (1985, 1988) have stressed, in an acquisition-poor environment it is impossible for L2 form to be acquired unconsciously, as in L1, as a by-product of communicative interaction. Writers such as Bialystock (1991:63) are, in this sense, seriously mistaken in asserting that "second language acquisition ... is an extension of first language acquisition in that the development of proficiency depends upon the same type of cognitive processes", i.e. from low to high analyzed knowledge and control. On the contrary, the fact that there are virtually no extra-linguistic clues to meaning that can scaffold that interaction while the language is being acquired means that the L2 learner has no alternative but to focus consciously and deliberately upon language form from the initial stages. Focusing on form means, however, knowing exactly what aspects of form to focus upon and this -- in turn -- is largely determined by the range of metalinguistic strategies developed through the L1 reading process. It is what the child brings with him to the L2 learning process that is crucial in allowing him to identify those 'significant generalizations' that encode meaning and, thereby, to turn 'input' into 'intake'. As Hawkins (1984: 181) was to point out, if reading in L1 is 'parasitic' upon primary linguistic activities. ". . learning the foreign language under school conditions is ... parasitic upon the learned skill of reading and writing and matching sounds to symbols". It is true that writers such as Bowey (1988: 71) argue that there is little (or no) direct evidence for the hypothesis " ... that metalinguistic ability predicts subsequent second language acquisition" but, in an acquisition-poor environment, it is difficult to determine what the learner should attend to in the target language [TL] input if it is not the way in which language structure encodes meaning. As Vygotsky (1935: 48) was to put it, it is the fact that the L2 learner has to pay attention initially to form rather than function that reverses the process of L1 acquisition since

> .. if the development of the native language begins with free, spontaneous use of speech and culminates in the conscious realization of linguistic forms and their mastery, then the development of a foreign language begins with the conscious realization of language and arbitrary command of it and culminates in spontaneous free speech.

It is, for Vygotsky, only as a result of controlled practice that the L2 learner is able to internalize the 'linguistic forms' to an extent where he can use it for 'spontaneous free speech' in communicative interaction. [24]

It has been objected, of course, that while Vygotsky's emphasis upon the initially conscious attention to L2 form may be valid in a foreign language context, it is less so in a second language one where the learner has greater access to communicative interaction on a regular basis and where such interaction can be sustained through a higher level of 'shared knowledge' (or intersubjectivity).[25] There is no doubt, as Smith (1997) has argued, that there are important differences between foreign and second language processes in terms of the extent to which the learner is compelled to rely upon linguistic (as opposed to extra-linguistic) clues to meaning. While this may be true, however, as Skehan (1985: 17) or Tunmer and Myhill (1984: 183-184) point out, this does not invalidate the point that even second language learning processes are considerably more dependent on the metalinguistic strategies developed in L1 than writers like Bowey (1988) would appear to acknowledge.[26] A second language learner, for example, may develop communicative competence based upon daily interaction in the L2 but it is unlikely that he will be able to extend that competence to analytic competence -- involving literacy skill use - without having developed a minimal level of metalinguistic processing in the L1 which can be transferred to the L2. This is, after all, the basis of Cummins' (1979) 'threshold hypothesis' involving the relation between BICS (basic interpersonal communication skills) and CALP (cognitive/academic language proficiency) in relation to the achievement of bilingual pupils. While, Cummins argues, a child can pick up 'surface fluency' in the L2 based on interaction in the host community, he will not be able to develop 'academic proficiency' unless he has first developed it in L1 since "... L1 and L2 CALP are manifestations of the same underlying dimension" and since "... previous learning of literacy-related functions of language (in L1) will predict future learning of these functions in L2". [27] The importance of Cummins' argument is that, even in contexts where the learner has considerable access to the TL through interaction in the host community, he is still reliant upon the metalinguistic strategies which he developed through L1 literacy if he wishes to move beyond communicative to analytic competence in the L2.

2.2.1. Pre-L2 awareness and 'aptitude'

While writers such as Hawkins have drawn attention to the importance of metalinguistic skills as a pre-requisite for L2 learning, however, less attention has been devoted to developing a taxonomy

of such skills than in the case of the transfer from spoken to written word in L1. Perhaps the most useful body of empirical evidence to emerge can be found in that pioneered by Pimsleur (1966) and Carroll/Sapon (1967) into the notion of 'linguistic aptitude'. In her review of Carroll/Sapon's (1967) *Modern Language Aptitude Test*, Bowey (1988: 74) notes that three of the four sub-tests designed to predict future L2 performance ". . can be viewed as written tests of metalinguistic skills" in that they attempt to measure phonemic coding ability, inductive language-learning ability (i.e. the capacity to infer patterns in a corpus of material and generalize from them) and grammatical sensitivity.[28] Hawkins (1981: 219) was to make the same point somewhat earlier when suggesting that, despite superficial differences between the MLAT of Pimsleur and that of Carroll/Sapon, there seemed to be agreement that linguistic 'aptitude' comprises three principal metalinguistic elements -- if one omitted reference to 'associative memory' -- which pivot around the notion of 'insight into pattern/induction of pattern rules'. Clearly, the typology of metalinguistic skills identified in aptitude tests as predictive of future L2 success -- and later incorporated by writers from Hawkins (1984) to Naiman *et al* (1978) or Rubin and Wenden (1992) into intensive pre-L2 training courses -- would appear to be those which are dependent upon, and emerge through, literacy skill development in L1. What is important to note, however, is that the apparent ability of the L2 learner to use such strategies for rapid on-line processing of the TL allows him both to 'conceptualize' the L2 learning process and 'decode' the TL back onto the mother tongue at a variety of levels in order to access meaning. It may be worth examining these in greater detail.

The primary task confronting the L2 learner is, as already indicated, to 'make sense' of the activity he is involved in. This requires, as McMeniman (1996: 21-6) suggests, understanding that meaning is a function of the linguistic rather than extra-linguistic encoding of the message and that such encoding may be culturally different, that is, suffer from what Hawkins (1981: 53) refers to as "inter-language interference problems". Coming to grips with the decontextualised nature of the L2 process may appear to be similar to coming to grips with that of the L1 written word -- in terms of what the learner has to attend to -- but it differs from it in one important respect. In learning to read, the child is able to reflect at leisure upon the way in which phonemes make up words and words make up sentences because of what Olsen (op cit. 222) refers to as the "permanent" nature of the visual symbol which lends itself to "repeated scrutiny and reflection". In learning a foreign

language, however, the L2 learner must realize that it is not only the *written* but also the *spoken* word which needs to be processed using solely linguistic information and -- largely due to the linear and ephemeral character of the latter -- this can impose a much greater burden upon his processing skills, including short-term memory skills.[29] If he has not learnt to become highly proficient in rapid online processing through L1 literacy skill development, at a variety of levels, his ability to handle such tasks orally in the TL in 'real time' can become increasingly inadequate. In other words, as Skehan (1985: 17) was to note in his analysis of the notion of language aptitude, the L2 learner's ability to handle the 'decontextualised material' of the L2 both at the oral and written level depends upon a highly efficient use of those processing strategies developed through L1 literacy skills which enable him to identify, analyze and generalize from relevant aspects of the TL input.[30]

In addition to understanding that meaning in L2 is a function of the (culturally induced) structuring of the message at both oral and written levels, the second task facing the L2 learner is to apply an appropriate range of 'decoding' strategies. While such skills may arise at differing stages of the reading process -- phonological and morphological processing appearing earlier, for example, than pragmatic processing -- it is evident that the ability of the L2 learner to access the target language depends upon utilizing all these strategies *simultaneously* from a very early stage. This is particularly true of syntactic or pragmatic processing -- what Gombert (1992: 127) calls the monitoring of "intertextual coherence" -- which is often overlooked in the literature. The L2 learner has to relatively rapidly deal with highly structured sentences and with the way such sentences change in terms of their relationship with each other as part of extended spans of discourse at the spoken or written level. An interesting example of the highly complex metalinguistic processing skills that the L2 learner needs, even at an early stage, can be seen in the area of question-and-answer work use as an input procedure to introduce simple structures in the TL such as (in French) *aller + infinitive*. A typical graded sequence of questions prompting the learner to identify and use such structures as *il/elle va au/à la ...* might include the following:

(a) Q; Jean/Annette va au/à la ...
A: Oui/non.

(b) Q: Jean/Annette va au/à la ... ou ...
A: [Il/elle va] au/à la ...

(c) Q: Jean/Annette va au/à la ...
A: Non, il/elle va au/à la ...

(d) Q: Où va Jean/Annette?
A: Il/elle va au/à la ...

What is interesting about such an exchange is that the ability of the learner to identify the pattern and its meaning -- the aim of the activity -- depends upon the simultaneous processing of the input at at least three levels. In the first place, the learner has to be able to perceive a given phonological sequence which can be broken down into lexis by the identification of word boundaries. In the second place, he has to be able to detect the sequence of such words as part of a pattern differentiated by gender (*au/à la*) and, finally, he needs to be able to modify the use of the pattern according to the precise linguistic context provided by the question, that is, to modify the answer according to metapragmatic factors that include intralingual referencing.[31] The fact that these processing strategies take place simultaneously in the accessing of a new structure implies that the child has to bring a highly sophisticated level of metalinguistic processing to the initial stages of L2 study. If he has problems dealing with syntactic processing in L1, for example, and/or finds difficulty in adapting syntactic patterns to their linguistic (as opposed to extra-linguistic) context, he is more than likely to replicate such difficulty in L2 where accuracy in intra-linguistic referencing can become increasingly complex in highly inflected and gendered languages such as French or German.[32]

2.2.2. Post-L2 awareness

If the child's ability to access an L2 is dependent upon the metalinguistic skills developed through L1 literacy development, in what way does the L2 (in turn) help to extend such skills? In one sense, as Katcham (1986: 679) has argued, there is no automatic answer to this question since any potential metalinguistic benefits that may accrue through L2 learning depend upon what she refers to as the 'threshold levels of competence' that the child brings to the learning. Cummins (1978: 679) was to put this another way when arguing that "... the level of second language competence which the ... child attains is partly a function of the type of competence the child developed in L1 at a time when ... exposure to language 2 begins" Assuming that the child's metalinguistic skills meet the 'threshold level' required by the L2 learning process, however, the internalization of the

L2 itself can act, as Vygotsky (1962:110) put it, to prompt the learner to "... see his language as one particular system among many, to view its phenomena under more general categories". In other words, if learning to read allows the child to become aware of the relationship between the spoken and written word, learning an L2 can allow the child to become more aware of -- and verbalize -- the relationship between the L1 and L2, to reflect upon the categories that are common to both in the conveying of meaning and the culturally-based differences that exist within such categories. Hawkins (1981: 47) was to refer to this widening of linguistic horizons as an 'escape from the monoglot's prison' and Hornsey (1989) was to see in the learner's growing awareness of the arbitrary nature of the linguistic sign an understanding that 'difference' does not necessarily mean 'inferiority'. [33] Such conclusions are reminiscent of the considerable body of evidence -- from Feldman and Shen (1971) to Ben-Zeev (1977) or Tunmer and Myhill (1984) -- that exists in relation to the supposed benefits of bilingualism and which pivot around what Katcham (1986: 672) refers to as "the arbitrary nature of the word/referent relationship".

While there would appear to be a clear link between the competence developed through learning to read in the L1 and successful second language acquisition/learning, however, such a relationship is by no means unidirectional. It should be recalled that, as Cole and Scribner (1981) pointed out, it is not so much the process of learning to read in itself which is important in developing metalinguistic skills as any activity that can prompt the child to consciously reflect upon what they have learnt to unconsciously implement in practice. The validity of this view would seem to be confirmed in more recent research seeking to explore a reversal in the relationship between learning to read and learning/acquiring an L2, that is, seeking to trace the impact of early exposure to a second language on the reading process itself. Precisely because early exposure to L2 is seen to promote an awareness of the arbitrary nature of the word/referent relationship, writers such as Tunmer and Myhill (1984) -- as Katcham (1986: 674) points out -- argue that it can result in "... increased metalinguistic awareness which facilitates the acquisition of written skills". A similar view has more recently been adopted by Titone (1998: 5) in his summary of the results of empirical studies concerning the early introduction of a second language -- for children from the age of 3 -- in Italy and Spain.[34] After comparing the results of such programmes with those from the earlier immersion programmes in Canada, Titone argues that developing a relatively high level of bilingual

fluency in the L2 early on can "... result in increased metacognitive/metalinguistic abilities which, in turn, facilitate reading acquisition" in both the L2 *and* the L1. Titone is, of course, referring to a second (rather than foreign language) context but it is interesting to note that the key variable in terms of expanding the child's linguistic repertoire is seen to be that of metalinguistic awareness.

2.3. A taxonomy of metalinguistic skills

Within the process of functional differentiation, metalinguistic awareness would appear to arise as both a by-product of, and pre-requisite for, skill extension. It is the implicit awareness developed through spoken discourse which lays the basis for the transition to written discourse and it is the explicit awareness that arises a-synchronously out of the latter -- from the metalexical to the metapragmatic -- which equips the child to access further linguistic functions, such as L2 learning in an acquisition-poor environment. The taxonomy of metalinguistic skills that emerges through such a process might usefully be seen in the modified version of Tunmer *et al*'s (1984: 167) 'hypothesised stages of reading acquisition' (figure 3):

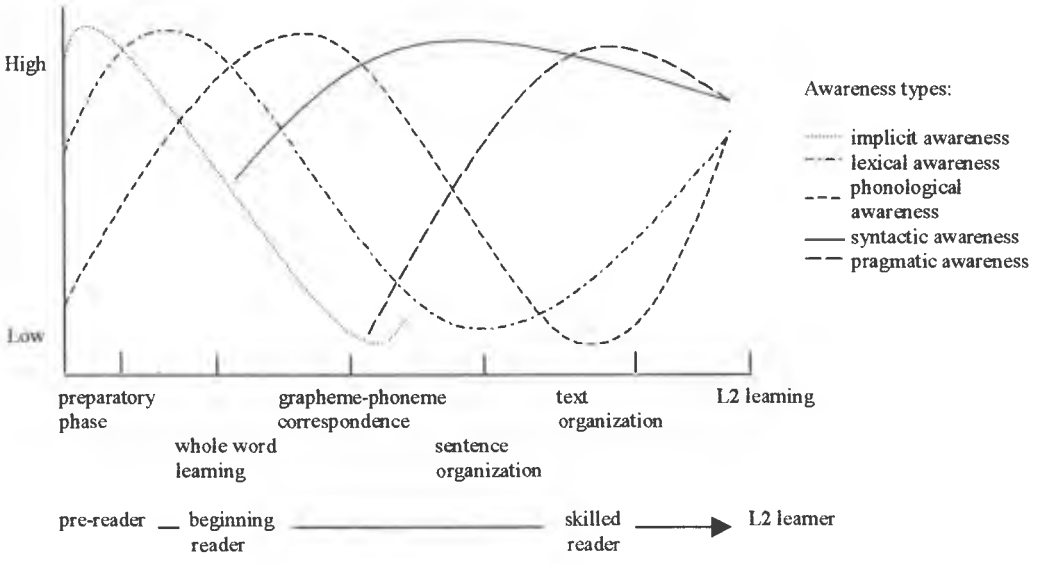


Figure 3: dependence of L2 learning on L1 literacy skill development in terms of metalinguistic processing

As can be seen, it is the a-synchronous development of metalinguistic skills which permit ever-more skilled literate practices -- particularly in the area of genre analysis -- and it is the synchronous application of such skills to the second/foreign language process which permits the efficient learning of the target language in an acquisition-poor environment.

3. 0. Awareness and system

The importance of functional differentiation as a 'spur' to the development of metalinguistic awareness is widely accepted by those writing within the Vygotsky-Piaget paradigm. While widely accepted, however, there would appear to be less consensus regarding the precise ways in which changes in the functional use of language affect the child's conception of it. For those influenced by Piaget, in particular, the link between the two might best be described as one of 'negative causality' or, as Marshall and Morton (1978) were otherwise to put it, of "negative feedback". Following Piaget's thinking -- which was, itself, highly indebted to the research of earlier writers such as Claraṕede -- awareness is seen as emerging out of the 'failure' the child experiences in using familiar cognitive strategies to cope with the progressively unfamiliar demands placed upon him.[35] It is his failure to respond adequately to such demands which is seen as crucial in prompting him to switch attention from the goal of behaviour to the strategies used for achieving that goal, i.e. to monitoring, evaluating and (if necessary) amending those strategies. As Karmiloff-Smith (1986) notes in her reference to the 'failure-driven' models of a Marshall and Morton (1978) or Tunmer *et al* (1984), this is as true for metalinguistic awareness as for any other kind of metacognitive skill. It is the child's attempt to get beyond the 'errors' made in seeking to cope with decontextualised uses of language -- as in reading or second/foreign language learning -- which is regarded as the principal 'motor' of his linguistic development and of his awareness of such development.

Vygotsky, it should be pointed out, does not entirely reject the Piagetian view that the transfer of attention from the goal of behaviour to the means for achieving it arises out of the failure to cope with new cognitive/linguistic tasks. While accepting the validity of this view, however, he argued that the emergence of reflective consciousness cannot be *reduced* to such a 'failure-driven' approach which appears to view cognitive/linguistic progress as arising out of what a child cannot (as opposed to can) do. It may well be, he suggested, that failure to accomplish a new task compels the child to switch attention to behavioural strategies but his ability to consciously control those strategies in the solution of such a task depends upon his ability to view them as what Karmiloff-Smith (1979: 238) calls a "system of relevant options". The notion of 'system' is, indeed, crucial to Vygotsky's view of the emergence of awareness in general and metalinguistic awareness in particular.[36] It is, he argues, only by being able to view cognitive or linguistic strategies as a system of behaviour potentials that

the child can monitor, evaluate and finally select the most appropriate ones in the solution of a new task. System is, he points out (1962: 92), crucial to the notion of 'choice' which is, in turn, crucial to reflective consciousness and control. If, however, the child is able to see what he 'knows' as a system of relevant options from which he can make conscious choices, he must already have mastered that system in practice beforehand. Metacognitive strategies -- that is, the ability to monitor and control one's own behaviour -- can be seen, in this sense, as making explicit in terms of a system of options what had previously been mastered implicitly and used in the normal process of skill-based activities. Put another way, metacognitive and/or metalinguistic processing involves rendering 'procedural' knowledge 'declarative' for the purpose of accessing ('making sense of') new skills.

In his discussion on the emergence of awareness [as 'reflective consciousness'], Vygotsky only briefly referred to its implications for language development as such. It would seem clear, however, that the child's ability to negotiate macro changes in functional use -- as in the case of the transfer from spoken to written word -- can be explained less in terms of 'negative feedback' and more in terms of his growing perception of the systematic nature of language. It may be true, as indicated, that it is the 'abstract' nature of the written word which prompts the child to attend consciously to what he had previously used unconsciously in the service of communicative interaction. If such attention is to be productive, however, if it is to serve as a key for 'opening up' the written word, it has to focus upon the systematic nature of speech and the various levels -- from the phonological to the pragmatic -- at which such a system operates to structure meaning. It is only when the child has become aware of the various levels at which the language system operates that he is able to consciously use them as processing strategies, selecting the most appropriate, as and when necessary, to promote the development of fluent reading/writing. What is evidently true of the process from the spoken to written word is also true, of course, of other macro changes in functional use such as that between non-standard and standard dialect or between first and second language learning. In all such examples, the ability of the child to make sense of and access a new language function would appear to be dependent upon his ability to render explicit the implicit knowledge that he already possesses in terms of its *systematic* nature.

3. 1. 'system' and 'function'

The importance of the notion of 'system' in the development of metalinguistic awareness has been highlighted in a range of models compatible with the Vygotskyan paradigm, such as that of Halliday (1975), Karmiloff-Smith (1979, 1986), Berman (1986) and Gombert (1992). Such models, which seek to account for changes in the internal representation of linguistic knowledge in child acquisition/learning, have generally tended to posit a three-stage approach in which a pre-systematic period of language is followed by the development of an implicit system (what Karmiloff-Smith refers to as an 'utterance grammar') which only becomes explicit in the switch from context to text-dependency. [37] As Karmiloff-Smith (1986: 474) was to put it:

> ... after the prelinguistic and presystemic periods of language acquisition, children first seem to concentrate on building up what might be termed an 'utterance grammar'. This seems to be mastered around the age of 5. They then go on, until 8 years or beyond, to reorganize its components and to acquire procedures for operating on spans of cohesively related utterances, thereby changing the functions of their earlier assumed categories. This involves fundamental changes in children's underlying representations.

What is interesting about such models is that, as in the case of Vygotsky, they tend to reject any notion that metalinguistic awareness is a by-product of the 'negative feedback' the child receives from being initially unable to access a new function. On the contrary, such awareness is seen as emerging out of the child's ability to reflect upon the functions he has already mastered at an earlier stage and which guarantee him a low level of failure in his linguistic undertakings. It is by disembedding and reflecting on what he can (as opposed to can't) do that the child is able to establish a repertoire of processing strategies which can be used to 'make sense of' and 'decode' new functional variants. While the work of Gombert, Karmiloff-Smith and others are characterized by significant differences, it may be worthwhile examining what the stages they posit share in common.

Stage 1: implicit knowledge The first stage is concerned with the young child's acquisition of language in which the internalized linguistic items are viewed as having a distinct one-to-one correspondence with their context of use but only a random relation with each other. For Halliday (1978: 34), for example, the initial utterances of the child are 'functionally simple' since he has no appreciation of any underlying system, particularly at the morphological or syntactic level, that

might link them together.[38] What Halliday refers to as a set of "fairly discrete functional components each with its own meaning potential' is echoed in the work of both Gombert and Karmiloff-Smith who also claim that, in the early stages, linguistic items are stored separately in memory even when the two forms are identical but refer to different contexts or when they share common elements in terms of belonging to the same linguistic system. As Karmiloff-Smith (1983: 36) was to put it in an earlier essay , children are concerned at this stage with

> ... achieving a successful one-to-one mapping between specific linguistic forms and the particular extralinguistic/pragmatic context to which each form most suitably refers. When one form refers to different contexts, they are first stored as independent form-function pairs.

It is presumably because such items are stored randomly and 'activated' by extra-linguistic factors that the child is unable to analyze them or represent them consciously to himself.

Stage 2: epilinguistic knowledge. The second stage is marked, in such models, by an internal reorganization of the linguistic items internalized in stage 1 so that they are no longer randomly connected but interlinked around their shared elements as part of a system. As in Halliday's model, this involves a tendency to substitute multifunctional forms for the initial mass of unifunctional form-function pairs and a simplification of the system that emerges. As Karmiloff-Smith (1983: 36) was to put it, " ... once the procedures for mapping [linguistic forms and extralinguistic context] function efficiently, and have become automatized, the child then works metaprocedurally on the forms themselves". The view that the second stage involves metaprocedures should not be taken to imply that the child is in any way consciously aware of the processes underway. On the contrary, Karmiloff-Smith specifically refers to such metaprocedures as 'unconscious' and Gombert (1992: 188-9), in his variant on her three-stage model, likewise argues that such activity is 'epilinguistic' in nature, that is, involves implicit rather than explicit awareness. "The general process at work during this phase", he was to suggest, "is an internal linking of the implicit knowledge which leads to a functional (i.e. unreflected) awareness of a system". What is interesting particularly in Gombert's approach is its tendency to link changes in the internal representation of linguistic data -- particularly its tacit reorganization at this stage into an embryonic system -- with changes in the extralinguistic context. Gombert (1992: 188) sees the increase in the range of discourse modes to

which the child is exposed as helping him to begin the process of disassociating linguistic items from their context of use and grouping them around their common elements which, in turn, provides the child with the flexibility to operate in ever-more unfamiliar contexts.[39]

Stage 3: explicit knowledge. The third stage in such models is concerned with the processes whereby the child's embryonic system becomes accessible to consciousness and can often be verbalized linguistically, that is, with the emergence of metalinguistic awareness itself. For Karmiloff-Smith, the ability of the child to move from an implicit to explicit awareness of system would appear to be dependent almost entirely upon the shift from the extra-linguistic to a linguistic structuring of meaning which occurs particularly -- as has been seen -- in the handling of extended spans of written discourse. It is because in written discourse language items relate to other language items rather than to extra-linguistic items that the child is compelled to explicitly consider the relationship of linguistic items to each other as part of a system and to verbalize, if necessary, such relationships. Gombert (1992: 190) is even more explicit in situating the shift from epilinguistic to metalinguistic processing in the role played by the handling of written texts although, he points out, there are two aspects about this shift which warrant emphasis. The first is that the ability of the child to handle the decontextualised nature of the written word depends upon having built up an implicit [epilinguistic] awareness of system at an earlier stage which can be accessed consciously in the development of literary skills. As he was to put it, the "*absolute pre-requisite for this consciousness is epilinguistic control*" which emerges at stage two. The second is that the extent and form of metalinguistic awareness that arises will depend not only upon the quality of epilinguistic control that already exists but upon the types of new linguistic functions with which the child is confronted. Metalinguistic awareness, in this sense, is not uniform across cultures (or sub-cultures) and does not necessarily develop in any given sequence since the child

> ... becomes aware in a 'meta' (i.e. conscious) sense only of those aspects of language which *have to be* apprehended in such a way if the new linguistic tasks demanded of him or her are to be accomplished.

Such a view would seem to correlate with the conclusion in Section 2 (above) that the a-synchronous appearance of different forms of metalinguistic processing -- from the phonological to the pragmatic -- does not depend upon maturation but is simply a function of the types of implicit knowledge the

child needs to make explicit in order to master new (and socially valorized) linguistic skills, such as reading and writing.

Karmiloff-Smith (1981, 1986), in particular, has sought to concretize this three-stage model in her research into the evolution of children's use of determiners (in French and English) from unifunctional homonyms into plurifunctional markers. As she notes (1986: 462-463), the French plural *les* marks both pluralization in opposition to *le/la* and totalization in opposition to *des*. Up to the age of 5, children use the term simply as a plural marker in response to items in the immediate context (deictic referencing) without, apparently, been aware of its second function. About the age of 5, however, they appear to become implicitly aware that it can have two functions by introducing an additional morpheme (*tous*) to indicate totalization.[40] As she argues, awareness of a second function tempts them to "... create temporarily a new form to cover one of the functions, retaining the original form for the other". This 'overmarking' reflects a shift from deictic to anaphoric referencing in that the child is clearly trying to distinguish between two functions by linguistic rather than extra-linguistic means. Overmarking may be said to represent, in this sense, an intermediate stage between presystemic (unifunctional) and systemic (plurifunctional) use of determiners although this process is still epilinguistic, i e. not open to conscious scrutiny. Only when the division is firmly established in practice, about the ages 6-8, do children seem to drop the unnecessary overmarker and use the term plurifunctionally. The ability of children at this stage to organize determiners into a 'system of relevant options' coincides, she argues, with a further movement towards anaphoric referencing which is necessary to master extended written texts. It is the link between the systematic use of determiners which have become entirely detached from the contexts of their use which, in turn, allow children to consciously reflect upon their use.

3. 2. 'décalage' of levels

The three-stage approach of writers such as Karmiloff-Smith and Gombert is clearly useful in terms of updating and concretizing the Vygotskyan approach to the emergence of metalinguistic awareness. It demonstrates that the child's ability to consciously reflect upon and regulate language stems from an ongoing process of internal reorganization of linguistic data into a "system of relevant options". It is only when that system has been mastered implicitly -- that is, subjected to

what Gombert (1992) refers to as 'epilinguistic control' -- that the child is capable of explicitly representing it to himself in response to external changes, principally the transition from context to text-dependency. Karmiloff-Smith sought to illustrate this process in her study of the evolution of determiners into a plurifunctional system, arguing that initial (epilinguistic) control is crucial for the emergence of the metapragmatic awareness needed later to handle intralinguistic referencing in extended texts. There is no reason within such a theoretical framework, however, why similar processes cannot be found in other manifestations of metalinguistic awareness -- such as metaphonological or metasyntactic -- which tend to arise earlier than metapragmatic awareness in the process of literacy skill development. A particularly useful example of this would appear to be to the relation existing between aural discrimination skills and phonological processing skills which, as Perfetti (1985) suggests, are widely accepted as crucial in the early stages of reading. As writers such as Goswami and Bryant (1990) note, in their review of the literature, there would appear to be a strong correlation between children who develop phonological awareness in the process of learning to read and those who, previously, demonstrated an implicit (epilinguistic) control over the sound system as revealed in their ability to handle such aural discrimination skills as the detection of 'onset' and 'rime'. [41]

Karmiloff-Smith's or Gombert's three-stage approach is valuable not only in showing how metalinguistic awareness arises out of a process of the systematic reorganization of linguistic data but also in explaining why such awareness can -- and often does -- arise differentially. It is important to note, as Gombert (1992: 185) reminds us, that the three stages in his or Karmiloff-Smith's model are not three global stages in linguistic development but, rather, what he refers to as " ..recursive cycles of processes which repeat themselves for each aspect of the linguistic system ...". The fact that different aspects of the system undergo a discrete process of development in relation to the extra-linguistic demands placed upon the child means that, as he continues, different sub-systems can at any time be at quite different levels of conscious representation and control. This would seem to correspond to the differentiation that has been widely noted to emerge in metalinguistic awareness in two senses. First, it would seem to explain the a-synchronous emergence *in children* of various meta-processes, such as that between metaphonological and metasyntactic, and, secondly, it would seem to explain the differing levels of awareness and control

that arise *between children* within each process and/or sub-process. The flexibility inbuilt into such models in these respects place them more within a Vygotskyan than a Piagetian paradigm in that the former views metalinguistic awareness emerging, not out of a process of maturation, but out of two inter-related factors, the type of linguistic input to which the child has been exposed and the types of linguistic demands placed upon him which require him to become conscious of what he implicitly 'knows'.

4. 0.. Metalinguistic awareness and valorization

As indicated, the value of models such as those of Karmiloff-Smith and Gombert (1992: 188) is that they seek to explain the child's ability to reflect upon language as a function of socio-cultural factors, that is, of " .. the extralinguistic context of the processing performed by the child". It is, they suggest, the type of discourse to which the child has been exposed which aids -- or hinders -- the transfer from epi- to metalinguistic processing and which explains the ease with which he is able to access text- (as opposed to situation-) dependent uses of language. While such models are valuable in allowing us to understand the socio-cultural origins of changes in the child's internal representation of language, however, they tend to concentrate on the cognitive side of the process to the detriment of affective factors. The value of Vygotsky's approach, however, was that it not only allows us to explain the child's cognitive processing skills as a function of his previous semiotic activity but, equally important, that it allows us to explain the child's attitude to such processing -- his valorization of it -- as a function of the same activity. As Widdowson (1991: 112) was to pertinently note, insofar as the need of the child to master ever more decontextualized linguistic functions requires a major increase in conscious processing, the child has to be convinced, at any given stage, that the new function is "worth the processing effort". The extension of the child's linguistic repertoire depends, in this sense, not only upon cognitive but affective factors, upon his attitude towards the function in question, which can in turn be considered a refraction of the socio-cultural values of the wider community of which he is a member.

The question of the child's valorization of a new linguistic function is hardly a factor in the acquisition of primary language skills. As Halliday (1975: 10) suggests, early language is for the child "... a rich and adaptable instrument for the realization of intentions" and, since it serves him

as an instrument both to interact with, and 'make sense of' (i.e. categorize) his environment, he is unconsciously motivated to internalize the socio-cultural values that it embodies. [42] It is only with the emergence of secondary (or parasitic) functions that the question of valorization is posed insofar as those functions -- which objectively serve to extend the child's repertoire -- may or may not stem from, or appear relevant to, the forms of semiotic mediation experienced at the primary stage. If the child is to access these new functions, it is necessary, not only that his earlier semiotic experience should prepare him for the higher levels of cognitive processing involved, but also that the socio-cultural values implicit in such experience should prompt him to valorize such functions and consider the extra effort involved in their mastery as 'worthwhile'. As Hamers and Blanc (1982: 33) were to put it:

> For a child to develop overall language competence, he must valorize language, i.e. attribute a certain positive value to language as a functional tool, that is, as an instrument which will facilitate the fulfilment of social and cognitive functioning.

Hamers and Blanc were referring specifically to the acquisition of a second language in a bilingual context but the underlying premise is applicable to all stages of functional differentiation. In particular, insofar as all parasitic activities require the ability to process language consciously and intentionally, it is important that the new metacognitive skill should be positively regarded within the child's own socio-cultural community, that is, that it should be "... valorized first in his community and then by the child himself". The ability to master secondary skills inevitably implies therefore what Hamers and Blanc (1982: 34) elsewhere refer to as an "affective dimension" which plays the role of "an important mediator in the process of language development" alongside the cognitive dimension.

4.1. Affective and cognitive factors

The question of the child's valorization of new linguistic functions has been discussed most frequently, perhaps, in terms of the transfer from the spoken to the written word which often involves simultaneously a transfer from a non-standard to standard dialect. This is not surprising in that the accessing of literacy skills involves the accessing of a function which, for the first time, no longer corresponds to the child's immediate communicative needs and which requires a

considerable increase in cognitive processing. As Vygotsky (1962: 99) put it, "In conversation, every sentence is prompted by a motive" whereas, in learning to read and write, the motives are "... more abstract, more intellectualized, further removed from immediate needs". If the child is to master this transfer from the multi-channeled nature of speech to the single-channeled nature of the written word, he will need to be, not only cognitively, but affectively prepared for it, i.e. persuaded of the value of this new text-dependent mode of communication in terms of the socio-cultural practice of the community to which he belongs. This may not always be the case since, if that community places greater emphasis in communicative interaction on the 'shared knowledge' of the participants than upon the explicit linguistic structuring of the message, this can create not only a cognitive but an affective barrier for the child. Gumperz (1986) and Simons and Murphy (1986: 205), in particular, have explored this question in relation to the apparent difficulty that some socio-cultural groups -- such as those using Black English -- appear to have in making the transition to reading. [43] The fact that members of such groups use "... more situation-dependent language as part of a verbal style", they suggest, may make it harder for them to "profit from those language activities .. which are designed to facilitate the transition to text-dependent language use". In other words, the context-bound nature of discourse, as refracted in a range of stylistic options and choices, can create a 'model' of language which can serve as an affective barrier to mastering new functional uses which are perceived to have, in contrast, low status.

Perhaps an even more important area where affective factors play a mediating role in the development of new functional uses is in the transition from first to foreign language learning. As Hamers and Blanc (1982: 235) suggest, the attitudes of the learner can comprise "... the second most important set of variables for predicting achievement in L2 after aptitude (Carroll, 1962)". Such a view is hardly surprising. In an acquisition-poor environment, where the learner has no natural 'intention to mean' or opportunities for communicative interaction, learning a foreign language is inevitably a long-term process which -- as already indicated -- demands even higher metalinguistic processing than does literacy skill development in the L1. The learner's attention is focused almost exclusively upon the linguistic structuring of the message, both oral and written, and it is only very gradually that he is able to internalize the language sufficiently to use it as a functional tool in interaction with others. If the learner is to engage in such cognitive processing over an extended

period, however, he inevitably has to be persuaded that an activity with so little immediate 'pay-off', as Roberts (1991) puts it, is valorized in terms of the socio-cultural group with which he empathizes.[44] While differences continue to exist regarding the relative superiority of integrative over instrumental motivation -- particularly in a foreign as opposed to second language context -- it would seem, as Lambert (1967) suggests, that learners who enjoy some form of extrinsic motivation will be more inclined to transfer from L1 the necessary cognitive processing skills over a period of time and, indeed, to persevere even when these skills are underdeveloped.[45] Learners, on the other hand, who seem to lack any form of extrinsic motivation and who are subject, in particular, to ethnocentric pressures from their own community are more likely to underachieve in the target language even when they possess the requisite processing skills.

If affective factors can either facilitate or hinder the transfer of cognitive processing skills from first to foreign language, the picture is somewhat more complex in the area of second language acquisition. The fact that, in the latter the child interacts communicatively with two cultural-linguistic groupings -- that of his L1 *and* his L2 -- inevitably means that, as Hamers and Blanc (1989: 79) suggest, the child's valorization of the two languages can differ considerably and this can have important consequences for " ... the internalization of each language" and for "the cognitive consequences of this internalization". Three broad possibilities stand out.

- In the first, where both languages are valorized -- that is, where the child is willing to "identify with the cultural group speaking the other language as L1" without abandoning his own cultural identity -- he should have little problem mastering new cognitive functions in both languages and in developing what Hamers and Blanc (1989: 78) refer to as an "additive form of bilinguality". Affective factors in this situation help to promote the development of metalinguistic processing to such an extent that 'breakdowns' in one language can be compensated for by transfer from the other. As Lambert (1967: 108) had put it much earlier in his study of French-American adolescents, it was those who expressed an "... open-minded, non-ethnocentric view of people in general" who "... profited fully from their language-learning opportunities and became skilled in *both* languages".
- In the second, where the L2 is valorized much less than the L1 -- that is, where the child feels neither integratively nor instrumentally motivated to learn it -- he can experience what Lambert

(1967: 91) called "major conflicts of values and allegiances" than can often lead to a fear of assimilation and loss of identity, to a sense of alienation and isolation that is often termed 'anomie'. A description of the ethnocentric pressures acting on the individual to inhibit L2 acquisition can be found in Schumann's (1978: 34) acculturation model which is premised on the view that "the degree to which a learner acculturates to the TL group will control the degree to which he acquires the second language", particularly the functions of such a language requiring metalinguistic processing. Problems arising in the acculturation process do not prevent the child developing metalinguistic processing in the L1 but may act to prevent him transferring such processing to the L2, that is, beyond the level of primary skill acquisition ('communicative competence').

- In the third, where the L2 is valorized more by the child (and his sub-group) than the L1, the relation between affective and cognitive factors is even more complex. It is unlikely that the child will develop the necessary metalinguistic processing through his L1 to transfer to his L2 and, even if he manages to develop such processing through the latter, he is unlikely to transfer it to his L1 because of the 'low status' it enjoys in his and his sub-group's eyes. This is the case, of course, as Hamers and Blanc (1989: 79) point out, with a child from a "socially disadvantageous subordinate group" who is "schooled through a prestigious L2 while the school system tends to ignore or denigrate his mother tongue" The result, as Cummins (1986) has persuasively argued, is that either the child is assimilated into the majority language and culture or, more likely, that he underachieves in both languages where affective factors objectively block the development and/or transfer of metalinguistic processing.

The inter-relation between cognitive and affective factors in second language acquisition is complex and involves a greater number of variables than in the transfer from first to foreign language learning. While such differences should not be downplayed, however, it is important to stress that the shift from first to foreign/second language are similar insofar as the transfer of cognitive skills needed to access analytic competence is a function of the child's valorization of the two languages.

4.2. Metalinguistic and metacultural awareness

The development of new linguistic functions, either intra- or intermodally, cannot be explained away, as Gombert (1992) stresses, simply as changes in the internal representation of language. It is

certainly such changes which render the development of new functions possible but it is the valorization of such functions which determines the extent to which they are internalized and used. This can be expressed somewhat differently in the idea that, while the child certainly needs to become aware of the systematic nature of language to access a new function, he also needs to appreciate that that system is arbitrary and relates differently to the functions he has mastered than to that which he is in the process of mastering. A useful example of this is the transfer from non-standard to standard dialect and/or spoken to written form. There is no doubt, as already indicated, that reading is dependent upon the child's growing awareness of the systematic nature of speech from the metaphonological to the metapragmatic level. While the child needs to develop such an awareness of system, that is, to shift from epi- to metalinguistic processing, he has also to appreciate that this system is arbitrary and relates in an increasingly divergent way to the spoken and written word. The child has, in other words, to accept that *we do not speak as we write*, that the system he has become 'aware of' applies differentially to two language functions - the spoken and written -- particularly in terms of the relation between syntactic structure and textual organization. [46] This process is even more true in the transfer from first to second/foreign language learning. Awareness of the systematic nature of L1 may be necessary to access the L2 but, at the same time, such awareness has to be accompanied by an acceptance that that system is arbitrary and operates differentially in the two languages. A child learning a second/foreign language not only needs to recognize, for example, that syntactic operations govern meaning in French or German, as they do in English, but that the concrete application of such rules is socio-culturally based and discrete to each particular language. As Katcham (1986: 671-672) points out, in her review of the controversial findings regarding bilingual development, one area on which there would seem to be some consensus -- from Feldman and Shen (1971) to Tunmer and Myhill (1984: 174) -- is that those children who seem to benefit from it are precisely those who evince a greater ability both to "treat sentence structure analytically" and to appreciate the "arbitrary nature of word/referent relationships".

The notion that successfully negotiating new language functions involves a conscious awareness, not only of the systematic, but also the arbitrary nature of language is not, of course, new. Both Piaget (1929) and Vygotsky (1962: 128) noted that the pre-school child was unable to appreciate

that the word-referent relationship was an arbitrary one -- dictated by convention -- and tended to see the word as an "integral part of the object it denotes ...". This tendency to see the word as an attribute of the object or event, in a similar way to its colour, shape or size, has since been confirmed in a range of studies designed to probe the child's appreciation of the word-referent relationship, such as that of Gleitman and Gleitman (1978) or of Smith and Tager-Flusberg (1982). While it is true that some bilingual children do evince an ability to dissociate the word from its referent somewhat earlier, as Bowey and Tunmer (1984) note in their review of the literature, most pre-school monolingual children find such a process difficult and, at most, seem capable of detecting a certain degree of lexical ambiguity. The tendency for the young child to see the word as part of the object or event it denotes is another way of saying, of course, that he is inclined to view the language of the home as 'natural' and/or 'inevitable' rather than as an arbitrary convention that can be altered. If the young child is to master the new functional uses of language, however, he has to overcome what Vygotsky (1962: 129) called this stage of " ... primitive linguistic consciousness" and become aware that the ways in which his own language structures meaning -- whether at the phonological, lexical or syntactic level -- are essentially arbitrary. Learning to move from one channel of communication to another (i.e. spoken to written), one dialect to another and/or from one language to another are stages, in this sense, in a long-term process in which the child is required to develop, not only *metalinguistic*, but *metacultural* awareness, the ability to understand that language forms vary and are appropriate to varying contexts of use. Put another way, the extension of the child's linguistic repertoire involves developing what Hawkins (1984) called a sense of 'linguistic relativity', knowledge not only of *what* to say but of *when, where* and *with whom* to say it.

5. 0. Summary

The value of the socio-cognitive approach to the development of metalinguistic awareness is that it is the most flexible in explaining the intersubject variability in such awareness widely recognized in the literature. While it may offer the most useful paradigm, however, it requires considerable elaboration in terms of the research findings and theoretical models that have emerged in recent years. Perhaps the most useful way of approaching the development of the child's ability to reflect on language is to view it as a product of functional differentiation in which the increasingly

decontextualized uses of language require the child to switch attention from the extra-linguistic to the linguistic structuring of meaning. The child's ability to attend consciously and intentionally to language can, in this sense, be viewed dialectically as both a by-product of the mastery of earlier linguistic functions and a pre-requisite for the accessing of new ones. This is particularly true in terms of macro shifts in code processing such as the transfer from the spoken to written word or from L1 to L2 which are symbiotically linked. While metalinguistic awareness can be seen as a function of the linguistic demands placed upon the child, however, the ability to move from an unconscious and automatic to conscious and voluntary approach to language has both a cognitive and affective dimension. In the first place, it depends upon the internal reorganization of linguistic data into a system which is initially implicit (i.e. procedural) before becoming explicit (i.e. declarative). In the second place, it depends upon the ability to recognize that the systematic nature of language is, itself, arbitrary and will operate differentially according to the socio-cultural shaping of the new linguistic function. Metalinguistic awareness is, in this sense, intertwined with metacultural awareness from the earliest stages of functional differentiation.

Notes

1. Gombert suggests that the paucity of models seeking to explain the development of metalinguistic awareness is a function of two factors: the "relatively recent emergence" of the former as a field of study and what he calls the "variable nature of the field", that is, the fact that there exists very little consensus in interpreting the empirical evidence in terms of a definition of metalinguistic awareness, let alone its origins and/or function.
2. Bertelson (1987: 9) observes, for example, in his review of the literature devoted to the relationship between metalinguistic awareness and literacy skills, that the "... phonological awareness hypothesis has stimulated an extremely active line of developmental investigations" which has tended to demonstrate "... a robust correlation between speech analysis and reading performance".
3. As Bruner was to put it, "... though language springs from and aids action, it quickly becomes self-contained and free of the context of action. It is a device, moreover, that frees its possessor from the immediacy of the environment, not only by pre-emption of attention during language use but by its capacity to direct attention towards those aspects of the environment that are singled out by language".
4. In his interesting essay contrasting Vygotsky's and Wittgenstein's approach to language development, Shotter (1998) notes that the former stresses the "... bootstrap function of this kind of talk in our cultural development; the way in which it can shift us from an unaware, spontaneous usage of words in a practical context, to a deliberate, selfconscious use of them in a solely intralinguistic (or disciplinary) context"
5. Olsen (1984: 223) was, interesting enough, to draw upon James (1907) in relating different language modes with different cognitive demands insofar as the spoken language is associated with "commonsense knowledge" and the written language with "scientific knowledge and philosophical knowledge".
6. It may well be true, as Simons and Murphy (1986: 187) point out, that even written language requires that a "... context exist or be envisioned for interpretation" but, as they acknowledge, such a context is a linguistic rather than extra-linguistic one, that is, one where language items refer endophorically to other language items rather than exophorically to the real world.
7. Donaldson's (1993: 268-269) model views the 'modes', which are defined as global stages in the process of linguistic (and cognitive) decontextualisation, as the 'point' mode (dealing with the 'here and now'); the 'line' mode (dealing with the 'then and there'); the 'construct' mode (dealing with unspecified times and places); and the 'transcendent' mode (dealing with abstract notions outside of space and time). It is interesting to note that -- as in Piaget's model of cognitive decentering -- it is only when the child reaches the 'construct mode' that "the achieving of some measure of separation between thinking and emotion becomes possible".
8. While there are observable differences in the three approaches, as Wells (1997: 8-10) notes, they are similar insofar as they stress the crucial role played by written texts in altering the child's conceptualization of experience, i.e. in allowing him to reflect on and objectify that experience as a 'product' rather than an ongoing 'process'. The idea is expressed most clearly, perhaps, in Halliday's (1993: 111) division between the 'dynamic' nature of speech and the 'synoptic' nature of written texts which operates at both the onto- and phylogenetic levels. "A written text is itself a static object", he writes, "it is language to be processed synoptically. Hence it projects a synoptic perspective onto reality; it tells us to view experience like a text, so to speak. In this way, writing changed the analogy between language and other domains of experience; it foregrounded the synoptic aspect, reality as object, rather than its dynamic aspect, reality as process, as the spoken language does".
9. In fact, Gombert (ibid. 161) suggests that the debate between supporters of the two traditions is somewhat arid in that, as Vygotsky argues, the child may in the initial stages use the indirect access procedures as a transitional stage in order to move, at a later one, to direct access procedures which no longer require "... the establishment of a correspondence between the spoken and written".
10. Vygotsky (1962: 98-99) was to view the need to link the visual and auditory in order to access meaning as the basis of the decontextualised nature of the written word. As he put it, "Speech that is merely imagined and that requires symbolization of the sound image in written signs (i.e. a second degree of symbolization) naturally must be as much harder than oral speech for the child as algebra is harder than arithmetic. Our studies show that it is the abstract quality of written language that is the main stumbling block, not the underdevelopment of small muscles or any other mechanical device".
11. As Wray (1994: 17) suggests, the debate between the 'strong' and 'weak' versions essentially involves "... the questioning of whether awareness precedes, and is a cause of, necessarily learning to read, or whether it is itself a product of this learning", i.e. emerges in the process of reading itself even if it, in turn, contributes to the reading process. It must be pointed out that Downing (1979: 20-21), while a 'strong' advocate of the 'cognitive clarity' approach, occasionally entertains the latter view as when he argues that "... children develop increasing cognitive clarity about the functions and features of language through reading itself".
12. While Bialystock and Ryan's model sees the analysis and control of language (via selective attention) as developing along different axes, the convergence between the two is seen as crucial for the emergence of metalinguistic processing and the earliest example of such a convergure appears in the area of reading comprehension.

13. Vernon (1957: 71) was to suggest relatively early, for example, that "... the fundamental and basic characteristic of reading disability appears to be cognitive confusion". It was in response to Vernon's work on 'cognitive confusion', of course, that Downing advanced his 'cognitive clarity' hypothesis.

14. It should be noted, however, that the assumption that that there is often a clash between children's home-based discourse modes and those of formal schooling – and that such a clash is responsible for problems in the transition to literacy – is by no means generally accepted. MacLure (1981: 227), for example, argues against such an assumption, on which Bernstein's code theory was partly based, by stressing that in terms of questioning strategies in particular "... children most certainly do not enter a culture of unfamiliar interactional routines when they enter school".

15. Brown argues that speech shifts between what she refers to as 'listener-oriented' and 'message-oriented' functions which differ primarily in the degree of 'shared knowledge' they presuppose. In order to facilitate the transfer to written texts, she suggests (1982: 81), it is important to encourage pupils to move from the first to the second which "represents a very complex skill" insofar as it involves "... the ability to produce and understand highly structured speech, with information relatively densely packed ...".

16. As Simons and Murphy (1986: 194-5) put it, "Instead of focusing on the content or meaning of the language, they [i.e. children learning to read] must focus on its form, particularly at the phonological level, in order to acquire decoding skills, and since most beginning reading programs focus on decoding to some degree, almost all children need to develop phonological awareness".

17. Wallach and Wallach (1976: 66) were to assert, at a relatively early date, that "... the children who have difficulty understanding talk about sounds and about relations between sounds and letters seem to lack readily accessible, manipulative concepts of the kinds of sounds at issue, the sounds to which letters are related, or 'phonemes'. While these children seem able to discriminate between words that differ in single closely-related phonemes ... they are unable to deal with phonemes in abstraction from their contexts (see Mattingly, 1972; Savin, 1972; Gleitman and Rozin, 1973; Venezky in press)".

18. Reid *et al* (1987), researching into literate Chinese adults' awareness of phonemes, found that it was at the same low level as that of illiterate Portuguese adults in an alphabetic culture, as recorded in the earlier research by Morais, Cary, Alegria and Bertelson (1979). It was to prompt them to endorse Morais *et al's* (1979: 34) conclusion that "Awareness of speech as a sequence of phones is thus not attained spontaneously in the course of general cognitive growth, but demands some specific training, which for most persons is probably provided by learning to read in the alphabetic system".

19. Ehri's (1979: 83) work was directed against the Piagetian hypothesis underpinning the work of Bereiter and Engelmann (1966) and Ryan (1979) that superior levels of metalexical and metaphonological awareness are a pre-requisite for learning to read rather than by-products of that process which enter into a symbiotic relation with it. As she was to argue, in relation to metalexical awareness, it is more likely that "... as a consequence of interacting with print, the beginner suddenly awakens to the fact that meaningful sentences are comprised of word units. Achieving word consciousness may be like turning on the light in his lexicon, rendering his implicit knowledge of words suddenly explicit and available for use".

20. As Meadows (1993: 12) puts it, "Experience of playing with contrasting sounds, as in nursery rhymes and as in many of the 'poems' and monologues young children often create for themselves (Dudley and Bradley 1985, Bryant *et al* 1989, 1990, Chukovsky 1976, Dowker 1989, Kirtley *et al* 1989 ...), looks like a very possible facilitator of phonemic awareness and learning to read".

21. Goswami and Bryant (1990: 18) , for example, are strongly of the opinion that it is children's syllabic awareness which facilitates reading and it is only in the course of reading itself, as Ehri (op. cit.) suggests, that phonological awareness arises. Others, such as Downing (1979) tend to argue that the child's earlier awareness of syllables facilitates phonemic awareness which is itself a crucial pre-requisite for reading. The latter position is particularly associated with writers within the Soviet tradition, such as Egorev (1988/1953) or Elkonin (1988/1976: 416), who stress that the child has to be trained in " ... phonemic analysis, as opposed to phonemic perception", prior to reading itself.

22. Perera (1986:: 517) summarizes the syntactic differences that emerge between speech and writing between the ages of 6 and 10 as threefold: first, a decrease in the number of 'mazes' (i.e. ungrammatical strings etc.), colloquial constructions and recapitulatory pronouns; second, a decrease in the number of co-ordinated main clauses and a corresponding increase in subordinate clauses; and third, an increase in some constructions that do not appear at all in spontaneous speech, such as relative clauses and/or non-finite nominal clauses used as subject.

23. Chafe (1982, 1985) suggested that the difference between speech and writing lay along two axes: that of *integration* (i.e. the degree of syntactic complexity) and *interaction* (i.e. the extent to which the speaker/writer is detached from his linguistic production).

24. As Dodson (1978: 48) was otherwise to express it, "The learner finds it difficult to reach communicative competence ... if he is not allowed to pass through two levels of communication. The first level, which can be called 'medium-oriented communication', is the stage where for any activity the child's mind is focused mainly on the language itself. At the second level, which can be called 'message-oriented communication', the language tends to become a tool and gradually of secondary importance to the learner, whose main aim at that juncture is to communicate a message which is not about language".

25. Vera John-Steiner (1985: 350), although supporting Vygotsky's general approach to bilingual development, makes unwarranted concessions in this direction when suggesting that his emphasis upon the conscious aspect of L2 learning may be "exaggerated" on account of his treatment of it "exclusively in a school context".
26. "Although Vygotsky was primarily concerned with foreign language learning in a school setting", they write, "his remarks would seem to apply to second language learning in non-school settings as well. Thus, becoming bilingual by whatever means can be viewed as a way of developing the child's metalinguistic awareness with consequent beneficial effects on the child's performance in both languages".
27. As Cummins (1984: 108) was to otherwise put it, in relation to the underachievement of bilingual pupils, "In summary, the research findings clearly refute the assumption that bilingualism per se is a cause of minority students' academic difficulties. Rather, it is the failure to develop students' L1 for conceptual and analytic thought that contributes to 'cognitive confusion'. When minority students' L1 proficiency is strongly promoted by the school programme, the resulting additive bilingualism appears to entail some subtle linguistic and possibly cognitive benefits".
28. While Bowey (1988: 74) is herself skeptical about any causal relation between metalinguistic awareness and second language acquisition/learning, she is prepared to admit that the conceptual similarity between aptitude tests and those used to measure metalinguistic awareness implies that "... metalinguistic ability is probably a useful predictor of at least formal aspects of second language attainment".
29. It may be that the more the child is able to process input in the TL simultaneously at various levels -- i.e. from the metaphonological to metasyntactic or metapragmatic -- the more he is able to overcome problems of short-term memory associated with the ephemeral nature of speech.
30. Skehan (1998) is particularly useful in seeking to review the various theoretical approaches to the notion of 'aptitude' and correlate them with research findings. He, himself, partly follows Carroll (1965) in identifying the crucial components of aptitude as auditory ability, linguistic ability and memory ability which are viewed as a continuum of processing strategies predictive of future L2 performance. What is interesting about his approach, however, is the assumption of an information-processing paradigm which sees such processing skills as relevant not only for acquisition-poor environments but also acquisition-rich ones. As he had already argued (1985: 17) "... the analysis of aptitude presented here is general enough to be relevant not simply to formal learning situations, but also to more communicatively oriented classrooms as well as 'acquisition' settings".
31. The response to an alternative question, for example, might well be a simple adverbial phrase (*à la gare/au stade*) whereas the response to a target question might well involve a verb plus adverbial phrase (*il/elle va à la gare/au stade*). The systematic variation of answer to question forms involves, in this sense, the metapragmatic ability to treat language in relation to the linguistic (rather than extra-linguistic) context of use from the beginning.
32. Intralinguistic referencing in pronominal use can be difficult in English in an extended text, as illustrated in the work of Hickmann (1981, 1986). It can be even more difficult in oral/written discourse in L2 where pronominal use is complicated by culture-specific variations, e.g. the existence of two (French, Spanish) and three (German) genders. To make sense of two sentences in French such as *Il lui a donné la robe. Elle était* ..., the child has to realise that *elle* can potentially refer linguistically as much to the preceding pronoun (*lui*) as to the noun (*la robe*).
33. As Hawkins (1981: 44) argues, in relation to L2 study, "Only through a progressive apprenticeship in comparison can judgments be learnt and learning how to make fair judgments is the beginning of wisdom".
34. Titone's (1998: 9) view is based on the somewhat dubious assumption, of course, that bilingualism is inherently more capable of developing metalinguistic awareness than monolingualism, that is, that it "... has the highest chance of providing food for thought, in that it can stimulate, spontaneously or systematically, analytic reflection over the structures and functions of the two languages and their cultures".
35. Vygotsky (1962: 88) was to notice this indebtedness when writing, "Piaget uses Clarapède's law to explain the development of thinking that takes place between the seventh and twelfth year. During that period the child's mental operations repeatedly come in conflict with adult thinking. He suffers failures and defeats because of the deficiencies of his logic, and these painful experiences create the need to become aware of his concepts".
36. "To us it seems obvious", he was to write (1962: 92), "that a concept can become subject to consciousness and deliberate control only when it is part of a system. If consciousness means generalization, generalization in turn means the formation of a superordinate concept that includes the given concept as a particular case. A superordinate concept implies the existence of a series of subordinate concepts of different levels of generality".
37. In actual fact, Karmiloff-Smith initially posed four levels in the process of cognitive representation of linguistic data (1979, 1981) although, in her more recent three-stage recursive model, she has tended to combine the two uppermost levels -- 'secondary explicit knowledge' and 'tertiary explicit knowledge' -- into one stage of metalinguistic awareness. Gombert's contribution is a variation of the latter's three-stage model.
38. It is only gradually, Halliday argues, that such early unifunctional utterances are gradually subsumed into a more abstract, if simpler, system which is capable of multifunctional use. What we know as 'grammar', Halliday (1975: 40) concludes, is little more than this system which acts to hook together " ... the selection in

meanings which are derived from the various functions of language, and realizing them into a unified structural form".

39. If anything, Gombert (1992: 188-189) is somewhat critical of Karmiloff-Smith in that she fails to stress sufficiently the importance of the 'extralinguistic context' in terms of providing the impetus for changes in linguistic representation. As he puts it, the key task of the child during this stage may be to link discrete linguistic forms into an implicit system but "... this is determined by, and affects, the real and thus contextualised uses of these forms". Interestingly enough, Stevenson (1988: 100) is similarly critical of the lack of priority given to the social aspect of such development in Karmiloff-Smith.

40. Karmiloff-Smith (1979: 224-225) was to note a similar process in the treatment of the French use of the determiner *un/une* which can mean both 'a' and 'one'. Initially, children tend to use each function discretely in relation to a given context but, at a certain stage, they seem to recognize implicitly that it can have two meanings and seek to distinguish them by overmarking, i.e. *une voiture* signifying 'a car' and *une de voiture* signifying 'one car'. Only later do they drop the overmarking and use the determiner plurifunctionally.

41. Discussing children's ability to divide a word into its onset and rime, and to categorize words which have the same onset or the same rime, Goswami and Bryant (1990: 147) note that "The effect of this skill on their progress is considerable both in a quantitative and in a qualitative sense. Children who are sensitive to rhyme eventually do much better at reading ... and children who are taught about rhyme are more successful at reading than those who are not given this training".

42. As Wells (1981) was similarly to argue, in his critique of Bernstein's theory of codes, "... the way in which each individual child constructs his model of the world, and discovers his place and power of control within it, is most strongly influenced by the values and orientations that are encoded and transmitted in everyday conversations with his parents ...".

43. It should be noted that Simons and Murphy, like Michaels (1986: 116), do not necessarily see the discourse style of those using Black English as the barrier to literacy skill development but rather as preventing them from profiting from the types of classroom-based teacher strategies which are most likely to help them make such a transition.

44. As Roberts (1991: 22) was to put it, "The fact that traditionally so many British pupils abandon foreign language learning at the earliest opportunity is not so much ... the result of an insufficiently 'communicative' methodology as a lack of that awareness necessary to sustain motivation in an activity with so little immediate 'payoff'".

45. In his earlier studies. Lambert (1967: 103) argued that English-speaking "... students with an integrative orientation were more successful in learning French than those with an instrumental motivation", although Gardner (1985: 54) was to later challenge this assertion.

46. As already indicated, changes in function prepare the way for -- and are consolidated in -- changes in structure. In the early stages, knowledge of the syntax of speech aids the processing of written texts but, as the latter diverge increasingly in function from the spoken word, so the syntactic knowledge necessary to process them changes in terms of its complexity and hierarchical organization, as Perera (op. cit.) notes.

Chapter 4

Problems of differentiation

Chapter Four

1. 0. Problems of differentiation

As suggested earlier, a major advantage of the socio-cultural approach is its ability to address not only the a-synchronous emergence of metalinguistic awareness *in* children -- as in the sequencing between, say, metaphonological and metapragmatic awareness -- but also its variable distribution *among* children. The latter point is of particular interest in that, while all children appear able to develop a comparable degree of linguistic competence in the primary skills of speaking/hearing, that is by no means so in the case of secondary (or 'parasitic') skills which involve the ability to consciously monitor linguistic input/output. As Mattingly (1972: 140) was to suggest, "synthesis of an utterance is one thing" but "... the awareness of the process of synthesis quite another". [1] The most obvious area where such differentiation can be detected is in the intermodal transfer from spoken to written word which appears to require, as Mattingly (ibid. 144) continues, a "minimal level" of metalinguistic processing, particularly phonological processing, but where "... not everyone is sufficiently aware of units in the phonological representation or can acquire this awareness by being taught". [2] Mattingly was, alongside Savin (1972), Wallach and Wallach (1976) or Venezky (1978), among the first to attribute problems in learning to read and write, not to such factors as insufficient motivation, inability to visually detect letters or to negotiate the transfer from non-standard to standard dialect, but to the absence of this "minimal level" of awareness. [3] As Venezky (ibid. 10-11) was to put it, "... the child's ability to treat language analytically ... has been identified as a crucial reading variable in a number of different cultures" While it would be incorrect to separate cognitive from affective factors, it would seem reasonable to suggest, as does Venezky or Gleitman and Rozin (1977: 3), that learning to read requires a "rather explicit and conscious discovery" about the structure of one's own language and, in particular, its sound structure.

The link between underachievement in reading and lack of metalinguistic skills – or, rather, of epilinguistic skills that become metalinguistic in the act of reading itself – has long-term implications for the child's ability to negotiate the ever more complex linguistic demands of formal schooling. Mattingly (op.cit. 140), interestingly enough, was to touch upon this issue when drawing attention to the essentially *active* nature of metalinguistic awareness, that is, to the fact that "the speaker-hearer can use [it] to control, quite consciously, his linguistic activity". For Mattingly, lack of such awareness can not only impede the child's ability to access new linguistic functions, such as

second/foreign language learning, which involve the conscious monitoring of linguistic comprehension and production. Equally important, it can also hinder the child's ability to access and monitor the content of such production, that is, to be able to cognitively 'decentre', in the Piagetian sense, and to objectively evaluate his own thought processes. As he was to put it, in a way that anticipates Donaldson (1978) or Wood (1988), "... without this active aspect of linguistic awareness, much of what we call thinking would be impossible" insofar as it is the ability to attend to the linguistic formulation of a message which allows us to sequence it intelligibly and express it unambiguously.[4] The inability to attend consciously to the products of one's own mental activity is most clearly evidenced, of course, in problems associated with developing competence in writing where composing, monitoring and editing texts involves the simultaneous processing of linguistic form and semantic content, as indicated by Fayol (1985, 1986) or Baker (1985). To the extent that lack of metalinguistic skills can impede the child's ability to deal with the cognitive and linguistic demands of formal schooling, it is hardly surprising that writers such as Halliday (1975: 18) were to see educational failure as essentially 'language failure'.[5]

1.1. Semiotic experience and 'verbal style'

The fact that metalinguistic awareness is so unevenly distributed among pre-school children is clearly a function of the quality of their prior semiotic experience, of whether or not the discourse modes ('verbal styles') to which they have been exposed aid or hinder their transition to the more reflexive discourse modes of formal schooling. Such a view is central to writers such as Donaldson (1978) or Wood (1988) who root the child's transfer from situation- to text-dependent language use in the extent to which child-parent interaction has encouraged him to reflect on language through a variety of metapragmatic activities. As the latter (in particular) argues, activities which involve using language to talk *about* language as in word play and language games can have "... an important role in laying the foundations of literacy".[6] A similar if somewhat more schematic attempt to identify the parental styles most conducive to the fostering of metalinguistic skills can be found in a range of other writers. Service (1984: 136), for example, suggests that parents can be divided into those who employ either 'symbolic' or 'functional' styles, the former helping their children to represent language to themselves by making their "communicative intention very explicit" and the latter doing "... little to allow [the] child the opportunity to decipher [his or her] intent". A similar distinction can be found

in Kagan *et al*'s (1963) earlier division between parents who encourage 'reflective' as opposed to 'impulsive' child language interaction, Witkin's (1967), between those who encourage 'field independent' rather than 'field dependent' discourse, and Nelson's (1973), between those who encourage 'referential' as opposed to 'expressive' language use. Such dichotomies, while clearly part of a continuum, are at least helpful in seeking to identify the type of semiotic experience that encourages the child to separate the ideational from the interpersonal function of language -- thereby creating the basis for linguistic self-representation -- and that which discourages such a process. As Service (1984: 139) was to argue, style 1 children can be seen as

> ... good at analyzing the relation between the signs they use and the referents they relate to ... [and]style 2 children as incorporating communicative strategies in their entirety as 'rules of thumb' without analyzing them as to their components nor how they work.

Bates (1979), interestingly enough, has developed a useful taxonomy of the differences between parental styles and the emergence of embryonic epi- (or meta-) linguistic activity (cf. Appendix 3).

While the attempt to distinguish between children's early semiotic experience based on caretakers' verbal style may be useful, however, it suffers from two limitations. In the first place, as Skehan (1998) or Wells (1986a: 118) have argued, such distinctions can be over-simplistic and imply a "reductionist strategy" which is simply not justified by "...the evidence actually available", particularly that accumulated during the Bristol Language Project.[7] In the second place, and somewhat more importantly, attempts to link the development of children's ability to reflect on language with parents' verbal style has limited 'explanatory power', i.e. does not identify those variables which incline parents towards one style rather than another. In other words, while the distinction between 'referential' and 'expressive' oriented children, as in the case of Nelson, may be a potentially useful one, it can appear somewhat random insofar as it is not rooted in, or enlightened by, a wider sociolinguistic framework. Other writers, such as Gumperz (1986), Michaels (1986) and Simons and Murphy (1986), have partly sought to overcome this limitation by arguing that parents' verbal styles represent a refraction of wider 'community' styles. Michaels, for example, suggests that the 'topic-associating' (as opposed to 'topic-associated') style of children speaking Black English represents not a random product of parent-child interaction but a systematic feature of a social group and its collective interaction as a group. If, she points out, such children find it difficult making the transition from the topic-associating form of oral discourse to the topic-associated form

of written discourse, it is not due to the 'random' verbal style of a given family but to that of the community to which the family belongs and which embodies a particular way of 'making meaning'. Educational success or failure, in the latter case, is no longer seen as simply a function of the 'parental lottery', as Hawkins (1981: 215) was to define it, but, rather, of the relationship between the culture of the school and that of the social group -- or sub-group -- to which the child belongs and whose values he internalizes as part of the 'verbal style' of parent-child interaction. [8]

Perhaps the most influential and, indeed, complex exploration of the social variables which shape a child's early semiotic experience -- and which have a profound bearing on his ability to handle the linguistic demands of formal schooling -- is Bernstein's (1971, 1973) class-based notion of linguistic 'codes'. Partly because his work has extended over such a long period of time and partly because, as Edwards (1989: 33) claims, his "theoretical stance has not always been completely clear", Bernstein's notion of codes has been the object of an ongoing and often acrimonious controversy. It has been claimed that the definition of 'class' on which the notion of 'code' is based is overly schematic (Wells, 1986a, 1986b); that the latter is not clearly distinguished from more traditional linguistic notions of 'dialect' and/or 'register' (Labov, 1972); and – most controversial of all – that the term 'code' confuses cognitive differences between children of varying socio-cultural backgrounds with cognitive deficit (Edwards 1976, Edwards 1989). There is no doubt that part of this criticism is justified insofar as it is rooted in the ambiguities and shifts in Bernstein's theoretical argument. [9] While partly justified, however, such criticism does not invalidate the central thrust of that argument, i.e. that the uneven distribution of metalinguistic skills is a function of the different 'orders of meaning' that children from differing social classes are predisposed to generate. It is because Bernstein's theory seeks to provide a social class basis for the relationship between the variable distribution of metalinguistic skills and educational performance that it requires analysis in some detail. Such a re-analysis might usefully be approached in the light of more recent research into metapragmatic processing, undertaken by writers such as Hickmann and Karmiloff-Smith (op. cit.), which has tended to complement many of his assertions regarding the nature of 'codes'.

2. 0. Class, codes and socialization

As a sociologist, Bernstein was concerned with exploring the ways in which social structure shapes our behaviour primarily through semiotic mediation or, as Robinson (1984: 192) was to put it,

with specifying the "sociological conditions conducive to the development of different communication systems". He himself, in an interesting early essay, was to define the parameters of his approach in a polemic with the 'linguistic relativity' hypothesis of Sapir and Whorf. Whereas, he argued (1971: 122), the latter were interested in the way in which language acts to define and constrain "habitual and characteristic behaviour in the speakers", he was more interested in the reverse process, that is, in the ways in which social structure acts to define and constrain the functional uses to which we put speech. [10] As Bernstein (1971: 123) goes on to suggest, it is changes in the social structure which are the "major factors in shaping or changing a given culture through their effect on the consequences of fashions of speaking". Within such a perspective, language assumes a crucial mediating role between social structure and social behaviour. If the functional uses to which we put our communication systems are determined by social structure, those systems act, in turn, to shape our behaviour and ensure it is replicated across generations or, as Edwards (1989: 90) confirms, speech acts to "... elicit, generalize and reinforce" the social relationships necessary for its continuation. Bernstein (1971: 122) himself was frequently to stress the important mediating role of speech that is both determined by the socialization process and, in turn, acts to reinforce and strengthen that process. It will be argued, he was to write, that

> ... a number of fashions of speaking, frames of consistency, are possible in any given language and that these fashions of speaking, linguistic forms, or codes, are themselves a function of the form social relations take. According to this view, the form of the social relation or, more generally, the social structure generates distinct linguistic forms or codes *and these codes essentially transmit the culture and so constrain behaviour.*

This view of speech as one whose functions are dependent on the social relationships of a given group and which acts, through the communicative interaction of that group, to reproduce these relationships implies, of course, that a variety of such speech 'fashions' or 'codes' are possible. Indeed, insofar as a given speech code will 'symbolize' the social relationships from which it stems, it will act to regulate the types of social interaction possible for members of that group and create for them what Bernstein (1976: 141) himself referred to as "different orders of relevance and relation" from members of another group. [11]

2. 1. 'modes of communication' and class

For Bernstein, the social structure which impacts most profoundly upon communication systems (or speech codes) is that of class. The class system, he argued (1979/1971: 315), has "... deeply

marked the distribution of knowledge in society" and it is "... naïve to believe that differences in knowledge ... would not affect the forms of control and innovation in the socializing procedures of different class societies". The focus upon class as the most important aspect of social structure shaping semiotic mediation was not, of course, original. Research underway in the USA had already drawn a correlation between social background, linguistic behaviour and orders of meaning. Fries (1940), for example, had purported to find, in his study of written texts, differences in the explicitness of meaning between lower working class (unskilled and semi-skilled) and professional workers. As Robinson (1984: 186-7) notes, on the basis of a taxonomy of lexical and grammatical differences, Fries sought to argue that there was an inclination in the texts of the lower working class towards "... leaving information less precise than it might be", whereas the professionals' use of linguistic features, such as prepositional and pronominal groups in particular, indicated a " ... greater concern to make meanings unambiguous and organized". The fact that the texts of the lower working class group presupposed a greater degree of 'shared knowledge' than the latter does not, it should be stressed, have any implications for underlying competence. It is interesting to note, as Edwards (1976: 87) points out, that Fries does not claim that there were any differences in the linguistic resources at the disposal of two groups, i.e. in knowledge of the tacit rule system, but merely in the use of these resources in that the language of the lower working class group appeared "poverty-stricken" in comparison. [12]

Similar results were to be found in the more elaborated research of Schatzman and Strauss (1955) which, as Bernstein admits, had a profound influence on his own concept of 'public' and 'formal' codes. Schatzman and Strauss' research involved the analysis of oral narratives provided by lower working class and professional adults based upon such categories as sense of perspective, correspondence of imagery in speaker and listener, classification used and framework and style of ordering in the description. The results, Robinson (1984: 187-188) suggests, once again revealed a difference, not so much in the linguistic items used by both groups, as in the extent to which the selection of some items rather than others appeared to correlate with the context-embeddedness of the narrative overall. Lower working class speakers, they suggested, were more likely to be reported as "... retelling events from their own perspective only" which often "did not accommodate to the fact that the listener had not been present". Partly as a result of such a perspective, pronominal forms ('we', 'they') and persons' names were often used deictically rather than anaphorically, that is,

without any "explicit reference or formal identification". In general, the information provided was "... concrete, referring to particular individuals rather than to roles, groups or organizations" and irrelevant or unconnected digressions were frequent. In contrast, the narratives of the professionals were reported as shifting the perspective from the narrator to that of the listener, as supplying the latter with "a context to set the stage for events to be related" and as anticipating "possible disbelief and misunderstanding". Moreover, the narratives as a whole were " ... tightly organized with considerable cohesion, digressions occurring but only as sub-plots to be followed by a return to the main theme". In summing up the principal differences between the two groups, Schatzman and Strauss (1955: 337) suggest that the narrative of the lower working class tends to be characteristic of someone who normally deals with "listeners with whom he shares a great deal of experience and symbolism" and where the "motives are implicit and terminal requiring neither elaboration nor explanation". [13]

On the basis of their research, Schatzman and Strauss tentatively drew the conclusion that there exist different "modes of communication" which arise out of the significantly different experiences of social interaction defined in class terms. It was this essential distinction that Bernstein was to inherit and which he was later to elaborate and refine by replacing the notion of "modes of communication" with that of 'codes'. As Adlam (1979: 277) suggests, Bernstein's premise is identical to that of Schactmann and Strauss in arguing that it is social class – defined in terms of its relation to the productive forces – which is crucial in determining the 'orders of meaning' that are developed in communicative interaction. More specifically, social background acts upon the symbolic systems used to determine the extent to which meaning is *implicit* in the shared knowledge that a speaker-hearer brings to such interaction or *explicit* in the verbal formulation of the message and these differences, in turn, determine the "... semantic and linguistic choices which a speaker-hearer makes in a range of situations". These two orders of meaning were initially encapsulated in the distinction Bernstein drew between 'public' and 'formal', and later reformulated in that between 'restrictive' and 'elaborated' codes. [14] While there are nuanced differences between the two, as Edwards (1989) observes, it is important to note that they are identical in seeing the essential difference between the two orders of meaning – which he labeled as 'particularistic' and 'universalistic' – in terms of *context-dependency,* that is, the extent to which speech is dependent upon a background of shared experience and shared definitions of that experience. As Bernstein

(1972: 163-4) was to put it, universalistic meanings are those "... in which principles and operations are made linguistically explicit" whereas particularistic meanings are those "... in which principles and operations are relatively linguistically implicit. If, he continued,

> ... orders of meaning are universalistic, then the meanings are less tied to a given context. The metalanguage of public forms of thought as these apply to objects and persons realize meanings of a universalistic type. Where meanings have this characteristic, then individuals have access to the grounds of their experience and can change these grounds. Where orders of meaning are particularistic, where principles are linguistically implicit, then such meanings are less context-independent and *more* context-bound.

The notion underpinning Bernstein's view of codes that the more shared knowledge assumed, the more particularistic the meaning is, of course, by no means new. As he was to stress (1972: 165), such a premise had indeed been central to the writings of Vygotsky and Luria which argued, from differing points of view, that the greater the intersubjectivity between speaker and hearer, i.e. the greater the range of shared interests and assumptions, the less need there was to "... render explicit through syntactic choices the logical structure of the communication". The originality of Bernstein was to link differences in the degree of metalinguistic processing involved in the formulation of meaning with social structure.

While social class is seen as setting the broader framework in which communication systems emerge, however, it is the family which plays the crucial mediating role in regulating the linguistic options that children take up. Indeed, as he was to suggest (1971: 171-2), even if it is accepted that there is a link between social structure, systems of communication and the shaping of experience, it is important to examine *how* these elements are linked together in practice. It is the family that, in his opinion, assumes this important 'focusing and filtering' role as a microcosm of the macroscopic structure of society determining the distribution of different orders of meaning. As Adlam (1979: 275) argues, the child's orientation to language is acquired initially within the family and is determined by the relations existing therein. "The communication patterns to which the child is exposed", she observes, "both reflect the social in the family and give a social base to his construction of the world". Insofar as the internal structure of the family is seen to mirror the wider social structure, Bernstein (1970: 79) posits the existence of two types of family, the 'positional' and 'personal', and seeks to explore the socializing context that each provides along four axes: the regulative, instructional, interpersonal and imaginative. In position-oriented families, he suggests, speech "... typically makes implicit or explicit reference to status requirements and the child acquires

a relatively communal and undifferentiated role" whereas, in person-oriented families, the individual motives and intentions of family members "... are typically made more explicit and the child acquires a more differentiated identity". [15] In other words, the 'decontextualisation of mediational means', which Wertsch (op. cit.) sees as underpinning the process of functional differentiation examined in Chapter 3, is less encouraged in children in position-oriented than in person-oriented families in pre-school years.

In arguing that there is a link between class and code, mediated through family type, it is important to be clear as to what Bernstein was, in fact, claiming. He was not claiming that there is an *automatic* relation between children in 'positional' (i.e. lower working class) families and a restricted code and children in 'personal' (i.e. middle class) families and an elaborated code. On the contrary, as Edwards (1976: 90) notes, the codes differ only in the extent to which, verbally, they help or hinder explicit statements of individualistic meaning and, linguistically, in the relative predictability of their vocabulary and syntax. A restricted code, in this sense, can be assumed to operate "*wherever* speech is refracted through a common cultural identity which reduces the need to be explicit" and, from a theoretical point of view, can be the preferred mode of expression of children from *any* class background. [16] If, in his model, the restricted code is particularly associated with children from lower working class backgrounds, it is only because the lifestyle of that sub-class is such that it is seen to limit its members to a certain (i.e. implicit) order of meaning. As Bernstein (1970: 28) was to put it, the accumulated features of that lifestyle – strong communal bonds, little variation in work relations and little exercise in decision-making, physical manipulation rather than symbolic organization and control etc – tend to generate a "particular form of communication" which shapes the intellectual and affective orientation of the children. This form of communication, while differing from child to child, will in general tend to emphasize "the communal rather than the individual, the concrete rather than the abstract ... the here and now rather than the exploration of motives and intentions, and positional rather than personalized forms of social control"

2. 1. 1. Differentiation in code elaboration and use

While Bernstein's link between class and functional differentiation in language use has a long pedigree, however, it is one of the aspects of his model which has been subjected to particular criticism even by those who otherwise detect some validity in his division of family types into

'positional' and 'personal' as a basis for explaining the transmission of knowledge and cultural values. Wells (1986a: 130-131), for example, argues in particular that the parameters used by Bernstein in his definition of class are both schematic and outdated and that empirical evidence, such as that emerging from the Bristol Language Project, may indicate a correlation between communication system and family but not social class background. As Wells (1986b: 143) was to conclude,

> On the basis of the evidence that we collected ... there is no justification for continuing to hold the stereotyped belief that there are strongly class-associated differences in the way in which parents talk with children.

The attempt to divorce the notion of 'codes' from social structure fails to appreciate, however, the complex and relatively sophisticated notion of class that underpins Bernstein's model and which gives it its internal coherence. As Robinson (1984: 184) himself admits, Bernstein's notion of 'class' is not based on superficially measurable – and therefore changeable – indices of income or prestige but, rather, on the Marxist notion of the relation between a given social grouping and the productive forces which defines its 'power relationships' vis-à-vis other social groupings. [17] Insofar as Bernstein employs a Marxist framework, however, he is not unaware that the 'working class', as a class, is not homogeneous but composed of numerous strata whose relation to the productive forces inevitably varies as a result of the differential impact on them of changes in those productive forces. [18] Indeed, it was because Bernstein was aware of the heterogeneity of class composition that he sought, as Robinson (1986: 184) concedes, to focus attention on "... contrasting *lower working class* (semi-skilled and unskilled) with the middle class", that is, a subgroup of the working class, because the former offered a degree of homogeneity which brought out the relation of social structure and codes most clearly. If Bernstein was concerned with contrasting the sub-group of one class with that of another, however, there was nothing in his model which prevented it from "generating any number of speech codes" corresponding to nuanced differences between what he called (1971: 62) these "two extreme social groups". [19] Indeed, if they are seen to differ simply in terms of the context-dependent way meaning is expressed, it is possible to envisage a continuum of such codes in which linguistic and semantic choices mirror intra-class, as well as inter-class, differences. Wells' (1986a: 130-131) view that Bernstein's two-code model replicates the 'reductionist' tendency implicit in writers such as Nelson or Kagan is, in this sense, inaccurate in that such a model does not preclude considerable

differentiation in code elaboration and use as, indeed, writers from Hymes (1972: 468) to Hasan (1973: 285) have pointed out. [20]

If criticism of Bernstein's notion of class is often ill conceived, so too is the attempt to correlate the context-dependency of speech with the family as opposed to wider social structures. Both Robinson (1984) and Wells (1986a), for example, argue that the ability of the child to make the transfer from spoken to written word is a function of the values and orientations that are encoded and transmitted in the everyday conversations he has with his parents. Basing himself on the findings of the Bristol Language Study (Ellis and Wells, 1980), Wells in particular (1986a: 136-7) was to suggest that there are three variables (amongst others) in parental style which play an important role in facilitating this process: ensuring that the child's meaning intentions have been understood, responding in a way which encourages the child to extend his contribution to the construction of shared meanings and, finally, explicitly guiding the child to reflect upon and monitor his performance. [21] The latter point is seen as particularly important in that it involves the child in developing what Wells (1981) somewhat earlier was to refer to as

> ... an awareness of the way in which language allows particular situations, problems and predicaments to be represented in symbolic categories and relations which can be communicated about and acted on independently of their particular context of origin ...

The focus in Wells upon certain aspects of parents' verbal style is not dissimilar, in many respects, to that of Bernstein upon the characteristics attributed to 'person-oriented' families. Indeed, as Light (1993: 79-80) had already pointed out, Bernstein's distinction between 'positional' and 'person' oriented families was to have an important influence upon writers as diverse as Cook-Gumperz (1973) and Wells (1986a) in their analysis of parental techniques for social control and discipline in speech acquisition. [22] While often acknowledging their debt to Bernstein, however, the latter models represent in many ways a step backward rather than forward in their attempt to divorce the family structure – which is seen to shape the child's semiotic experience – from wider social structures. For Bernstein, as Edwards (1989: 107) notes, the family acts as a " ... microcosm of the macroscopic orderings of society" in that the language the child learns in the home embodies those functions which are necessary for dealing with the wider social environment. "The 'genes of social class' are", in this way, Edwards continues, "carried through modes of communication that social class itself promotes..." By seeking to sever the link between parental style and the wider social structures

which both justify and shape it, Wells and other writers necessarily run the risk of portraying the emerging differences in metalinguistic awareness between children as relatively arbitrary or random rather than causally determined. To the extent that this is so, their models have less explanatory power. [23]

2. 2. Code and 'planning procedures'

For Bernstein, if social structure regulates the 'orders of meaning' a given code is capable of, the central task remains to trace the relation between these orders of meaning and the lexical and syntactic choices that 'realize' them. In other words, differences along the implicit-explicit continuum in the making of meaning should both determine and constrain the range of grammatical options from which a child makes a selection in any given context. Bernstein's initial attempt to draw up a taxonomy of the linguistic features that distinguish the codes – the 'public' and 'formal codes' – was, in many ways, a reformulation of the pioneering work of Schatzman and Strauss (Cf. Appendix 4). Its listing of the relevant lexical and semantic features may indeed be seen linguistically, as Edwards (1989: 92) points out, as something of a 'rag-bag' but it represented sociologically a serious attempt to detail the ways in which implicit (i.e. context-dependent) and explicit (i.e. context-independent) orders of meaning found expression. It was not long, however, before Bernstein began to distance himself from the somewhat naïve notion that it is possible to determine a one-to-one relationship between orders of meaning and linguistic features. In his later work, he argued that it was not possible to predict the *precise* lexical and syntactic features that a code would find expression in – e.g. the 'simple and repetitive' use of conjunctions etc. identified initially with the restricted code – but merely to suggest the general parameters that a background of 'shared knowledge' will assume and which will find context-specific linguistic form. He was to formalize this shift in view in the distinction he drew (1973: 29-30) between speech 'codes' and speech 'variants', the former being defined as the "regulating principle controlling speech realization" and the latter as the sets of linguistic choices which are specific to a given context. [24]

Empirical data to support Bernstein's view of codes as 'planning procedures', determining the semantic and pragmatic constraints within which linguistic choices can be made, are often meagre and difficult to evaluate. [25] Perhaps the most useful contribution was to be made by the Sociological Research Unit (SRU) in its study of the speech of London school children based upon the use of

Halliday's Scale-and-Category Grammar that provided a more standardized descriptive framework than had been applied before. The study sought to examine the extent to which implicit (as opposed to explicit) orders of meaning acted selectively on children's lexical and grammatical choices in the use of narrative, description and explanation. As Edwards (1989: 98) suggests, implicit meaning – i.e. meaning that is embedded in shared knowledge – will tend, *by definition*, to use fewer nouns than pronouns, fewer noun modifiers (*the* man, *ten* men) and qualifiers (the woman *with the dog*) and, finally, less intra- than extralinguistic referencing, particularly in pronominal use. In other words, implicit meanings will tend to result in discourse which is both less linguistically differentiated and internally cohesive than that of explicit meanings. As regards linguistic differentiation, evidence based on frequency counts certainly seemed to suggest a class-based difference. Hawkins' (1973: 85-87) study of five-year olds' use of narrative seemed to reveal that lower working class children tended to use fewer nouns than pronouns and few noun modifiers or qualifiers whereas Henderson (1970: 47-8), in analyzing a range of descriptive and explanatory tasks, found conversely that middle class children appeared to show "... more concern to make explicit classification of persons and objects, and more precise ascription of attributes". [26]

As regards internal cohesion, an even more useful attempt to show the link between orders of meaning and linguistic choices was to be found in the area of indexical referencing. As Hasan (1973) pointed out, cohesion in oral or written extended texts is largely a function of intralinguistic referencing in pronominal use, either backwards (anaphoric) or forwards (cataphoric) to a noun, noun phrase (or another pronoun). Inability in cases of extended texts to treat language as its own context – that is, attempts to use pronouns extra- rather than intralinguistically in relation to some assumed common knowledge or some assumed common context – can result in verbal ambiguity. Hawkins' (1973) study requiring children to 'narrate' a set of pictures seemed to indicate that lower working class children found considerable difficulty in mastering intralinguistic referencing and, in their tendency to use pronouns to refer to the extralinguistic rather than linguistic context, often identified objects or persons in an ambiguous way. It has been objected, of course, that Hawkins' claim regarding the inability of lower working class children to handle intralinguistic referencing in relation to pronominal use fails to take into account problems in experimental design. [27] While such an objection is not invalid – and partly reinforced by Hawkins' own retrospective analysis of the findings -- the claims need to be considered in relation to a range of complementary studies which

have tended to replicate his results. Tough (1970: 156-67), for example, found in her study that 'advantaged' children (as she put it) as early as nursery school tended to use a more differentiated vocabulary, more nouns and less extra-linguistic referencing than 'disadvantaged' children and similar results, albeit in a more diluted form, can be found in the research of Rackstraw and Robinson (1967), Robinson (1972) and Edwards (1976).[28] Most interesting of all, Skehan's (1985) follow-up study to the Bristol Language Project tended to show a correlation between first language development, foreign language aptitude (i.e. the ability to handle 'decontextualised material') and certain family class indices.

2. 2. 1. Code, dialect and 'style'

Partly because of the limited and somewhat controversial evidence provided by Bernstein and his supporters to justify the link between function and structure in the use of codes, the latter has been increasingly challenged at the conceptual level. Trudgill (1976: 47), for example, argues that the paucity of evidence showing the link between different orders of meaning and linguistic choices simply does not justify the theoretical edifice which it is called upon to support.[29] Coulthard (1969: 45) was to argue a similar point of view somewhat earlier when suggesting that the evidence available reveals merely a quantitative difference in the use of the same linguistic features rather than a qualitative difference in the selection of different linguistic features. As he puts it, the figures Bernstein provides

> . . . suggest that the linguistic performance of the working class boys, as a group, is depressed in relation to that of the middle class boys; they certainly do not show two distinct groups 'differently oriented in their structural selections'.

Others, such as Labov (1972) or Cook-Gumperz (1976), have gone even further in questioning the validity of the codes when suggesting that the limited differences in linguistic selection can be reduced to matters of 'verbal style'. As Labov (1972: 192) was to argue, the linguistic code of the middle-class, as defined by Bernstein, is not as "flexible, detailed and subtle" as he claims but merely an ". . . elaborated *style*, rather than a superior code or system". Such criticisms appear to carry some conviction insofar as the codes defined by Bernstein lack systematic linguistic realization but, in reality, it can be argued that they miss the point. Bernstein's model was not based upon – and did not start with – observations regarding systematic differences in linguistic choices. On the contrary, as a

model, it is primarily concerned with examining the ways in which social structure differentiates between different orders of meaning. The extent to which these orders of meaning are 'realized' through lexical and syntactic choices is primarily a feature of a specific context even if, as already indicated, general benchmarks such as linguistic differentiation and cohesion will be involved. Certainly, to suggest as does Labov that the concept of codes, which involve differences in the realization of meaning along an implicit-explicit axis, can be confused with verbal style is, as Edwards (1989: 92) reluctantly admits, a "travesty of the argument".

Perhaps a more subtle if no less inaccurate criticism of Bernstein's model was the accusation that the notion of code lacked any independent status and was, in reality, little more than a synonym for social dialect. Labov (op. cit.), for example, was among the first to suggest that the linguistic features Bernstein outlines as being typical of restricted code are identical with those of non-standard English and, insofar as he attributes lower order (i.e. implicit) meanings to speakers of the former, implies that speakers of the latter are likewise incapable of higher-order thought. [30] Bernstein, it should be noted, never disagreed with Labov's claim that speakers of non-standard social dialects were as capable of high-order thinking as those of the standard form. He merely argued that, while there may appear to be an overlap between dialect and code, the former is conceptually different from the latter in two respects. In the first place, as Hasan (1973: 258) points out, whereas a dialect is defined principally in terms of its formal features, a code is defined in terms of its semantic properties whose realization in linguistic terms is much more indirect.[31] It is, as Edwards (1989) suggests, more correct to see a code as a set of 'planning procedures' which guide linguistic choices than a set of formal features in themselves. Moreover, in the second place, whereas a dialect is only incidentally related to its context of use, a code is envisaged by Bernstein as being directly related to the latter in terms of the orders of meaning that are being expressed. In other words, as Adlam (1979: 296) put it:

> Coding orientation ... follows logically from the nature of the eliciting context itself while dialect, although it can be used in very subtle ways to define and redefine contexts, is only incidentally related to them. We might say that while coding orientation *realizes* the social context, dialect or variety is used to *mark* the social context.

Contrary to Labov's criticism, it is quite possible, in terms of these distinctions, to envisage someone speaking a non-standard social dialect who is able to switch code – from restricted to elaborated – according to the social situation and the role relationships between speaker and hearer. Whereas the dialect he speaks is defined in terms of its formal features, the order of meaning it is required to carry

out will change in relation to a range of extra-linguistic variables. As Edwards (1989: 91) was to argue, there is nothing in a dialect to inhibit explicit statements of individual feeling or opinion. "While dialects are identified by their formal features, and by *who* their speakers are, codes are identified by the kinds of meaning they transmit and by *what* the words are used to do".

2. 3. Cognitive 'deficit' and 'difference'

Closely tied to the debate on the relation between code and dialect in Bernstein's work is a parallel debate which has, if anything, been conducted in an even more acrimonious way on account of its educational implications. If, as Bernstein noted, different codes act as 'planning procedures' to regulate the order of meanings expressed, it would appear possible that those children using a restricted code – i.e. those locked into lower-order or 'implicit' meanings – will suffer a corresponding restriction in cognitive growth. In his early work, Bernstein (1971: 24) was indeed prepared to admit that there is a "... relationship between the mode of cognitive expression and certain social classes" and that "... the emotional and cognitive differentiation of the working class child is comparatively less developed" than that of the middle-class child. [32] Partly because of the criticism such assertions received, however, Bernstein gradually retreated from what might be called his 'strong' position by stressing that any cognitive differences between the codes related (in Chomsky's terms) to the area of performance rather than that of competence. As he was to suggest (1972: 158):

> Looking back with hindsight, I think I would have created less misunderstanding if I had written about sociolinguistic codes rather than linguistic codes. Through using only the latter concept it gave the impression that I was reifying syntax and at the cost of semantics.

Working class children, he was to continue, internalize the same tacit rule system as middle-class children and differ from the latter – as, indeed, Fries had pointed out – simply in the selected use of parts of that system as opposed to others to convey a given order of meaning. The fact that Bernstein's views have appeared to equivocate, however, on the relation between the various 'orders of meaning' embedded in codes and children's cognitive growth has given rise to two broad schools of thought – the 'cognitive deficit' and 'cognitive difference' – both of which claim his work as seminal. It may be useful to explore the latter in greater detail both to tease out what Bernstein was, in fact, advocating as well as what he has often inaccurately been claimed to advocate.

2.3.1. 'orders of meaning'

The 'cognitive deficit' viewpoint could, as indicated, be traced back to some of Bernstein's (1971: 151) earlier and somewhat more crude statements that the 'order of meanings' in a restricted code demonstrated " ... a less complex conceptual hierarchy" and a ". . lower order of causality" than those in an elaborated code. This view was to become a central plank of the 'compensatory education' movement in the USA which was represented by figures from Bereiter and Engelmann (1966) to Jensen (1968: 105) who argued that much of working class language consisted of a kind of "... incidental 'emotional' accompaniment to the here and now". [33] Although writers such as Jensen represented an extreme version of this school of thought, there would appear to be a clear thread running through it that the context-dependency of working class children's speech – that is, their inability to consciously focus on form in the reception/production of messages – has cognitive implications. Lack of ability to deal with utterances as "sequences of meaningful parts" – the basis for making meanings explicit – is seen not as a difference in performance but as one in competence insofar as the child appears not to have internalized the underlying rule system. "The speech of the severely deprived children", wrote Bereiter and Engelmann (1966: 34),

> ... seems to consist not of distinct words, as does the speech of middle class children of the same age, but rather of whole phrases or sentences that function like giant words. That is to say, these 'giant word" units cannot be taken apart by the child and re-combined.

As Ehri (1979: 78) was to note in relation to Bereiter and Engelmann's work, the latter seem to accept that what distinguishes 'disadvantaged' from 'advantaged' children is their "inadequately developed knowledge about words as units of language" and that "this difference stems from differences in basic linguistic competence ..." [34] The first major consequence of this inability to attend to and segment speech into meaningful utterances is, according to Bereiter and Engelmann, manifested in a metacognitive activity such as learning to read. Both they and others writing within this tradition attribute underachievement among lower working class children in reading specifically to a lack of metalinguistic awareness which is seen as a deficit in basic linguistic competence. [35]

There can be little doubt that the link established between lack of metalinguistic awareness and reading difficulties in the 'cognitive deficit' school has similarities with Bernstein's views. The latter's central hypothesis, after all, was that it was the context-embedded or 'implicit' nature of meaning that undermined the need of lower working class children to attend to speech itself and,

through that, to the cognitive content of speech. The crucial difference between Bernstein, however, and those who claim his work as support for the 'cognitive deficit' hypothesis, is that he never suggested that differences in the nature of meaning involved differences in underlying competence. As Edwards (1976: 36) suggests, while Bernstein's work can, at a superficial level, be interpreted to bolster the 'deficit' hypothesis, he was consistently clear that such an interpretation was misguided. "At no time", he was to argue (1973: 70) in retrospect, "did I ever consider that I was concerned with differences between social groups at the level of competence, that is, differences ... which had their origin in the basic tacit understanding of the linguistic rule system". It may well be, he was to continue, that children's social background regulated the orders of meaning their speech conveyed but this was not due to differences in the internalization of the basic rule system but to the uses to which such a system was put. Such a difference with proponents of the 'deficit hypothesis' was to assume a practical dimension in his attitude towards the notion of 'compensatory' schooling. Writers such as Bereiter and Engelmann (1966), for example, were strong advocates of remedial programmes to help children overcome the supposed 'verbal deprivation' – particularly lack of segmentation skills -- necessary to master the transfer to reading/writing. Bernstein (1971: 192), on the other hand, argued strongly alongside Labov that the notion of verbal deprivation is "part of the myth of modern psychology" and that such schemes incorrectly laid the emphasis for underachievement upon the family that was unfairly viewed as a "little deficit system". Working class children may be more geared towards particularistic meanings in most contexts than their middle class peers, he was to argue, but the role of the school is not to challenge the use of such meanings which are appropriate for certain contexts but simply to help them develop universalistic meanings that are appropriate in other contexts. As he was to point out (Ibid. 197):

> It simply means there is a restriction on the *contexts* and on the *conditions* which will orient the child to universalistic orders of meanings ... It does not mean that the children cannot produce at any time elaborated speech in particular contexts... Because a code is restricted, it does not mean that a speaker will not in *some* contexts and under *specific* conditions not use a range of modifiers or subordinations etc., but it does mean that where such choices are made they will be *highly context-specific*

In other words, in a way similar to Trudgill's notion of 'bi-dialecticism', Bernstein was arguing essentially for a kind of 'code switching' in which respect for orders of meaning appropriate in context-embedded situations is balanced by encouragement for the development of other (more explicit) orders of meaning appropriate in more context-disembedded situations. [36]

It was largely in reaction to the 'cognitive deficit' hypothesis that what Edwards (1989:36-40) terms the 'cognitive difference' view emerged. Writers such as Labov (1972) or Cook-Gumperz (1986) did not reject the notion that there were differences in the functional use of speech between social groups but argued that such differences were simply "... manifestations of alternative ways of looking at, and reacting to, the world". The distinction between context-dependent and context-independent uses of language becomes, within this framework, merely a distinction in the style used by varying socio-cultural groups to regulate their communication in everyday interaction and has little, or no, relation to referential meaning. The linguistic 'relativity' hypothesis can be seen most clearly, perhaps, in the work of writers such as Simons and Murphy (1986) or Michaels (1986) in relation to Black English. The fact that some children speak a language whose context-dependent style does not equip them for making the transition to the context-independent style of expository prose, such writers would insist, does not imply a limitation in the child's earlier semiotic experience but simply a clash between two different – and equally valid -- ways of 'making meaning'. As Gumperz (1986: 50) puts it, the difference between Black English and Standard English "... can best be characterized as context-bound differences in usage and as markers of stylistic options and choices" and if such choices "carry pejorative connotations as deviant forms" within formal schooling, such an attitude is entirely unfounded. Unlike the 'cultural deficit' approach, the task is not to help the child to overcome the limitations in prior semiotic experience but, on the contrary, to see literacy itself as a social construct which needs to be adapted more to the experience and values of given social groups. [37] As Gumperz (1986: 50) was to continue, the clash between the culture of some social groups and that of formal schooling -- particularly in the area of metalinguistic awareness -- involves "... differences in notions of what learning is about and differences in the criteria used to judge what has been learned and evaluate achievement".

Clearly, there is much that is derived from Bernstein's model in the 'cognitive difference' hypothesis, particularly in their common objection to 'compensatory' schooling. While they overlap in many respects, however, Bernstein's views are no more synonymous with the 'cognitive difference' hypothesis than they are with the 'cognitive deficit' one. It is certainly true that Bernstein would agree that differences in the orders of meaning based on socialization patterns do not exist at the level of competence, i.e. do not determine the extent to which the child masters the tacit rule system. It is one thing to assert that children have a common 'potential', however, and quite another

to suggest that there are no conceptual differences in the way social structure acts upon the child to use that rule system to create different orders of meaning along the implicit-explicit axis. Indeed, the very essence of Bernstein's argument was that children limited to a restricted code are less able to verbalize their thinking and – to the extent that they cannot use signs to refer to, define and comment upon other signs – become locked within a "less complex conceptual hierarchy" than other children. A restricted code can, in this sense, be seen as a limitation on the child's natural 'potential' insofar as the 'orders of meaning' it imposes can hinder his access to abstract concepts where the ability to use language as its own context is crucial. To suggest that the different orders of meaning embedded in the codes, which have such important long-term consequences conceptually, are simply culturally-induced and *equally valid* verbal 'styles' is as much a travesty of Bernstein's argument as was that of writers such as Bereiter and Engelmann. The weakness of the 'cognitive difference' hypothesis is, of course, the a-historical approach it appears to have borrowed from the neighbouring fields of anthropology and linguistics. Differences in cultural or linguistic behaviour are seen as equally valid if discrete phenomena rather than as standing at a higher or lower level of a developmental process. [38] Literacy, within this framework, is seen both at the ontogenetic and phylogenetic levels, not as a cultural phenomenon that implies a *higher* level of cognitive and linguistic processing than does speech, but simply as a *different* level of such processing.

2. 3. 2. Metalinguistic awareness and code

It has, perhaps, been the ambiguities in many of Bernstein's formulations, as he has sought to refine his theory under critical pressure, which has encouraged proponents of the cognitive 'deficit' and cognitive 'difference' schools of thought to claim it as their own. The debate that has arisen around the nature of codes has, in this sense, often been an unnecessarily polarized one which has tended to downplay, or ignore, Bernstein's rather more subtle and original argument which is firmly rooted within the Vygotsky-Luria tradition.[39] For Bernstein, the different orders of meaning that arise in children's use of speech relative to their social background can neither be described as differences in cognitive potential nor dismissed simply as cognitively neutral 'verbal styles'. On the contrary, his view is much more developmental in nature than that of his critics and may most usefully be teased out in relation to more recent models on the development of metalinguistic processing, such as the three-stage model of a Berman (1986), Karmiloff-Smith (1986) or a Gombert

(1992). Bernstein's insistence that all children master the tacit rule system, that is, have the same underlying competence, corresponds with the first stage in that model where linguistic items are internalized in terms of a one-to-one relationship with their contexts of use. The extent to which the child's social background determines which aspects of that rule system are prioritized in the exchange of meaning – i.e. the extent to which meaning is made increasingly explicit rather than implicit in communicative interaction – may be said to occupy the second stage of the model. Those children who, in Bernstein's definition, operate within a restricted code of largely implicit meanings will have less opportunity to organize those linguistic items into a system of relevant options or, as Gombert otherwise put it, will be less likely to develop 'epilinguistic' awareness. Finally, if the child has not built up such a system of relevant options at the implicit level, he will have greater difficulty, in the third stage, in transforming epi- into metalinguistic awareness in the process of learning to read and this will have long-term implications, as Skehan (1985) notes, for his ability to access a range of secondary (or parasitic) linguistic functions. [40]

While the focus of Bernstein's work has been seen to shift over the years, the central theme in the analysis and exploration of codes has been the implications of context-dependency in terms of the child's linguistic and cognitive growth. His work has, in this sense, anticipated the considerable interest that has developed in more recent years around the development of metacognitive and metalinguistic processing as in the case of writers such as Hickmann and Karmiloff-Smith, and, on more than one occasion, he has stressed (1971: 134) that the essential difference between the codes lies precisely in this area:

> A child *limited* to a restricted code will tend to develop essentially through the regulation inherent in the code. For such a child, speech does not become the object of special perceptual activity, neither does a theoretical attitude develop towards the structural possibilities of sentence organization ...

What has been important about his contribution to this debate, however, has been his willingness to explore the notion of metalinguistic processing in relation to social background, that is, to seek to deal with the most important feature of such processing, which is its variable distribution between socio-cultural groups and between sub-groups in the same grouping. It may well be that the way he has attempted to link metalinguistic processing with class has been highly contentious and that some of the accusations of schematicism -- in terms of his notion of two counterposed classes reflected in two counterposed codes – have some validity. It should be pointed out in Bernstein's defense,

however, that both his definition of class and codes were more subtle than is often acknowledged and that he did not rule out the possibility of a range of such codes mirroring intra- as well as inter-class differences. It might also be pointed out that his work at least seeks to anchor differences in metalinguistic processing in wider social structures – and the power relationships derived from these structures – rather than viewing them, as do his detractors, as the random (and non-explanatory) variables of parental 'verbal styles'.

3. 0. Educational implications

One of the causes of the controversy surrounding Bernstein's notions of codes was undoubtedly its implications in the area of educational achievement. The notion of code is, after all, premised on the view that there are differences in orientation of social groups towards the various functions of language in given contexts and that this gives rise to different 'orders of meaning'. If this is so, however, then these differences will manifest themselves in contexts which are crucial for the socialization process -- such as formal schooling -- and will determine the response of the child to such contexts which are inevitably premised upon the values and communication patterns of given sub-cultures. Insofar as the context of formal schooling involves the transmission of knowledge and skills, the dominant function in the discourse the child encounters will be a referential one in which there is much less emphasis upon 'shared knowledge', i.e. upon context-dependency in meaning making. Children oriented towards an elaborated code will find that the emphasis upon explicit meaning in the transmission of knowledge is "one of symbolic and social development", as Bernstein (1971: 144) was to put it, whereas children oriented towards a restricted code will need to develop an elaborated code if they are to succeed, that is, their experience of formal schooling will be "one of symbolic and social *change*". Underachievement in the educational system is, in this sense, one which is locked into the class structure of society since the social relations of working class children dictate an order of meaning opposed in varying degrees to that which predominates in formal schooling. Moreover, as Bernstein (1971: 35) was to continue, the attempt to substitute a different order of meaning and a different order of communication, that is, to orient more towards elaborated meanings, can in turn "... create[s] critical problems for the working class child as it is an attempt to change his basic system of perception, fundamentally the very means by which he has been socialized".

The problems facing children oriented towards more restricted meanings in formal schooling have featured as a central concern in the work of linguists such as Halliday (1975: 18) who was highly influenced by Bernstein's hypothesis. [41] For Halliday, difficulties encountered by children in terms of learning to read, or master the transfer from non-standard to standard dialect, are indicative of a " . . deeper and more general problem, a fundamental mismatch between the child's linguistic capabilities and the demands that are made on them" This mismatch, which Bernstein posed in terms of a clash of 'symbolic systems', pivot in Halliday around the fact that the functional demands required for interaction in his social context simply do not match the functional demands made on language in an institutionalized setting. Halliday (ibid. 19) was himself to target those functions which he saw as under-developed in children with an orientation towards a restricted code – and which have an increasingly important role within the context of formal schooling – as the 'personal' and the 'heuristic'. These are, he suggests, the "... functions which are most crucial to his success in school" largely because they involve the ability of the child to consciously attend to language as a learning tool. The personal function, he suggests (ibid. 14-16), refers to the child's awareness of language as a "range of behavioural options" and the heuristic function refers to his awareness of "how to use language to learn" which, in turn, entails control over a relevant metalanguage (such as 'question', 'answer' etc.). As Halliday argues, in learning to cope with the new demands placed upon him, the child needs to be aware that he is mastering new 'behavioural options' and, at the same time, to be able to analyze language and develop a language for talking about language. Whereas some children have already mastered such (metalinguistic) processing skills, he argues, when they arive in school, others have not and it is this difference which explains the success or failure of children in accessing the 'linguistic repertoire' of formal schooling. "Whether one calls it a failure of language", he (1973: 19) was to suggest, "or a failure in the use of language is immaterial" What is important is that the child's prior semiotic experience be recognised as the crucial variable in shaping educational development.

3.1. 'dual barrier'

Perhaps the earliest and most obvious area where the clash between the child's prior semiotic experience and the linguistic demands of schooling emerges is, as indicated, in the transfer from oral to written discourse. Stubbs (1986: 228-9), in an interesting study on classroom modes of discourse,

suggests that the crucial differences in Bernstein's distinction between the codes – those of context-dependency, planning, explicitness and unpredictability – are exactly the same differences that distinguish spoken from written forms. To say that a child with restricted code has difficulty adapting to a situation of formal schooling predicated upon an elaborated code, therefore, is simply another way of saying that he will have difficulties in transferring from spoken to written discourse. [42] Although Bernstein was never to address the problems of literacy as such, considerable evidence emerged at the time that under-achievement in learning to read was predicated precisely upon the inability of children from lower social groups to cope with the decontextualisation of written discourse in terms of their own 'meaning making'. What is important about the written word, as Stubbs pertinently notes, is precisely the fact that in the absence of any 'shared knowledge', there is a much greater unpredictability about the information that is being transmitted and which requires a much greater attention to what the text 'says' rather than what the writer might be inferred to 'mean'. Children oriented towards a restricted code face a dual barrier in this sense in learning to read. Not only do they have to move from the predictable utterances of speech -- from what Bernstein (1971) portrays as condensed and stereotyped phrases often involving non-specific cliches -- to the unpredictable sentences of written texts but they also have to be able to segment those utterances into meaningful linguistic units. It is precisely in these two related areas that a range of writers from Savin (1972), Rozin and Gleitman (1973) to Wallach and Wallach (1976) have identified the difficulties experienced by children from lower social groups.

Entwisle (1979: 154), in particular, is quite explicit in seeing the relation between children's social background and reading achievement as a function of differences in the context-dependency of their speech. While acknowledging that all spoken discourse tends to be more context-dependent than written discourse, she argues that "... the middle class child probably hears speech that is less context-dependent than the speech heard by other children", that is, one which takes into account "alternative modes of action and alternative contexts". It is, Entwisle continues, through using and responding to speech of greater abstraction and complexity that the child begins to develop awareness of it and the ability to segment it into those meaningful units required for the transfer to reading. This is most obvious, she suggests, in the area of lexical awareness where middle-class children have little difficulty in identifying word boundaries but where lower working class children seem to be "... confused about common word segmentation" and, as Bernstein had pointed out, often

tend to work at the linguistic level of the phrase which is used in an undifferentiated and stereotypical way. [43] Entwisle is not suggesting that there is a link between social background and an inadequate knowledge of the tacit rule system but, simply, that some working class children are less able to consciously use that rule system in the pursuit of a (new) linguistic task. A similar point is made by Wallach and Wallach (1976: 66) who argue that, if lower working class children seem to lack the phonological segmentation skills of more middle class children, this is not due to a "deficiency in auditory discrimination" but, rather, to a lack of the "readily accessible, manipulative concepts of the kinds of sounds at issue, the sounds to which letters are related, or 'phonemes'". It would, of course, be incorrect to over-generalize from such research particularly since, as Bernstein himself acknowledged, there are more nuanced differences corresponding to intra- as well as inter-class variables. While this may be true, however, it would seem to argue in favour of a correlation between social experience and metalinguistic awareness which is crucial to educational success.

Learning to read can be interpreted, in Bernstein's terminology, as the first stage of 'code-switching' for many children, that is, the first stage in the transition from restricted to elaborated code use. The child has to learn to use language differently from that to which he is accustomed through socialization in everyday communicative interaction, to pay attention to meanings in the text rather than in the context, to be explicit rather than implicit in its production and comprehension. Learning to read is, however, only the first step in this process and if the child is to extend his linguistic repertoire still further, the ability to move towards more elaborated meanings – that is, to consciously process language production/reception – will become ever more important. As Halliday (1973: 20) was to put it, "The child's awareness of language cannot be separated from his awareness of language function" and it is this inter-relation between awareness and skill as he expands his linguistic repertoire that permits the elaboration of a "perspective that is educationally relevant".

4.0. Summary

A key feature of metalinguistic awareness is its variable distribution both between different socio-cultural groupings and between individuals within the same grouping. Attempts to explain such differentiation has tended to focus around the variation in 'verbal styles' in child-parent interaction and/ or the relation of these to wider community discourse modes. Perhaps the most complex – and certainly controversial – attempt to explain the uneven distribution in metalinguistic processing can

be found in Bernstein's class-related notion of sociolinguistic codes. Bernstein's work essentially seeks to explore metalinguistic awareness – viewed as a given 'order of meaning' – as a function of the socialization of children in relation to class structure. Criticism has been directed at Bernstein in terms of the schematic definition of class in his work, the confusion between code and dialect/register and, perhaps most importantly, the implications of 'cognitive deficit' for educational development that appear to be embedded in his analysis of 'restricted' code. While some of these criticisms are valid -- particularly that in relation to his schematic and unnecessarily polarized description of codes -- they fail to understand the importance and continuing validity of his attempt to link the notion of metalinguistic awareness with wider social structures and to explain educational achievement and underachievement as a function of the two.

Notes

1. As Mattingly (1972: 140) was to continue, "There appears to be considerable individual variation in linguistic awareness. Some speaker-hearers are not only very conscious of linguistic patterns but exploit this consciousness with obvious pleasure in verbal play (e.g. punning) or verbal work (e.g. linguistic analysis) ..." while others are not very aware or aware of words only.
2. It is, as Mattingly (1972: 144) asserts, precisely the metacognitive aspect of reading which creates a problem for some children, i.e. the fact that it "... depends ultimately on linguistic awareness and the degree of this awareness varies considerably from person to person".
3. Savin (1972), in particular, was to argue that it is impossible to attribute reading disability to such factors as non-standard dialect or lack of motivation insofar as it is well documented that many inner city 'disadvantaged' children who speak non-standard dialects and whose culture does not valorize reading do, in effect, become proficient readers.
4. Donaldson (1978: 95) was to make the same point somewhat later when arguing that "... those very features of the written word which encourage awareness of language may also encourage awareness of one's own thinking and be relevant to the development of intellectual self-control, with incalculable consequences for the development of the kinds of thinking which are characteristic of logic, mathematics and the sciences".
5. Halliday (1975: 18) was, in fact, referring to Bernstein's view of codes and the clash between cultures represented by children with restricted codes who enter formal schooling which is predicated upon elaborated code use. "Bernstein has shown", he points out, "that educational failure is often, in a very general and rather deep sense, language failure. The child who does not succeed in the school system may be one who is not using language in the ways required by the school".
6. Like Donaldson, Entwisle (1979: 150) notes, for example, that "...some families directly or indirectly encourage a high degree of metalinguistic awareness in their children. Parents who make puns or poems easily, for example, consciously exploit the sounds and segments of language. Reciting nursery rhymes, reading aloud, listening to speech recordings, singing nursery songs and lullabies, or recording speech on tape or with movie cameras are all activities that foster linguistic awareness in children".
7. Wells (1986: 112), in his presentation of the Bristol Language Project findings, argues in favour of a more complex model in which the interpersonal relations between parents and child constitute only one out of four factors influencing language development. The other three factors include 'inherited attributes', 'social background' and 'situation' (i.e. the setting, activity and status of participants).
8. It is important to note that, for Michaels in particular, the fact that the verbal style of a given cultural grouping conflicts with that of the school does not in any way suggest the inferiority of the former in relation to the latter, since both are seen as equally valid social constructs.
9. A useful example of this is the debate between cognitive 'deficit' and 'difference' that his work provoked. As Edwards (1976: 36) points out, "Bernstein himself now rejects the deficit viewpoint of lower-class language and, indeed, there are hints in his earliest work of this. However, one can also find statements that seem to show support for a language deficit point of view ...." and the result of such ambiguity is that he is often claimed simultaneously for quite opposed schools of thought.
10. The view that speech reflects the socially conditioned behavioural patterns of speaker-hearers and, in turn, acts to reinforce those patterns is not of course new. It was firmly embedded in the work of Volosinov (1973: 20) who, in his call for a new approach to linguistic analysis, argued that the latter should be based upon defining the range of verbal contacts between people ('genres') and, in particular, the " ... repertoire of speech forms" specific to each social group at each given period. "A typology of these forms of utterance", he argued, "is one of the most urgent tasks of Marxism".
11. "... language is", he was to write (1971: 173-174), "a set of rules to which all speech codes must comply, but which speech codes are realized is a function of the culture acting through social relationships in specific contexts. Different speech forms or codes symbolize the form of the social relationship, regulate the nature of the speech encounters and create for the speakers different orders of relevance and relation".
12. "Over and over again", writes Edwards (1976: 87), " ... it appeared that the differences between the language of the educated and those with little education did not lie primarily in the fact that the former used one set of forms and the latter an entirely different set ... the actual deviation of the language of the uneducated from Standard English seemed much less than is usually assumed. The most striking difference lay in the fact that Vulgar English seems essentially poverty-stricken".
13. In his analysis of the impact of Schatzmann and Strauss upon Bernstein, Edwards (1976: 88) was to suggest that it was precisely the formers' recognition of the inability of lower working class narratives to "... bridge the gulf in experience between themselves and their listener by providing explicit information" which was to reappear in the latter's definition of the restrictive code.
14. It is important to note that, from the beginning, the codes were not abstractions from empirical data but, rather, constructs or "polar dimensions" towards which performance could usefully be seen as orienting. In this sense, it might have proved more useful if Bernstein had, as Gumperz and Hymes (1972: 468) point out, used the terms 'elaborated and restricted cod*ing*' as indicative of the various intermediate stages along the continuum between them.
15. Bernstein was not unaware of the tendency, in the description of family types, to caricature differences between the classes and, in his later essays, such as a *Socio-Linguistic Approach to Socialization* (1971: 162), was

to denote the social changes post-war which were eroding the traditional communal-based working class family unit and creating the conditions for "… more individualized and less communalized relationships".

16. Possible alternative groupings whose social relationships were such as to incline them towards the use of a restricted code were, as he notes (1971: 77), possibly ironically, " … peer groups of children and adolescents, criminal sub cultures, combat units in the armed forces, senior common rooms…" etc.

17. Bernstein (1971: 172) is quite explicit in using the Marxist definition of class as determining the nature and use of symbolic codes because of the power relations built into it. "Although Marx is less concerned with the … process of transmission of symbolic systems", he was to write, "he does give us a key to their institutionalization and change. The key is given in terms of the social significance of society's productive system and the power relationships to which the productive system gives rise. Further, access to, control over, orientation of and *change* in its critical symbolic systems, according to the theory, is governed by power relationships as these are embodied in class structure".

18. That he was only too aware of the heterogeneity of class structure can be seen in his integration of the division of labor into the explanatory model of code creation in *Social Class, Language and Socialization* (1971: 187). It is, he argues, the division of labour which determines the codes and the class structure which affects their distribution through the family unit where parental occupation plays a crucial role.

19. As he (1972: 161) was to put it, seeking to compare the relation between the tacit rule system and codes as that between Saussure's *langue* and *parole*, "… I shall take the view that the code which the linguist invents to explain the formal properties of the grammar is capable of generating any number of speech codes…".

20. "In theory, at least, the possibility is allowed that social conditions may arise which would allow different re-alignments of the factors. It is therefore possible that we may have an array of the varieties of restricted and elaborated codes rather than just two highly idealized ones".

21. Analyzing the Bristol Language Project findings, Wells (1986b: 144) was to draw a clear correlation between reading age scores, educational achievement and family – rather than class – background. "This test, better than any other, predicted overall achievement at the age of 7; it was even a good indicator of achievement at age 10. Significantly, it was also the test that was most closely associated with family background. In fact, at all ages, all the measures concerned with literacy – tests and teachers' assessments – were significantly associated with family background".

22. As Light (1993: 79-80) was to argue somewhat later, Bernstein's definition of different styles of family relationships and their impact upon the child's language also played an important role in the research of Klauss and Glucksberg (1969) which suggest that "the effectiveness of communication between mother and child may represent an important element in what the authors term the 'cognitive socialization of the child'".

23. Wells' (1986a: 112) alternative model is a case in point. It may be true that the factors he indicates – inherited attributes, social background, style of linguistic interaction and situation – interact to determine variation in children's linguistic development. Insofar as no indication is given of the determining relationships between these variables, however, it might be argued that the child's linguistic growth is the result of an eclectic and essentially random interaction between them.

24. In a later essay (1973: 29-30), using Chomsky's distinction between surface and deep structures as an analogy, he was to define language variants as "surface structure" and codes as "transmitting the deep-meaning structure of the culture or the subculture".

25. As Edwards (1989: 96-7) suggests, the scope of Bernstein's model was considerable and was based initially upon a theoretical construct rather than on a generalization from empirical data. Problems with obtaining such data arose in relation to the range of hypotheses to be tested – e.g. from the relation between class and language use to that between semantic content and linguistic form – and the unsystematic nature of much of the early research.

26. Henderson's study, which was focused upon the role of speech in different parental regulation tasks, was particularly interesting in featuring a range of class-based differences which included, among others, greater explicitness in conveying messages, greater abstraction in definitions and greater willingness to respond to, rather than avoid, children's questions. The list is reminiscent in many ways of the taxonomy of favourable parental styles noted by Wells (1986).

27. As Edwards (1989: 100) points out, the conclusions drawn from this well-known study have been put into considerable doubt by the fact that both child and experimenter were able to see the pictures involved. Since there was no need to be explicit insofar as the background information was available to both, the working class child's use of, for example, pronouns rather than nouns and extra- rather than intralinguistic referencing, may have been more (not less) appropriate than that of the middle class child.

28. Robinson (1984: 214), in his later article, usefully reviews the range of areas in which the verbal styles of lower working class and middle class parents differ, particularly in the area of regulative mechanisms and the implications for children's affective and cognitive development. Like Cook's (1971) earlier study in the same area, he found that "MC children made more explicit reference to attributes of offenders and the effects on controllers; used intensifiers (e.g. very) to make more specific reference to states; and they offered fewer examples of implicit references marked by exophoric pronouns".

29. As he was to put it, in a scathing if somewhat blinkered reference to Bernstein's work, the latter simply seeks to show "… that in situations more artificial and alien to them than to middle-class children, working class children use a higher degree of pronouns. Is this what it has all been about? ".

30. Labov (1972: 183-4) centres his attack upon Bereiter and Engelmann (1966) in suggesting that their accusation that Black ghetto children speak the "language of culturally deprived children" is simply a confusion

between code and non-standard dialect. The fact that Labov then proceeds to devote an article to asserting that such expressions as *Me got juice* are as rule-governed as that of standard English may be correct – as Wells admits – but entirely misses the point.

31. Hasan's (1973: 258) distinction between the two is worth quoting as a suitable rebuttal to Labov's criticism of the notion of code. Firstly, he claims," ... while the extra-linguistic factors correlating with social dialects are incidental, those correlating with code are said to be causal....". And, secondly, "... while social dialect is defined by reference to its distinctive formal properties, the code is defined by reference to its semantic properties ... that is to say, it can be argued that the semantic properties of the codes can be predicted from the elements of the social structure which, in fact, give rise to them".

32. Other examples abound, as when he argues (1971: 33) that speech modes have an impact on conceptual thinking in that some produce "... a descriptive cognitive process, e.g. the recognition of events A, B, C, D as separate unconnected facts, or at best, crude causal connections".

33. The notion of 'verbal deprivation' was used in Jensen's (1968) case, of course, as a fig-leaf to cover openly racist views based upon the so-called genetic inferiority of Black ghetto children in particular and the working class in general.

34. Bereiter and Engelmann's claim was based, as Ehri (1979) notes, on limited empirical evidence. Moreover, students of Bereiter, such as Thomson (1968), who did subsequently carry out limited segmentation tests to verify their hypotheses, failed to observe any qualitative differences between children's lexical awareness based on social class lines.

35. An example of the latter school can be found in Ryan, McNamara and Kenny (1977) who argue strongly that metalinguistic awareness – that is the ability to segment language into meaningful units – is a prerequisite for successfully accessing written texts and that lack of such segmentation ability is related to an inadequate internalization of the rule system.

36. The comparison with the notion of bi-dialecticism may indicate a weakness in Bernstein's argument in this area. A dialect is defined merely in terms of linguistic features and bi-dialectism merely involves altering the linguistic features in the exchange of meaning. A code, however, is defined in terms of the orders of meaning it is able to carry out and it is by no means so simple to switch from one code to another when cognitive differences -- i.e. levels of meaning -- are involved.

37. Czerniewska (1992: 10) is a useful example of the latter approach when she argues that "... the concept we have of literacy as it is presented in schools is a culturally constructed one" and may penalize certain sub-groups whose approach to speech would be more compatible to the role of literacy in another culture.

38. A useful critique of the cultural relativity hypothesis can be found in Hawkins' (1984) response to the assertion, fashionable in synchronic linguistics, that no language is more 'primitive' than another. As Hawkins argues, while all languages may have the same potential in terms of their generative capacity, the fact that historically some languages have evolved more than others in realizing that capacity can hardly be denied and hardly makes them 'equal' in practice.

39. As Bernstein (1971: 122-123) was to put it, in seeking to compare his view of language with that of Whorf, the latter's "... psychology was influenced by the writings of the *gestalt* school of psychology whereas the thesis to be put forward here rests on the work of Vygotsky and Luria".

40. Skehan's (1985) follow-up study to the Bristol Language Project sought to demonstrate the long-term effects of mother tongue development on foreign language learning in an acquisition-poor environment as predicted through aptitude tests

41. As Halliday (1975: xv) was to put it, the fact that the education process is premised upon a certain set of cultural values means that " ... it creates for some children a continuity of culture between home and school which it largely denies to others".

42. As Stubbs suggests, "Relative to spoken language, written language is highly planned, explicit, context-free and unpredictable. Spoken language is not planned in advance, less explicit, context-bound and more predictable. If the differences between written and spoken languages are formulated in this way, they come out sounding very similar to Bernstein's distinction between elaborated and restricted codes".

43. Entwisle (1979: 150) recounts a word association test where she discovered that "...when asked to free associate to the word *once*, some lower class fifth graders wrote the word *apone*. At first, Entwisle classified *apone* as a nonsense word or error. Later she realized that *apone* probably meant *upon a*, as in the sequence *once upon a time*. The response clearly revealed that some lower-class fifth graders were confused about common word segmentation...".

Chapter 5

Metalinguistic awareness and language planning

Chapter 5

1. 0. Metalinguistic awareness and education: shifting rationales

As Brumfit *et al* (1994) suggest, there has been a growing re-interest in recent years in the role played by metalinguistic awareness in children's educational development which has found its sharpest focus in the discussion surrounding National Curriculum reforms. Such a re-interest does not imply a consensus regarding the definition of the phenomenon – reformulated in the Kingman Committee report (1988) as 'knowledge about language' [KAL] – or the rationale for its inclusion in the curriculum which, as Brumfit *et al* (1994: 5) go on to say, has been "... marked by considerable controversy and disagreement . .". The most important source of this disagreement has undoubtedly been the relationship between analytical knowledge and language performance or, rather, the conditions under which such a relationship might emerge. While the Kingman Committee report argued, albeit hesitantly, in favour of the explicit study of language as a means of improving linguistic performance in certain identifiable areas, such an argument has been widely contested elsewhere in the literature.[1] Carter (1990: 16), for example, in his influential introduction to the *LINC Reader*, claims that the relationship between knowledge about, and competence in, language remains a "... major unanswered and unexplained question" and such a view is widespread among writers in the 'personal growth' tradition of English Mother Tongue [EMT] teaching who were initially antagonistic to the Kingman Committee report, such as Rosen (1988), Barnes (1988) or Richmond (1990). [2] It has largely been in the light of skepticism regarding the beneficial impact of analytic knowledge upon skill-based performance that a number of alternative rationales have emerged. These range, as Brumfit *et al* (1992) point out in an earlier review, from enhancing the motivation for foreign language study to 'sensitizing' pupils to the social meaning of linguistic variation or 'empowering' them in terms of understanding the potential [mis] uses of language as a tool of social control. There is no doubt that the advocates of Critical Language Awareness [CLA], such as Ivanic (1990) or Fairclough (1992), have played an important role in shifting the emphasis away from the cognitive to the affective or social rationales for the inclusion of explicit language study in the curriculum.

While regretting the controversy surrounding the relation between reflection on language and competence in its use, Carter (1990: 16) argues that the issue can only be resolved, one way or another, on the basis of further empirical evidence..[5] The notion that what is required to resolve the

issue is further evidence, however, is somewhat disingenuous in that there already exists a considerable body of data bearing on the issue, particularly in the crucial areas of the transfer from spoken to written and from first to foreign/second language. What appears to be required is not so much additional data as a theoretical framework which is capable of making sense of the data that already exists and drawing out its implications for language planning and pedagogy. [6] The advantage of the socio-cultural approach to language acquisition/learning lies precisely in this area, i.e. in its claim to demonstrate the enabling role that metalinguistic awareness plays in the child's expanding linguistic repertoire. It is, as has already been argued, mainly through being able to disembed and reflect upon what he implicitly knows that the child is able both to 'conceptualize' new linguistic functions and develop the decoding strategies necessary for accessing them in practice. The link between the child's ability to reflect on the 'known' in order to master the 'unknown' -- that is, the link between reflection and action -- cannot be dismissed, within this framework, as merely one potential rationale among many. On the contrary, it is by being encouraged to monitor, evaluate and amend his own use of language that the child develops the capacity to make sense of and master the range of secondary (or 'parasitic') practices which make up formal schooling. The fact that some children, as Bernstein points out, have little or no pre-school experience of such reflective activity, in terms of language reception/production, makes inclusion of it in the school curriculum *from a very early date* crucial in combating the underachievement which can stem from an impoverished linguistic repertoire. Such an approach, as Bernstein (1971) himself suggests, should not bring the child's home use of language into question but simply make him aware that changes in linguistic medium, context and audience (i.e. diatypic variation) require corresponding changes in the extent to which meaning is rendered explicit in linguistic structure.

2. 0. Historic polarities

Carter's (1990) assertion that there exists little or no evidence causally linking analytic knowledge with linguistic performance is part of a long tradition that can be traced back to writers such as Robinson (1960), Braddock et al (1963) or Elley (1975).[7] Partly inspired by shifting attitudes towards the notion of 'grammar' within the sphere of linguistics, such writers sought to show that the 'prescriptive' model currently taught in UK schools, via such activities as parsing and clausal analysis, had little or no impact on children's written composition and/or correction of 'faulty usage'.

The assertion that there was a negligible link between analytical knowledge and performance received an even more negative formulation in writers such as Wilkinson (1971) who, in his summary of the research findings to date, argued that the study of grammar actually had a "harmful effect" on written composition insofar as it inhibited the child's expression of meaning. Wilkinson's conclusion that the analytic study of language form appeared to have little (or no) benefits in terms of skill development was rapidly to become an almost unquestioned assumption of the 'personal growth' tradition in EMT teaching that dominated practice for decades to come. [8] As Rosen and Stratta (1979: 29) were to argue, in their historical review of the shifting rationales for EMT teaching, the idea that knowledge about language improves performance has been "widely discredited" and the study of linguistic form "has been jettisoned" generally. While there is little reason to query the research findings on which these conclusions were based, however, it is important to situate the type of analytic activity that was found to be so ineffective in its socio-cultural context or, as Carter (1990: 106) succinctly suggests, to deconstruct the "insidious connection between social forces and old-style grammar teaching..."

2. 1. Grammar and the 'common culture'

The prescriptive grammar that Wilkinson (among others) was to reject so forcefully was intimately linked with the introduction of Standard English [SE] in the curriculum and was, as such, deeply shaped both in terms of its rationale and pedagogic practice by the ideological connotations of the latter. Such connotations are complex. As Cameron and Bourne (1989: 19) point out, in their critical response to the Kingman Committee report, 'standard' is a weasel word that can be interpreted in at least two distinct (if related) senses: as normal as in 'standard weight' and as normative as in 'high standards'. [9] What serves as a symbol of inclusion, of belonging to a 'common culture', can equally serve as a symbol of exclusion, of demarcating boundaries based upon notions of superiority of that culture vis-à-vis other cultures. The role of Standard English in our schools has, at least since the time of the Newbolt Report, shifted uneasily between these two functions and has, as such, played a complex role in shaping the contribution of other language variants within the wider curriculum. [10] In the first sense, i.e. as the normal language of the nation, Standard English has played an important enabling role for many pupils, aiding the spread of literacy skills and – largely through this – giving access to a national and increasingly international culture of power and

prestige. In the second sense, however, insofar as Standard English has been associated with normative notions of culture, it has tended to embody an elitist and ethnocentric view of both non-standard dialects and other languages spoken by indigenous or immigrant minorities. Inclusion in the 'common culture' advocated by Newbolt has historically carried a mono-dialectal and mono-lingual price-tag. Skutnabb-Kangas and Philippson (1989) go so far as to talk of the 'paranoia ideology' of a country monolingual in an international language in which linguistic diversity is seen as, at best, irrelevant and, at worst, as a threat to social cohesion and/or national identity. [11] While somewhat exaggerated, such a view usefully highlights the anti-pluralist assumptions that have historically acted to shape the language curriculum and which have led to the marginalization of non-standard dialects and, more recently, minority languages on the spurious grounds that mother tongue maintenance might interfere with the acquisition of the language of the dominant culture. [12] As Rosen and Stratta (1979: 25) were to put it, the role of Standard English can be seen historically as inculcating a "bogus common culture" premised on the "deliberate oppression of the pupils' own language".

Clearly, insofar as the language curriculum has been shaped historically by anti-pluralist assumptions – that is, by what may be called a 'cultural heritage' rather than a 'cultural analysis' perspective – the study of grammar that accompanied the teaching of Standard English had a narrowly explicit purpose. [13] Far from encouraging the child to reflect upon his (and others') use of language as a basis for extending his repertoire, it sought principally to inculcate a body of 'facts' about a prestigious variant mastery of which was seen as crucial in developing social cohesion and national identity. It was, after all, during this period that, as Cameron and Bourne (1989: 11) point out, grammar became increasingly identified with notions such as "hierarchy, tradition, order and rules" Within such an ideological framework, the encouragement of reflective practice would simply have been counter-productive, i.e. would have helped the child to valorize rather than devalorize non-standard forms of the language and to question rather than accept anti-pluralist notions of a 'heritage culture'. The fact that the explicit study of grammar started not with reflection on the child's use of language but with a series of decontextualized 'facts' inevitably implied a prescriptive rather than descriptive view of language usage and reliance upon transmissive rather than exploratory or 'discovery' methods in mastering such usage. These were the hallmarks of the parsing and clausal analysis procedures that dominated the classroom and which constituted, as the

Kingman Committee Report (1988: 3) readily admits, a " ... rigid prescriptive code rather than a dynamic description of language in use". Considering that the activities typical of this approach to language study were not anchored in children's own competence – and very rarely led to the productive use of the forms analyzed – it is hardly surprising that little correlation was found in the range of empirical studies that emerged in the 1960s between proficiency in grammatical analysis and pupils' written composition.

While writers such as Rosen and Stratta (1979) were doubtless correct to reject the anti-pluralist assumptions of prescriptive language study, however, there was from very early on a tendency in their approach to over-generalize the findings on which such a rejection was based. The fact that a particular study of linguistic form proved irrelevant and/or harmful to a particular form of language behaviour, notably written composition, was gradually taken to assume that *any* study of linguistic form was irrelevant and/or harmful to *any* aspect of the child's expanding skill repertoire. Doughty *et al* (1971: 10), interestingly enough, were to draw attention relatively early to this danger when suggesting that the debate over the relationship between grammatical analysis and performance was being trivialized and distorted by identifying the former exclusively with the "... rudimentary and inadequate type of knowledge about language" traditionally in vogue. The danger noted by Doughty *et al* of a tendency to over-generalize the findings of research into prescriptive language study has been reiterated, more recently, by Stubbs (1991) or Carter (1990: 107) who, while recognizing the importance of questioning the misconceptions of the past, argues that many writers tended to take up an " .. equally unsatisfactory counterposition". Such a tendency could be seen in the 'personal growth' model of English that was pioneered by figures such as Dixon (1968) or Rosen and Stratta (1979) where the self-realization of the child through mastery of a range of diatypic and dialectal variants was seen to occur independently of any conscious focus on the relation between function and form. [14] This is not to deny that children were to be encouraged, within this model, to reflect upon language but that such reflection was to be restricted to what Barnes (1988: 35) refers to as the 'higher levels' of linguistic processing, i.e. the metapragmatic features relating language to purpose, audience and context of use. Reflection on differences in the social use of language, it was argued, rendered attention to the 'lower levels' of linguistic form, i.e. the metamorphological and metasyntactic, superfluous insofar as changes in the latter were triggered 'automatically' in the service of the 'higher level' choices. [15]

The highly inductive approach followed by supporters of the 'personal growth' model was partly indebted, of course, to nativist views on language acquisition which stressed the importance of tacit knowledge in the development of competence at the expense of conscious monitoring of input or output. [16] The notion that the extension of the child's linguistic repertoire occurs simply through 'use' -- that is, through a planned exposure to linguistic variation alone -- can be traced up into the highly critical response of writers such as Dixon (1988) or Richmond (1990) to the Kingman Committee report. As Richmond (1990: 27) was to suggest, in criticizing the latter's argument that reflection on language form could play a positive role in many areas of skilled performance, notably that involved in the monitoring and editing of written texts:

> The most important kind of knowledge about language is implicit knowledge ... The most important job for the adults who care for the child is to help the child's implicit knowledge develop. For teachers, this means providing a classroom environment which supports the child's achievements while continually proposing activities which call forth greater powers of articulation and understanding.

Richmond's argument is not necessarily incorrect in that the crucial task of the language curriculum may well be to develop pupils' competence – i.e. implicit knowledge – over a range of new dialectal and diatypic functions. What such an argument fails to take into account, however, is that mastery of secondary (as opposed to primary) skills *starts with* a conscious reflection on language form which only becomes unconscious to the extent that it becomes automated through use. To deny the initially conscious approach on the part of the child is to confuse the learning process with the acquisition process that precedes it where the relation between conscious and unconscious knowledge is reversed, that is, where implicit knowledge (Bruner's 'communicative competence') only gradually gives way to explicit knowledge ('analytic competence') through the intermediary of reflection.

2. 2. 'Language education'

Attempts to modify the highly inductive approach of mainstream EMT teaching within the 'personal growth' model that was favoured were not slow to emerge. Writers from Robinson (1972) to Mittins (1981) drew attention to the "less than conclusive" evidence on which the new orthodoxy was built and Doughty *et al* (1971), in particular, were to complement their critique of existing practice with support for the more analytical approach embodied in *Language in Use* in which, they argued, "... the development of awareness in pupils will have a positive effect upon their competence, although this effect is likely to be indirect and may not show up immediately". [17] While

there was an ongoing attempt to re-shape the potential links between considered reflection and spontaneous use, however, little real progress was to be made before the emergence of the National Council for Language in Education (NCLE) and the pioneering work it was to inspire in the area defined as 'language awareness'. [18] The historical significance of the NCLE lay in the fact that it sought to develop a more coherent approach to the notion of a 'language curriculum' by synthesizing what was positive in the two counterposed traditions that had characterized both EMT and, incidentally, FL learning. [19] From one tradition, it drew on -- and extended -- the concept of language education as a repertoire of functions through which the individual child is able to 'realize himself' culturally, socially and cognitively. Several reports were to focus specifically on examining the relation between EMT and FLL, both in terms of curriculum organization and pedagogic practice, as the basis for elaborating a "national policy on language in education". [20] From the second tradition, however, it also drew on the importance of clarifying what pupils might need to explicitly know to master this repertoire of skills in that, as the 1981 Resolution of the Language Awareness Working Party made clear, 'exposure' alone seemed to result in considerable underachievement at major points of the continuum, particularly the transfer from spoken to written and from first to foreign language use. It was mainly in response to the need to develop a more coherent and effective approach to linguistic pluralism that a writer such as Hawkins (1978, 1981, 1984), among others, was to advance the notion of a 'trivium' in which explicit language study was viewed as a way of developing the cognitive and affective skills needed to bridge the gap from first to foreign language study.

To suggest that the NCLE sought to redefine the relationship between reflective analysis and performance does not imply, of course, that such a process was to occur without internal conflict and contradiction. On the contrary, the differing objectives, structure and content of the courses that were inspired by the NCLE Working Group on 'language awareness' would seem to reflect a considerable blur in the initial definition of the concept or, as James and Garrett (1991: 3) were to suggest, at least a "lack of clarity and consensus regarding its meaning". Such courses included, for example, those seeking to prepare pupils with the 'insight into pattern' deemed necessary to access foreign language learning, those seeking to 'sensitize' them to linguistic diversity in school and in society at large and yet others ('parenting' courses) whose emphasis was on developing an understanding of child language acquisition. As James and Garrett (1991: xii) were to note,

'awareness' in such variants might be defined cognitively, in terms of some heightened perception or salience, socio-psychologically, in terms of some attitude or evaluative judgement, or sociologically, in terms of connections to be made between language variation and the nature and function of social institutions. The "creative untidiness" of the movement, as Sinclair (1984: 1) put it – the fact that the rationale for course implementation ranged somewhat arbitrarily from the cognitive to social and/or affective – was seen by many as a strength rather than a weakness. Rosen (1988: 8), for example, was to see in such diversity an attempt to relate aims to the differentiated needs of pupils in much the same way as Quinn and Trounce (1984: 9) were, somewhat earlier, to seek to explain the "problems of self-definition and evolving clarification" faced by Australian language awareness courses. [21] While there may be some validity in such a position, however, the 'untidiness' noted by Sinclair was possibly less a function of course writers' adaptation to pupil needs and more a case of the ambiguity that was embedded in the Working Group's initial definition of the term as it sought to grapple with the complex theoretical issues involved.

Apart from the tautology apparent in the opening line, the Working Group's initial definition of the term, in a short paper advanced in 1982, would appear to be relatively precise in viewing 'language awareness' as part of the child's reflective practice, that is, as part of more general metacognitive strategies involved in the monitoring and controlling of behaviour. [22] Language awareness involves, the report argues,

> .. both making explicit and conscious the knowledge and skills pupils have themselves built up in the course of their experience of language and developing powers of observation and analysis of the language in their immediate environment and more widely in the world.

On closer consideration, however, it becomes clear that, as Mittins (1991: 26) was to put it, such a definition opens up "a can of worms" or, as van Lier (1996: 79) was to suggest somewhat more delicately, that it "... leaves itself open to an enormous variety of interpretations". It is not simply that the definition is vague in relation to the types of knowledge -- ranging from the metaphonological to metapragmatic -- that might usefully be the object of such reflection at any given stage. More importantly, it is not clear from such a definition what the purpose of reflective practice is, that is, whether it involves primarily cognitive or affective goals such as 'shaping attitudes'. Donmall (1991: 2), some time later, was to suggest that the term 'awareness' did imply an affective dimension that is lacking in the Kingman Committee use of the term 'knowledge' but, in

the initial NCLE definition, this was still relatively unclear. [23] It is equally not evident from such a definition whether the emphasis in terms of reflective practice refers to the child's own use of language or to language use generally. There is, as Garrett and James (1991: 5-6) point out, a clear difference in this respect between courses which are designed to bridge the 'consciousness-gap' and those designed to bridge the 'information' or 'knowledge-gap', i.e. between those which are intended to render the child's own implicit knowledge of language explicit and those designed to impart new explicit knowledge to improve his understanding of various aspects of social usage. Finally, and perhaps most importantly, there is a lack of clarity as to whether the child's reflective practice – even if it is interpreted as focusing on his own use – is designed to refine his existing skills or to facilitate access to new ones. Prominent members of the NCLE Working Group were only too aware of such ambiguities or possible sources of misinterpretation and, on various subsequent occasions, sought to refine the initial definition although, as Quaiffe (1984: 28) notes, with little apparent success. The 1983 NCLE report (p. 7), for example, was to conclude that possibly the only "... response to the difficulties of definition was to suggest that ambiguity in the term is inherent and not disturbing".

While the NCLE definition of 'language awareness' is open to widely varied interpretations, however, -- or what Stubbs (1990: 5) rather negatively refers to as "incompatible educational philosophies" -- it would be incorrect to view its influence as entirely confusing. [24] On the contrary, as Garrett and James (1991: 4) acknowledge, certain strands of thought within the movement were more influential than others and served to advance the underlying theoretical debate in several respects. Perhaps the most important example of this was the contribution made by Eric Hawkins who had long advocated, in such essays as *Language as a Curriculum Study* (1978), the need for greater cross-curriculum collaboration in the study of "language as an aspect of human behaviour" in terms of easing the transfer from first to foreign language study. Quaife (1984: 29-30) argues that, while Hawkins' views tended to evolve over time, he is no more successful than others in the field in terms of clarifying the term he did so much to promote and that, even in his later work, he tends to substitute descriptions of course content for clarity in definition and/or rationale. [25] Such a view is somewhat disingenuous, however, in that Hawkins' "utilitarian approach", as Garrett and James (1991: 2) put it, simply addresses the key issues in a highly practical way. In the first place, insofar as he argues for a 'trivium' in which language study is seen to bridge the gap between first and foreign language learning, it is clear that he views 'language awareness' as process-oriented, that is,

as a functional tool in the child's expansion of a linguistic repertoire. As he was to suggest (1981: 53), foreign language study

> ... is obviously parasitic on a great deal of linguistic awareness learned in the acquisition of the mother tongue. It is a parasitic activity but at a further remove. It is dependent not only on analytic competence in the primary activity of listening/speaking, but also to a large extent on the secondary activity of reading an alphabetic script with added inter-language interference problems due to the learners having already learnt one method of mapping alphabetic symbols onto sounds.

The fact that the awareness developed through reflection on earlier semiotic practice is seen to facilitate access to new practices is central, of course, to his notion of a vertical cross-curricular language policy. In the second place, it is clear in the description of course content he provides that the functional aspect of metalinguistic reflection has both a cognitive and an affective dimension, that it both helps the child to develop requisite decoding strategies ('insight into pattern') and respect for the validity of difference ('combating prejudice'). [26] Such an approach seemed to integrate the work on aptitude developed by Pimsleur (1966) and Carroll/Sapon (1967) with that on motivation by Gardner and Lambert (1972). In the third place, in arguing that the child should be encouraged to reflect upon what he already implicitly knows, he clearly sees language study as a form of 'reflective practice' in which competence precedes analysis. He may seem, in this respect, to share the same viewpoint of others within the 'language awareness' movement such as Tinkel (1991: 102) who argued that language study should be a "... guided tour of something of whose functioning they [i.e. pupils] are, to a greater or lesser degree, unaware, but which they, nevertheless, intuitively know and act upon". Whereas Tinkel's objective appears to be to refine existing skills, however, for Hawkins 'reflection' assumes validity only as part of a dynamic process of self-realization through mastery of new language functions.

While Hawkins' work is not entirely consistent – and while his notion of a 'trivium' tends to see language study as occupying a discrete place in the curriculum, rather than being integrated into the ongoing process of skill development – there is no doubt that it raised the debate to a higher and more productive level. The themes that run through his work – the notion of awareness as a form of metacognitive processing, as assuming a functional role in the mastery of new skills and as possessing both a cognitive and affective dimension – were to provide the 'baseline' in the discussions surrounding both the Cox (1990) and Harris (1990) Committee reports. There may well be, as Mitchell (1992) observes, a discontinuity in the way in which the two reports deal with some

of these themes, thereby undermining Hawkins' notion of a vertical curriculum in which modern languages is seen as "part of a continuous education in language". [27] This can be seen, for example, in the differing emphasis given to the balance between the cognitive and affective dimension of metalinguistic reflection. While both reports tend to view metalinguistic reflection as having a functional aspect, Harris appears more concerned with the affective dimension than Cox who focuses more around the importance of the cognitive dimension in evaluating and refining written composition. [28] If such differences exist, however, it is still important to note that Hawkins' work provides valuable insights into the role of metalinguistic awareness within the wider language curriculum and a basis on which a more comprehensive model can be built.

3. 0. The language curriculum as 'semiotic apprenticeship'

A useful starting point in developing such a model is to be found in Wells' (1994, 1997) view of education as a form of 'semiotic apprenticeship'. The metaphor of apprenticeship has been widely used in recent years to describe the learning process (Collins *et al* 1989, Rogoff 1990) and has particular advantages when applied to the language learning process. With its roots in traditional craft practices, it usefully stresses the socially interactive nature of the child's development, the fact that mastery of a range of functional variants is a collaborative process in which the learner's efforts are 'scaffolded' by a more skilled practitioner. [29] While the socially interactive aspect of the metaphor is widely accepted, however, less attention is often paid to the nature of this 'scaffolding' and its function in the child's growing autonomy as language user. As Wells notes, the crucial role of the skilled practitioner is to help the child to make use of what he 'knows' in order to access what he doesn't 'know'. This means helping him at any given stage to disembed his existing semiotic experience, to reflect upon it and identify those elements which will help him to develop purposeful strategies for refining an existing, or mastering a new, diatypic or dialectal variant. Scaffolding is geared, in this sense, towards aiding the learner to reflect on what he (implicitly) knows in order to form hypotheses that can be (explicitly) tested in further practice. In the case of the beginning reader, for example, this can be interpreted to mean aiding the child to reflect upon his implicit knowledge of the sound structure of speech in order to explicitly identify those patterns that will aid in the process of grapheme-phoneme correspondences and word recognition. Within the apprenticeship metaphor, therefore, social interaction 'triggers' metalinguistic reflection which plays

a crucial mediating (i.e. self-regulating) role in the child's mastery of a range of (parasitic) semiotic practices (as in figure 1 below):

Figure 1: relationship between interaction and reflection in the mastery of semiotic practices.

It is by rendering explicit what was previously implicit, i.e. by developing what Hall (1994: 53-85) refers to as a "collaborative-reflexive epistemological framework", that the child accumulates the knowledge needed to guide his action in a more purposeful and deliberate way in mastering a new skill. The mediating role of reflection between past and future competence is at the heart of the apprenticeship metaphor.

The notion of language development as a form of 'reflective practice' triggered by the interactive nature of the learning process is not, of course, unique to Wells. It is implicit in the work of many writers from Dewey's (1938) view of learning as a form of 'reflective activity' to Mezirow's (1981) or Kolb's (1986) more recent notion of it as a self-monitoring process linking (prior) experience and (future) action. [30] The latter's four-stage model is particularly interesting in the way that it seeks to refine the mediating role of reflection by dividing it into two separate learning activities, those of 'perceiving' and 'processing'. The former (or 'critical reflective stage'), he was to argue, seeks to identify what in our implicit knowledge may help in accessing new knowledge and the second (or 'abstract conceptualization' stage) seeks to formulate a course of action by selecting among viable options and forming hypotheses to be tested. In Kolb's model, it is the learner's ability to form and test out the differing hypotheses identified at the earlier stage of 'critical reflection' that allows him, as Boud (1987: 27) was to put it, to associate "new knowledge with that which he already possesses" and, thereby, integrate "this new knowledge into the learner's conceptual framework". Reflection performs, in this sense, a crucial metacognitive role in allowing the learner to perceive and

understand a domain-specific area of knowledge as part on an ongoing process of reinterpretation. Kemmis (1987: 141) was to put this somewhat differently when referring to the ambivalent nature of reflection, to the fact that it "... looks inward at our thoughts and thought processes, and outwards at the situation in which we find ourselves" and which acts to shape the relationship between the two.

The notion of 'reflective practice' that is embedded in Wells' metaphor of a semiotic apprenticeship clearly has important implications for the role of metalinguistic awareness within the curriculum and its relation to language development. Primarily, it would suggest that developing such awareness is not a question of mastering a body of 'facts' about, or 'attitudes' to, language -- as in prescriptive grammar study -- but, on the contrary of, developing a 'mediating' tool in the acquisition of a range of functional variants. Put another way, developing metalinguistic awareness is not so much a question of what Garrett and James (1991: 5) refer to as bridging the 'information-gap' but, rather, of developing a reflective practice which allows the child to bridge the 'consciousness-gap', that is, to cultivate a level of self-critical awareness in language use which facilitates access to new linguistic functions. Insofar as metalinguistic awareness is seen as closely related to performance, it implies a *process*- rather than *product*-oriented approach, one that is concerned less with what a child consciously 'knows about' language at the end of a course and more with the functional uses to which that 'knowledge' has been put at various stages in the development of relevant new skills. This is not to counterpose 'process' and 'product' but to suggest that the aim of helping learners to move from spontaneous practice to deliberate reflection on language is as much to allow them to do new things with it -- to extend its uses as a communicative tool across a range of new 'parasitic' functions -- as to build up a set of decontextualized facts about it. [31] As Wray (1994: 9) was to put it:

> ... the development of awareness does not entail the learning of a body of facts about language. It is a process by which pupils come to understand much more fully than before the nature of their own experience as users of language. The degree to which this understanding comes to be formulated explicitly in what they say and write about language depends upon their own capacities and the judgement of those who teach them ...

The development of metalinguistic awareness can be seen, in this sense, as a cumulative process in which explicit knowledge is progressively constructed, applied and revised in the service of extending the learner's linguistic repertoire. If, at the end of the course, the learner is able to respond sensitively to the complex demands of a multilingual society -- if he is to be empowered to "see through language to the ways in which messages are mediated and ideologies encoded" (Carter 1990:

4) -- it is because he has learnt to apply that knowledge concretely in a range of new semiotic practices.

To suggest that metalinguistic awareness plays a functional role in allowing the child to master new semiotic practices is not to suggest, of course, that such a process is either uniform or linear. It may be true, as Wells (1994) suggests, that the major shift in the child's use of language from interpersonal to ideational -- that is, from an accompaniment to action to reflection upon such action -- is occasioned by the transfer to formal schooling. Britton (1970) was to capture this shift in language use in the child's changing role from that of 'participant' to 'spectator'. [32] It is equally true, however, that within formal schooling itself, there are gradations in the extent to which language use is disembedded from action and in the extent of metalinguistic processing needed to access and master them. Halliday (1989) was himself to suggest that the continuum between language-as-action and language-as-reflection is characterized by a series of stages in the 'distancing' process, from language as a 'commentary' on action to language as 'reconstruction' of action and, finally, to language as 'construction' of action, that is, true analytic reflection where the child is required to "... exploit the 'frozen' nature of the written mode as it invites us to play around with thoughts captured on paper" [33] This distancing process clearly operates both along the 'vertical' and 'horizontal' curriculum, to use Hawkins' analogy, i.e. both a-synchronously and synchronously. On the one hand, there are distinct differences in metalinguistic processing between, for example, young learners' reconstruction of a narrative in oral discourse and older learners' construction of a range of specialized written genres, what Wells (1994) calls the organization of the " ... information at their disposal in a rhetorical structure appropriate both to their own purpose and to the audience in view" On the other hand, as writers from Martin et al (1987) to Derewianka (1991) point out, there are equally clear differences in learners' use of language at any given stage in a subject-specific curriculum area as they shift between intermediary forms on the oral/active to written/reflective continuum. [34]

While metalinguistic processing operates both vertically and horizontally in the curriculum, however, it is important to view it as a constantly growing and flexible body of knowledge which changes in relation to the child's mastery of semiotic practices. This is hardly unusual in that, as Wells (1993) stresses, the process is a reciprocal one. If (metalinguistic) reflection allows the learner to access new semiotic practices, the power of reflection is in turn progressively shaped by the

cultural tools that he appropriates and the functions that those tools were designed to carry out. This is particularly true of literacy skill development, for example, which Vygotsky himself saw as central in allowing the child to bring under conscious and deliberate control the meaning-making capacities that he had, until that time, deployed spontaneously in oral speech. [35] As Halliday (1993: 111-112) points out, mastering the varied and specialized genres of written discourse allows the learner to develop a different, more abstract and analytic way of interpreting experience which he labeled 'synoptic' as opposed to 'dynamic':

> In a written culture in which education is part of life, children learn to construe their experience in two complementary modes, the dynamic mode of the everyday common-sense grammar and the synoptic mode of the elaborated written grammar.

It is, as he put it, because written texts encourage the learner to view experience as 'product' rather than 'process' that they help the child in "... symbolically managing the complexity and invariability of experience, allowing it to be reconstructed in abstract categories which can be systematically related in taxonomies" In other words, mastering disembedded semiotic practices acts, in turn, to progressively disembed the learner's thinking and promote the capacity for analytic thought since, as Moll (1990: 12) put it, "... it is by mastering these techniques of representation and communication that individuals acquire the capacity, the means for 'higher level' intellectual activity". As already indicated, this is particularly in evidence in the learning of foreign languages where meaning can only be accessed via the 'abstract categories' that operate at different levels of the language system from the metaphonological to metasyntactic.

Within Wells' notion of education as a semiotic apprenticeship, it is important to be aware of the interaction of these two processes at work, that of (metalinguistic) reflection as 'mediating' access to new semiotic practices and that of semiotic practices as refining the process of reflection. It is the interaction between these two processes which explains another feature of the apprenticeship metaphor, that is, the shift from dependence to autonomy in the learner's use of his linguistic repertoire. As Wells (1994) was to argue, the learner-apprentice not only has to reproduce what he has learnt but become a master-craftsman in his own right who "... creates new artifacts and adds to the cultural resources". This shift from other- to self-regulation depends, in this sense, on the extent to which he is capable of reflecting upon his own semiotic behaviour and selecting appropriate strategies in further 'meaning-making'. The efficient foreign language student, for example, is one

who is able to independently review and shift between a range of metalinguistic strategies in order to 'make sense' of spoken or written input. Moreover, becoming aware of what one 'knows' in order to select appropriate strategies implies being aware of what one doesn't know -- and may need to know -- in the solution of a given task. As Garrett and James (1991: 19) suggest, once we know what we know, "...we are able to identify what it is that we need to know. By the same token, realizing what we do not know helps us to see what we do know. It is in this way that skills improve when we raise implicit knowledge to awareness".

3.1. Guidelines for curriculum implementation

To suggest that metalinguistic awareness plays a functional role in the development of the child's linguistic repertoire may be valid but does not necessarily indicate how it might be incorporated into the wider language curriculum or how it might affect pedagogic practice. Quite varied approaches have emerged in response to these questions. Writers working within the NCLE tradition, for example, such as Hawkins (1978, 1981) or Tinkel (1981), have argued in favour of discrete courses seeking to develop specific attitudes or processing strategies for given curriculum areas. Others, writing more recently, have adopted a more integrative approach, as illustrated in Carter's (1990: 118) view that the process of making the child's implicit knowledge explicit " ... should not be imposed or engineered but rather fostered and supported as naturally as possible, as needed in specific contexts and in ways which reinforce the process as one of positive achievement with language". While different approaches to the problem of curriculum implementation have their respective merits, however, the fact that metalinguistic awareness is defined as having a mediating role in skill development would seem to suggest a broad set of guidelines for its inclusion in the wider language curriculum. Such guidelines partly overlap with many aspects of 'common practice', as enumerated by Stubbs (1990) or Carter (1991), and partly involve an informed critique of it.[36]

3.1.1. 'implicit' and 'explicit' knowledge

In the first place, insofar as mastery of new semiotic practices involves making the child's implicit knowledge explicit, competence will normally precede reflection upon it. The notion that metalinguistic reflection involves introspection of one's own language behaviour rather than the mastery of a body of decontextualized facts is embedded in a long tradition which extends back to those writing within the NCLE paradigm, such as Tinkel (1981) or Davies (1986: 3-7). As the latter

suggests, the chief task of the teacher should be to find "practical ways" of building on those aspects of the (implicit) knowledge children bring with them into the classroom which will help them in the refinement of an existing skill and/or mastery of a new one. [37] Bains *et al* (1992: 10) were to put it succinctly when suggesting that metalinguistic reflection describes those "moments (or more sustained interludes)" in the learning process when the child is encouraged to stand back and consider his own production/reception. Such moments, they continue,

> ... build upon what children already know about language, but shift the status of such understanding from the implicit to the explicit. Such explicit knowledge can then become a further powerful resource for shaping and controlling pupils' language performance and response.

What is useful about such an approach is not only that it demonstrates the need to build upon the positive aspects of the child's language achievement but that it overcomes the dichotomy, as highlighted by writers such as Garrett and James (1991: 5-6) between approaches designed to bridge the 'consciousness-gap' and those designed to bridge the 'information-gap'. Clearly, insofar as the child is encouraged to reflect upon and render explicit aspects of his competence ('consciousness-gap'), he is preparing to assimilate the new knowledge that is required to build upon and extend that competence ('information-gap'). In other words, rendering implicit knowledge explicit is not an end in itself but key to accessing and integrating new knowledge. Such a view is distinct from that developed by, among others, Carter (1990: 4-5) in the *LINC Reader*, which sees reflection on implicit knowledge as divorced from language performance and related solely to empowering pupils in their appreciation of language use and misuse. [38]

A considerable body of literature has been built up, particularly in the area of second language pedagogy, exploring the ways in which making implicit [L1 or L2] knowledge explicit is crucial in the development of effective learner strategies. As Ringbom (1990: 172) suggests, the underlying theoretical basis of such literature is that "new learning is largely based on what the learner already knows", that is, that success in the L2 depends upon interlingual transfer from the L1 and (increasingly) intralingual transfer within the L2. The important function of such prior knowledge is, as Gass (1990; 135) has pointed out, that it is an "activator of selective attention", i.e. that it allows the learner to identify and focus upon those systematic aspects of the L2 input that he needs at any given stage to improve productive/receptive skills.[39] Gass herself has examined how explicit knowledge of relevant aspects of syntax in L1 may aid the L2 learner to deal with, for example,

relative clauses in EFL and others, such as Kellerman (1990), have examined the converse, that is, how absence of such explicit knowledge in the L1 can lead to the development of inadequate or ineffective L2 learner strategies.

3.1.2. 'reflection' and 'action'

In the second place, if metalinguistic awareness is seen as playing a crucial functional role in the extension of the child's linguistic repertoire, it would tend to suggest that it should be fully integrated into the language curriculum rather than be organized separately from it, as was often the case with courses inspired by the NCLE. As Fairclough (1992: 16) points out, in a critical review of NCLE practice, the work carried out under the umbrella of 'language awareness' was often " .. isolated from other parts of language education as a separate element in the curriculum" rather than being "fully integrated with the development of practice and capabilities". Such an approach would seem to imply that what should be the object of metalinguistic reflection at any given stage should be dictated in large measure by the semiotic practice currently being mastered. Encouraging children to reflect on those aspects of their experience which allow them to 'make sense' of new practices is valid at both the intramodal, intermodal and interlingual levels and would seem to suggest a curriculum organization based on contrastive analysis. If such was the case, however, this would in turn imply the need to develop a cross-curricular language policy which, as van Lier (1996: 19) stresses, involves in particular "... cross-fertilization between native and foreign language[s] which is insufficiently exploited in the school"

The dialectic that is set up between reflecting on competence in order to access the knowledge necessary to extend it also implies that the traditional dichotomy between 'prescriptive' and 'descriptive' knowledge would tend to lose its validity. [40] Clearly, to the extent that such reflection starts from the child's (or others') 'language in use', the knowledge the child obtains will be largely descriptive in nature. As Stubbs (1990: 3) was to put it, in commenting on the Cox Committee recommendations, starting from the child's own use of language will allow him to develop a " . non-prescriptive, non-judgmental approach to language and its diversity". Such a viewpoint is somewhat one-sided, however, in that it overlooks the fact that using that knowledge to access new semiotic practices – up to and including a foreign language – also involves recognizing and conforming to the prescriptive conventions that govern the latter's use. The young child's reflection

on the way word order shapes meaning in a given register may well be descriptive in nature but the use of such knowledge to access new registers involves conforming to the prescriptive conventions that govern the use of those registers. Writers from the 'critical language awareness' movement such as Ivanic (1990: 127-8) may argue that what characterizes a "good language user" is "not just an accurate reproducer of patterns, nor someone who conforms to conventions of appropriacy" but someone who "understands how language is shaped by social force ... and acts accordingly". Certainly, the child should be encouraged to critically reflect on language use and, increasingly, exploration of choice of genre and sense of audience in speech and writing, for example, and the notion of reading as cultural practice, do raise issues of ideology and of power which pupils are aware of implicitly and which need to be made explicit. It is, however, difficult to see how a *learner,* as opposed to a *user,* can simply disregard the prescriptive conventions of the new semiotic practices he is seeking to master without abandoning the attempt to extend his repertoire entirely. The child seeking to make the transfer from spoken to written, or from first to foreign language use, is not free, as Ivanic suggests, to "choose between conforming to [the conventions of their use], reproducing the conventions as they are, or challenging them ..." if he wishes to become competent in either skill.

3.1.3. 'inquiry' techniques and metalanguage

In the third place, if metalinguistic reflection implies reflection upon language use rather than mastery of a body of decontextualized facts, it suggests a child-centred approach based on 'exploratory' or 'inquiry' strategies rather than a transmissive method of teaching. Such a view can be traced from those working within the NCLE tradition such as Davies (1986: 4), who was to define language awareness pedagogy as "... a commitment to involving pupils actively in their own learning", to more recent writers such as Stubbs (1990) or Bains *et al* (1992) who advocate the use of fieldwork techniques. This sense of 'discovery learning', in which children assume responsibility for monitoring and evaluating their own performance, is clearly part of the wider literature devoted to the theme of 'learner autonomy' and 'self-directed learning' represented by writers such as Holec (1980, 1981) and Brookfield (1985). It is important to be clear, however, what such terms mean within the language learning context since the notion of 'autonomy' may seem at odds with the notion of 'interaction' (or 'co-operation') with a more skilled practitioner that is central to the apprenticeship metaphor. In reality, such an opposition is more imaginary than real in that – as

Wells (1997) argues – the apprenticeship metaphor includes not only the notion of social interaction but also that of the gradual emancipation of the learner from such interaction in the use of semiotic tools. It may well be, for example, that the teacher will – particularly in the initial stages – 'scaffold' the learning process by guiding pupils towards the 'hypotheses' he wishes them to draw, helping them to crystallize such 'hypotheses' in an appropriate metalanguage and apply them to the mastery of a new semiotic practice. The more experienced the learner becomes, however, in reflecting on his knowledge – on what he knows, doesn't know and may need to know – the more independent he will become in formulating the learning goals, choosing and implementing appropriate learning strategies and evaluating learning outcomes. Put another way, the more the learner becomes aware of what he knows, the more he is able to use that knowledge independently to access new knowledge or, in this context, to expand his linguistic repertoire. Metalinguistic reflection can be said, in this sense, to occupy a crucial intermediary role between social interaction and autonomy in language learning/use, or between other- and self-regulation.

Such a framework is useful for examining the controversial role of 'metalanguage' in the language learning process. The Cox Committee (1989) report, interestingly enough, argues strongly in favour of providing pupils with an appropriate terminology, a 'language to talk about language', in that it helps to "consolidate what is already known intuitively" (5.3). Rendering what is implicit explicit can then, the report continues, play a useful role in allowing the child to consciously reflect upon his own performance and discuss that performance with others, particularly in the area of written composition. While the report hints at the mediating role that metalanguage can have in the learning process, however, it fails to bring it out adequately. The value of metalanguage is, indeed, that it allows the child to corroborate a 'hypothesis' stemming from reflection on his own use or, as Cox (1989: 5. 9) puts it, to "crystallize a concept". Applying a label to a concept, however, not only brings the concept 'into existence' but allows the learner to use it in the extension of his linguistic repertoire by focusing attention on those areas of a new semiotic practice that require attention. In other words, metalanguage can play the role of a bridge between existing knowledge and new linguistic knowledge and, insofar as the child possesses it, it allows him to operate more autonomously in language learning/use. [41] A useful example of the potentially emancipating role of metalanguage is in the area of the transfer from first to foreign/second language learning. Learners who already possess a metalanguage built up through a process of contrastive analysis in the L1 will

be much more able to 'make sense' of what is involved in L2 learning and to direct their attention (as and when necessary) to pertinent features of the target language. Learners who, for example, are aware of such concepts as 'clause' or 'phrase' will be much more able to identify corresponding patterns in TL input than those who do not and they will, moreover, be more able to discuss differences between the way in which relative clauses are formed in German as compared to English as part of the wider 'contrastive analysis' process. [42]

4.0. Towards a cross-curricular syllabus

If education can be seen as a process in which reflection plays a crucial mediating role in the extension of the child's linguistic repertoire, this has important implications for the development of a cross-curricular KAL syllabus. In the first place, as Hawkins (1978) has long argued, it implies that language development is viewed as a continuum in which mastery of new practices depends on the extent to which the child's metalinguistic reflection has provided him with the tools to 'make sense' of and 'decode' any such practices. This would suggest the adoption of a 'vertical' approach to language planning in which both intra- and interlingual changes are seen as part of a cumulative (if non-linear) process rather than as discrete areas in their own right. In the second place, insofar as the semiotic practices the child is required to master operate on a cross-curricular basis, it also implies that the 'vertical' approach to language planning be complemented by a 'horizontal' one. The child's extension of his linguistic repertoire operates increasingly through subject-specific genres and, as such, subject areas have to understand their role in consolidating and extending semiotic practices and the analytic thinking embedded in them. As van Lier (1996: 18) was to argue, a wider approach to language planning cannot restrict language education to language lessons but needs "... a more systematic in-depth approach to language education across the child's entire educational career, emphasizing the central institutional and social role of language all over school life".

4.1. Contrastive analysis

One of the dangers of integrating metalinguistic reflection into the mainstream language curriculum is that – as Stubbs (1990) has suggested, citing the HMI *Report on Language Awareness Courses* (DES 1990) – it could lead to a "fragmented experience" without any underlying coherence. [43] If metalinguistic reflection is seen as playing a crucial role in skill development, however, in which the object of reflection is determined by the semiotic practice being mastered, there is no

reason why the organization of KAL should be any less coherent or systematic than the organization of the language curriculum itself. Indeed, as Stubbs (1990) has himself argued, the most useful way of integrating metalinguistic reflection is via a syllabus based on a contrastive analysis structure in which it is reflection on what the child 'knows' which leads – through analytic comparison – to what the child needs to 'know' at any given stage in time. Hudson (1992: 8), in his analysis of grammar teaching, was to explain the principle underpinning this approach when writing that the "ideas, concepts and terminology" that emerge from introspection can then be used " ... as tools for helping them [i.e. the pupils] to expand their knowledge and to learn to apply it in schoolroom contexts ...". Such a syllabus might be defined as a series of topics based upon the range of diatypic and dialectal variants to be mastered – e.g. spoken and written forms, non-standard and standard dialect, written registers and styles, L1 and L2 etc. – which can be explored at varying degrees of sophistication along various axes of enquiry (as in figure 2).

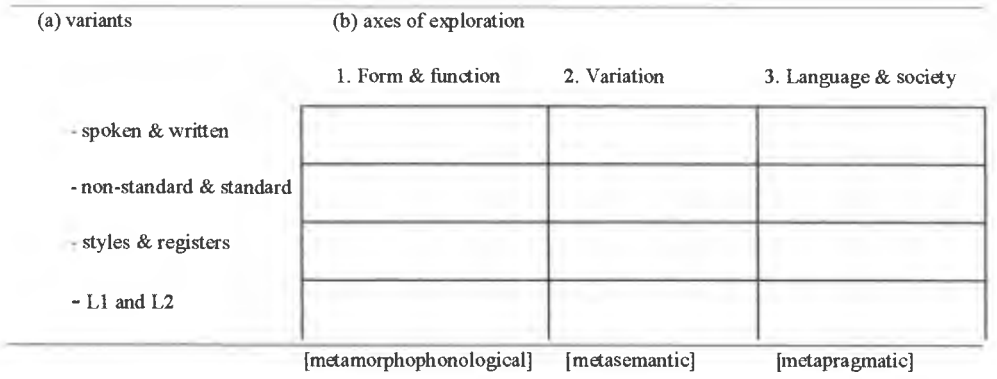


Figure 2

Such a model is not dissimilar to that advocated by Ivanic (1990) or Fairclough (1992) in which functional differentiation is explored along the axes of 'accuracy', 'appropriacy' and 'social action'. Clearly, within such a framework, there can be further refinement in that the various axes can be sub-divided into more specific themes, as in the case of axis 3 (e.g. Language and society) which will involve not only the relation of genre to purpose, audience and context but also to wider and more controversial issues of ideology and power.

One of the most important features of such a syllabus would be, of course, its recursive pattern in the sense that mastery of a given language variant corresponds to different levels of reflective analysis. The child's mastery of written texts, for example, may involve a shift from the initial

morphophonological knowledge necessary to 'break the code' through the metasemantic knowledge regarding the way in which ideas are organized in extended texts (in terms of their 'coherence' and 'cohesion') to metapragmatic knowledge, that is, knowledge of the different genres of text related to domain-specific areas of knowledge. Others, such as Taylor (1990: 57), argue a further refinement in the recursive nature of such a syllabus in suggesting, within each axis, a cycle in which *use* is followed by *description* of what one 'knows' in context and only later by real *analysis*. [44] Although the pattern of recursivity may vary, however, most would agree with Carter (1990: 5) that the child's reflection on language use – the rendering explicit of his implicit knowledge in order to master new aspects of the new linguistic variant – is not a linear process but a "recursive, cyclical and mutually informing relationship" which extends up to, and includes, foreign language study. An interesting example of this might be the development of writing skills where, as Clark and Ivanic (1991: 179) point out, reflection on their existing skills will "help learners to become consciously aware of aspects they already know" which, in turn, helps them to "put on the agenda aspects that bother or interest them". Children who have reflected, for example, on how to structure an informal letter are much more able – through the process of contrastive analysis – to focus on and evaluate what will be required to structure a formal letter and knowledge of both will contribute to a more abstract analysis (at a later stage) of the notion of textual 'formality' and its ideological connotations. Other examples of this recursive process can be found in Kent's (1992) study of the role played by a series of contrastive features between speech and writing in accessing initial literacy or Jensen's (1992) study of the role played by 'language histories' at differing levels of complexity in the transfer from non-standard to standard dialects.

4. 2. Cognitive and affective axes

One of the advantages of viewing metalinguistic reflection as playing a functional role in the expansion of the child's linguistic repertoire is that it helps to identify those aspects of language which might – at any given stage – constitute the object of such reflection. This issue has, of course, long been the source of considerable controversy in that it is possible to build up a typology of knowledge sources that can be rendered explicit in terms of accessing new linguistic functions across the diatypic/dialectal spectrum. As Barnes (1988) or Dixon (1988), among others, have indicated, sources of implicit awareness that can be made explicit operate in terms of a hierarchy of choices

from the metapragmatic (that is, the relation of language to its social and psychological context of use) to the metaphonological, as below:

* Metapragmatic	A. Context:	1. Awareness of audience, situation and relationships. 2. Purpose(s).
* Metasemantic	B. Message:	1. Constituents of the message ('gist units'). 2. Role choice (in speech, on which style, polite form etc., depend; genre style in writing).
	C. Utterance, Paragraph:	1. Speech act: elicit, command, state etc. 2. Organization of information within the utterance or Paragraph.
* Metasyntactic Metalexical	D. Forms I:	1. Syntax. 2. Intonation in speech 3. Choice of words.
* Metamorphophonological	D. Forms II:	Medium of production (in speech, delivery, phonology etc; in writing, the forms of the medium, including spelling).

Figure 3

Partly because the hierarchy of choice is so complex, there has been a tendency traditionally to prioritize certain of these levels at the expense of others and, in particular, to separate the 'higher' levels (options A-C) from the 'lower' ones (options D-E) on the assumption that knowledge of the appropriate use of a new skill takes precedence over its structural form. As already indicated, such a view characterizes, for example, the work of writers such as Barnes (1988: 35) who, in his anticipation of the Kingman Committee Report, was to suggest that the focus be placed upon the metapragmatic and metasemantic aspects of language in that they are more "open to direct conscious control" than are the metasyntactic or metaphonological aspects. Awareness of the ". . situation we are operating in and of our own purposes is open to reflection, to discussion with others, and to refinement by conscious effort", he was to write, in a way in which awareness of the lower level grammatical structures simply is not. In other words, children should be encouraged to attend less to the cognitive aspects of the functions they are required to master and more to the affective aspects, that is, to valorize the use of certain linguistic behaviours rather than others in relation to differing contexts of use.

If the role of (metalinguistic) reflection is to help the child access a range of new semiotic practices, however, it is clear that any attempt to counterpose the affective to the cognitive aspects of language is simply counter-productive. The central feature of secondary (as opposed to primary)

semiotic practices is that meaning is embedded less in extra-linguistic than in the linguistic encoding of the message. Insofar as this is true, accessing and mastering such practices depends primarily upon the child's ability to reflect upon his own use of language and identify those structural features that will help him to 'break the code' of the new function. It is only by reflecting upon pronominal use in his own language, for example, that the child is able to identify, 'make sense' of and decode alternative forms of pronominal use in SE or in a foreign language. Accessing a new language variant, however, as already indicated, involves the ability to reflect not only upon the systematic but also the arbitrary nature of language, what Tinkel (1981: 115) refers to as the "arbitrariness of linguistic signs". [45] The child not only needs to identify those structural properties in his existing use of language which provide a 'bridge' to deciphering the new code but also to realize that those properties vary from function to function in a way which is appropriate to different contexts of use. As Crystal (1978) was to put it, children must become " ... polyglots in their own speech and writing" by developing a command of a range of formal patterns and "... the knowledge of when and where to use them, and the ability to put this knowledge into practice ...". It is largely by reflecting on changes in the rule-governed nature of language across given functional variants that the child will develop a sense of the 'validity of difference', what Donmall (1984), following the original NCLE definition, refers to as the 'affective" aspect of language awareness or what Carter (1990: 14) refers to, in relation to the Cox report, as its "social" aspect, that is, one which

> ... underlines the benefits in enhanced social tolerance and understanding which can follow from greater awareness of language diversity and of the necessary variation which occurs within and across language, often for social reasons ...

What is important to bear in mind, however, is that the affective side of metalinguistic reflection – the 'sensitivity' to, and 'tolerance' of, diversity that emerges from it – is not counterposed to but dependent upon the cognitive dimension. [46] It is because the child is aware of language as a system that he is increasingly able to measure the arbitrary nature of this system as it is embodied in a series of semiotic practices corresponding to purpose, audience and context. The cognitive and affective aspects of metalinguistic reflection constitute, in this sense, two crucial (and interdependent) axes underpinning the language curriculum based on functional differentiation.

The notion that metalinguistic awareness should be seen as helping pupils to valorize and master new semiotic practices appropriate to differing contexts of use has, of course, been criticized more

recently by writers within the CLA such as Ivanic (1990) and Fairclough (1992). [47] While accepting that there may be a link between "developing awareness and developing capabilities", they suggest that uncritical mastery of these new practices may involve an equally uncritical acceptance of the social relations in which they are embedded and which they serve to reproduce. As Fairclough (1992: 15) was to argue in relation to SE, children's life chances may be enhanced by mastering it but the passing on of such prestigious practices without developing a critical awareness of them could lead to "... implicitly legitimizing them and the asymmetrical distribution of cultural capital" that exists between them and other, less prestigious, practices. There is a basis of truth in Fairclough's approach, in that mastery of a curriculum based on the appropriate use of a range of semiotic practices may imply the acceptance of the power relations which underpins that use in a given speech community. Such a view – which prompts Fairclough to see CLA as, in contrast, an 'emancipatory discourse practice' – may add a valuable perspective but is possibly over-simplistic in two respects. In the first place, it fails to realize that the principal problem in children's language development is not their acceptance of 'prestigious practices' such as SE at the expense of less prestigious ones but, on the contrary, the difficulty they experience in valorizing and mastering semiotic practices which may not seem relevant to their experience but which are crucial to their socio-cognitive development. In the second place, it fails to appreciate that mastery of such semiotic practices involves mastery of what Gramsci (1985: 166-7) referred to as "technically superior" forms insofar as such forms open for children an increasing range of socio-cultural doors at the national and international level. [48]

Summary

The relation between metalinguistic reflection and linguistic performance has long been a controversial one. The negligible (if not harmful) effect prescriptive grammar teaching was deemed to have on certain areas of language behaviour provoked a hostile reaction, particularly in EMT circles, to the notion that any form of explicit language study aided skill development. A more balanced approach was developed by the NCLE where, despite considerable theoretical confusion in the definition of the term and its rationale for inclusion in the curriculum, certain strands of thinking did advance the debate in a significant way. In particular, the notion that metalinguistic reflection plays a facilitative role in the extension of competence and that it possesses both an affective and

cognitive dimension are valuable acquisitions on which any new curriculum model needs to be built. Perhaps the most fruitful starting point in the elaboration of a more comprehensive model is Halliday's notion of language learning as a process of 'functional variation' or that of Wells as a 'semiotic apprenticeship'. The latter is particularly helpful in re-examining the notion of metalinguistic reflection in language development as part of a wider view of the learner as 'reflective practitioner' in which the ability to evaluate one's own behaviour is seen as playing a crucial mediating role in developing new socially valorized skills. Such a view of the nature and function of metalinguistic reflection allows the elaboration of a set of guidelines for its integration within the curriculum and the elaboration of a syllabus model based upon the principle of 'contrastive analysis' operating along cognitive and affective axes.

Notes

1. The Kingman Committee Report appears bolder in arguing *against* the view that "conscious knowledge of the structure and working of the language is unnecessary for effective use of it" (p. 1) and slightly more hesitant in arguing *for* the view that such knowledge will "... increase their [i.e. children's] ability to control and be sensitive to the use of the English language" (p. 17). As Garrett and James (1991: 17) point out, the latter is expressed merely as a 'hope' or a 'belief'.
2. Wray (1994: 7) also finds claims for such a link "highly controversial". His equivocation on the issue does not simply concern the wider theoretical question of the relationship between knowledge and skill but the pedagogical implications of such a relationship. "Baldly stated", he was to argue, "it concerns the question of whether linguistic awareness can be taught directly in such a way that it leads to improved linguistic performance, or whether increased awareness is itself a product of broadening experience of language use".
3. The skepticism was to extend as far as the National Association of Advisers in English (1988: 221) whose submission to the Kingman Committee explicitly argues that it is difficult to substantiate any claim that language study improves performance "... since all the research of which we are aware shows no positive correlation between theoretical linguistic study and linguistic performance".
4. It is to be noted, however, that Fairclough (1992: 15-16), even when arguing the importance of 'critical language study' or 'critical discourse analysis', does not deny that the latter should "... be fully integrated with the development of practice and capabilities". Clark and Ivanic (1991) or Clarke and Smith (1992) were to specifically develop practical strategies for linking the two at different stages in the 'vertical curriculum'.
5. Brumfit *et al* (1994: 7) likewise argue that it is further research which is required to resolve such issues since "... little is known about the explicit and articulated 'knowledge about language' which they might possess, or how pupils might exploit this knowledge to improve performance in the language classroom".
6. As Goswami and Bryant (1990: 4) suggest in their review of the literature, while there is "... plenty of evidence for a connection between children's reading and their awareness of sounds", what needs to be developed is an adequate interpretation of such evidence in terms of "cause and effect".
7. Robinson's negative conclusions were based upon a comparative study published in the *British Journal of Educational Psychology* (1960) "In the present enquiry", she was to write, "there is no evidence that pupils from schools where there is a higher degree of association between knowledge of grammar and ability in composition, or pupils from schools with a significantly different level of attainment in grammar, obtain, as a group, marks in composition which are significantly different from those obtained by pupils from schools with neither of these characteristics".
8. It is even reflected in the Kingman Committee Report (1988: 3) itself which explicitly rejects a "... return to old-fashioned grammar teaching and learning by rote" largely because, it continues, the latter was "... ineffective as a means of developing a command of English in all its manifestations".
9. Interestingly enough, Stubbs (1986: 94) notes an even wider range of ambiguities in the use of the term, e.g. as an accepted authority as in 'standard work' or a means of comparison as in 'gold standard'. Like Cameron and Bourne, he suggests that connotations from such uses only serve to further confuse the debate about the role and function of Standard English.
10. It should be recalled that the Newbolt Report (1921) was unashamed in its bid to use Standard English as a means of developing a 'common culture' to offset the threat of class division and conflict. "If the teaching of the language were properly provided for", it stated, "the difference between the educated and uneducated speech, which at present causes so much prejudice and difficulty on both sides, would gradually disappear".
11. The extent of this paranoia can be seen in the National Curriculum treatment of non-indigenous minority languages spoken in the United Kingdom. As Roberts (1991: 8) was to suggest, their inclusion under the brief of the *Modern Foreign Languages* Working Group was "... based on deliberately excluding them from the 'common culture' Kingman was asked to define and Cox to concretize".
12. As Cameron and Bourne (1989: 13) persuasively argue, the National Curriculum takes "... an authoritarian position by advocating cohesion around one variety of language (Standard English...) while at the same time seeking to contain diversity by downgrading minority languages and nonstandard dialects".
13. Whereas, Stables (1992: 5) argues, a cultural heritage viewpoint seeks to develop in the child an appreciation of common cultural values (embodied in literature), a cultural analysis viewpoint ". . emphasizes the role of English in helping children towards a critical understanding of the world and the cultural environment in which they live".
14. As Rosen and Stratta (1979: 35) were to put it, "It remains a problem to find a way of linking the study of language not only with active learning but also with the productive uses of language. It may be that language study will remain in its own niche with only tenuous links with the rest of English".
15. It is interesting to note that the view advocated by Wilkinson, that grammar study was not only irrelevant but potentially harmful, runs like a leitmotif through the responses to the Kingman Committee report. Barnes (1988: 34) refers to it, for example, as "ineffective and even perhaps inhibiting", Keith (1988: 79) describes it as "unhelpful and as peculiarly alien..." and Finney (1988: 43) argues that it may "hinder the development of children's written English...".
16. The work of Chomsky (1968: 103-4) was particularly influential in its claim that "...A person who knows a language has mastered a system of rules that assigns sound and meaning in a definite way for an infinite number of possible sentences . . Of course, the person who knows the language has no consciousness of having

mastered these rules or putting them to use, nor is there any reason to suppose that this knowledge of the rules of language can be brought to consciousness...".

17. It is noticeable that even the Bullock Report (1975: para. 11.19) was less condemnatory in its criticism of traditional grammar teaching than many when it pointed out that "What has been shown is that the teaching of traditional analytic grammar does not appear to improve performance in writing. This is not to suggest that there is no place for any kind of exercises at any time and in any form".

18. It is worth noting how Strevens (1986: 8), in his retrospective attempt to explain the emergence of the interest in 'language awareness', sees it as a recognition of linguistic pluralism, that is, as a "... response to changing problems in the learning and teaching of foreign languages, in the study and teaching of the mother tongue, and above all in the education and assimilation of different cultural and linguistic groups within the community".

19. The 1981 Conference Reports, in particular, were concerned with developing a cross-curricular approach to language work, as reflected in Mittins' *The concept of a school language policy* or Sharp's *Language policies in schools: a critical evaluation*.

20. The Bullock Report (1975) was to be subjected to particular criticism from advocates of the 'language awareness' movement, such as Hawkins (1978, 1984), for limiting linguistic pluralism to variation within EMT rather than adopting a wider and less parochial view of the languages curriculum which included FLL.

21. Sinclair (1984: 1) was to make the same point when arguing that "Language awareness courses arise in different schools for different reasons, are devised by different groups and are applied at different stages to different pupils in pursuit of different objectives".

22. Interestingly enough, Garrett and James were also to refer to the initial statement -- "Language awareness is a person's sensitivity to and conscious awareness of the nature of language and its role in human life" (Donmall, 1985: 7) -- as pleonastic.

23. As Donmall (1991: 2) puts it, "A person who is linguistically aware is sensitive to language in use, has a good understanding of its nature and functioning which he/she can express clearly and has an appreciation of its importance in all areas of life. The words 'sensitivity' and 'awareness' are used to indicate dimensions of experience and personal involvement over and above 'knowledge' which is usually associated with factual information only and from which the individual can stand apart".

24. Stubbs (1990: 4) was to dismiss the language awareness movement as one "... appropriated by different, incompatible educational philosophies; a back-to-basics view of learning skills; the anti-intellectualism of learning-by-doing; a child-centred view that all pupils are expert native speakers of some language; a preparation for the world of work; and the view that pupils should have a critical cultural understanding of the social conditions in which they live".

25. As Quaiffe puts it, in relation to Hawkins' (1984: 4) section entitled *A Definition of Awareness of Language*, "A close scrutiny ... will reveal that what it actually contains is nothing more than a brief summary explaining who the work is aimed at, what it might consist of and how it might be approached. In other words, yet again, a description of the course replaces any attempt to define the state of language awareness which the work aims to achieve".

26. In *The Linguistic Needs of Pupils* (1979: 37), Hawkins was to argue that foreign language learning "... makes demands on empathy, which few other parts of the curriculum make" and that combating the prejudice that might preclude such empathy is one of the central tasks of 'language study'.

27. Roberts (1991: 7-9), in particular, was to suggest that the opportunity offered by the National Curriculum to develop a comprehensive language policy was largely wasted. Beneath the façade of 'planning', he stresses, decisions were made by subject-discrete Working Parties in the same ad hoc and piecemeal way as in the past and were based on the same anti-pluralist assumptions.

28. Cox (1990: 17) is quite explicit that the main function of KAL is "... to consolidate what is already known intuitively" in order to allow children to refine their written work and discuss it with teachers. Harris (1990: 54-55), on the other hand, downplays the role of conscious awareness in mastering the target language when he argues only that it " .. *can be* an important ingredient in learners' progress..." (emphasis added).

29. As Wells (1997) was to put it, "The third advantage of thinking of learning in these terms is that it recognizes the complexity of real-life activities and of the need for collaboration between participants with different kinds and levels of expertise."

30. Dewey's (1933: 12) view of reflective practice is, in many ways, similar to that of Piaget in that it is occasioned by ".. a state of doubt, hesitation, perplexity, mental difficulty in which [reflective] thinking originates, and ... an act of searching, hunting and inquiring to find material that will resolve the doubt, settle and dispose of the perplexity".

31. It is interesting to note that Widdowson, in his *Note of Reservation* to the Kingman Committee Report (1988: 77), was to draw attention to the latter's failure to reconcile these two traditional rationales for the inclusion of English in the curriculum, that to do with the "functioning of language in adult life" (product) and that to do with the "functioning of language in ... different aspects of child development..." (process). Lack of clarity here, he argues naturally leads to a lack of clarity in the motivation given for the inclusion of KAL into the curriculum.

32. Britton's (1970: 98) distinction pivots around the emergence in school of 'displaced speech', that is speech where "... language is used to *refer to* or *interpret* or *recount* an experience (or experiences) and not as an embedded part of the here and now of the experience concerned" (emphasis in original).

33. Cf. B Derewianka (1990: 199).

34. Derewianka (1990: 197-214) provides a useful exploration of the shift in young children's use of language in dealing with an action-based project in geology. As she points out, the language used reflected quite differing levels of metalinguistic processing as it moved from a simple accompaniment to their exploration of a given geographical site to discussing (i.e. restructuring) their experience and, finally, to classifying (structuring) their findings in written texts.
35. As Wartofsky (1979: xxiii) was otherwise to put it, "... our own perceptual and cognitive understanding of the world is in large part shaped and changed by the representational artifacts we ourselves create. We are, in effect, the products of our own activity, in this way; we transform our own perceptual and cognitive modes, our ways of seeing and of understanding, by means of the representations we make".
36. Stubbs (1990), for example, includes in the 'principles' he envisages as underpinning a KAL syllabus such items as learning "should start from pupils' own linguistic competence and implicit knowledge", should be "based on children's own fieldwork", and should involve a "non-linguistic, non-judgmental approach to language and its diversity". Such principles would seem to be similar to those of writers such as Carter (1990) and endorsed by others supporting the approach of the *LINC Reader*.
37. As Hudson (1992: 10) was to put it with reference to teaching grammar, "We assume ... that children already know (unconsciously) a great deal about grammar before they reach school .. This means that most of the data needed for a grammar lesson are already in the children's heads...".
38. While Carter (1990: 4) admits that reflection on implicit knowledge may "influence use", the emphasis in his exploration of the value of KAL for pupils focuses upon its role in empowering them to deal with its ideological content. Implicit in such an approach, as already indicated, is a tendency to prioritize the affective or social aims of language study over potentially cognitive ones.
39. Gass (1990: 137) sees her work as similar to that of Schmidt (1990) in terms of the crucial role played by selective attention – based on prior knowledge – in the L2 learning context. "What I am claiming is that selective attention is a major factor in second language development. I have argued elsewhere (Gass 1988a) that selective attention results in 'apperceived input'. It is what triggers the learner's noticing of a mismatch between the speech of native speakers of the target language and her own organization of the target language, a first step in grammar restructuring".
40. It is interesting that theoretical linguists such as Stubbs (1991) or Hudson (1992) continue to stress the distinction between 'descriptive' and 'prescriptive' grammar as if a valid distinction in synchronic linguistics was operable in the same way in a diachronic process of language acquisition.
41. Such an argument does not mean, of course, that metalanguage can be imposed on children as part of a crude stage-related process. The Cox Committee Report was quite correct, in this sense, to reject a taxonomy of metalinguistic terms and any timetable for its introduction. Children will extend their metalanguage repertoire differentially, i.e. as a consequence of the need to render explicit what they implicitly know in order to access new semiotic practices.
42. One of the supportive arguments in favour of metalanguage was the need to develop a language to 'talk about language'. This is nowhere more needed than in the area of foreign language learning where attempts to make pupils focus upon the differences between the target language [TL] and native language [NL] – as in adjectival positioning in French and English – is facilitated precisely by the use of a metalanguage common to each.
43. As Stubbs (1990: 3) was to put it, "Although pupils' knowledge about language should be integrated with their use of language, incidental teaching about language is not enough. Important areas of English are neglected if the curriculum does not include an explicit focus on how language works".
44. Wray (1994: 7-14), on the other hand, argues that the axes along which language areas can be studied in the vertical curriculum could include the linguistic (i.e. formal), psycholinguistic, sociolinguistic, communicative, discourse and strategic.
45. As Tinkel (1981: 115) was to put it, "A language course would also emphasize the arbitrariness of linguistic signs and help the pupil to make a distinction in his mind between the concept and the naming of the concept". It is, of course, precisely this process which Hawkins, in relation particularly to foreign language study, saw as crucial in helping the pupil to break out of the "monolingual straightjacket".
46. It is interesting to note that Donmall (1984) tends to see the two dimensions as virtually discrete when she writes that "Language awareness programmes "... will have a cognitive aspect (developing awareness of pattern, contrast, system, units, categories, rules of language in use and ability to reflect on them to make pertinent interpretative judgements and to convey meaning appropriately and effectively); and an affective aspect (forming attitudes, awakening and developing attention, sensitivity, curiosity, interest and aesthetic response) ...".
47. As Fairclough (1992: 13) argues, the traditional approach of the 'language awareness' movement appeared to be "making up for and helping to overcome social problems (e.g. making up for a lack of 'verbal learning tools' in the home, extending access to standard English to children whose homes do not give it to them)" rather than helping children to understand why such problems exist in the first place.
48. Fairclough (1992: 49), somewhat ironically, invokes Gramsci's notion of 'hegemony' to support his view without recognizing that, in the major educational debate in Italy in the 1920s, it was precisely this notion that led Gramsci (1985: 182) to favour the introduction of standard Italian on the grounds that it represented a welcome step forward over existing regional/class dialects which he associated with "local particularisms and phenomena of a narrow and provincial mentality ...". He was particularly scathing of those who polemicised

against such an introduction, as in the case of Gentile, whose views he dismissed as containing "a great deal of unconscious reactionary thought".

Chapter 6

Metalinguistic awareness and pedagogy

Chapter 6

1. 0. Language curriculum and pedagogy

As van Lier (1996: 6) points out, in addition to specifying the content of pedagogy, the "... purpose of a curriculum is to guide the processes of teaching and learning". The view of the curriculum as a form of semiotic apprenticeship in which the child 'realizes' himself through mastery of a range of cultural practices is certainly no exception. Learning, within this framework, can be seen as a process of reflective practice in which the child's ability to monitor his linguistic performance ever more consciously prepares the ground for extending and refining that performance across a range of new functional variants. Insofar as there is a symbiotic relation between learning and teaching, the task of the latter is clearly to facilitate this process, that is, to provide the relevant level of 'scaffolding' (in the Vygotskyan sense) that may be necessary at any stage to help the learner reflect on those elements in his semiotic practice that will enable him to extend that practice and become more autonomous in its use. [1] It is important to be aware, however, that this process is not a linear one. The level of metalinguistic reflection that the child will need to engage in to access a new linguistic variant will clearly vary according to the degree of decontextualisation of that variant. Such differences will, in turn, have a 'knock-on' effect upon pedagogy insofar as they determine the quantity (and quality) of scaffolding that the child will require to identify those aspects of his existing knowledge which will facilitate his access to new knowledge. Put another way, the notion of the curriculum as an 'apprenticeship' does not downplay differences in pedagogy between different language areas but, on the contrary, sees them as integral to the extension of the child's linguistic repertoire.[2]

The emphasis in the 'apprenticeship' model of the curriculum on what distinguishes pedagogy in different language areas runs counter to the growing interest, in recent years, in language 'planning'. Attempts by writers within the NCLE tradition to develop a more cross-curricular approach to language provision, as in the case of Mittins (1981) or King (1981: 99), for example, were based on elaborating a set of guidelines common to all forms of language pedagogy, particularly EMT and FLT where "... the development of functional-notional courses" appeared to offer a "growth point for co-operation between English and foreign language departments" [3] This tendency to define cross-curricular planning in terms of a set of common guidelines (or principles) can be traced up into writers such as Brumfit (1989) or Stubbs (1986: 248) who, likewise, argues that all language

pedagogy should be based upon a "communicative and functional view of language" which is "grounded in the ethnography of communication and speech act theory". Consistent with such an approach, Stubbs (1986: 36-38) argues, FL teachers – like their EMT colleagues – would benefit from training in discourse analysis as a basis for shaping the interactive activities that characterize a 'communicative' approach to language use. This tendency to interpret a cross-curricular language policy in terms of what different language areas have in common is, however, singularly unhelpful in terms of pedagogy. As Roberts (1991: 8), among others, has argued, focusing on what the learner needs to 'know' in order to be able to function effectively across a range of areas can easily lead to downplaying very real differences in the processes by which such 'knowledge' is acquired. As he continues:

> ... the processes the learner passes through to achieve a given goal will necessarily differ according to the precise inter-relation of socio-cognitive variables involved which current linguistic models simply cannot account for.

A functional description of language might be useful in determining the *aim* of both EMT and FLT but will not clarify the radically different *means* the learner will need to employ to achieve that aim in an L1 as opposed to an L2 context or within different L2 contexts.

This tendency to downplay differences in pedagogy related to different language processes operates at both the intra- and interlinguistic levels. At the intralingual level, it is evident in the way that writers such as Smith (1971) or Goodman (1979) have sought to disregard the crucial difference in metalinguistic reflection needed to master text- as opposed to situation-dependent language uses and, at the interlingual level, in the way writers from Widdowson (1978) to Brumfit and Johnson (1979) have similarly tended to neglect such a difference between acquiring competence in a second/foreign (as opposed to a first) language.[4] In many ways, the tendency at both levels to slight differences in the pedagogic process is indebted to nativist models of language acquisition where competence is viewed as an evolving form of 'tacit' knowledge which is achieved independently of conscious reflection. While such a view has permeated language teaching generally, however, it has been particularly influential in the area of second/foreign language pedagogy where it has tended to blur the differences both between L2 and L1 and, within L2, between such areas as 'second' and 'foreign' language acquisition/learning. As van Els (1984: 130) was to put it, writers and researchers often incorrectly "... equate L1 learning with L2 learning, or assume that L2 learning in a classroom

be compared with L2 learning in a natural environment". Insofar as the 'apprenticeship' metaphor emphasizes the differences in pedagogy that make up the 'vertical curriculum', it may be useful to tease out the relationship between pedagogy and the child's level of metalinguistic functioning, both in terms of the difference between L1 and L2 and within L2.

2. 0. Differentiation between L1 and L2

The view that it is possible to replicate in second/foreign language learning the same processes that characterize first language acquisition has its roots in what has come to be known as the 'invariant route' hypothesis. [5] Evidence that the mother tongue was acquired in a pre-determined way, independent of contextual variables, appeared to emerge from a range of studies in child morpheme acquisition carried out within the nativist framework by writers such as Cazden (1968, 1972), Brown (1973) and de Villiers and de Villiers (1973). The notion of an internally-driven process of rule formation that such studies seemed to confirm was soon extended, however, in the work of writers such as Dulay and Burt (1973), to second/foreign language learning where a similar, although not identical, pattern was detected (i.e. the L1=L2 hypothesis). [6] It was against this background that interest in the pedagogic process began to shift away from the teacher to the learner insofar as the latter was deemed to possess an 'internal syllabus' developing at its own speed through a series of pre-programmed stages. After all, as Felix (1981: 109) was to argue, if the learner acquires the L2 in a predetermined way according to his own 'syllabus', what is the purpose of seeking to develop a pedagogic syllabus that may contradict the child's and/or inhibit his access to the target language [TL]? Second/foreign language learning, he pointed out,

> ... under classroom conditions seems to partially follow the same set of natural processes that characterize other types of language acquisition .. there seems to be a universal and common set of principles which are flexible enough and adaptable to the large number of conditions under which language learning may take place. *These observations furthermore suggest that the possibility of manipulating and controlling the students' verbal behaviour in the classroom is in fact quite limited.*

The implications of this hypothesis for second/foreign language learning were considerable. If the learner decides what is internalized and when, then the role of pedagogy is primarily to provide the meaningful chunks of the TL from which the learner can induce the underlying rule system at his own speed. As Prabhu (1985: 169) was to put it, if the interlanguage hypothesis is correct, "... one can no longer expect language pedagogy to benefit from a planned linguistic progression,

preselection of language for particular activities or language practice as such. The only important requirement is that language data be made available continually". Prabhu was, of course, writing specifically within a second language acquisition [SLA] context but such highly inductive conclusions had already begun to permeate foreign language circles where writers such as Newmark and Reibel (1973: 231) could argue that the task of pedagogy was simply to provide the raw data, through a series of communicative interactions, which the learner tacitly "stores, segments and eventually recombines" to convey personal meaning in new contexts. [7]

Perhaps the clearest exposition of the nativist hypothesis in second/foreign language learning has been Krashen's (1978, 1981, 1985) Monitor Theory which was to receive a pedagogical application in Krashen and Terrell's (1983) Natural Approach. The main principles underpinning such an approach – that the learner should be encouraged to induce the TL rule system as a by-product of functional use; that he should be allowed to pass through a series of interlanguage states without correction; and that comprehension of the TL should precede production – represent a serious attempt to replicate the L1 maturational process in the L2 classroom. [8] The underlying assumption behind such a highly inductive approach is that, while pedagogy might affect the *rate* at which the L2 rule system is acquired, it cannot in any serious way alter the *route* which, as in L1, is predetermined and operates independently of external stimuli.[9] It is true that Krashen's model represents a strong nativist viewpoint – what Ellis (1993: 5) refers to as the 'zero position' – which has rarely received wide endorsement. The principles on which it is based, however, have permeated second/foreign language teaching, albeit in diluted form, as can be seen in the early work of writers such as Widdowson (1978), Brumfit and Johnson (1979) or Littlewood (1978, 1986) who did so much to promote the 'communicative' approach to FL learning. The central tenet of Krashen's work, i.e. that language form can only be internalized unconsciously through functional interaction, is reflected, for example, in Widdowson's (1978: 19) claim that 'usage' can only be internalized through 'use' or Allwright's (1979: 168) somewhat more practical view that a "focus on communicative skills . . . will necessarily involve developing most areas of linguistic competence as an essential part of the product". [10] Balet (1985: 178), interestingly enough, seeks to summarize the principles underpinning communicative language teaching as fourfold:

- A second language is best learnt as the mother tongue has been learnt, i.e. by using it in real-life situations;

- As a result, classroom activities should be 'empirical' in nature and should involve processes which are spontaneously creative;
- Explicit study of the grammatical structure of the language and appeal to the students' cognitive skills should be discarded or kept to a minimum; and
- Real life should be brought into the classroom in the form of 'authentic' materials and tasks.

Such principles were also to structure the growing interest in immersion programmes as far afield as Canada (Canale and Swain, 1980; Swain, 1981) to Australia (Fernandez, 1992) where the teaching of the second/foreign language through a content syllabus was seen as the most fruitful application of Krashen's highly inductive model. As Fernandez (1992: 4) was to put it, if it is accepted that one " ... learn[s] language best when ... attention is focused on understanding messages rather than learning about the language", it follows that the most effective environment for second language learning would "provide maximum exposure to the target language communicating meaningful and interesting information".

2. 1. 'schematic' and 'systemic' knowledge

While the highly inductive premises underpinning second/foreign language learning were widely accepted, however, they were rapidly challenged. It is not simply that the 'invariant route' hypothesis was questioned as being empirically weak (McLaughlin, 1978, 1987) or as confusing an order of acquisition with an order of accuracy (Widdowson, 1990). [11] More important still, the notion that 'usage' can be internalized through 'use', as in L1, simply fails to appreciate the differing contextual variables shaping the two processes and which have a major effect upon the quality and quantity of input. In the first place, the L2 learner simply does not possess the same opportunities for communicative interaction as the L1 user and, in the second place, he is denied the contextual clues to meaning that might sustain such interaction while the rule system is being internalized. Widdowson (1990: 110) was, somewhat later, to draw attention to such differences when examining the way in which 'schematic' and 'systemic' knowledge interrelate in the L1, as opposed to L2, process. In the former, he argues, the child's schematic knowledge (i.e. what Romaine (1984) refers to as 'real world knowledge') provides both the impetus for communication and the framework in which such communication assumes meaning. It is precisely because he is able to rely upon contextual clues to meaning to structure his interaction that he can communicate while still internalizing the rule system, that is, at various stages of the interlanguage process. Such a process

cannot be replicated in exactly the same way in the L2, however, he argues, simply because the relationship between 'schematic' and 'systemic' knowledge has changed or, more precisely, been reversed. The learning context simply cannot provide the same impetus for communicative interaction (Searle's 'intention to mean') as in an L1 acquisition process or the same pragmatic support to the internalization of the rule-system. It is because of the 'poverty of the stimulus', as Littlewood (1986) puts it, that the L2 learner – as opposed to the L1 user – is compelled from the very early stages in the learning process to pay greater attention to form rather than function, to the medium of language rather than the message it conveys. [12] It is only by exploring how the linguistic structure encodes meaning that he is able to overcome the impoverished extra-linguistic context and identify what Jakobovits (1973: 278) refers to as the " elaborate system of abstract rules" governing TL use.

For Widdowson (1990: 161), the fact that the L2 learner does not have the same opportunity – in terms of quantity and quality of input – to induce the underlying rule system means that, more often than not, he ends up in communicative-led learning with a "patchy and imperfect repertoire of performances" without any underlying competence. The criticism that Widdowson directed, somewhat belatedly, at the communicative approach is reflected in the findings of a range of process-product studies such as Mitchell (1981), Spada (1986) or Higgs and Clifford (1982) who were likewise to argue that lack of attention to linguistic form, while not impeding lower level transactional skills based on the internalization of formulaic phrases, was a serious obstacle to higher level communicative interaction. [13] As the latter (ibid. 61) were to put it:

> Broadening the range of language proficiency expected from our students absolutely changes the rules of the game. Paralinguistic communication strategies become inefficient and counter-productive, and speakers whose communication repertoires are thus limited are rendered incapable of efficient or even marginally successful communication.

What was to emerge from such findings was a clear suggestion that learning outcomes are directly related to instructional differences and, more specifically, that accuracy in the use of the TL is directly correlational with an emphasis in the instructional process upon identifying form-meaning relationships. A similar response was to emerge from the immersion programmes that had been undertaken, within the Krashen paradigm, in Canada and in Australia. Canale and Swain (1980), for example, were relatively early to question the prevailing view that mastery of TL rules would occur 'incidentally', i.e. as a by-product of meaningful interaction through a content-based syllabus. They

stressed the preponderance of learner errors that arose through a lack of focus on form and the tendency for such errors to fossilize and develop into a classroom 'pidgin'. Others, such as Bibeau (1984), Harley and Swain (1985) and Pellerin and Hammerley (1986), were to go even further in their criticism. As Hammerly (1991: 215) was to put it, to say that immersion students 'do not perform at native-like levels' of proficiency is a misleading understatement. "These students' speech and writing are very far from native-like -- nowhere near it. Theirs is a terminal classroom pidgin -- 'Frenglish' in Canada (and 'Spanglish' in the US)." The fact that immersion courses failed to develop an accurate use of the TL – that is, that the errors tended to fossilize relatively rapidly – would seem to contradict the notion, implicit in Krashen's model, that errors are a necessary part of the learner's interlanguage which spontaneously self-correct. On the contrary, in a context where input is both limited in quantity and relatively random in quality, such self-correction seems unlikely in the absence of a deliberate teacher-induced focus on form.

2.1.1. 'medium' and 'message'

For Widdowson, the root cause of the error behind nativist approaches to second/foreign language learning is that they fail to grasp the reversal between schematic and systemic knowledge occasioned by socio-cognitive variables or, as Vygotsky (1962: 110) had put it, the fact that "... analogous systems develop in reverse directions, at the higher and at the lower level.". While, in L1, implicit knowledge of the system develops through communicative interaction, in L2 the relative lack of opportunities for such interaction mean that the learner has to focus attention on that system in order to access meaning, that is, has to use high level metalinguistic processing developed, as indicated, primarily through L1 literacy skills. Such a view is central to McLaughlin's (1987, 1990) critique of Krashen's highly inductive approach insofar as it argues that second/foreign language learning, unlike first language acquisition, involves a passage from 'controlled' (i.e. conscious and deliberate) to automatic (i.e. unconscious and spontaneous) processing. As he was to put it (1990: 125),

> ... a complex cognitive skill, such as acquiring a second language, involves a process whereby controlled, attention-demanding operations become automated through practice. This is essentially learning through accretion, whereby an increasing number of information chunks are compiled into automated procedures. In addition, however, there are qualitative changes that occur as learners shift strategies and restructure their internal representation of the TL.

McLaughlin's view is reflected in Littlewood's differentiation (1984) between 'pre-communicative' and 'communicative' strategies, Skehan's (1998) between 'structure-oriented tasks' and

'communication-driven tasks' and Dodson's (1985: 332) between 'medium' and 'message' oriented speech where even bilingual learners are seen to develop strategies ". . . initially satisfying a *linguistic* need in order to satisfy a subsequent *non*-linguistic need". This reversal in the mastery of the two processes can be seen, as in Roberts (1991), as operating along four major 'axes' or interlinked dichotomies.

- *Medium/message*: In L1 acquisition, the child only gradually becomes aware of what he spontaneously uses, i.e. is concerned not so much with what language is as with what it does. This initial focus on 'message-oriented' speech is hardly accidental in that extra-linguistic clues to meaning are so rich that he has little need to rely upon awareness of how linguistic form encodes messages to understand/convey meaning. This process is necessarily reversed in an L2 context, however, precisely because of the changing relation between cognition and context. Reduced contextual clues mean that the learner (as opposed to the user) can only access meaning by focusing consciously on language form and it is only as a result of controlled practice that he can internalize that form to such an extent whereby attention can be switched from the 'medium' to the 'message', i.e. to spontaneous use.
- *System/function:* In L1 acquisition, the child develops a mastery of the language system largely as a by-product of functional use, i.e. 'propositional' meaning encoded in that system is accessed via 'illocutionary' meaning in achieving interpersonal goals. It is no accident, as Halliday (1975) suggests, that the child's representational use of language – that is, his ability to convey meaning depending less on its contextual interpretation than on its linguistic formulation – is only gradually acquired. Such a process is again reversed in a second/foreign language context precisely because the same opportunities for communicative interaction do not exist and, even if they did, would be ineffective in the more limited exposure time available. In a situation where there is no genuine 'intention to mean', the learner is initially constrained to focus more upon the propositional meaning encoded in the language system which only gradually, through a range of appropriate activities, assumes illocutionary force.
- *Accuracy/fluency:* In L1 acquisition, the use of language is largely unplanned and contextual clues to meaning often overcome 'distortions' in the message caused by linguistic errors. It is largely because communication is not impaired that adults focus more on the correction of

semantic rather than systemic errors. In an L2 context, however, where extra-linguistic clues to meaning are sharply reduced and language becomes largely its own context, such errors inevitably assume a different role. If meaning is dependent more upon accurate use of the language system, errors in that system (i.e. in the propositional use of language) have considerably more potential for distorting the message than in an L1 acquisition process. Error correction necessarily focuses, therefore, more on form than on meaning since what might be an effective 'utterance' in the context of language use might be a defective one in the context of language learning. Attempts to differentiate between those systematic deviations which impede communication and those 'lapses' that do not (Corder, 1972) are simply unhelpful in this sense. As Borman (1983) has pointed out, it is difficult – if not impossible – to distinguish between the two categories in a cumulative learning process since an error that might not impede communication in one situation may well be indicative of, or lead to, a systematic deviation that will impede it in another. [14]

- *Meaning/sense:* As Vygotsky observed (1962), communication depends upon a common conceptual framework. In L1 acquisition, the child achieves such a framework as a result of successive approximations in which the 'sense' (i.e. pragmatic meaning) of an item only gradually gives way to its 'meaning' (semantic meaning). In an L2 context, however, this process is once again reversed in the sense that the learner's already well-developed conceptual repertoire allows him to access meaning directly through the linguistic form. It is only gradually, by the recycling of such items across a range of contexts, that he is able to concretize and thereby enrich them, i.e. develop an increasing appreciation of their 'sense' and, as Volosinov (1973) argued, to transform a 'signal' into a 'sign'. [15]

For Roberts, as for McLaughlin or Widdowson, what is critical about the reversal in process between L1 and L2 is precisely the conscious attention to form which characterizes the latter. The fact that the learner has no 'self-generating communicative needs' means that – at least in the initial stages – he is compelled to pay attention to the linguistic as opposed to extra-linguistic structuring of meaning. Learning an L2 implies, in this sense, as indicated in Chapter 3, a greater degree of metalinguistic awareness in terms of being able to identify those formal properties which the learner will have to attend to, at various levels, in order to access that meaning.

2. 2. 'attention enhancing strategies'

One of the principal features of research into L2 development in the past decade or so has, indeed, been a marked shift away from unconscious to conscious attention to language form, i.e. to metalinguistic processing. As Cohen (1990: 108-109) observes, the 'incidental' approach to L2 learning -- that is, the view that mastery of TL form is 'incidental' to communicative interaction -- has increasingly been seen as ineffective and as resulting in an unnecessary fossilization of the learner's interlanguage. [16] Conscious attention to form has, on the other hand, been viewed as critical to the learning process precisely because it allows the learner to 'identify' those features of the TL that he needs to master at any given stage. As Nagle and Sanders (1986: 17) were to suggest, in discussing what is involved in comprehension of TL input, ".. attending involves the application of mental energy to processing tasks and may range from focusing on specific features of input to controlled processing for retrieval". Attention, in such a perspective, is clearly a metalinguistic act that transforms 'input' into 'intake' by allowing the learner to identify and control those features that need to be internalized. Schmidt (1990: 129) argues that there are potentially three levels in second language acquisition/learning in which conscious attention can play a role: that of 'noticing' the input (as opposed to 'subliminal' learning); 'paying attention' to features of it (as opposed to 'incidental' learning); and, finally, seeking to 'understand' the features identified and generalize upon them through hypothesis-testing (as opposed to 'implicit' learning). While Schmidt himself argues that not all levels are necessarily invoked at any given point in the learning process, what is clear is that the ability to notice, attend to and generalize upon the features identified depends in large measure on what the learner brings to the learning process. [17] As Gass (1990) was to suggest, if the learner is, in particular, to transform 'input' into 'intake', he must already 'know' the features he wishes to internalize or, at the very least, be able to highlight them by comparing what he 'knows' with what he doesn't know.

For Gass, as for Ringbom (1990) or Lightbrown (1990), the process by which previous knowledge allows the learner to identify and access new knowledge operates at both the inter- and intralingual level. In the early stages, the L2 learner uses knowledge of his mother tongue to identify the required TL features and, as competence in L2 grows, this is gradually replaced by knowledge of the L2, along the lines of Selinker's (1969, 1972) interlanguage [IL] model. Differences exist, it is true, as to whether the role of such prior knowledge consists of provoking a match or mismatch with

TL input. In the case of Gass (1990: 135), for example, the transfer from 'input' to 'intake' (or what she refers to as 'apperceived input') is clearly based upon a mismatch between what is known and what the learner needs to know. As she puts it:

> With regard to second language learning, attention is what allows a learner to notice a mismatch between what she produces/knows and what is produced by speakers of the target language. Readjustment of one's grammar is triggered by the perceptibility of such a mismatch.

In the case of Ringbom (1990: 172), on the other hand, it is the 'perceived similarities' between knowledge of the L1 and what is required to be learnt in the L2 which facilitates the child's progressive mastery of form. [18] While such differences may exist, however, the emphasis in both writers upon the conscious application of prior knowledge to identify and access new TL features is clearly counterposed to the nativist tradition represented by a Felix (1981) or Krashen (1982). Various process-product studies have, moreover, sought to empirically demonstrate the impact of selective attention on mastery of various aspects of TL form even in second language acquisition contexts, as in the case of Tarone (1983), Hulstijn (1989), Bardovi-Harlig (1987) and, in particular, Ijaz (1986) where the access of non-central meanings of lexical items (in this case prepositions) was seen to occur only when those meanings had been made 'linguistically salient', that is, when the learner had been helped to selectively attend to them. The growing link in such findings between attention to form and efficiency in language learning has prompted others to stress the importance of linguistic 'consciousness-raising' as a pre-requisite for second/foreign language study. Both Sharwood-Smith (1981) and Rutherwood and Sharwood-Smith (1985), for example, have argued that such programmes should seek to aid the learner to make efficient use of the resources available in the learning process, primarily to be able to reflect upon his own 'implicit' knowledge and to use such knowledge to implement what Cohen (1990: 111) refers to as 'attention-enhancing strategies' in making sense of and accessing the input. [9]

2.2.1. 'scaffolding' the learner

One of the important implications of selective attention in the L2 acquisition/learning process is in the area of pedagogy. As indicated earlier, the notion that TL form was mastered incidentally through communicative interaction led to a highly inductive approach in which the role of pedagogy was simply to provide the 'raw data' on which the learner's 'internal syllabus' would operate. In a

situation where conscious attention to form is seen as a pre-requisite for efficient learning, however, the role of pedagogy plays a much more proactive role in 'scaffolding' the learner in order to help him perceive the intended regularities in the TL input and, thereby, turn 'input' into 'intake'. This means, in particular, that the 'roughly-tuned input' that was crucial to Krashen's 'natural approach' should give way to input that is based upon clearly defined selection and sequencing criteria. Choosing what Hornsey (1981) refers to as items of 'high transfer value' -- i.e. items capable of generating utterances across a range of contexts -- and sequencing them in a progressively more complex way would appear to be crucial in helping the learner to identify what he needs to internalize. [20] Such a view is clearly implied in Rutherwood and Sharwood-Smith (1985: 275), for example, who suggest the use of instructional strategies which "... draw the attention of the learner to specifically structured regularities of the language, as distinct from the message content". Gass (1990: 137) is even more specific. Explicit instruction, in her opinion,

> ... facilitates student awareness of the target language forms and/or meanings and of the discrepancies between what they themselves have constructed for their second language and the system which becomes apparent to them (through instruction) from the target language data they are confronted with. In other words, it acts as a selective attention device.

It is not enough, however, simply to aid the learner to perceive the regularities that need to be internalized since, as in Schmidt's (1990) three-level model, he also needs to test out his hypotheses and draw significant generalizations on the basis of relevant feedback. Such a process is facilitated by the grading of input in such a way that the learner is able to move from controlled interaction with the teacher to growing autonomy in his responses or, as Ellis (1994: 1) was to put it, from making to testing hypotheses "in a search for structure".

One of the potential dangers of the current emphasis upon the role of selective attention in L2 acquisition/learning is the relationship between learning and communication strategies. As Roberts (1994: 10) points out, while the current literature correctly stresses the importance of a conscious attention to language form in the initial stages, there is a corresponding lack of clarity at times – as in Gass – as to how the learner, having internalized a given item, can be aided to use it unconsciously in interaction with others, i.e. move from 'knowing' about it to 'doing' things with it. Such a process will not arise spontaneously unless, as Roberts (1994: 11) continues, it forms "part of a planned cycle of activities in which the learner is encouraged not only to consciously form hypotheses about a given item – and to test out those hypotheses in practice – but to use the item spontaneously for

communication". [21] Useful models describing the process by which an initially conscious focus on form gives way to an unconscious focus on function can be found in Hawkins' (1981) four-stage or Allen's (1983: 36) three-stage 'variable-focus' model moving from structural mastery to experiential use on a cyclical basis: [22]

Level 1	Level 2	Level 3
Structural	*Functional*	*Experiential*
Focus on language (formal features)	Focus on language (discourse features)	Focus on the use of language
(a) structural control	(a) discourse control	(a) situational or topical control
(b) materials simplified structurally	(b) materials simplified functionally	(b) authentic language use
© mainly structural practice	© mainly discourse practice	© uncontrolled, free practice

Figure 1

The latter is not dissimilar from Roberts (1991) three-stage 'input-practice-use' model which also views L2 learning as a process from structural mastery to functional use of new linguistic items (Cf. Appendix 5). In the first (i.e. input) stage, the task of pedagogy is to help the learner – through sensitively applied selection and sequencing criteria – to use his existing metalinguistic knowledge of language to selectively attend to those features in the input that need to be internalized. [23] In the second (i.e. practice) stage, the learner needs to be encouraged to test out the hypotheses he has formed regarding the TL item and to develop a generalized understanding of its use, based on relevant feedback, so that, in the third (i.e. use) stage, he can use the TL item more flexibly to convey personal meaning. As in the Allen model, the process between the teacher-scaffolded activities of the first stage to the autonomous activities of the final stage reflect a shift, on the part of the learner, from attention to form via internalization to functional use, that is, to the use of language to achieve non-linguistic goals.

3. 0. Differentiation within L2

There has been a growing recognition in recent years that attempts to replicate what Grenfell (1990: 8) refers to as the 'natural process of language' acquisition in the L2 context are simply ineffective. Second language acquisition/learning is, as Hawkins (1981) suggested, an even more

'parasitic' activity than reading and, as such, depends ultimately on the (meta-) linguistic knowledge the child brings with him to make sense of the process and 'crack the code'. Skehan (1985: 17) was, as indicated, to view such knowledge as a form of 'aptitude' which seems to involve "both a language processing ability as well as the capacity to handle decontextualised material". Whether it is referred to as metalinguistic knowledge or aptitude, however, it is this capacity that the language teacher can arouse and direct in helping the learner to identify ('attend to') those aspects of the TL input that are to be internalized. Such a process, it might also be pointed out, is true of *all* second language acquisition/learning processes – apart possibly from child bilingualism – insofar as the learner already 'possesses' a language whose knowledge can be utilized to help focus his attention, in a variety of ways, upon specific features in the acquisition/learning of the second language. As Vygotsky (1986:159-60) pointed out some considerable time before, the L2 learner does not return to the "immediate world of objects" in his acquisition/learning of the L2 but "... uses the semantics of his native language as its foundation".

While all L2 processes will tend to be parasitic upon the development of L1, however, they will clearly do so to quite different extents, depending upon the opportunities for communicative interaction in the L2 available to the learner, that is, on the quantity and quality of the input. A child who has access on a daily basis to the TL in a range of communicative exchanges within the host community (e.g. second language acquisition) will rely less upon the 'knowledge' built up through the L1 to access the L2 than will a child who is exposed to an L2 solely in the acquisition-poor context of the classroom (e.g. foreign language learning). If, in the past, differences between the L1 and L2 learning processes were downplayed or ignored, however, the same disregard has often developed with respect to similar differences between L2 acquisition/learning processes in terms of exposure to the TL. Bialystock and Ryan's (1985a, 1985b) model is illustrative of the problem in that it assumes that all L2 processes will develop unidirectionally along the same axes as L1 acquisition, that is, from unanalyzed to analyzed knowledge and from low to high control. As Hulstijn (1990) points out, such a view not only downplays (or ignores) the difference in contextual variables between L1 and L2 but, equally, between non-instructed and instructed processes within the L2. Such a blur can lead, he argues, to incorrectly assuming that activities which require low levels of analysis and control in one process necessarily do the same in another. One example of this might be the case of spontaneous conversation which, in an acquisition-poor FL context, may very well

require much higher degrees of metalinguistic processing than in an acquisition-rich SLA context on account of the lack of opportunities for communicative interaction.

Stern (1983) has severely criticized the tendency to blur the difference between instructed and non-instructed L2 contexts, as in the Bialystock model, or to use data drawn from the latter as the basis for motivating changes in pedagogy in the former. Phillipson (1990: 45) goes further in suggesting that the blur between *second* and *foreign* language processes, as that between ESL and EFL, can often be an educational 'life or death' issue affecting children's life chances and argues that course planning "... should take the specificities of each context as its starting point ...".[24] A useful example of the attempt to show the impact of differing socio-cognitive variables on learners' strategies can be seen in Pica's (1983: 495) comparative study between learners in 'natural', 'mixed' and 'instructional' contexts. While somewhat indebted to Krashen, such a study concluded that "... differing conditions of L2 exposure appear to affect acquirers' hypotheses about the target language and their strategies for using it". A similar study was carried out by Smith (1997) using a similar typology of learning/acquisition contexts, that is, second language acquisition, immersion and foreign languages which are posited as points along a spectrum of increasing decontextualisation. It may be useful to re-examine the differences between such contexts with the emphasis upon teasing out the pedagogical implications of the shifting relationship between metalinguistic processes and context-embeddedness.

3. 1. Second language acquisition/learning

As Littlewood (1984: 2) was to put it, a second language (as opposed to a foreign one) has "... social functions within the community in which it is learnt" and the second language learner has contact with it usually both through exposure to it in the community and in school. Partly because of the incentives to interact with members of the host community to fulfil a variety of needs and partly because of the extra-linguistic clues to meaning that 'scaffold' such interaction, it is widely expected that second language learners will rapidly develop communicative competence with little (or no) necessity for formal L2 study. As Townsend's (1971: 38) survey of LEA reaction in the UK to the integration of bilingual pupils into mainstream education revealed, the majority view was that "immigrant infants ... will pick up the language just as a child picks up his native language from an early age". There is some truth in the view that acquisition of oral competence in L2 bears a strong

resemblance to the acquisition of such competence in L1 insofar as, as Cummins & Swain (1986: 153) note, "context-embedded communication derives from interpersonal involvement in a shared reality which obviates the need for explicit linguistic elaboration of the message". This is particularly the case with young second language learners in mainstream classes who, as John-Steiner (1985: 352) points out, are "resourceful in maximizing their communicative means" largely because they focus their interests on "shared behaviour" and tend to "limit their talk to the activity at hand", that is, replicate the L1 process of using language in the initial stages as an accompaniment of action. While it is partly true that the young second language learner does follow the L1 route in developing oral proficiency, however, it should be noted that he rarely achieves the same level of proficiency as his L1 counterpart for whom it is a 'primary' rather than 'secondary' skill. This is partly because he may rely, in the early stages, upon use of the L1, particularly within the minority community, and in the absence of formal L2 tuition, his L2 interlanguage may fossilize at a stage where communicative interaction is no longer impeded. In addition to cognitive reasons, there may well also be affective ones in that his own minority community may not valorize the L2 and/or the learner may himself feel rejected by the L2 host community.

While the second language learner in mainstream classes may seemingly develop a sufficient level of communicative competence to meet his needs, this is by no means the case with the more analytic competence required to access context-reduced uses of language, as in the case of written texts. On the contrary, as Cummins and Swain (1986: 207) have stressed in the contrast between surface fluency (BICS) and academic proficiency (CALP), there is a major distinction in L2 as there is in L1 between " . using language in a richly contextualised situation and using language where clues to meaning come primarily from the text itself". In L1, the child's ability to cross this gulf depends, as has been argued, upon disembedding those aspects of his oral competence which can serve as decoding strategies for accessing the new skill. In L2, partly because the child's L2 oral competence may be too 'weak' to provide a base for metalinguistic processing, the only way he can cross that gulf is by relying upon the development of such processing in L1. This is, of course, the basis of Cummins (1986) 'Common Underlying Proficiency' theory in which it is the metalinguistic processing built up through literacy skill development in L1 which can be transferred to L2 text-related language use to compensate for weak L2 oral competence. As the latter (1986: 211) was to argue, evidence seems to suggest

> ... that context-embedded grammatical L2 skills develop primarily as a function of exposure to and use of the L2 in the environment whereas L2 academic skills are relatively more dependent on cognitive attributes of the individual.

While Cummins views such a transfer of proficiency as crucial for the second language learner if he is to master the demands of formal schooling in the host community, however, the fact that the child may have been denied the opportunity to develop literacy skills in the L1 can place him in what Skinner (1985: 378) called a " .. 'no-win' situation where academic failure is the inevitable result". The reasons why the second language learner may have been denied the opportunity to study his L1 vary, of course, from the fact that the minority community may no longer valorize the L1 to the fact that, as Geach and Broadbent (1989: 119) point out, the host community may, through the educational system, simply refract ethnocentric attitudes towards pupil use of any language other than that of the dominant culture for pedagogic purposes. Whatever the reason, what is clear is that the lack of metalinguistic skills needed to make sense of L2 text-dependent language in formal schooling condemns many bilingual children to academic failure.[25]

3.1.1. 'threshold' levels

The central thrust of Cummins' approach to second language development is, as Hamers and Blanc (1989: 51) point out, that " ... competence in the mother tongue has to be sufficiently developed before the child can successfully acquire a second language". Cummins (1979, 1984) himself often referred to the notion of a 'threshold' that had to be reached in L1 proficiency if the second language learner was to navigate the complex text-related uses of language that constitute formal schooling. Much of his empirical research was aimed at highlighting the difficulties facing US minority group immigrants who, he pointed out (1984: 4) "had attained apparently fluent English face-to-face communication skills" without reaching the 'threshold' in L1 and who were consequently unable to deal with the academic demands of mainstream learning. For Cummins, as indicated, the 'threshold' was intimately linked with the development of literacy skills in the L1 and it is no accident that he was, therefore, to associate age with success in second language learning. As he (1984: 3) was to put it, "... older immigrant students (10-12 years old) whose academic proficiency (e.g. literacy skills) in L1 was well-established, developed L2 academic proficiency more rapidly than younger immigrant students". Such a view was supported by writers such as John-Steiner (1985) and by Skutnabb-

Kangas and Toukomaa (1976: 75) in their large-scale study of Finnish immigrant students enrolled in Swedish schools. Older children aged above 10 who had well-developed literacy skills, they claimed, found it much easier to access Swedish than their younger siblings whose verbal development in L1 often underwent "serious disturbances" with a consequently detrimental effect on their progress in L2. [26] More recently, further studies have sought to show the type of metalinguistic skills that emerge in L1 literacy development and their impact on second language learning. Hakuta (1986) and Snipper (1985), for example, have sought to establish a general correlation between literacy levels among children in L1 and in English as L2 and others, such as Goldman (1984: 54), have sought to show how an understanding of various narrative skills, such as story comprehension in L1, "appear to be transferred to comprehension of English" as L2. [27]

Cummins' work was, in large measure, prompted by the underachievement of minority group immigrants in terms of dealing with the academic demands of formal schooling. What is central to his argument, however, which has undergone numerous shifts in nuance over the years, is the emphasis that is placed on the role of metalinguistic processing in second language acquisition/learning. [28] Even in a context where the second language learner has considerable opportunities for communicative interaction in the TL, the latter is clearly viewed as a 'secondary' rather than a 'primary' skill which cannot be accessed by seeking to replicate the 'natural process' of language acquisition. On the contrary, accessing the TL -- and, in particular, those aspects of it which are text- rather than situation-dependent – is seen as requiring the type of metalinguistic processing skills that can only be developed through L1 literacy skill development. The only way of combating academic underachievement, Cummins was to stress, was by implementing a pedagogic strategy that gave *status* to the child's L1 within the education system as a pre-requisite for successful L2 development. There are two inter-related aspects of such a strategy which merit attention. The first is the importance of ensuring mother tongue maintenance, that is, providing second language learners with the opportunity of developing oracy and literacy skills within their L1. It is, as writers such as Saville-Troike (1982: 216) note, only by using the "... opportunity to discuss the concepts they are learning in their native language with other children or adults" that second language learners will be able to access the decontextualised discourse of formal schooling. The second is the importance of placing greater attention in the teaching of the TL on form-functional relationships rather than on communicative and discourse strategies. As writers from Gass (1990) to

Lightbrown (1990) have recently stressed, there appears to be growing evidence that – even within a process of high exposure to the TL – the learner can be helped to tap his metalinguistic skills developed in L1 to focus attention upon those aspects of his interlanguage in the TL which are the source of ongoing problems. This might include, for example, features that are in danger of fossilization and/or the subject of avoidance strategies. [29]

3. 2. Immersion programmes

Immersion programmes differ from second language acquisition/learning programmes in that the learner lives in an L1 environment (such as Hong Kong), or a bilingual environment (such as Montreal in Canada), and uses the L1 as a mother tongue outside of formal schooling. The L1 is, in this sense, the language of daily communicative interaction and the L2 – even if taught through a content-based curriculum – the language exclusively of the school. Largely because the learner's exposure to the L2 differs negatively from that of a second language learner, both in terms of the quantity and quality of input, it might be expected that such a programme would be clearer as to the parasitic role that L2 will play in relation to the L1 and that this would be reflected in the way in which pedagogy seeks to tap the metalinguistic skills of the learner. What is interesting to note, however, is that despite such differences, the attempt to teach L2 through a content-based approach has been motivated almost exclusively by the desire to replicate L1 acquisition processes in the classroom. As Swain and Lapkin (1982: 5) were to put it, the aim is for the school to provide

> ... a naturalistic setting for second language acquisition; that is, the second language is acquired in much the same way as children acquired their first language by interacting with speakers of the language in authentic and meaningful communicative situations

The attempt to replicate the L1 acquisition process – in which form is induced as a by-product of functional interaction -- was to be informed, particularly in the Australian model, by a strictly Krashenite pedagogical approach. Children were to be exposed to 'comprehensible' input and only required to produce what they had internalized when they were ready, errors made as part of the child's developing interlanguage were to be self-correcting and no attempt was to be made to direct or focus learners' attention on form in the comprehension/production of utterances. [30] It is interesting to note that the transfer to literacy skills was, within this framework, undertaken initially through the L2 rather than the L1 although, as within the Canadian model on which it was partly based, there was

a staged phasing in of English (L1) literacy from grade 1, which gradually assumed a preponderant role.

Partly because content teaching was seen, as Swain notes (1990: 234) as "communicative language teaching *par excellence*" expectations for the levels of fluency reached by immersion students were considerable. Early reports did, indeed, tend to suggest that children reached a threshold level relatively early although, as Swain (1985: 12) went on to admit, this was partly because motivation was high and the threshold level was relatively low ". . . given the young age of the learners and the relative simplicity of the content initially taught". It soon became apparent, however, that as the programme developed and the content became conceptually more complex, considerable weaknesses began to emerge in learners' L2 (as compared with L1) proficiency. The primary weakness focused around productive skills which, unlike receptive ones which were recorded as near native-like in their sophistication, appeared to develop much more slowly and fossilize much more rapidly. Spilka (1976: 553-4), for example, noted that, after six years of content teaching, immersion students seemed to make little progress in accuracy and that their IL [interlanguage] actually contained increasing error percentages. Conners *et al* (1978: 69) likewise observed the "deviant and painfully simple nature of their [i.e. immersion students] output", as illustrated through errors, inappropriate grammatical forms, avoidance of complex tenses (such as the conditional) and a generally simple use of language, and even Swain (1986: 13`) was forced to admit that, after seven years of 'comprehensible input' in French, immersion students in Canada were "somewhat limited in their grammatical development relative to native speakers". Other writers such as Bibeau (1984: 45) were somewhat less reticent in their criticism when noting that

> When it comes to expressing themselves and demonstrating their knowledge in an active fashion, they hesitate, speak in incomplete sentences, produce stereotyped utterances, avoid difficult structures by using overly complex sentences, have a strong foreign accent and make numerous errors in grammar and vocabulary... [31]

Perhaps the clearest cause for concern were the results from a comparative study that Swain (1983) herself conducted between early and late-start immersion students which seemed to suggest that the latter did as well as the former despite receiving less than half the exposure time. Such a result appeared to question the assumption, drawn from writers such as Krashen and underpinning immersion programmes, that proficiency develops automatically as a function of exposure to the TL as it appears to do in L1.[32] A similar result, it should be noted, was found in a later comparative

study among immersion students in Hong Kong. As Ho (1985) records, Cantonese-speaking children who were taught English as a foreign language in grade 8 appeared to achieve identical results after five months to those who had been taught 60% of their curriculum through English over the same period of time.[33]

3.2.1. Limitations of content-based programmes

While such results were disappointing, the apparent failure of immersion students to develop grammatical accuracy in TL use was explained away initially by deficiencies in the implementation of the programme rather than by questioning the highly inductive premises on which the programme was based. In particular, writers such as Conners *et al* (1978: 69-70) sought to attribute the problem to such factors as the limited range of interactive tasks the learner could undertake in a formal setting or the restricted nature of the input to which he was exposed, i.e. the absence of certain kinds of discourse "in their ordinary social circumstances", the "unusually artificial" material, the "conservative and stylistically undifferentiated grammar" of the non-native teachers and the stilted interlanguage of non-native peers. There is no doubt that some of these criticisms may be valid but they do not address the central problem which is, as Swain (1990: 249) was somewhat later to recognize, that "typical content teaching is not necessarily good second language teaching", that is, that teaching a 'parasitic' language skill through functional interaction is not necessarily the most efficient way to do so. There are, perhaps, three areas in which this is most apparent and which pivot around the Krashen-derived pedagogy that characterizes immersion programmes:

- *Selective listening*. In the first place, in content-related language teaching, the emphasis is upon comprehending meaning rather than on exploring the ways in which linguistic form encodes that meaning. Since the input is bound to be relatively random in this respect, the learner is compelled to use whatever strategies exist at his disposal -- both linguistic and non-linguistic -- to disembed that meaning. Unfortunately, as Swain (1990: 239) was to point out, "... it is possible to comprehend input – to get the message – without a syntactic or, I would add, a morphological analysis of that input. What appears to occur is 'selective listening' (Van Patten, 1985)". By 'selective listening' is meant an attention to input which relies upon non-linguistic strategies and which can, over time, make the learner insensitive to many aspects of the linguistic encoding of meaning or what Gary and Gary (1981: 3) referred to as a range of "...

redundant grammatical and semantic functions such as concord, definite/indefinite distinctions, singular/plural distinctions etc". [34]

- *Interlanguage.* In the second place, even if the learner is able to form hypotheses of form-meaning relationships, the insights are likely to mirror the randomness of the input itself rather than be part of a planned linguistic progression. Certainly, within the framework of content-based teaching, there is little opportunity for the learner to systematically test out his hypotheses, to receive relevant feedback and – on that basis – to integrate new systemic knowledge into existing knowledge as a means of facilitating more complex uses of the target language. On the contrary, the unsystematic or random nature of the learner's discovery of form-meaning relationships – and what Swain (1990: 249) refers to as the equally "unsystematic, possibly random feedback" on the part of the teacher to learners' errors – would suggest that there is no automatic progression in the learner's interlanguage. What is required to assure such progression, as Swain (1990: 240) continues, involves a willingness to structure the input in such a way that it will "... help learners focus their attention on particular form-functional relationships" and then to "contrive contexts in which [their] use is natural"
- *Fossilization:* In the third place, even if the learner can be aided to focus attention upon form-meaning relationships, the notion that he should be placed under no 'cognitive pressure' to test out his hypotheses in productive use can further underline competence. Not only will he be tempted to 'make do' with his existing level of competence but – insofar as he does seek to test out any new hypotheses -- to downplay any inaccuracy in their use provided that meaning is not impeded. The danger of fossilization, which Littlewood (1984: 34) suggested arose when a learner "realizes (subconsciously) that the error does not hinder him in satisfying his communicative needs (at the functional or social level)", is as real among immersion students as it is among second language learners. Both tend quite rapidly to reach a plateau in their interlanguage precisely because there is no teacher-induced pressure for them to develop accurate use of new structures as long as, as Swain (1986: 133) suggests, "their current output appears to succeed in conveying their intended meaning". [35]

The weaknesses identified by writers such as Swain in immersion programmes have led them increasingly to question the premises on which they were based, notably the view that an L2, like an

L1, is best learnt through 'meaning making'. While she never explicitly rejects the value of a content-based approach, her work has sought to combat the highly inductive pedagogy that results by arguing that (a) input should be less random and should encourage the learner to attend to form-meaning relationships, and (b) activities should be structured to encourage the learner to test out hypotheses about such relationships in productive use. "Students", she (1990: 249) was to suggest, "need to be guided through this process by engaging them in activities which have been contrived by the teachers to focus the learners' attention and to naturally elicit particular uses of language".

There can be no doubt that Swain's critical review of immersion programmes – like that of Spilka (1976), Bibeau (1984) or Hammerly (1992) – would appear to be further confirmation that, in an L2, as opposed to L1 process, 'use' does not necessarily lead to 'usage'. If anything, however, the critique does not go far enough in that the immersion student is in a more disadvantageous position than the second language learner. Unlike the latter, for example, he has less contact with the TL, a more restricted range of interactive situations in which to use it and, very often, less non-linguistic clues to scaffold his access to meaning in a content-based syllabus. In such a situation, if the learner is to overcome the errors and distortions of a fossilized interlanguage, he has to be able to make use of his developing metalinguistic skills to attend to the linguistic structuring of meaning from a relatively early stage. The task of the teacher is clearly, as Swain suggests, to help the learner form and test out hypotheses about these relationships by reducing the randomness of the input and providing a series of more carefully sequenced and graded activities. Whether this can be achieved within a content-based syllabus – or whether the latter should be dismissed as confusing rather than clarifying the child's attempt to move from pragmatic to semantic processing -- is a valid discussion.

3. 3. Foreign language learning

In contrast to immersion programmes, foreign language learning occurs within the learner's native country where he has no contact with the TL outside the classroom except in a peripheral or accidental way. As Littlewood (1984: 2) was to suggest, a foreign language is learnt "... primarily for contact outside one's own community" Such a situation involves a considerably more decontextualised process than in either second language or immersion programmes in two respects. In the first place, the foreign language learner has virtually no opportunities for communicative interaction outside or inside the classroom (as in a content-based syllabus) and, consequently,

progress in TL learning/use is not motivated at all by what Searle (1968) referred to as an 'intention to mean'. This lack of an 'interpersonal' dimension -- what Hammerley (1991) refers to as the learner's sense of "delayed gratification" -- can, in turn, be the cause of affective as well as cognitive problems. [41] In the second place, even if opportunities for such interaction were to exist, there are no extra-linguistic clues to meaning that can scaffold such interaction while the learner is internalizing the TL form as in an immersion programme. The fact that the foreign language learner lacks both the opportunity for, and scaffolding of, communicative interaction means that he is compelled from a very early stage to focus attention upon form-meaning relationships. It is *only* by using his metalinguistic skills developed through L1 to attend to and identify form-meaning relationships in the input – and to test out those relationships in a range of suitably graded activities – that the foreign language learner's interlanguage can progress.[36] As Roberts (1991: 27) was to put it, development in FLL "... is dependent upon the learner's prior metalinguistic awareness which alone can allow him to associate form and meaning as a pre-requisite for subsequent use" [37]

It is against the decontextualised nature of foreign language learning that the current emphasis on 'communicative' language teaching has to be assessed. Although writers such as Widdowson (1978) or Brumfit and Johnson (1979) were never to adopt the highly inductive approach characterizing immersion programmes, their work was – at least initially -- inspired by the same (quasi-nativist) assumption that language form can be mastered through communicative interaction. This assumption can be detected in terms of a revision at the level of both syllabus design and methodology even though, as Widdowson (1991) correctly observes, there is no necessary link between the first and the second. In the area of syllabus design, for example, the view that grammatical accuracy could be developed through illocutionary function led to the rejection of the structural in favour of the 'semantic' or 'notional-functional' model in which content was defined in terms of such categories as 'ordering', 'warning', 'promising' or 'denying' etc. As Wilkins (1976: 19) was to put it, structuring the content in terms of functions is "... potentially superior to the grammatical syllabus because it will produce a communicative competence" The emphasis on function in the sequencing of language items was, in turn, to lead to a range of methodological 'guidelines' in which the emphasis was on involving the learner in interactive activities ('information-gap') through which form could be internalized as a function of meaningful use. Out of 10 points listed in the CILT (1987) guidelines on communicative language teaching, for example, three are worth stressing:

- *Legitimacy of tasks and activities*, i.e. learners should learn by being involved in activities which correspond to their own interests and needs and which, thereby, have 'motivational force';
- *Meaningful use*, i.e. learners should be given opportunities to use language in a purposeful way in which the emphasis is upon the 'message' rather than the 'medium' (dismissed as 'structurespeech');
- *Authenticity in language*, i.e. learners should be exposed to authentic materials which emphasize the importance of intake rather than input control.

There is a causal relation between these three features which pivot around the notion that, as Prabhu (1984) suggests, "form is best learnt when the learner's attention is focused on meaning". Tapping the learner's interests allows him to engage with, and make sense of, authentic language texts which, in turn, provide the basis for internalizing the form-meaning relationships needed for further task-based activities. Within this process, as in immersion programmes, the emphasis on 'fluency' leads to a corresponding de-emphasis on 'accuracy' and a greater tolerance towards error-formation which is seen, not so much as an unnecessary deviation from the TL system, as an inevitable and valid part of the learner's interlanguage. [38]

3.3.1. 'motivational force'

Even though the 'communicative approach' is a diluted version of the highly inductive pedagogy advocated in immersion programmes, it has perhaps proved even more problematic in terms of facilitating access to the TL. The notion that a syllabus should be based on functional rather than on formal progression is clearly confused in that it assumes that what the learner needs to 'know' to operate effectively in the TL is synonymous with how he acquired that 'knowledge', that is, it prioritizes the pragmatic aspect of language use over the systemic aspect of its acquisition, as in L1 acquisition. It may well be true, as Wilkins (1976) claimed, that in order to be able to communicate effectively a learner needs to be able to use the TL functionally but that hardly means -- in a context where there is minimal exposure time and opportunities for genuine communicative interaction -- that he can internalize form-meaning relations as a by-product of functional use. On the contrary, as writers such as Brumfit have stressed, since there is no one-to-one relation between functional and formal progression, the learner usually ends up with a shopping list of expressions learnt in a formulaic way which he is unable to adapt – because of constraints in time and use – outside of the context in which they were learnt to convey personal meaning. As the latter was to put it (1978: 79-82), in his critique of Wilkins' model:

> The point about the grammatical system is that a limited and describable number of rules enable the learner to generate an enormous range of utterances which are usable, in combination with paralinguistic and semiotic systems, to express any function. To ask learners to learn a list instead of a system goes against everything we know about learning theory.

The tendency in semantic-based syllabi to obstruct rather than facilitate learners' access to the generative system – or parts of that system – is reinforced by classroom procedures. The emphasis on 'authentic' (i.e. 'random' as opposed to selected and sequenced) input, for example, further acts to impede the learner's ability to attend to and identify relevant form-meaning relationships and the more tolerant attitude to error-formation tends to encourage incorrect hypotheses to fossilize as a permanent part of the learner's interlanguage. As Allen (1983: 91) was to suggest, in the absence of systematic teacher feedback and correction, "... learners may develop fossilized interlanguage when they become able to communicate fairly successfully".

In a rather belated critique of the 'communicative' approach, Widdowson (1990: 112) was to suggest that the attempt to replicate natural L1 acquisition in the L2 classroom was 'simplistic'. [39] The latter is, he went on, a "long and rather inefficient business" and the task of pedagogy is to help the learner to draw relevant conclusions which avoid such a wasteful process of trial and error. Widdowson's point is a valid one but possibly does not go far enough insofar as the communicative approach is not so much inefficient as pedagogically unprincipled. Its central premise is, as indicated, that it is possible to internalize TL form through functional interaction and the emphasis in pedagogy is, consequently, on tapping learners' "self-generated communicative needs" (Grenfell 1990: 8) in a range of interactive activities, such as information-gap etc. While the latter may be a valuable pedagogic procedure, however, it is as well to remember that – as writers from Swan (1985) to Skehan (1988) have stressed – it still remains a simulated and not a real 'speech act', that is, an act which is intended to learn the TL rather than achieve any genuine communicative purpose. [40] Insofar as this is true, attempts to simulate classroom interaction can never carry the same 'motivational force' which, as in first (or second) language acquisition, will allow the form-meaning relation to 'stick'. On the contrary, it is precisely because such activities are never more than simulations – i.e. do not stem from any genuine "self-generated" needs – that their completion can only come after the pupil has attended to and practised the form-meaning relationships necessary to carry them out rather than, as in Brumfit's earlier communication-led model, before them. [41] Such an approach would

seem to suggest that, in the early stages of foreign as opposed to second language learning or even immersion programmes, the learner needs to be scaffolded in using his metalinguistic skills to access the 'formation rules' through considerable selection and sequencing of material before he can focus on the 'speaking rules'. [42]

4. 0. Summary

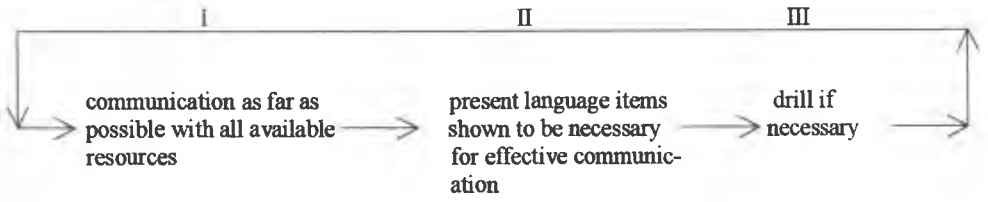
The principles underpinning a curriculum concern not only what is taught but how also how it is taught, that is, not only content but also pedagogy. Until recently, attempts to explore a wider cross-curricular approach to language education have tended to stress more what, in terms of themes and practices, the traditionally different areas have in common than what distinguishes them. The 'apprenticeship' approach to curriculum design, however, focuses more upon the differences between such areas as part of the child's expanding semiotic repertoire. Such differences are not random, of course, but represent a process based upon the growing importance of metalinguistic processing in allowing the child to make sense of, and access, increasingly decontextualised skills. Such an approach, it is argued, is crucial for understanding differences in pedagogy between first language acquisition and second language acquisition/learning and, within the latter, differences between such processes as second language acquisition, second language 'immersion' programmes and foreign language learning. Differences between the latter are particularly important to appreciate in that there has long been a tendency to transpose findings from one process to another in a way which has often been unprincipled and which has rendered pedagogy both inappropriate and ineffective.

Notes

1. As Brown and Ferrara (1985: 281-2) were to put it, when discussing the pedagogic implications of Vygotsky's notion of the 'zone of proximal development', this is a gradual process "from other-regulation to self-regulation" which proceeds through the nurturing of the emergence of personal planning in the child.
2. This is similar, as already indicated, to Hawkins' (1978, 1981) notion of a 'vertical curriculum' in which language awareness was designed – as part of the 'trivium' – to bridge the gap in pedagogy between first and foreign language learning.
3. Interestingly enough, convergence between the two areas was widely interpreted in NCLE reports as due to a shift in FL pedagogy towards a more communicative approach. As Tinkel (1981: 118) was to point out, "The foreign language teacher's conception of language is beginning to change towards seeing language in terms of communicative acts rather than in terms of grammatical categories", and it is this which facilitates cross-curricular collaboration.
4. Brumfit's (1978) distinction between 'fluency' and 'accuracy' is a case in point. As Ellis (1982: 77) observes, Brumfit's view that fluency can only stem from acquired and not learnt knowledge implied a highly inductive methodology in which, as in L1, "pupils first 'communicate' as far as possible with all available resources" and only secondly receive systematic practice if it is required.
5. The nativist assumptions underpinning the 'invariant route' hypothesis can be detected, albeit in a more diluted form, in Pienemann's (1984, 1989) Multidimensional model or Bialystock's (1985) Analysis-Control model. While there are important differences between them, what they all share is a view that second language acquisition/learning proceeds unidirectionally along the same axes as does L1 acquisition, that is, through a series of 'cumulative stages' (from low to high analysis/control).
5. The view that language can be acquired as a function of communicative interaction can, in a wider sense, of course be traced back to the Reform Movement at the turn of the century. It was to receive its most consistent theoretical rationale, however, in the work of applied linguists influenced by Chomsky's nativist hypothesis.
6. Dulay and Burt's (1973) tests were carried out on two groups (one Spanish and one Chinese) learning English as a second language and involved a sub-set of the 14 morphemes analyzed in Brown's (1973) earlier study. They claimed to find identical results in the order of acquisition between the two groups, thereby suggesting that the process was both developmental and invariant and not susceptible to contextual factors such as L1 transference
7. With admirable consistency, Reibel and Newmark were to draw out the implications of this approach for syllabus design somewhat earlier than Wilkins (1976) when suggesting that "The pedagogical implications of our position is that we abandon all notion of structural grading and structural ordering of exercise material in favour of situational ordering".
8. The extent of the nativist assumptions underpinning Monitor Theory can be seen in Krashen's (1985: 4) attempt to summarize the 'five hypotheses'. "People", he was to write, "acquire second languages only if they obtain comprehensible input and if their affective filters are low enough to allow the input 'in'. When the filter is 'down' and appropriate comprehensible input is presented (and comprehended), acquisition is inevitable. It is, in fact, unavoidable and cannot be prevented – the language 'mental organ' will function just as automatically as any other organ".
9. Although Ellis (1985: 15) tends to accept such a view, he is careful to indicate the lack of empirical supporting evidence: "The few studies of the effects of formal instruction on the developmental route suggest that the 'natural' route cannot be changed. These are not conclusive, however. Formal instruction can take many different forms and it is possible that the route of development is amenable to influence by certain methods but not by others".
10. Widdowson may, in his later writings (1990), been highly critical of the 'communicative approach' but, in his early work, he clearly accepts its premise that form can be internalized as a byproduct of functional use as in L1. As he was to argue (1978: 19), while use cannot be acquired through usage, "the teaching of use ... does seem to guarantee the learning of usage since the latter is represented as a necessary part of the former".
11. As Widdowson (1990: 17) points out, the assumption underpinning the invariant route hypothesis that accuracy coincides with acquisition, that is, that competence mirrors performance, may simply not be true: "It may be", he writes, "that learners have internalized aspects of the system which for one reason or another they cannot access on particular occasions, that circumstances of different kinds prevent them from acting on this knowledge". Rosansky (1976), it might be noted, had reached a similar conclusion some time before.
12. Swan (1985: 82) was to express a similar viewpoint somewhat more prosaically when arguing that "A certain amount of artificiality is inseparable from the process of isolating and focusing on language items for study, and it is a serious mistake to condemn types of discourse typically found in the classroom because they do not share all the communicative features of other kinds of language use".
13. Roberts (1993: 25) makes the same point when suggesting that learners often "... cannot transfer what they have learnt outside the context in which they learnt it. They may know how to ask where the nearest café is (*Est-ce qu'il y a un café pres d'ici*?) but, because they have learnt this as a formulaic expression for a given task, are unable to transfer the underlying pattern to ask if there is any cheese in the fridge (*Est–ce qu'il y a du fromage dans le frigo*?)".
14. The reply *Je vais au disco* to a question in French may be a valid utterance but may also reveal a confusion in the use of gender which will lead to non-valid (i.e. non-communicative) utterances at a later stage.

15. If the learner needs to focus initially on semantic rather than pragmatic meaning, this would seem to suggest that the current obsession with 'authentic' materials could be considered counter-productive. The fact that the latter are often context- and/or register-discrete means that they can hinder rather than facilitate the learner's access to semantic (i.e. socially accepted) meaning which depends more upon the selection of items of 'high transfer' that can be recycled across contexts.
16. As Cohen (1990: 108) was to argue, seeking to develop conscious learning strategies in L2 learners – partly through training programmes such as those advocated by Rubin and Thompson (1982), O'Malley *et al* (1985) or Wenden (1986) – is designed "...to ensure that average learners do not waste their valuable time while in language courses, simply because they do not know how to go about learning effectively".
17. Schmidt (1990: 149) was to conclude, "Incidental learning in another sense, picking up target language forms from input when they do not carry information relevant to the task, appears unlikely ... Paying attention to language form is hypothesized to be facilitative in all cases, and may be necessary for adult acquisition of redundant grammatical features. In general, the relation between attention and awareness provides a link to the study of individual differences in language learning, as well as to consideration of the role of instruction in making formal features of the target language more salient and facilitating input encoding"
18. For Ringbom (1990: 172), the L2 learner is "constantly concerned with the question of how similarity, intralingual or interlingual, can be efficiently used in learning". By developing input which in the early stage stresses such similarity, he argues (ibid. 179), the learner will find it easier to focus on and identify novel TL features since "...perceived crosslinguistic and intra-lingual similarities provide learners with a reference frame which they can lean on when learning new tasks and material".
19. Gass (1990: 138) was to argue that developing conscious L2 learning strategies through training, as in Sharwood-Smith, is important in "... showing how 'natural' language development can be 'short-circuited' by capitalizing on learners' abilities to generalize".
20. As Hornsey (1994: 7) was to argue in relation to authentic input. " ... authenticity is a possible goal, a point of arrival rather than a point of departure. The means do not have to be identical with the aim and authentic materials are not necessarily the medium through which a learner can progress most effectively towards eventual authentic use of the target language".
21. Interestingly enough, Balyayev (1963; 221) was to warn of the same danger some time ago when suggesting: "There is not and cannot be any direct transition from the study of a language to the mastery of it; the second is not and cannot be a necessary and direct consequence of the first. Practical mastery of language is always the result only of previous linguistic practice".
22. Hawkins (1981: 246-248), for example, argues in favour of a four stage model in which the first level involves a focus on the 'medium', the second on 'message-relaying' as a rehearsal for an eventual performance, the third on the 'conveying of messages' with an 'element of rehearsal' and the fourth on 'true speech acts' or 'real performance'.
23. "In a situation where the learner has little (or no) genuine 'intention to mean', Roberts (1991: 27) writes, "his/her attention is initially focused upon the language itself, i.e. upon using whatever clues are available to form (and test out) hypotheses about how the patterned nature of speech encodes meaning. The key role of the teacher at this stage is to help ... the learner to form the correct hypotheses in terms of the selection and sequencing of the language items to which s/he is exposed".
24. As Phillipson (1990: 43) points out, "It goes without saying that there are quite different teaching needs and strategies in the many various ESL and EFL situations. Yet judging by this authoritative definition, the same label, ESL, is supposed to do service for a multitude of different contexts, in addition to which in North America 'foreign' and 'second' are used interchangeably".
25. Broadbent and Geach (1989: 119) stress that " .. negative attitudes to the use for educational purposes of any language other than English (or possibly French or German) are so deep-seated that even where the possibilities of actually using the target language are high, inhibiting psychological factors inevitably come into play".
26. As John-Steiner (1985: 350) points out, with regard to the research conducted by Skutnabb-Kangas and Toukomaa (1976), "They found that students who had moved from Finland to Sweden at an average age of 10 years knew their first language and learned Swedish much better than their younger siblings".
27. Goldman (1984: 52) was to conclude that "... the group mean data for students dealing with two languages during elementary school indicate that there is transfer of prior knowledge of story content and structure across input languages ".
28. It is interesting to note how Cummins sees metalinguistic awareness playing a dual role in bilingual development. If, on the one hand, it operates as a 'threshold' in allowing the child to access analytic skills in the L2, it is skills developed in the L2 (both communicative and analytic) which are seen in turn to enhance such awareness. As he argues (1978: 148) in relation to an empirical study carried out on bilingual children in Ireland, the latter "... showed a significantly greater awareness of the arbitrary nature of the word-referent relationships and were also better able to evaluate non-empirical and contradictory statements".
29. Lightbrown (1990 197), who was particularly concerned with fossilization among French children learning ESL, draws attention to the work of Higgs and Clifford (1982) who argued that a " . focus on form is particularly crucial in the earliest stages of learning to prevent learners from leveling off at a stage of basic – but inaccurate – communication in the second language".
30. As Fernandez (1992: 7) points out, the Canadian immersion programme had commenced before the publication of Krashen's major works although the results have "lent much support to his theories".

31. Bibeau was concerned not only with poor productive capacity among immersion children but also with the tendency for their proficiency to decrease over time. "The deterioration of language skills at the age of eight or nine", he argued (1984), "is a very important phenomenon that has been given too little attention. Many children in early immersion are very successful in the first three years, but regress in the second language for reasons that seem related to their phase of social identification".
32. As Swain (1985: 9) records, the performance of one group of 16 year olds who had only two years contact with the TL (1400 hours) appeared comparable with that of a group of 14 year olds who had 9 years contact (4000 hours). Swain was to conclude, in a way similar to John-Steiner (1985), that "These results ... suggest that in school settings, at least, older learners are more efficient in some aspects of language learning than young learners. It has been suggested that this is so because older learners are cognitively more mature. Their ability to abstract, classify and generalize may aid in the task of consciously formulating and applying second language rules".
33. Swain (1990: 236) admits that there are various possible explanations for the result but argues that the most likely one is the methodology that was used and which downplayed attention to language form, i.e. one in which "... teachers work through a content lesson by asking a lot of questions about something they have just presented before, or that the students have read before..." in order simply to ensure comprehension.
34. As Van Patten (1985: 91) was to put it, selective listening "... seems to involve concentrated focus on informational content and not necessarily on how that content was delivered". Thus a question such as *'Qu'est-ce que tu ferais si tu gagnais la loterie*?' may receive the response *'je vais mettre dans la banque'* and be accepted in terms of meaning despite the fact that, from a formal point of view, there is an incompatibility in the tenses used.
35. As Swain (1990: 249) was to put it, "Appropriately, content teaching focuses on comprehending meaning. However what second language learners need is to focus on form-meaning relationships. Doing so is facilitated through the production of language, whether in written or spoken form".
36. Larsen Freeman and Long (1991: 322) admit that a focus on form is a key feature of foreign (as opposed to second) language instruction insofar as it brings 'saliency' to targeted features in the TL input but – they argue – this should not lead to the teaching of a sequence of 'decontextualised forms' as in the past. In a situation in which the learner has no opportunities for communicative interaction in the TL, however, it is difficult to know what can realistically replace the sequencing of structural forms.
37. It is interesting to note that Hawkins (1981: 227) was to see the absence of 'intention to mean' in the language interactions of the classroom combined with the absence of 'insight into pattern' needed to rapidly process incoming data as the two main causes of failure in foreign language learning in the UK context.
38. As Riddell (1990: 28) points out, errors within the nativist framework were considered part of the learner's interlanguage, that is, " ... a part-way house situated between the native language of the learner and the foreign language. It was systematic, and in the system the student error had its place. It was a transitional stage, in a state of perpetual flux, but which was a valid system in its own right".
39. The assumption that "... natural conditions of language learning through use ... can be directly replicated in the foreign language classrooms" is, he was to argue, simply untenable.
40. Skehan was to link the learners' ability to cope with the simulated nature of task-based activities in the foreign language classroom with metalinguistic awareness. As he was to put it: (1988: 52), learners "... will have to cope with the disembedded nature of the task and perceive its relevance to their future language learning. In so doing, they may well be drawing on very much the same sort of skills that are implicated in the decontextualised component of language aptitude tests".
41 .Brumfit's (1979: 183) sought to reverse the traditional process in structurally-based language courses along the following lines:



42. As Swain (1990: 249) was to suggest, learners "... need to be guided through this process (i.e. of seeing form-meaning relationship) by engaging them in activities which have been contrived by the teachers to focus the learners' attention and to naturally elicit particular uses of language".

Conclusion

Conclusion

1.0. KAL and cross-curricular language strategies

In seeking to define 'metalinguistic awareness', Gombert (1992: 2) noted that it involves a cognitive effort ".. which goes far beyond the boundaries of a strictly linguistic activity". Such a comment is useful in highlighting the crucial mediating role that such processing plays in the socio-cognitive development of the child. It is, as already indicated, the latter's ability to disembed and reflect upon his own semiotic practice that allows him to appropriate a range of new practices and it is these practices which, in turn, serve to shape and refine his powers of reflective thinking. Wells' metaphor of education as a 'semiotic apprenticeship' is valuable precisely for highlighting the symbiotic relationship between (metalinguistic) reflection and (linguistic) performance in the language learning process. Clearly, specialist language teachers -- EMT, ESL and FL -- play a central role in helping the child to extend his repertoire of 'secondary' skills through attention to syllabus content and pedagogic practice. It is important to note, however, that insofar as these skills operate across the curriculum -- that is, are crucial in allowing the child to access domain-specific knowledge across a range of disciplines -- all teachers play a contributory role in this process. It is not for nothing that the Bullock Report (1975: 337-8) was to define all teachers as 'language teachers' and to argue that "... among the modules that go to make up the professional training element there should be a compulsory one on language in education".

If all teachers have some responsibility for the child's linguistic development, this clearly implies the need for what Brumfit (1988: 38) was to refer to as a "co-ordinated policy on languages as a medium for learning and languages as subjects". The notion of a cross-curricular language policy, it must be admitted, has gained little support in the UK where reforms tend to operate within discrete language areas with little (or no) reference to general principles underpinning the wider curriculum. Such an approach, as Roberts (1991) argues, can be detected even in the National Curriculum where the opportunity for a more integrated approach to language policy was disregarded in favour of subject-discrete working parties operating independently of each other. If the language curriculum is to be viewed, however, as the extension of a functional repertoire -- in which, as Vygotsky suggested, each new variant 'builds upon' the preceding in terms of conscious control processing -- such a parochial tradition needs to be abandoned and teachers need to be encouraged to view their specific area of expertise as part of a wider 'language education'. As already indicated, this might

operate along two dimensions. Along the 'vertical' axis, specialist language teachers need to see their area as merely one semiotic practice among many in which differences in pedagogy play a complementary role in the development of the child's repertoire. Along the 'horizontal' axis, on the other hand, non-language subject teachers need to see their area as one in which the child's mastery of new semiotic practices can be reinforced and extended through the discourse modes specific to their discipline. In both cases, what is important is that any given linguistic activity is subordinated to the notion of a 'language education'.

1.1. Implications for Initial Teacher Education [ITE]

If all teachers contribute, albeit in different ways, to the child's linguistic development, however, the question is posed as to what the teacher (as opposed to the child) needs to explicitly 'know' about language to facilitate this process? This question has, at least since the Bullock Report (1975), been the source of some concern. Two trends can be distinguished. On the one hand, there has been a growing recognition that, insofar as education is primarily a process of semiotic mediation, teachers' explicit knowledge about the nature and function of language and language learning should be prioritized. Bullock (1975: 339-340), for example sought to outline a 'minimum specification' of what all teachers should 'know' about language and the concern underpinning his recommendations can be traced up into the Kingman Committee Report (1988: 62) which argued, among other things, that 50% of the initial training of primary teachers should be devoted to study of the four parts of the 'model' of the English language destined to form part of the primary-secondary school curriculum. If the first trend has laudably sought to extend the proportion of time allocated to KAL in training beginning teachers [both specialist and non-specialist], however, the second trend has been somewhat more controversial in its attempts to define exactly what aspects of KAL should be prioritized. A major problem here has been a confusion between pedagogic and linguistic criteria in terms of establishing a taxonomy of knowledge sources which was implicit in Bullock's 'minimum specification' list and which has become even more pronounced in the 4-theme model of the Kingman Committee and/or that of writers such as Stubbs (1989), as illustrated below:

1. Language diversity within Britain
2. Language diversity within English
3. Practical language planning
4. A model of language itself

Attempts such as that of Stubbs to give a sharp focus to what teachers should 'know' were/are clearly intended to overcome the criticism of the Swan Committee report (1985: 559) that the so-called 'permeation' of language throughout beginning teachers' courses " .. cannot be regarded as providing adequate provision for the kind of teaching which we have advocated".

In one sense, there is little doubt that much of the knowledge contained in taxonomies such as that of Stubbs or Kingman is valuable. Language specialists in particular do need to explicitly know, for example, the relationship between form and function across a range of diatypic and dialectal variants if they are to help children to extend their functional repertoire. The problem with such taxonomies, however, is that the criteria for selecting certain categories rather than others and the relationship between them are based on linguistic rather than pedagogic considerations. As already indicated, the task of the KAL syllabus is not to present a body of decontextualized 'facts' to learners but to help them develop a reflective practice which allows them to extend their skill repertoire. What is true of the learner is also true of the teacher. What the latter needs is not a body of decontextualized facts about language but, rather, an understanding of the key features of the language acquisition/learning process -- including the role of conscious control (or metalinguistic) processing -- into which facts from a range of source disciplines, including linguistics, can be incorporated. Brumfit (1988: 46) was to sum up the difference well when criticizing the contribution of taxonomies such as those from Bullock or Stubbs:

> Although each version is intended to serve pedagogical needs, neither one provides a pedagogically based rationale for the selection of the themes it proposes. Thus, for example, Stubbs mentions some of the language problems that arise at school but does not attempt to provide, on the basis of these problems and the aims of educational process, a rationale for the help which he, as a linguist, would like to offer teachers

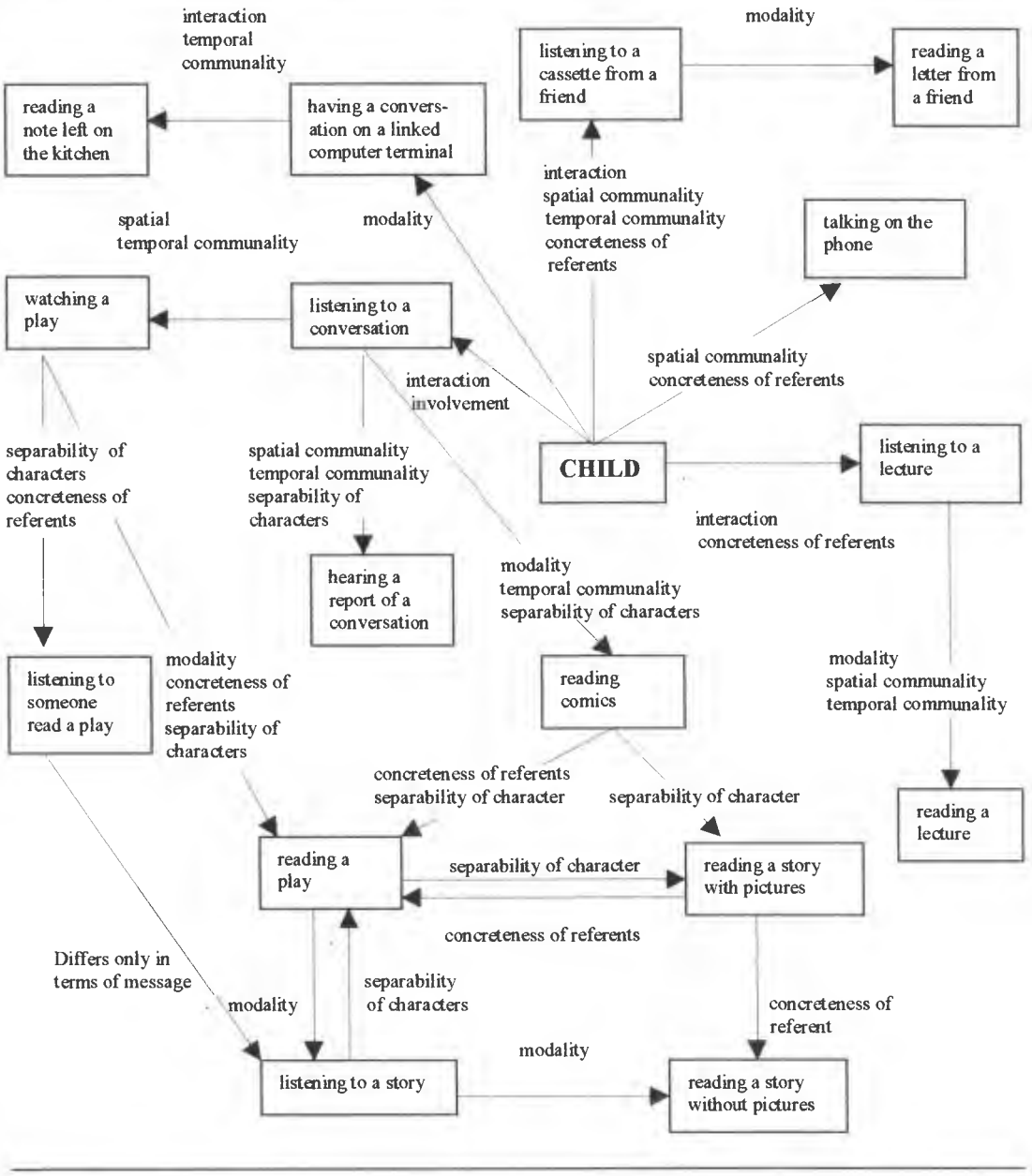
For Brumfit, what such taxonomies lack is a "pedagogical frame of reference", that is, clarity as to the nature of the learning process in which various facts -- from linguists as from other source disciplines -- can be introduced. Roberts (1991) was to make the same case when suggesting that what beginning teachers require is a developmental approach to language learning (i.e. a 'learning theory') since it is only when they are aware of the complex socio-cognitive processes involved, for example, in the transfer from non-standard to standard dialect that a linguistic taxonomy of those differences might prove valuable.

To suggest that initial teacher education should be informed by a learning theory is not, of course, to exhaust the subject. There will clearly be differences in terms of focus and amount of time allocated to language development between non-specialist and specialist language teachers and, in the latter category, between those teaching a first or second/foreign language. What all teachers require, however, is a general understanding of the crucial importance of semiotic mediation in education, of the range and type of semiotic practices the child needs to master and of the role played by conscious control processing in mastering such practices.

Appendices

Appendix 1

Rubin's 'A theoretical taxonomy of the differences between oral and written language'.



Rubin's 'theoretical taxonomy' outlines a process of decontextualisation which proceeds from, at one end, 'listening to a conversation' to, at the other, 'reading a story without pictures'. There are, he claims, a wide range of intermediate stages between these two extremes which can be characterized by the interplay of a number of dimensions, which include:

- *modality,* i.e. the differences between the spoken and written word insofar as the former can clarify meaning by making use of intonation, stress and other prosodic features (such as pauses to indicate syntactic boundaries);
- *interaction,* i.e. the differences between the spoken and written word insofar as the speaker-hearer -- unlike the reader/writer -- can clarify/disambiguate points and verify hypotheses through almost instant feedback;

- *involvement,* i.e. the difference between the spoken and written word in the extent to which the topic is based upon shared knowledge;
- *spatial communality,* i.e. the extent to which the speaker/hearer, unlike the reader/writer, can see each other, that is, make use of paralinguistic features to clarify meaning and use words such as 'here' and 'there' deictically rather than anaphorically;
- *temporal communality,* i.e. the extent to which the speaker/hearer rather than reader/writer use temporal deictic expressions (such as 'now', 'tomorrow' or 'yesterday') to refer to the same time frame;
- *concreteness of reference,* i.e. the extent to which the objects/events that are referred to are visually present; and
- *separability of characters,* i.e. the extent to which the distinction between different people's statements and points of view is clearly indicated and the extent to which it is liable to confusion, as in reported speech and narrative.

Appendix 2

Downing's (1979) 'cognitive clarity' thesis is based upon the following 8 postulates:

"1. Writing or print in any language is a visible code for those aspects of speech that were accessible to the linguistic awareness of the creators of the code or writing system;

2. This linguistic awareness of the creators of a writing system included simultaneous awareness of the communicative function of language and certain features of spoken language that are accessible to the speaker- hearer for logical analysis;

3. The learning to read process consists in the rediscovering of (a) the functions and (b) the coding rules of the writing system;

4. Their rediscovery depends on the learner's linguistic awareness of the name features of communication and language as were accessible to the creators of the writing system;

5. Children approach the tasks of reading instruction in a normal state of cognitive confusion about the purposes and technical features of language;

6. Under reasonably good conditions, children work themselves out of the initial state of cognitive confusion into increasing cognitive clarity about the functions and features of language;

7. Although the initial stage of literacy acquisition is the most vital one, cognitive confusion continues to arise and this, in turn, gives way to cognitive clarity throughout the later stages;

8. The cognitive clarity theory applies to all languages and writing processes."

Appendix 3

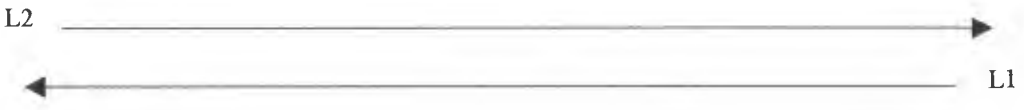
Influence of parental styles on language acquisition as developed by Bates (1979)

Style 1	Style 2
• Referential (Nelson) - predominance of nouns in first 50 words - interest in labeling - first-borns predominate - solitary play with objects (Rosenblatt) - typical or more advanced language learners (Ramber/Hogan)	• Expressive (Nelson) - heterogeneity of form in first 50 words - focus on social forms of language - later-borns predominate - social orientation to play (Rosenblatt) - typical of later language learners (Ramber/Hogan)
• Propositional speech (van Lancker) - - - associated with left hemisphere	• Formulaic speech (van Lancker) - associated with right hemisphere
• Word babies (Dore) - single word utterance - oriented towards labeling	• Intonation babies (Dore) - contentless babbling with sentence contours - oriented towards social functions of language
• Elaboration of Noun Phrase in multi-word speech (Bloom)	• Elaboration of Verb Phrase in multi-word speech (Bloom)
• High noun/pronoun ratio (Bloom)	• High pronoun/noun ratio (Bloom)
• Relatively low use of imitation (Bloom)	• Relatively high use of imitation (Bloom)
• First reference to speaker-hearer by name	• First reference to speaker-hearer by pronoun
• No use of 'dummy' forms (Leonard)	• Use of empty 'dummy' forms (Leonard)
• Patterners (Wolf & Gardner) - interest in re-arranging and playing with component parts	• Dramatists (Wolf & Gardner) - interest in reproducing realistic patterns
• Elaborated code: middle class (Bernstein)	• Restricted code: working class (Bernstein)
• Field independence (Witkin)	• Field dependence (Witkin)
• Reflective (Kagan)	• Impulsive (Kagan)
	• Formulaic approach to second language learning in older children (Fillmore)

Appendix 5

Roberts (1991) three-stage 'input-practice-use' model of foreign language learning.

Input	Practice	Use
medium	medium/message	message
system	system/function	function
accuracy	accuracy/fluency	fluency
meaning	meaning/sense	sense



While the stages in such a process are inevitably more fluid than indicated, they seek to highlight the fact that 'doing is subservient to knowing', that is, that the ability to access the TL is dependent upon the learner's prior metalinguistic skills which alone can allow him to associate form an meaning as a pre-requisite for subsequent use.

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