

THE
APPLICATION OF LINGUISTICS
IN THE
TEACHING OF THE MOTHER-TONGUE

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SUMMARY

This study is principally concerned with the definition of the relationships between linguistics as a body of knowledge and the practical issues of teaching English in the Scottish senior secondary school. A prescriptive 'set' to mother-tongue language learning in Scotland can be shown to derive from traditional rhetoric of the nineteenth century and the grammars associated. Teacher guidance memoranda of the last two decades show that, while prescriptive rhetoric has fallen into desuetude, traditional prescriptive grammar work continues, producing an uneasy agnosticism in teacher attitude to syllabus reform.

A consideration of the background debate in school grammar reveals two phases (i) a discussion on grammatical terminology and method (1860 - 1940) (ii) an extensive debate on the nature of school grammar resulting from findings of modern linguistic theory. Structuralist attacks on 'Latinate' school grammar were intemperate, and lacked insight to the semantic

significance of 'deep' grammar. Bloomfieldian constituent analysis, however, profitably focussed school attention on surface segmentation problems. Halliday's scale and category grammar, together with his later concepts of deep and surface strata in a systemic grammar provide a profitable basis for applications to school courses. Chomsky's transformational generative grammar (TG) presents rationalist insights to language as cognition but raises problems of formulation and handling which reduce the value of the model for Scottish school use. A pedagogic grammar for native speakers should be eclectic, intuitively satisfying and orientated to the practice of text description. The principal role of linguistics in mother-tongue syllabus reform, however, is not to provide a 'new grammar' for the syllabus, but to provide an orientation for teachers, assisting them in grading materials and in solving practical problems of language learning.

Teacher orientation involves questions of psycholinguistic attitude to initial acquisition of the mother-tongue and to subsequent learning strategies. A language acquisition theory must account for 'creative' production of utterances. After considering alternatives, a transformational view of child

speech, defining underlying semantic categories and characterizing output processes is upheld. In subsequent mother-tongue language learning a heuristic model, involving 'discovery', reflects continuing language learning as a creative process. The inductive teaching methods following this approach make use of mother-tongue insight to language contrasts as a main dynamic of the learning.

The linguistic justification of the experimental materials is associated with the educational aim of a rationalized awareness of the mother-tongue in use, and it implies a graded process towards this goal. Firthian language levels analysis provides a general framework for grading in which the status of substance, phonology and graphology may be defined in linguistic terms, and their applications in the experimental materials demonstrated. The materials are justified in grammar by a model drawn from Halliday's systemic grammar and Hudson's 'many I-C's' surface segmentation. Deep and surface strata of language are defined in Halliday's terms and an unformalized realizational link is postulated between deep and surface components. A pedagogically useful view of lexis, derived from Firthian linguistics, is suggested. The study of

varieties of language proposed is an amalgam of register theory and informally defined semantic features of descriptive rhetoric.

The assessment of the efficiency of the materials was based on a language 'awareness' test. Analyses of variance and co-variance were carried out and the statistical significance of differences in results between groups and schools was computed.

The overall conclusions were that the materials produced a statistically significant increase in language awareness in the mother-tongue pupils taught over similar pupils studying traditionally orientated language courses. Further, I.Q. differences were shown not to account for the test gains noted.

INTRODUCTION

A central issue for Applied Linguistics, in studying the teaching of a mother-tongue, is to define the relationships between general linguistic theory and practical problems of the teaching process. General linguistic theory is regarded as a body of knowledge which is a central informing discipline for pedagogy. It would be wrong to regard general linguistics as a finalized corpus of fact, however; like other continuing disciplines it is in dynamic flux. Further, from the point of view of teaching, it would be mistaken to regard general linguistic theory as the only relevant theoretical source guiding language syllabuses. Similarly, it would be short-sighted to regard the most modern linguistic theory, or a particular view within it, as the sole valid source of insight. Clearly, if it is to perform well in its role, applied linguistics must be critically selective in its approach to general linguistics.

Linguistics has been defined by Lyons as the scientific study of language, and he glosses his terms thus: '(the) investigation (of language) by means of controlled and empirically verifiable observations and with reference to some general theory of language structure.' (1968:1). Linguistics, as theory, is concerned with necessary fact; applied linguistics is concerned, over large areas of its enquiries, with contingent facts such as teaching technique, local and national environment and background. Thus, applied linguistics, although principally orientated towards linguistic theory as a specifying body of principle, is also concerned with

psychology, sociology and history.

The linguistic study of teaching the mother-tongue is one of the intractable fields of pedagogic enquiry, since the language which is the subject of the teaching is also the medium of general education and the language of the pupil's life. To delimit our field, both from the point of view of discussion and experiment, this present study concerns itself with English as a mother-tongue, and it concerns itself with a particular stage in the Scottish school system. It is keenly hoped that the discussions of background, and theory, together with the experimental materials produced and tested, will contribute towards the illumination of the important role of applied linguistics in syllabus reform.

This is not to imply that the child has been forgotten. It is a principal goal of our work to add significantly to the intellectual and social awareness of the pupils taught. This aim is one well known to linguistics and stated thus by Firth: '... to raise the standards of education in the mother-tongue and make young people actively and critically aware of the sort of language which is used for them and against them every day of their lives.' (1937:108). It is thus as much in the humanities as in the sciences that applied linguistics functions, performing a bridging service of immense importance to education. It is hoped that the present study, in some non-trivial way, declares this.

CHAPTER I

THE ENGLISH LANGUAGE SYLLABUS IN SCOTLAND

Of all that was done in the past, you eat the fruit, either
rotten or ripe. T.S.ELIOT, The Rock

1.0 Introduction

The syllabus for the teaching of English as a mother-tongue in Scottish schools has a comparatively short history. Two dates in the nineteenth century mark its origins, 1864, when English was raised to a status in the syllabus equal to that of Latin or Greek, and 1888, when the first national public examination of English was instituted. By 1888 English had largely won its fight for recognition as a separate school subject for syllabus and examination purposes, but this new status was modified by two influences, closely related to each other. One, a practical contingency, was that the classics master still taught English; the other, that the enormous prestige of traditional studies in rhetoric was brought to bear on the school presentation of the subject. Rhetorical studies had gained a high place in eighteenth and nineteenth century university curricula in Scotland with the result that a classically orientated approach to composition, criticism and grammar was dominant in the academic climate. This had a profound influence on how English language was studied as a developing school subject in the nineteenth century. Rhetoric, and the grammars associated with it, set a direction for the study of English language in Scotland which has lasted, in some degree,

to the present day (cf.1.2). Further, rhetoric catered for a distinctive rationalism in both teacher and pupil in Scottish schools and catered for an intellectual climate which may have no counterpart in the study of English in England (Davie, 1961: I). It is our argument that no contemporary twentieth century issue in the teaching of English language in Scottish schools can properly be undertaken without some reference to the distinctive influence of rhetoric on the school syllabuses we have inherited.

1.1 The Influence of Academic Rhetoric

The Scottish School of Rhetoric, as it has been called by historians of the movement, such as Williams (1897), had two main phases; the first was defined by a group of rhetoricians writing towards the end of the eighteenth century, (Kames, 1762; Campbell, 1776; Blair, 1783); the second by a group of writers in the later decades of the nineteenth century, (DeQuincey, 1860; Bain, 1869, 1887). Of the earlier group, Campbell had the greatest influence.

Campbell (1776) defined rhetoric in a sentence drawn from Cicero; 'Rhetoric is the art or talent by which discourse is adapted to its end'. Methodologically, he treated rhetoric as if it operated on two planes. On the one hand he regarded the study as a speculative enquiry into the laws of universal literature and on the other, as a mechanism for the practical criticism of texts, and thereby, by implication, as a practical guide to the art of composition. This view characterizes Scottish rhetoric in both phases outlined. The double aim of the study interestingly reflects something of the dual role given to Latin grammar in

mediaeval education. Robins (1951:75) notes that, after the re-discovery of the grammar and rhetoric of Aristotle, together with the Jewish and Arab commentaries on the works, grammar was taught both as a practical tool to aid reading and as a branch of speculative philosophy.

The climate of idealism in nineteenth century education in Scotland seems to have obscured the essential difference between these goals. Teachers appeared to think it reasonable that a body of academic knowledge, justified by scholars, should both be the content of a school course and a practical method for composition. Certain educational and social difficulties have resulted from this view. Under an idealistic philosophy, education becomes dedicated to excellence, albeit an excellence which may only exist as a golden rule. Ideal excellence as a goal makes pupils' efforts seem to fall short; it promotes prescription and doctrines of ideal 'correctness' and critical and social values stemming from these; in its approach to texts, it is rule-centred rather than usage-centred and it tends to show all diachronic change in language as pejorative. A common result of these factors operating in English language study is that both speech and writing performances in schoolwork are inhibited. To illustrate: inhibition of student writing reached an extreme under Bain (1869,1887), who forbade the writing of essays by university students on the grounds that bricks could not be made without straw (Grierson,1944:vii), since students whose mastery of the principles of rhetoric was slight could not be asked to display practical skills in composition.¹

1. Vide T.Martin, The Instructed Vision, Bloomington,1961. Martin

Campbell's view of the double role of rhetoric, that it was at once philosophical and practical, left him somewhat exposed in his arguments, at times. He shunned two extremes: (i) too much abstraction in investigating causes, which would lead, he felt, to a blunting of performance and (ii) too much minuteness in specifying effects, which would lead to the erosion of the dignity of composition. His concern was for the precise effects on written performance of different ways of presenting the principles of rhetoric. He does not question whether principles taught can transfer to performance; nor does he question the methodological validity of his assertion-and-proof technique. It is characteristic of the period that few teachers questioned specific transfer as a methodological assumption. Attacks on these assumptions were summarily dismissed; for example, Lord Dufferin in his rectorial address to the students of St Andrews in 1891, in which he questioned the expository method, was dismissed as incompetent by Williams (1897:11-15). The position of Campbell and his successors seemed to be absolute, that it was inevitable that an intelligent exposition of the principles of rhetoric would result in pupils writing better English.

Campbell seems to jockey himself into an untenable position at one point in his Preface. Within a few pages of an argument

argues at length that the Scottish common sense philosophy and the rhetoric associated with it sufficiently inhibited the writing of fiction in America in the eighteenth and nineteenth centuries for dearth to have resulted.

that principles are prior to practice, superior to practice and necessary for practice, Campbell finds it necessary to apologise for his own style. 'Nor can anything be further from his (the author's) thoughts than to pretend to an exemption from such positive faults in expression as, on the article of elocution, he hath freely criticised in the best English authors.' (1776:IX,2). Thus, the most influential figure in early nineteenth century rhetoric, who might be argued to have had a more profound knowledge of the principles of rhetoric than any students he might teach, acknowledges himself fallible in composition.

This contradiction infected Scottish schools in the nineteenth century and it was virtually unchallenged for more than a century. Teachers did not suspect that there might be a philosophical flaw in 'the rhetoric method' when they found with distressing regularity that children could know their grammar well (or their figures of speech) and still perform lamentably in productive composition work. Craik, the Senior Chief Inspector of the Scotch Education Department, writing in his annual reports in 1895 and again in 1900 (S.E.D. 1895,1900) made typical complaints of this order. His successor, Struthers, made similar complaints in reports in 1907 and 1913 (S.E.D. 1907,1913), and in a whole range of school textbooks, from the end of the nineteenth century onwards, prefaces pointed to the need for more and better work on principles to produce more and better performance in writing. The rhetorical movement embraced a simplistic idea of transfer from principles to practice and, through Campbell and others, this view of language learning was accepted by the schools

as authoritative.

Campbell (1776) formulated the principles of Scottish rhetoric and Bain (1869, 1887), writing almost a century later from the same university, Aberdeen, produced the practical textbooks on composition and grammar which influenced schoolroom practice. Bain (1869) set out to prescribe rules for writing. In a complementary spirit, his school grammar books and his treatise On Teaching English (1887) emphasised the reverse; they censured what they found wrong with English texts.¹

Bain (1887) dominated English teaching in Scotland in the critical decades during which English as a mother-tongue was emerging as a subject in its own right, that is in the eighties and nineties of the nineteenth century. At this time he was also an important influence in America. He displays direct links with Campbell and Blair, and his interpretations of the tradition of rhetoric were taken as authoritative by the schools. Certain of his principles are worth noting. He believed that it was 'a possible thing to arrive at a definite code of prescriptions for regulating the Intellectual Qualities of Composition' (1869:vii). These involved considerations of syntax as well as style. He suggested that these prescriptions would form both a discipline for schools and a practical teaching model for writing. In this he obviously perpetuated the split goal which we have described.

1. Note the strategic importance of the date 1887, - one year before the institution of the first Leaving Certificate in English. His Rhetoric was re-issued also in 1887.

Bain's proposals had considerable influence on Scottish schools. His textbooks were used extensively, and textbook writers clearly copied Bain and reflected his approach. It is doubtful whether any books more radically affected the content of the syllabus in English than Bain's two-volume English Composition and Rhetoric and his companion volume On Teaching English.

It is important to recognise that Campbell and Bain both tried as far as possible to make the elucidation of the principles of rhetoric (and grammar) part of the wider reading of literature. This approach is still characteristic of the English language syllabus in Scotland today, and it is stressed in present day reforms of the English syllabus (S.E.D.1967,1968) that principles of description ought to be implied by texts and demonstrated from living literature rather than proposed as detached drills and exercises.

Bain's explanation of the relationships between rhetoric and grammar in a school course was parsimonious and vague. Consider his 1887 argument that there are certain aspects of order which for reasons of propriety are in grammar while other aspects of order are for reasons of propriety in rhetoric. The implicit distinction between formal contrasts and register contrasts is linguistically sound (see 5.5, 5.7) but poorly formulated. It anticipated the Firthian theory of levels of analysis, and the complementary theories of linguistic variety (5.7).

As a critic of texts Bain was explicitly prescriptive. One of his favourite tasks was recasting the English of the Authorised Version of the Bible to give it greater clarity and effect. His

semantic naivety was coupled with a remarkably primitive psycholinguistic theory. He felt that a word like 'horse', given alone, would conjure up a picture in the mind of the hearer. That picture might be of a brown horse or a grey one. If the adjective 'black' followed 'horse', as 'That horse is black', it caused the hearer to modify his mental picture of the referent and this disturbed his thinking. One proviso was made, - that if the hearer was used to suspending conceptualisation until all his adjectives were given, he might avoid this erection and demolition of concepts. This theory, indicative of the poverty of the semantic tradition inherited by schools, prompted Bain to look at texts and suggest radical modifications of word order. Thus, 'My yoke is easy and my burden is light' would be rewritten as 'Easy is my yoke and light is my burden' in the cause of clarity. The thematic issues involved in reordering, including the phonological variation (Halliday, 1967a, 1967e,f, 1968a), indicate that Bain's superficial approach must be regarded as inadequate. While one would not argue that modern linguistic theory has an impeccable account of meaning, at least statistics, aided by linguistics, has faced the issue that complicated underlying interdependencies of phonology, syntax and meaning relate to surface order; phenomena of serial order in text cannot effectively be characterized as word-pictures clashing in the mind.

Bain had no time, it seems, for the performance irregularities of language, the idiomatic roughnesses, the time-honoured phrases in which so much of the life of a spoken language lies. His idealism was writing-specific and was fortified by an acute

and severe logic which seemed readier to disqualify a phrase than to accept it as language in use. His overriding aim in teaching was to produce perspicuity of language. Ambiguity was abhorrent. Bain may well be seen as a scholar of the temper and stature of Donatus who was not content to find evidence for the best Latin in his own classical literature, but who, instead, roundly criticised the sacrosanct and irreproachable Virgil for his offences against grammar and style. This dangerous and alluring precedent has been widely followed in the approach to English studies in Scottish schools (Wattie, 1930).

Grierson was the student and, later (1897), the junior colleague of Bain. In many ways he is an apologist for Bain to a century which began to understand idealistic thinking less and less. Grierson lectured early, from 1897, but published late (1944). Grierson's essay (1944) does more than identify him with the Scottish tradition; it shows him to bring two new influences to the teaching of rhetoric. The first of these was a re-fertilisation of his rhetorical theory by a re-reading of Aristotle's Rhetoric, a work which he notes had ceased to be of much interest to scholarship at the time. Secondly, Grierson plainly brings to his rhetoric a distinctly more flexible and more empirical approach to style than either Campbell or Bain could have accepted in their idealism. One is reminded that above Plato's Academy was inscribed the caveat: 'Let none ignorant of Geometry enter here'. The absolute, the perfect, the essential qualities of the geometrical figure are not absent from the work of the idealistic rhetoricians of the Scottish nineteenth century

tradition. Grierson showed himself, particularly in his later writing, to have moved some way away from the rigorous prescriptivism of Bain and to have absorbed to some extent the more empirical, more liberal philosophy of the present century.

Grierson gave as his definition of rhetoric 'the study of how to express oneself correctly and effectively, bearing in mind the nature of the language we use, the subject we are speaking or writing about, the kind of audience we have in view (often only vaguely definable), and the purpose, which last is the main determinant'. This might well have been a preliminary definition of style adopted by a descriptive linguist in the last decade or so, concerning himself with stylistics.

In his rhetoric, Grierson (1944) set out certain principles of sentence construction. He held that not so much principle but usage was the guide of grammar, although in this he was no Mencken. He warned against the error of laying down non-English prescriptions for English writing, and in this one feels that Bain was his main target. Grammar, he claimed, does not prescribe laws for a language but exists to ascertain and define the usage of those who are regarded as speaking the language well. Thus, grammar becomes a descriptive instrument and a heuristic device. Neither Campbell nor Bain would have accepted this. This so deflates the idea that grammar is principle that it questions radically the basis of the nineteenth century view (and that of the eighteenth century before it) that grammar and rhetoric were based on universal principles which were inviolable, and that performance changes must necessarily follow mastery of these.

Grierson's liberalism did not profoundly affect the syllabus in Scottish schools in the period up to the second world war. This was partly because the main lines of thought for English language and literature work had been laid down early and with great authority in a series of reports and memoranda and partly because, as we shall discuss in Chapter II, the debate in schools was by this time more specific; it concerned the nature and quantity of grammar teaching appropriate for English language. Scottish schools, in this debate, were to display a syllabus inertia and a rational inclination to teach formal grammar and a diluted form of rhetoric, which their English colleagues had largely rejected by the mid-twenties (see 2.1). Several S.E.D. reports in the twenties went so far as to assert that grammar had been rehabilitated in Scotland.¹ It would appear that Grierson's liberalism on grammatical prescription went largely unheeded or, if heeded, unacted upon, by the majority of Scottish teachers. It was only in the fifties and early sixties, when the need to reconsider the entire school curriculum became apparent, that it became clear that there had emerged a widespread dissatisfaction with the standard of writing in Scottish schools and with the dullness and inappropriateness of grammar. What in fact would seem to have happened is that the prescriptive form of nineteenth century rhetoric and grammar had been preserved in the textbooks used in schools, in the attitudes to language given to teachers in training and by official memoranda, and, most of all, in the

1. S.E.D. (1924, 1927).

lay mind, whose idea of correct English instilled at school left the average man conscious of failure, but unaware of how to succeed (1.3).

Yet, it seems equally clear that if the present-day syllabus in English has a confused view of the correctness of style or of the role of grammar in composition or other skills, in reform there is a clear tendency to re-rationalise about both grammar and style. While English teachers in England in the fifties and sixties seemed content to adopt some kind of ad hoc teaching programme, based on such vague principles as 'acculturation' and 'experience of literature' and to promote a free-expression type of writing, vivid and creative, but unallied with any principle, descriptive or prescriptive, Scottish teachers tended to ask for new grammar techniques and new rhetorical descriptions. The appetite for necessary facts about language is present without there being any clear view of how they link with contingent facts of performance. It is this atmosphere which faces syllabus reformers and it is to suggest an approach to part of the problem that this research is submitted.

At this point it seems appropriate to record that the problems of reforming the language teaching syllabus in Scotland for native speakers of English are far less intractable because of the influences on our education system of our long tradition of rhetoric than they would be in, say, England, where a virtual rejection of rationalisation as part of English teaching has taken place. A distinctive Scottish tendency to think philosophically, rationally and articulately about the subject under discussion in

school or university is still manifest. In our reforms we are intent on recognising this tendency in the schools, of catering for it and if possible of providing for teachers part of a new rhetoric geared to the age (Currie, 1968).

1.2 Official Guidelines in the Teaching of English

Since the end of the nineteenth century, teachers of English in Scotland have had a series of official documents made available to them offering guidance on the practice of English teaching in schools. These documents originated, for the most part, as official comment on the practice of teaching made by school inspectors in the annual Reports of the Scottish Education Department, tabled in the House by the Secretary of State. Another main source of official guidance documents has been the reports of councils, committees or other specialist bodies set up from time to time to advise on the course of education. While these reports are not law in the sense that they are legally binding either on the writers or the teachers, they represent a focussing of interest on a certain aspect of English teaching which strongly influences teacher training, conference topics and, not least, individual teacher practice. In the context of this present study, these documents help us to assess the climate of development in the teaching of English in recent years and they make it possible for us to relate the main features of guidance to the historical and traditional influences of our education system. For example, a study of certain official documents on English teaching since 1946 confirms that written composition work in schools has become

progressively less bound by attitudes of traditional rhetoric (1.2.1) while, in the same period, school work in grammar, an adjunct of rhetoric, has become institutionalised in a much more ingrained way and has remained entrenched until the present decade (1.2.2).

1.2.1 Guidelines in Composition and Rhetoric Teaching

The fortunes of composition and the status of rhetoric and grammar were very closely linked in Scotland until the fifties of this century, since most teachers willingly accepted the view that a form of grammar or rhetoric rule-learning was essential to the production of correct English. A key report in secondary education (1947) was produced by the Scottish Advisory Council on Education and the attitudes of pre-war education were questioned in the light of the Education (Scotland) Act of 1945 and of ideas thrown up by the war itself. An element of prescriptiveness was evident in some of the document's provisions: 'The campaign against the speech of the street, the cinema and the illiterate home . . . admits no truce.' (1947:283). But the schools were said to have rid themselves of the 'moralising and sententious essay' and there was a detectable urge in the document to move away from the essay itself as the only acceptable form of pupil writing. Personal record writing and creativity were advocated, but the creativity was to be channelled into another literary form prescribed by the teacher, for example, story, dialogue, play, etc. (1947:295). Formal language teaching was advocated as a composition auxiliary. For example, subordination was to be

taught as superior to simple sentences; idiomatic usage and vocabulary were also to be taught. There is a suggestion in this document that older pupils might be profitably involved in a study of the principles of word order 'as they are determined by the interaction of syntax, idiom and rhetoric'. (1947:299). In contrast to the Scottish Council for Research in Education (1931) syllabus (2.1) the Report of the Advisory Council (1947) is a liberalising document, and it should be noted that it exceeded in liberalism the guidance which was to follow in the fifties. Compared with the Report on primary education (1946), emanating from the same Council, the secondary document (1947) is comparatively stiff in its reforms, while, in pupils' writing at least, primary schemes advocated a greater degree of free writing (1946: 277).

In its advice on composition, there is an uncompromisingly traditional tone in the Scottish Education Department memorandum of 1952. Teachers were encouraged to stop testing composition and begin teaching it systematically. Paragraph structure was to be helped by an analysis of the paragraphs of such essayists as Macauley (1952:38); sentence structure exercises continuing the methods of the primary school were advocated, despite the specific advice to the primary schools (1946) to discontinue this form of exercise. Frequent exercises in synthesis were encouraged (1952:39) and the use of textbook exercises as a class teaching technique was approved (1952:36); rhetoric of a prescriptive sort was proposed for diction and style; figures of speech were to be learned and recited; imitation was proposed as a tactic of

learning; verse writing was encouraged as a discipline and translation from foreign languages was upheld as a useful composition activity for English work (1952:42 et seq.). Further, correction of composition was urged on a regular basis. A more reactionary statement for teacher guidance can scarcely be imagined, considering the date, 1952, and the existence of the 1946 and 1947 reports of the Advisory Council. This document endorses the worst aspects of prescriptivism, together with the censoriousness of the nineteenth century.

It is instructive to compare the tone of the memorandum on secondary school English teaching (1955) with that of the primary school document (1957). The 1957 attitude continued the freeing of the primary school from excessive prescription in writing and over-marking by the teacher. It is important to note that spontaneous speech was recognised and encouraged in oral composition and held to be the basis of written work of a creative sort. The secondary memorandum (1955) advocated systematic training including a thorough grounding in sentence construction before composition work proper was allowed, highly reminiscent of Bain's prescriptions noted in 1.1. Synthesis was the key to transfer from exercise work to composition (1955:5). One might speculate that the freeing of writing in the primary school is related to the high interest in Froebel techniques of the fifties, together with the re-discovery of Piaget's findings for the primary school, assisted by Froebel. Studies by Beard (1957), Wheeler (1958), Williams (1958), Lunzer (1960) and others are quoted by the National Froebel Foundation documents (1960, 1961). These studies link

with primary liberalisation and anticipate the effect of Piaget's findings on the secondary school syllabus through later work by Bruner and other apologists.¹

The primary school case for freeing writing continued in the Scottish Education Department memorandum (1965), with a stress on creativity and spontaneity in both speech and writing (1965:118). The report also stresses that writing must be accepted by society and certain conventions appropriate to certain situations must be observed. The concept of appropriateness of variety was promoted in what would appear to be a proposal for descriptive rhetoric.

In this open state of mind primary school memoranda have remained and in 1967 a major piece of research was initiated by the Central Committee on English into primary school composition. There is much more of Holbrook (1964) and Clegg (1964) in this current work than there is of the prescriptive rhetoric familiar in the pre-war era. Further, spoken English work in primary and secondary schools, while showing an increased awareness of styles roles and dialects, shows little connection with the rules of eloquence evident in syllabuses until 1946.²

The degree to which the secondary school English syllabus has been freed from rhetorical prescription is confirmed in the Bulletin No. 1 (1967) of the Central Committee on English. The early stages of the secondary school, which include the stage at which our experimental course (Appendix B) was taught, deal with

1. See Chapter IV for a detailed treatment of this aspect.

2. See Glasgow Syllabus for Spoken English, 1966.

the development of communication skills, - talk and writing - and there is practical advice to teachers to abandon the traditional, outmoded notions that underlay composition effort in the past (1967:9). Proposals for thematic studies embracing reading and writing of differing varieties of English are advocated. In this, as in the work of the contemporary primary school, a new descriptive rhetoric is hinted at, if not explicitly detailed. With the publication of this Bulletin (1967) guidance in composition for the secondary school becomes as open-ended, at least in the early stages, as primary school work. It is against this new climate of writing that we must judge the separate fortunes of grammar in the syllabus.

1.2.2 Guidelines in the Teaching of Grammar

The academic debate on the nature of grammar, with its attendant implications for school grammar, is dealt with in detail in Chapter II. In this section we are merely attempting to show that documents of official guidance on school grammar work clearly demonstrate that, in the last two decades, a dogmatism about the place and nature of grammar in secondary school syllabuses in Scotland has only recently given way to an uneasy agnosticism on the subject of the teaching of language form to native speakers. It would appear that the prescriptivism of the nineteenth century has often been fostered by official guidance documents or has remained unchallenged by them. In preparing and teaching our experimental course we have recognised a confusion in schools on this topic. Some teachers continue with traditional grammar

teaching, albeit with a sense of guilt, while others see fit to abandon grammar teaching, and they remain uneasily aware that its place has not been fully taken in the syllabus by any other coherent aspect of language teaching.

Few passages illustrate more clearly than Struthers (1907) the roots of the grammar teacher's dilemma:

'Grammar owes its place in the Elementary Curriculum not to its method, which is not peculiar to it, but to its subject matter, which is of universal interest. It is taught because the discipline which it affords is needful or at least helpful to the right use and understanding of language. Only so much grammar need be taught as can thus be applied: the phenomena treated should be such as can arise naturally in reading and writing; but systematic instruction in its principles, so far as is required, should be given in regular grammar lessons.' (1907:207).

One detects in this key passage the attractiveness for the teacher, in the role of scholar, of the philosophy of grammar, which might link the modes of investigation of language form with mathematics, logic or science; but there is a rejection of this abstract, if attractive, field in the name of practical teaching in favour of a grammar which is a descriptive instrument with practical applications. Studies of the nature of grammar are in conflict, in Struther's view, with applications of grammar as description, and in this he neatly anticipates the character of the academic struggle between theoretical and applied linguistics. The resort to pragmatism as a criterion of what grammar to teach

and what degree of instruction to give is vaguely formulated between 'needful' and 'at least helpful', but his goal of producing the 'right use and understanding of language' is unequivocal. The individual teacher was apparently to be left with the difficult problem of deciding how much 'pure grammar' and how much 'applied grammar' he should teach. This kind of decision is commonly left to teachers in Scottish education. Although there is a recognisable nineteenth century insistence in Struthers (1907) that writing is the basis of grammar, there is a clear urge to use grammar descriptively in school work. Prescription and description are advocated by the same pen in the same paragraph, and this, we feel, is symptomatic of a dilemma in teacher thinking today.

It is intended in this section to concentrate on recent directives in grammar teaching, but we may note in passing that in the years between the wars Scotland committed itself to a grammar much less descriptive, more prescriptive (Wattie, 1930), more exercise-bound (S.C.R.E., 1931) and inherently more difficult (Macaulay, 1947) than was envisaged by Struthers (1907).

The first post-second-world-war document to deal explicitly with grammar was the secondary report of the Advisory Council on Education (1947) and it demonstrated a clear-thinking anti-traditional line on the place of grammar in schools. Barren exercises were condemned and their non-transfer to productive writing was asserted; teachers were to be free to decide how much grammar they needed and should be free of coercion in this decision (1947:229). Parsing and analysis as examination

requirements were condemned; where grammar was taught it was to be functional and clearly related to pupils' writing and reading; error correction, that favourite practice of nineteenth century rhetoric, was dismissed as 'the grammar of what they (the pupils) never go wrong in' (1947:299).

The primary school document parallel with this report (1946) was a strong clear document which not only analysed the tradition of 'universal' grammar taught in schools but came firmly out against it. 'Grammar is not a primary means of learning correct English, but an apparatus of criticism; a formalisation of observed tendencies and usages into rules.' (1946:236). 'We recommend (accordingly) that grammar should not be taught at all under that name in the earlier years of the primary school.' (1946:237). The report recommended that teachers 'should throw away the crutches of interpretation and language exercises rather than have them become the boring grind of uninspired teaching'. (1946:238).

If we compare with this highly reformatory document a contemporary syllabus in grammar for Edinburgh primary schools (1947) we find that grammar work was to last for five years, from 6+ to 11+, and its justification was this: '(It) is recognised that a certain knowledge of grammar is necessary to aid the correct speaking and writing of English. The pupils must be given standards to which errors may be referred.' (1947:20). The scheme of work embraced a Latin-like parsing of noun, verb and 'all parts of speech', a knowledge by 10 years of age of clause analysis and by 11 of general analysis, together with certain

etymological derivations. The inclusion of this last item under 'Grammar' is a curious indication of the nineteenth century origins of the scheme of work.

The contrast between the liberal recommendations of the report (1946) and the scheme of work (1947) serves to show (a) that the report was facing boldly a difficult and entrenched situation in the schools, and (b) that because of classroom inertia gross disparity may result between recommendations and classroom practice. It is interesting to note that the Edinburgh primary school syllabus panel, charged in 1965 with making a new scheme of work, opted out of making any grammatical prescriptions until linguistics pointed the way. Under liberalisation pressures, entrenched attitudes may give way not to reform but to agnosticism.

We have noted the liberal tone of the report of the Advisory Council (1947) in its suggestions for secondary education. The 1952 memorandum on secondary English teaching, which we have already noted as an illiberal document in its suggestions for writing (1.2.1), is a reactionary and even damaging document in its dealings with grammar work in schools. It asserted that there were no solid grounds for the view that teaching traditional grammar was out of date or unnecessary (1952:21); grammar, sensibly taught, was an aid to correct expression; colloquial speech was inaccurate and incoherent and rendered recourse to teaching by appealing to the intuitions of the native speaker ineffective; pupils could only use you and I correctly if they knew the grammar of English dealing with subject, object, government and case form; knowledge of grammar would prevent such

solecisms as without me knowing, who for whom, and will be for shall be; those who knew about the subjunctive would clear up the enigma of such phrases as if I be and if I were. The document pled with teachers to simplify their grammatical terminology, however, since an effective common nomenclature was necessary.

It is instructive to compare with this report (1952) nearly contemporary provisions for the teaching of English language in English schools. The National Union of Teachers (1952) suggested no overt grammar work in secondary schools, although some incidental, ad hoc clearing up of points of usage is recommended. It is interesting to speculate whether the basic aims of English teaching in Scotland were the same as those for teaching the subject in England. The Ministry of Education pamphlet (1954) dealing specifically with language teaching in England implied that in aim no great disparity existed, and one would add that between provisions of the report of 1947 and the pamphlet of 1954 little methodological difference was suggested. The schemes of work and the subsequent official documents we have considered, however, would suggest that Scotland is in method and syllabus content radically different from England in its handling of English language work. This difference was described in Chapter I.1 as a tendency to rationalise. That the rationalisation is linked with an unprogressive and entrenched scholasticism is made clear in the memorandum (1952).

As in composition work, it is Bulletin No.1 (1967) which confirms a contemporary, liberal tone in new thinking about the syllabus. In England, progressive liberalisation might be seen

from the Norwood Report (1943) onwards, although it could be argued that English attitudes to grammar were effectively revised from the early decades of this century, as we shall note in 2.1. Scotland has only recently adopted a more open approach to language work and, for cultural reasons already referred to, presents a problem of some magnitude for syllabus reformers. It would be a gross miscalculation to equate the uneasy shelving of the problem of grammar in the syllabus with any solution to the latent problem. In this atmosphere, Bulletin No.1 seemed to strike a bold new note for secondary schools, but, on analysis, its language teaching recommendations represent merely a holding position. No overt language work of an analytic sort is proposed for the first stage of the secondary school (the common course). The second stage, that is, the first academic secondary stage, may follow the common course at the age of 11+ or 12+ (and the course which we have devised for this programme of research fits into this slot). The directives are merely these: grammar is to be incidental to textual study; rational discussion of points emerging is advocated; the pupil is to be helped to make critical assessment of writing, including his own; variety of language is urged as a main feature of language study and description useful in this area is called for. Finally, on the vexed question of terminology the document suggests that the syllabus '... requires that they (pupils) should gradually acquire a terminology sufficiently sophisticated to make it possible for them to talk adequately about language'.

This attitude to Scottish secondary work in English language

is accompanied by some negative statements about traditional school practices. The grammar/exercise book is to be abandoned. New grammar would not solve syllabus problems and, in a phrase of hopefulness, more detailed guidance on language teaching matters is awaited 'in the next few years'. (1967:22).

There can be little doubt that a very difficult but challenging situation exists in the teaching of English language to mother-tongue speakers in Scotland. In even the most anti-traditional documents there is a characteristic advocacy of rationalisation in the classroom, without any coherent system of description necessarily being available. Further, there is a desire to study language as a whole, without any extensive knowledge of what this would imply being clear to the teachers urging it. In view of Scottish traditions, the official analyses of the teaching situation and the guidance on syllabus reformation we have considered, it would seem clear that an important and individual case for the provision of a linguistically graded course for mother-tongue language work in English is called for in the teaching of language in the secondary school. It is towards this end that our present research is directed.

1.3 'Correctness' as a Feature of the Language Syllabus

References to correctness as a desirable quality of speech and writing are typical of prescriptive rhetoric schemes (1.1) but correctness is commonly found as a purported goal of Scottish school grammar work in books and in contemporary schemes of work. Most guidance documents consider correctness to be defined by a

set of prescriptions relating to form¹ and, given correctness of form, certain social, aesthetic and literary values are accorded to the language. 'Solecisms' are deplored² and, in eradication of these mistakes, the formal grammar component of courses was, and still is, often justified.³ Thus we come rapidly in a full circle; prescriptive rules define acceptable forms; errors against pre-scriptions are detected by the rules; the teaching of the rules justifies the occurrence of aberration. This view characterises the Scottish syllabus in English to the present day although some erosion of strict prescriptivism is to be noted in the last decade.

Prescription in practical school work usually manifests itself as proscription, the rule as a negative caution, 'Thou shalt not...'. A high proportion of most traditional textbooks courses in language in Scotland deal with the correction of errors offending against the canons of prescription, (Barclay & Knox (1942), Dubber (no date)), and in correction work the pupil is required not only to show that he is intuitively aware of a lack of well-formedness in an utterance, but that he can rationalise the cause of the error in terms of rules broken. In practice the circularity is commonly perpetuated to the point at which the examples become so artificial that it has been held to involve the correction of what native speakers never go wrong in.⁴

1. See S.C.R.E. Curriculum, 1931, p.81

2. S.E.D. (1952):21

3. S.E.D. (1947):20

4. S.E.D. (1947):299

Normally, in error correction work in school course books there is a classification of errors involved, ranging from the common errors of everyday use, the 'vulgar' errors of speech and writing, to the detection of the most delicate and devious errors of rhetoric. A precedent for this activity certainly lies in traditional rhetoric, since the prestige of a rhetorician of the eighteenth and nineteenth centuries lay in his being able to show his ability to detect faults, and, curiously, several writers on rhetoric in the twentieth century have defined it as a study of errors (Richards, 1936; Ohmann, 1964). Consider De Quincey's remarkable view (1860) that there was hardly a page of the fairest writer of his day that was not suspect in some aspect of its grammar or style, and Cobbett's remarks (1826) that he would not hear precedents drawn from Milton, Johnson, Watts, the King, aristocrats and others because these writers were in breach of the rules of grammar (1826:XXI-XXIV). Bain's preoccupation with the style of the Authorised Version of the Bible, which he was much given to rephrasing and discussing in his work (1867), is also germane to the point. A continuing tradition of noting errors in prestigious and other texts was noted by Wattie (1930), the Senior Chief Inspector of Schools in Scotland, and he took the view that it was the status quo of classical grammars to concern themselves with errors (at least from Donatus onwards) and, thus, teachers need not feel that dogmatism and prescription were out of place in education, even if grammar was becoming centred on description.

For an example of error-correction exercises in school texts

see Hutton, Rintoul and McKinnon (1962:70-71) where twenty-one careless mistakes in speaking and writing are demonstrated. Some of these are concord errors, some colloquialisms and others dialectisms. 'Dialectisms' form an interesting class of error. The field embraces slang, colloquialisms or vulgar speech, but the errors for correction are errors of writing. This view of error in Scotland quite clearly confirms the persistence of the written medium as the criterion of prescription. Even a rudimentary consideration of the performance characteristics of spoken utterances as distinct from written texts is absent from the terms of reference of language schemes of work in Scottish schools, although some changes are now being advocated by such bodies as the Central Committee on English.¹ Parallel with a new interest in speech performance features runs a new awareness of the social implications of utterance manifested in rudimentary 'register' studies now being advocated. The bidialectal problem raised by the interference between Scots and English language study is partly resolved by the growing awareness of the distinctions between speech and writing, and partly by the weakening of the influence of Scots on non-art writing.² Thirdly, the recognition of Scots as a part of national culture by the schools encapsulates

1. See S.E.D. (1967) Bulletin No.1: English in the Secondary School, Early Stages.

2. As recently as 1907 the Report of the Scottish Education Department referred to English as a second language for rural children in Lowland Scotland (1907: 277,287).

it in the study of literary texts, reducing the area of contact with written English, in language work in Scottish schools, through which interference errors may be held to take place.

In the sociological sector of this problem for present day Scottish schools we may note that vulgarity of life is often equated with vigour of dialect. The middle class standards of the Scottish English classroom are marked by the high value placed on formal literary English, and on writing displaying this form. The motivation for the correction of accent via elocution can be traced to speech training (elocution) schemes of the thirties and to guidance documents dating from that time. There is, for instance, a clear tendency towards upholding the standards of middle class literary English in documents of guidance in the fifties.¹

In the correction of errors in children's speech and writing, in Scotland, grammar is used as a litmus test. Grammar is regarded as fact and fact can be learned and applied to language use. Social endorsement for correctness is claimed. In other parts of the English-speaking world similar canons of correctness were established as Gleason (1964:269; 1965:13), Dineen (1967:V) and Halliday, *et.al.* (1964b:102 ff.) demonstrate.

It is curious that English-speaking cultures have tended not to produce an academy to regulate the correct use of language, since, as Lyons (1968:18) notes, all the literary and philosophical prejudices shown by the French Academy are as prevalent

1. cf S.E.D. 1952, p.6.

in English-speaking society as they are in France. There has been in England a Society for Pure English and with it such important names as Fowler and Bradley have been associated.¹ England invested its correctness, in effect, in individuals and it is worth noting that in the correctness movement, in France and England, individuals are more amenable to change than institutions. Claude Favre, Sieur de Vaugelas demonstrates this well. His name was associated with rigid prescription for French, yet his Remarques sur la Langue Française (1647) shows that he was himself of an evolutionary turn of mind. Fowler (1926) has run to several editions in the last forty years, each edition, however, embracing usage changes, albeit with a nearly disastrous time lag.

What Warburg (1962:316) referred to as a 'transcendental' notion of correctness was foisted on the schools in the nineteenth century and has been reinforced by elements of present-day society. The more liberal attitude to correctness evident today in Scottish schools has these sources, (i) the vast communications developments of the twentieth century making comparison of language use part of every native speaker's life (ii) the invention of recording devices by which close study of the characteristics of spoken language may be made (iii) the change in emphasis from diachronic language study to synchronic study, drawing attention rather to the 'observation of the phenomena of living languages' than to 'antiquarian philology' (Sweet).²

1. The Society for Pure English issued its first tract in 1919, and a list of members was appended.

2. H.Sweet, Address to the Philological Society, 1877, quoted by

We would accept Quirk's main dictum (1962:95) that we have entered a period of English study in which multiple standards of suitability, not a single standard, are recognised.

De Saussure's (1916,1959) terms diachronic and synchronic, the objective study of language through a continuum of time and the objective study of language at one état de langue respectively, have helped educational thought to focus more clearly on the premisses of the 'correctness' argument. The ingenious analogy of the chess board has much cogency and is widely used to distinguish a descriptive point of view from a historical one. One major difficulty for education often arises, however, Is the linguist, and the teacher influenced by him, to uphold a wholly permissive view of language use, that any language use which works for any contemporary native user is acceptable as a legitimate part of school language? In spoken language is ain't acceptable as standard American English because of its frequency of use? (Hall,1960:11; Gleason,1965:9-10). Are we to accept 'It's me', who for whom, I for me, of as an auxiliary and many other alter-native forms as standard English noted by Barber (1964)? Educational debate still asks this question and there is a strong undercurrent of fear in teachers' minds that an affirmative answer to this question will precipitate a state of anarchy in language use. In Scotland particularly, questions are raised whether education should condone the extensive confusion of the

J.R.Firth in General Linguistics and Descriptive Grammar
in Papers in Linguistics, London, 1957, p.218.

past participle and past tense in verbs, as I seen, I have went, etc... These forms are standard in a great many pupil-speech situations outside of the class. By a simple 'descriptive' frequency argument, ought we to accept these as legitimate forms of English in the central and southern parts of Scotland?

The answer to this is contained in Quirk's (1962) argument mentioned above; there is not a single standard of English usage, there are multiple standards. Speaking purely sociologically, it would be possible for a Motherwell working class child to be derided, or even attacked, for using standard English I saw you yesterday when I seen ye yesterday would have been deemed appropriate for a certain situation. The choice of a correct form, from the point of view of educated usage of English, is often the choice of a social class marker and a degree of class antagonism can be released by its use. Further, if we regard the consistent confusion of past participle and past tense forms as dialect, that is, as a form of the language recognisably regional and systemically different from other forms of the language, the bi-dialectal aspect of Scottish society might be made apparent and provision made for this in judging a form 'right' or 'wrong' for a given situation. (cf. Philp, 1968:27)

The solution to the continuing problem of correctness in Scottish schools lies in regarding the mother-tongue as not merely one form of language, inflexible and prescribed, but as many forms of the language able to be related to many social situations. In a formal English essay the Scottish teacher does not expect casual spoken forms, even if they communicate a high degree of information

within the passage but in a 'free writing' situation the acceptability range would be wider. The suitability of language terms as opposed to their mere adequacy in communication is a practical basis on which this issue may be judged (Davies, 1968:113). The confusion of the present-day situation in classroom terms is that the restriction of English study to a few varieties can become associated in a rigidifying way with the acceptability of only these few forms. On the other hand, too wide a use of varieties in class may have a bad effect on the 'public relations' side of school work revealing parents, school governors and perhaps even teachers as a conservative body of lay opinion on language.

Scottish teachers of English have inherited a more rigid view of 'polite' speech and 'correct' usage than it would appear their English colleagues have. The roots of this are in the nature of Scottish society and the nature of Scottish scholarship in language and rhetoric. It would be futile to think that society will change suddenly, although a progressive liberalisation is clearly detected. Linguistic science, however, has changed considerably and one of its effects has been to produce a review of standards of 'correctness'.

There is a high degree of lay resistance to multiple standards of correctness, as a perusal of letters to the editor of journals may confirm. Within the teaching profession in Scotland, however, a movement towards multiple standards of correctness is evident, particularly in development of new spoken English syllabuses and in work in schools in varieties or styles of language. Further, free composition with an emphasis on spontaneous personal expression (Clegg, 1964), now being used more and more in Scotland shows

error tolerance of an order far removed from former standards of correctness in writing and, as usage tolerance grows, so description rather than prescription is supported as a school language teaching instrument.

1.4 Summary Position

The background to the teaching of English in Scottish schools radically affects the direction of proposed reforms of the syllabus, the shaping of materials and the devising of an experimental model. The characteristics of mother-tongue language teaching in Scotland are found to centre on the tensions between a changing society and a school syllabus marked by inertia. A main factor in the school background is traditional rhetoric which proposed a view of language based on dogmatic prescriptions, couched in rules, and although rhetoric itself was in the process of changing to a more objective view in the course of the present century, a descriptive rhetoric approach has not yet come to maturity. The grammar associated with rhetoric, however, has persisted to the present day and its prescriptive viewpoints and canons of rationalisation persist in contemporary syllabuses.

The net result of the interaction between the advancing attitudes of society and the institutionalised attitudes of school language courses has been a form of syllabus agnosticism in which certain important issues for the teaching of English in Scotland have been shelved. It is an urgent consideration of educational language research that the applications of linguistics in shaping relevant courses for mother-tongue speakers be considered

and it is in this climate of enquiry that the following chapters discuss the linguistic philosophy, the grading and the testing of a course of materials for a specific population of mother-tongue speakers of English in the Scottish senior secondary school.

CHAPTER II

THE SCHOOL GRAMMAR DEBATE2.0 Introduction

In contemporary discussion of the reformation of the language syllabus it is sometimes assumed in the re-appraisal of the role of grammar that for something like a century it has enjoyed an unquestioned dominance in classroom teaching. In fact the nature of grammar, its role in education and the teaching techniques best associated with it have been under constant debate virtually since the institution of English as an academic subject in schools in Scotland in the eighteen sixties. Further, there is a national element in these discussions. Grammar as a component of English mother-tongue teaching has enjoyed significantly different fortunes in Scotland, in England and in the United States of America. The current issue of the relevance for language courses of linguistic theory has heightened the debate on school grammar to levels of considerable educational significance. For example, the twenty development centres in English which have been set up throughout Scotland under the auspices of the Central Committee on English have all listed the grammar debate as of principal interest to their work; linguistic approaches to language teaching form part of every teacher training course for specialists in the colleges of education in Scotland and of many in England; the consideration of the linguistic contribution to new light on the grammar debate dominates in-service training schemes in

English in Scotland and makes an important and growing element of such courses in England. Finally, text books for school use are now appearing in which a changed attitude to grammar in mother-tongue language teaching is apparent. In illuminating the relationships which exist between modern linguistic thought and the teaching of language to mother-tongue English speakers two aspects of the continuing debate on school grammar are dealt with in this chapter: (1) the background of school grammar in mother-tongue teaching syllabuses from 1860 to 1940, with particular reference to Scotland where our experiment has been set; (2) recent linguistic theories which have affected the course of the debate on school grammar for mother-tongue English study.

2.1 School Grammar in Scotland, 1860 - 1940

School grammar may not have been entirely the invention of the nineteenth century, as has been suggested, but there is no doubt that it was popularised and embedded in the mother-tongue language syllabus during that century in both the United Kingdom and the United States of America. In Scotland, partly because of the movement in rhetoric, which produced grammars as a by-product, and partly because of a strong philosophical trend in education which expressed itself as a desire for the rationalisation of subjects studied, English established itself as an examinable subject embracing a body of authoritarian formal grammar, directed towards certain practical goals. The Dick Bequest inspection reports reveal that in 1833 only one pupil in ten learned English grammar, but by 1865, when grammar was examined in the Bequest's

scholarship along with English literature, five pupils in ten studied the subject (Simpson:1947). By 1888, when English was examined as a subject in the public leaving certificate, grammar was well established and formed a compulsory aspect of the papers, and, circularly, was advocated as an important sector of school study by the Department, who set the examinations, when the tradition of memoranda on the teaching of English began.

In Scotland, as elsewhere, grammar was seen as an essential part of education in the 'three R's'. It justified its existence in the syllabus by claiming practical advantages resulting from the body of fact studied. These advantages were often listed as correct speech and correct writing, although gains in comprehension and something called 'mental discipline' were sometimes also used as justifications of the grammar work done. We recognise this as an idealistic belief in specific transfer of training, similar to the articles of faith of the rhetorical movement, which held that knowledge of the principles of the composition of literature led to an ability in the pupil to produce elegant sentences.

The syllabuses suggested for the schools in the nineteenth century usually included orthography, etymology and syntax as 'grammar', with prosody added to grammar for good measure. Often this inventory was reduced to etymology and syntax in schools, for orthography was dealt with in the spelling lesson, and prosody was one of the aspects of reading and composition. Thus a separation of what might be called the facts of grammar was made, and these facts were learned in expository courses,

re-inforced by rote exercises and tested in various ways in school. Grammar became an isolated aspect of English study linked by belief in specific transfer with the rest of the syllabus.

The body of knowledge that we call school grammar, by the end of the nineteenth century confessed itself concerned with words and sentences. Words were classified as 'parts of speech' in a well known mistranslation of partes orationis (parts of sentences) as the phrase was used by Donatus. English grammar accepted the eight parts of speech commonly cited for the study of Greek and Latin, and without very much debate on the matter, teachers appeared to accept these as universal elements of grammar.¹ Most school grammars defined these parts of speech in an informal semantic way by referring to notions of their meaning. Notions of function were largely based on logic. Thus school grammar as it was embodied in courses in the mainstream of the Scottish school tradition, and as it still is embodied in that tradition today, was characterised by semantic criteria for word classification and propositional logic of an Aristotelian kind for the definition of the function of the elements analysed.²

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1. J.Lyons, Introduction to Theoretical Linguistics, Cambridge, 1968, 1.2.5. The four Stoic parts of speech (noun, verb, conjunction, article) were amplified by Dionysius Thrax (2nd Cent.B.C.) to eight (Adverb, participle, pronoun, preposition).
 2. See J.Lyons, Introduction, pp.337-338, in which he outlines the relationship between logical and grammatical criteria.

It is a principal contention of the debate on the nature and status of grammar for school use that both semantic classification of word units and their equivalents and logical classification of dependency systems have misled pupils. (cf Nida, 1960; Fries, 1952:II; Halliday (et.al.), 1964:157 ff; Currie, 1966:6.) In a subsequent section of this chapter we shall show that proposals for a structural grammar for schools were largely based on anti-mentalist attitudes to form. Criticisms of the topic-and-comment approach to grammar, - that is, of the approach which lies behind the traditional grammar of English - have been made by linguists who find this type of analysis quite unsuitable for languages outside the Indo-European family. This destroys its 'universality'. Further, in certain clear aspects of English grammar such as passive constructions, the prescribed actor-action-goal analysis, based on Latin and Greek inter-dependence of logic and grammar, leads to a confusing analysis of English unless a surface/deep distinction is introduced. It is possible to show that in such sentences as Bill met John and John was met by Bill traditional grammar would identify Bill and John as subjects (i.e. actors). But clearly Bill is the logical subject of the passive sentence. Traditional grammar identifies John as subject in the second sentence prescriptively because the preposition 'by' prescribes Bill as non-nominative (objective after a preposition). But only pronouns in English show objective case inflection. Further, the concord relationships of the sentence are determined by the first noun in the declarative sequence, - the grammatical subject. Thus John meets them and They are met by John. Finally, in cases of

co-ordination, the grammatical subject determines the interpretation of a passive 'subjectless' co-ordinate clause, thus, Jane met Bill and was pleased and Bill was met by Jane and was pleased.

A school grammar which on the one hand prescribed forms and types of analysis, - which drilled these types of analysis and suggested that understanding of the principles of grammar embedded in them was the basis of proper control of the productive side of language - could only turn a deaf ear to criticisms of a 'notional' sort such as those outlined above. There is evidence of official concern, however, over teachers rejecting traditional grammar in the first decade of the present century.¹ To some it seemed principally a matter of terminology² and out of a general concern for the consistency of grammatical descriptions of Indo-European languages in education (including English) a proposal to set up a committee on grammatical terminology was made by the Classical Association of Great Britain.³

1. See General Reports of the S.E.D., 1908.

2. This was true of the sponsors of the Joint Committee on Grammatical Terminology (1908-1911) and is true in development work in language description to this day. cf. p.22 Bulletin No.1 of the Central Committee on English, English in the Secondary School: Early Stages, H.M.S.O., 1967. There are many questions raised in public about terminology at conferences and courses which the writer has attended and a paper on terminology is at present before the S.E.D. Central Committee on English on this topic.

3. Proceedings of the Classical Association, 1908, p.83

The brief of the Joint Committee on Grammatical Terminology arose from this proposal made in 1908 by the Classical Association. The work of the Committee was directed towards the simplification and unification of the terminologies and classifications employed in the grammars of different languages. The Committee embraced representatives of classics, modern languages and English teaching as well as academic linguists. Henry Bradley was a member and Professor Sonnenschein, a prominent classicist, was Chairman. There were French and German official correspondents.

In the prolegomena to the Committee's report of 1911 it was noted that teachers everywhere felt that some reform of grammar was needed. It was noted that the French authorities had issued an Arrête limiting the amount of grammar to be known in their schools (1910); that the American educational system was desirous of a clearing of the air on terminology¹ and a number of European sources were also involved.

The brief of the Committee was 'to consider the terminology used in teaching the languages, ancient and modern, including English, commonly studied in English schools, in the hope of framing some simplified and consistent scheme of grammatical nomenclature, tending in the direction of uniformity for all the languages concerned.' As the result of a plea for help the

1. The Classical Association of New England sent their request to the Joint Committee that the terms of American grammars be taken into account in their deliberations.

Committee received over a hundred detailed accounts of confusions in teaching arising from terminology. An interim report was circulated in 1909 and issues arising from it were referred back to the Joint Committee who further revised their proposals. There were seven reservations on signature by members of the Committee on the final proposals in 1911. Some of the reservations were unspecified and some specified for particular languages or for particular grammatical issues. Nevertheless the results appear to be as nearly unanimous as a group of scholars as diverse as this one might produce.

It is probably not surprising to find that in the decade which followed the publication of the Report a keen discussion rose up in England and in Scotland on the implications of Sonnenschein's findings. The issues resolved themselves as one of principle, whether the findings of this committee had forced the descriptive terms for modern languages into too classical a mould. The tide of opinion moved Sonnenschein to collect evidence for a display of public support for his findings and in 1922 he wrote to all the associations represented on the 1911 committee asking for a re-pledging of their support for the terminology published. The English Association was among those asked and when they gave their support formally to the report of the committee, Sonnenschein wrote to the press announcing that there was unanimous approval for his findings. The consternation that this caused in the ranks of the English Association gave rise to many meetings and conferences, at least one of which, at Bedford College in 1922, brought to light a profound feeling of disagreement with Latinate

terminology and with the general idea of grammar teaching in schools, particularly for mother-tongue pupils.¹

A sub-committee of the English Association published a note in 1922 in which they expressed disapproval of the pro-classical tone of Sonnenschein's report, and in a key sentence set the target for what was to be a preoccupation of at least three decades of English teachers to follow: '(The English Association) desires, therefore, to explain that its assent to the recommendations of the Report has been given with reservations, and to express its belief that teachers who keep abreast of modern linguistic and grammatical research will be careful not to prejudice investigations by using in their English lessons any term borrowed from the conditions of other languages unless it can be justified by the occurrence of similar conditions in our own.' (1923:6).

It seemed to the English Association that it was less than satisfactory to throw down old gods and set up nothing in their place. Accordingly in 1923 they published two papers in a pamphlet to set teachers off on a constructive tack in proposing a 'pure or functional grammar of English' for use in the classroom. The papers, by an academic, Professor Allen Mawer, and a schoolmaster, Mr S.O. Andrew, have an interestingly modern ring and could almost have been from a conference in English language developments for teachers of our own decade.

Mawer and Andrew produced complementary papers in that the

1. Some school courses actually taught English grammar as an entrée to Latin study. cf Wilsden (1906).

former was an academic linguist with a more abstract view of the role of grammar, while the latter was a practising teacher with a distinctly pragmatic line of thought centred on the practical issues of the classroom. Mawer stressed the 'vast and essential' differences between English and Latin grammars. He argued that the changes in English from a state of inflection to a 'weakened' state of comparatively low inflection was neither simplification nor corruption. The changes in English structure call for change of descriptive technique in grammar. Morphology and accidence become less and less, and syntax becomes more and more important. Further, a dead language responds well to a grammar which is a statement of rules, but a living language requires an ordered account of what we hear spoken day by day.

Andrew's paper is a model of pragmatic thought. He asks why we should teach grammar in schools, and if we decide to teach any what ought the grammar to be? He rejects transfer of training from grammar to 'correct speech' as illusory and with the caveat that 'ulterior motives are always a danger to honest teaching' dismisses the aim of teaching English grammar to help pupils to learn Latin. He quotes aptly that Shavian jewel, 'The English way of learning a thing is to study something else'.¹

In considering what the content of a grammar course might be,

1. In this context one would willingly read 'British' for 'English' for the idea of transfer of training from one specific area of learning to another is well embedded in the Scottish educational system also.

Andrew appeals for 'pure grammar' which he is ready to call 'universal grammar'. Stated briefly, this involves subject and predicate distinctions, the noun and its modifications, and the verbs and their modifications. Words, he argues, function, therefore they are to be defined by function, not form. Context determines function, but inflexion and form may support it, as may the syntactic order of items. Andrew is well aware of noun clusters and of the role of the post-head modifier and in his general outline shows himself to be far forward in devising a working model of grammar for school by an eclectic process.

Andrew was also very much aware of the primacy of speech, for he made speech acceptability the arbiter of 'correctness' in language use. One might argue that he was intuitively aware of competence and the sense of grammaticalness which Chomsky was later to propound.

What did Andrew expect to gain by his proposed approach to grammar? He restricts himself to two highly relevant educational points: (i) That the pupil will gain from a study of grammar what he would gain from any other science, - that the manifold of his experience can be reduced to order, which is to say that it can be classified and generalised. Grammar he claims is the child's first lesson in science. (ii) That the pupil, having seen that language is structured, will surmise from his own experience that structures have functions. As to whether his grammar has practical use Andrew will not say. It really depends on teaching technique. If grammar is used to explain an aspect of a text which has already evoked high interest, it is probable

that it will prove useful in writing or comprehension; if it is drilled as a dull course, the reverse is likely.

This exceedingly acceptable and insightful statement of the role of grammar by a practising teacher of the early twenties is sullied only by his attitude to correctness. While he advocates that speech should be prime, and should be encouraged as a spontaneous activity in class, he also argues for correction of the speech of pupils to make it conform to some unstated standard of rightness. Whether this is merely a weakness of his exposition in the paper or a genuine confusion in his own mind is hard to say. Most of the paper represents a highly enlightened view of the role of grammar and it contributes solidly to the 'innovation and reform' side of the school grammar debate of the early twenties. We would go so far as to say that no more liberal view of grammar was proposed by anyone in England at this time, and no comparable shaft of enlightenment reached Scotland for something like another thirty years.

In his comparison of English and Scottish schools, G. S. Osborne has drawn attention to the differing fortunes of grammar north and south of the border (1966:114). The shifts of fashion in each country's attitude to grammar, he claimed, followed roughly the same trends, except that after 1927, when grammar was 'in' on both sides of the border, England again rejected traditional formal grammar for school work and has remained in this rejection period ever since, whereas Scotland after re-asserting its faith in grammar in the twenties remained grammar-prone afterwards. A study of Scottish memoranda and education

reports, and the content of the public examinations shows quite clearly, however, that there never was a period of official rejection of grammar at all in Scotland although the subject was at times shunned by teachers. Mr Lamb's complaint in 1908 that pupils got 'little or no instruction in the structure of sentences and the general scaffolding required for expression of thought' (S.E.D.,1908:38) is to be interpreted in castigatory terms. Grammar was taught and was supposed to be taught. Inspectors drilled classes in grammar; public examinations and internal examinations relied on grammar. Mr Lamb is whipping up still further efforts, rather than indicating that grammar had fallen into desuetude. By 1924 one inspector, Dr Stewart, was highlighting the 'repatriation of grammar after a period of ostracism' and noting steady improvement in the method of teaching it (S.E.D.,1924).

An interesting paper on The Grammarian and his Material was given in 1930 with a Scottish audience principally in mind. We should recall that J.M.Wattie, who gave this paper, was himself Scottish and had risen to be H.M. Chief Inspector of Schools. He had in 1927 rejoiced that grammar was 'in' in Scotland after a period of neglect (S.E.D.,1927:36); 'grammar is fully restored to favour, though shorn of a good deal of its former elaboration'. Wattie's main consideration in his paper was correctness and his contribution to the continuing debate on school grammar was to clarify the role of the grammarian in this aspect of school teaching and use of English. While a degree of liberalism appears in his argument, for example his growing realisation that spoken

forms are prime, and that speech is learned by speaking rather than drilling, Wattie is still confessedly conservative about grammar and its status. Even if the role of the grammarian is merely to record, observe and not to sit in judgement on the language, Wattie holds firmly that description can never be the attitude of the school grammar-book writer or the teacher of grammar in class, 'for the simple reason that in every department of school work (I say particularly in grammar) effective pedagogy necessarily calls for a certain degree of dogmatism' (1930:14).

It is probably not unfair to cite the English Component of an experimental curriculum contemporary with Dr Wattie's exhortation as a gauge of the attitude to grammar teaching of the early thirties and a confirmation of the 'degree of dogmatism'. The Scottish Council for Research in Education undertook an investigation of the nature of the curriculum for those post-primary pupils whose school career would not run to academic certificates, and, using an English panel of practising teachers, a proposal for pupils from twelve to fifteen years of age was made (1931). The recommendations for the English syllabus begins by using the rhetorical category 'intention' as the key to composition. Intention is the thing to be said. The 'communication of the intention' is the issue through which the grammar syllabus is presented. Order of words, richness of vocabulary and the effective use of idioms are all given, together with exercises by which these may be improved. These exercises are slot filling, choice of effective words from lists, completion of sentences and collocation of verbs and adverbs.

But these are the fringes of the real work in grammar in this proposed syllabus. In dealing with the difficulties of coherent expression, correctness of grammar raises problems which the rhetorical side of the syllabus seems incapable of handling. In consequence a long appendix on grammar is added to the English section. This definition of the iceberg whose tip showed in composition gives us a good idea of advanced school thinking in the teaching of grammar in Scotland in the early thirties.

Grammar is presented as an important subject in school, but one which should not be expected to yield more than it is fitted to give in class work. Thus grammar alone may not produce prowess in reading or writing well. Grammar can, however, make the pupil realise that the language is articulated, that there is order, groupings, functions and relations in English words in sentences. Analysis of sentences has a primary aim, that of revealing the structure of the language, but it may also be said to have as a by-product the clearer apprehension of meaning and, in composition, the elimination of formal errors.

The 1931 syllabus is explicit in its demands for an extensive knowledge of accidence, which the compilers presume to be inculcated by the age of twelve. The declensions of the noun and pronoun in English and the conjugations of the verb, taken as given, lead on to the study of function in English grammar. The term function covers allocating the appropriate part of speech to the word studied, defining notionally the role of the adverb, verb and noun. By this means functions like modification by adjectives, by nouns functioning as adjectives, by prepositional

phrases, participial phrases and the like are considered. Avoidance of errors of concord relationship and errors of participial relationship and the sequence of tenses follow from this training. Parsing is to be pruned to giving the part of speech and the principal relation, not of every word in the sentence but only of the main ones.

An inventory of the 'reforms' within this syllabus include the view that the word is not the principal unit of grammar; the sentence is. The advice given on sentence analysis (i.e. clause analysis) is that the main division is subject and predicate. The finite verb is indispensable to the predicate. Object(s) and Adverb(s) are further divisions of the predicate, and a warning is given that for the slower pupils sub-divisions dependent on clauses such as 'verbs of incomplete predication' are unwise.¹ However, for the majority of the population legislated for (and we must recall that it is a non-academic population) the teacher must bear in mind that we must prepare for later analysis of complex sentences. In this 'more complicated' kind of sentence what is primary and what is subordinate must be taught, together with the recognition of deviation from usual word order. In a syllabus, claim the compilers, this is justified because adults think first of principal clauses then of subordinate ones in comprehending English. The compilers are aware, however, that grammatical and logical analyses are different.

1. The provisions made for clause analysis in S.C.R.E. (1931) are those embodied in particular analysis. See 5.5 for discussion of this.



The method of teaching this body of grammar is to be the simplest form of exposition possible, using oral teaching with blackboard examples. Synthesis of parts of sentences into full sentences and of other units into coherent composition units is advocated as a complementary exercise to analysis. But, the crown of analysis, rhetorical and grammatical, is the analysis of a complete composition. Poetry, the teacher is exhorted, need not be excluded. This style of analytic procedure should be used by the teacher in analysing pieces of music, paintings and the like. From the combined experience of grammatical and critical analysis the pupil may get an idea, however dim, of a unity based on relation, proportion, coherence and order.

This syllabus, summarised above, clearly makes Wattie's (1930) conservatism look liberal. Yet it too purports to be a liberal document. It is a weakened statement of a full school grammar-rhetoric programme such as would be found throughout the thirties and forties in those long continuing (and still extant) school coursebooks simply known to many teachers as 'Nesfield' or 'Standard Nesfield'.¹ The S.C.R.E. syllabus content is formal

1. J.C.Nesfield, Modern English Grammar, London, 1912, had six reprintings to 1924 when the text was revised in accordance with the views of the Joint Committee on Grammatical Terminology. Thereafter there were ten reprintings up to 1949. Nesfield's Manual of English Grammar and Composition, London, 1898, had 24 reprintings to 1923 and thereafter ran to four editions and ten reprintings to its most recent edition in 1964 by Nesfield & Wood.

traditional grammar and it defines a course quite normal for current Scottish English syllabuses for able pupils. That this content should be devised for non-academic pupils, however,¹ makes one certain that the academic contemporaries of this group would be obliged to follow a full grammar syllabus with no concessions. The method advocated is clearly one of exposition and exercise and the demands on the pupils' powers of abstraction and memorisation are considerable. Precisely how a study of this order could be motivated in a non-academic school population is not made clear. On the face of it, it would seem that a course in grammar of this order even with the best motivation in the world would be difficult to carry out with all but the most intelligent academic pupils. What the syllabus shows very clearly, however, taken together with Wattie's paper, is that in the formative thirties of this century, Scottish teaching of the English language was much taken up with rationalisation of both structure and style and that the debate in school grammar was not whether to teach it, but how best to teach it. (cf Currie, 1967a)

That this is still, in principle, the case can be argued for the teaching of the mid-sixties.² The debate in school grammar from

1. The average I.Q. of these pupils might be of the order of 90.

The slower or poorer pupils referred to in the document may well run down to the 80 minus or even the 70 minus categories.

2. The writer's own grammatical training in school in Scotland in the thirties and forties was based on Holmes's Comprehensive Grammar, a text incorporating work of the sort typified by the 1931 S.C.R.E. syllabus. Holmes's book is in wide use in

this point in the thirties to the early fifties when post war re-assessment was beginning to take official shape, may be held to be not so much a debate as a series of pronouncements on how best to continue the traditional formal courses.

2.2 Recent Influences of Linguistics on School Grammar

2.2.1 Structuralism and Traditional Grammar

Traditional grammars of English, such as those of Poutsma (1914), Kruisinga (1917), Jespersen (1928) and Curme (1934) have been the subject of scholarly attacks by linguists of the Bloomfieldian persuasion, principally on the traditional treatment of syntax. (cf Nida, 1960:II). Many of these attacks were directed at school grammars derived from scholarly traditional approaches, for example Bloomfield's 'Applications' (1933:496), and the climate in which syllabus innovations in English language work took place approximately from 1940 to 1965 was much characterized by the Bloomfieldian position. The tone of Bloomfield's polemic (1925, 1933), with its unjustified assertions about traditional grammar (see Chomsky, 1964:29; 1968b:12) fostered a militancy in school reform which some linguists have openly denounced in recent years (cf O'Neil, 1968). Chomsky's proposals (1957) and his

2.(cont.) primary and some secondary schools today. One would surmise that there had been little real change of orientation in grammar teaching from the thirties to the present day, particularly in the primary schools of country areas.

subsequent development of generative grammar, principally (1965, 1966a) have been instrumental in countering the structuralist argument and re-valuing traditional grammar approaches in schools.

Bloomfield's attack on school grammars was couched in what were virtually emotional terms. He held that traditional grammars were fanciful and were based on the works of 'grammarians' (Bloomfield's quotation marks) (1933:496). The schoolmasters themselves who taught grammar were 'ignorant of linguistic science' and 'wasted years of every child's life' (1925); they were 'benighted', 'authoritarian' and produced 'cultural inertia'. Enlightened linguistic science, however, was not yet ready to offer a pedagogic substitute for traditional approaches (1933:499).

The tone of this attack may be traced in a wide literature openly antagonistic to school grammars. Fries (1927,1940,1952), Nida (1943,1960), Francis (1954), Roberts (1956,1964), Levin (1960) and Newsome (1961) are typical. Their attitudes may be characterized, briefly, by key issues debated. Francis (1954) spoke of a Darwinian-type revolution sweeping through language study, bringing a behavioural, language-objective, synchronic and scientific viewpoint. Levin (1960) continued these assertions by identifying the semantic, normative and logical fallacies of traditional grammar, which he portrays as perversely unwilling to see the light of structuralism. Roberts (1960,1964) summarised his position as 'anti-Latinate, anti-notional, speech-centred and anti-correctness in the authoritarian sense'.

These attacks should be seen in the context of a radical positivistic empiricism which characterized the natural and

physical sciences by about 1900, and in the next two decades established itself as the basis of behaviourism in psychology (cf Watson, 1920). The period vis-à-vis linguistics is well summarized by Dineen (1967:166-174), but the effect of Chomsky's re-appraisal is clearly seen in Dineen's renewed interest in the traditional model.

Two very serious results emerged from the structuralist attack and they are, albeit in a lessening degree, still widely met today: (i) that 'linguistics' for application to school problems means 'structuralism' and (ii) that teachers moved by the 'authoritative' attacks of structural linguists become confused when structuralism is itself attacked by later theories. Clearly, education demands an eclectic linguistics drawn from a spectrum of well established theory. Further, education, knowing its own problems, is well advised to retain a scepticism both as to the pedagogic claims made in the name of linguistic theory, and to the psycholinguistic assertions associated with the applications of such theory.

Several important benefits have accrued from the structuralist debate, however. The general one, that schools were stirred up, both in America and Britain, to review their language syllabuses in the light of changes in scholarly attitude, is well noted. A specific benefit is that thought was given to the surface organization of language (cf Nida, 1960) an area of form neglected by traditional school grammars.

Nida criticised traditional grammar for its lack of a category of order in syntax, pointing out that only unusual order was dealt

with by the major traditional grammarians. In our belief, Nida would have resolved his argument better if he had distinguished the uneasy relationship which exists between stylistic order and grammatical ~~order~~. Rhetoric, as we have argued (I.1), failed to clarify this distinction and school grammars have perpetuated the confusion. Further, the universal features of language which were thought to be embodied in Latin grammar (and in fact, in terms of deep grammar, were) forced school grammars of the eighteenth and nineteenth centuries, as a consequence, to think about English sentences in categories devised for Latin grammar (cf Roberts, 1960:30).

Nida's criticisms of traditional grammars (1960:II) were extensive, and much of the detail need not concern us here, but several key issues for education might be elicited. His plea for grammar to develop a proper sense of taxonomy links with Firthian arguments for a proper arrangement of levels and, within grammar, for a developed hierarchy of ranks (Firth, 1935; Halliday, 1961:244).¹ Further, Nida's arguments against excessive diachronic study in traditional grammar matches similar attitudes in British linguistics from Sweet (1877). (cf Firth, 1964:218; Halliday, 1961:252; 1964b:95 etc.).

1. 'In order to be able to handle it (the living voice of man) at all, we must split up the whole integrated behaviour pattern we call speech, and apply specialized techniques to the description and classification of these so-called elements of speech we detach by analysis.' Firth, 1935 in 1964:20. This is Firth's embryonic statement of the theory of levels of analysis.

There is little doubt that, in addition to order, discussed above, the concepts of language levels, taxonomic arrangement of items and descriptive as opposed to historical statements about grammar sketch out the main directions of school grammar reform to date. What was not realized by structuralists was that such an emphasis need not exclude school consideration of deep grammar relationships, expressed in logical or dependency terms. Nida assumed that surface organization of language was all there was to say about grammar; Firthian linguists, however, although directing attention to the neglect of surface features, have never outlawed meaning, dependency and system (Firth, 1964:15-16; Halliday et al., 1964b:37-38). Nida's antipathy to universal grammar was typical of structuralism. It should be noticed that both by universal categories (Halliday, 1961), together with acceptance of universal features such as noun substantive, process and modification, Neo-Firthian approaches have avoided being jockeyed into a position of extreme positivism based on the perceived physical distribution of forms. We strongly agree with Nida, however, that a particular language ought not to be distorted for translators (1960:24), e.g. by hypothesising an aspect system to simplify relationships with other languages. Similarly, distortion of a grammar for teaching should be deplored, e.g. making language A resemble language B to facilitate learning.

Finally, Nida associated himself with a revision of grammatical terminology, as Fries (1952) did. Nida was particularly conscious of (i) the conceptual basis for traditional terminology (ii) the authoritarianism associated with the prescriptive use of

that terminology (cf Wattie, 1930; Tibbetts, 1964:370). Authoritarianism is also produced by the corpus described, Nida argued, and of the traditional grammarians he discussed, only Curme (1934) departed from a restricted literary model in their grammars. He asserts that, from the Bloomfieldian point of view, the spoken language was prime; traditional focus on literary written texts therefore may be shown to have distorted the descriptions by authoritarian reference and limitation of corpus.

The extensive attack carried out by structuralists on traditional grammar affected the schools directly, but only minimally, through scholarly articles. Lay books, such as Hall (1950) and new grammars, such as Fries (1952) and Roberts (1956) made an important impression, however. The doctrinaire attitudes of these texts weakened in the fifties. Gleason (1955:209) argued that traditional grammar might not be deviant in theory, but only wrong in description. We should recall in this connection that Nida's scholarly, but extreme position must be judged against the date (1943) of framing rather than of publication (1960). By this later date, as Gleason points out (1965:85), Nida's theoretical standpoint had been largely negated by the changes in linguistic theory, particularly those deriving from Chomsky (1957, 1959). The loss to teaching in the forties was that Nida (1943) might have helped teachers to come to terms with constituent analysis a decade before Fries (1952). In our view, Wells (1947), Harris (1951) and Hockett (1954) did not substantially affect education themselves, since they were works of linguistic theory. Nida interpreted his position in a way teachers could follow. We should

note the hunger for interpretative statements about grammar that lay behind the warm reception given by teachers to Fries (1952). Nida (1943) might have satisfied much of this.

Fries's grammar (1940) significantly lacked a syntactic model and his Structure (1952) provided this missing component over a decade later. It was produced for an applying audience, not a theoretical one, and, as Sledd (1955) notes, the model was warmly received by educationists such as Dykema (1952). Particular note should be made of Fries's attack on the conceptual definitions of the sentence produced by traditional grammar (1952:II). The sentence, Fries maintained, in the best traditions of Bloomfield, was a series of hierarchically related constituents from which one may derive form classes of items, principally by substitution (slot-and-filler) techniques. His view was strictly anti-mentalist and with Bloch and Trager (1942:4.11, 5.4) he eschewed meaning as relevant to the interpretation of linguistic signals, either phonological or grammatical. There is a 'gaudy contradiction' in his position, however. If meaningless analysis is sound, readers would not have been able to understand the telephone conversations analysed as the corpus of the description, nor indeed of any language event, save as a sequence of perceived physical sensations. Fries significantly lacked a semantic theory and a working phonology, which again appears contradictory, since his data was speech, but he protested vigorously that both he and Bloomfield had been widely misinterpreted on 'meaningless analysis' (1954). He argued that he rejected wide definitions of 'meaning' as unsuited to S-R behaviourism, but retained 'same' and 'different'

as a crude working semantic distinction.

It may not be of value to criticize Fries (1952) and his provisions for a pedagogic grammar, from our standpoint in linguistics some fifteen years later. The philosophy informing linguistics has changed from a stark positivism towards a rationalism; semantics has now emerged as a principal focus of syntactic interest (Halliday, 1966b; Lyons, 1963; Katz and Postal, 1964, etc.) and severe criticism of constituent analysis has been documented (Chomsky, 1957, 1964; Postal, 1964b). Nevertheless we ought not to obscure these points: (i) Fries was the first linguist to publish a pedagogical 'new grammar' on structuralist lines (1952) (ii) he made a bold attempt to deal scientifically, systematically and clearly with issues facing a teacher of grammar (iii) Fries attempted to provide a terminology for school language work which was free of old associations and syllabus attitudes.

Fries strongly influenced Roberts (1956), and many imitators and disciples involved in schoolwork (Newsome, 1961; Pooley, 1957; Quirk, 1959). Several progressive Scottish schools used Fries (1952) and Roberts (1956) in the early sixties; Roberts (1956) is still in use in one Edinburgh school, in 1969, as the grammar text for senior study. Roberts (1956, 1962) displayed what Gleason (1964) called 'eclecticism'; Roberts (1956) drew heavily on Fries (1952) and Trager and Smith (1951), but Roberts (1962, 1964, 1966, 1967a, 1967b) drew heavily on Chomsky (1957).

Kreidler (1966) analysed thirty school textbooks with a principal linguistic component, or an overt linguistic method. Only three authors used generative concepts in explicit teaching;

nine texts were principally concerned with constituent analysis in classroom operations, and the remaining textbooks made extensive use of constituent analysis without proposing an overall scheme using the technique. Only one textbook in thirty attempted to make a clear statement about phonology. Kreidler's survey suggests that, in America, most applications of linguistics to the teaching of the mother-tongue were structuralist, lacked explicit phonological description and ignored generative grammar.¹

2.2.2 British Linguistics and School Grammar

In the period 1960-1968, the principal influence on the reform of school grammar in Britain, and particularly in Scotland, was Halliday. His Categories (1961) was widely read, formed the basis of re-training courses and contributed a component to post-graduate teacher training in English. There was direct contact between linguists (including Halliday, Sinclair and Catford) and the teachers, and extensive parts of the MS of Halliday et al. (1964b) were studied by teaching groups from 1962. Certain Scottish teachers produced schemes of work based on the 'Edinburgh approach' and at least one authority (Glasgow) (May, 1967) has written a small official school grammar based on Halliday's Categories (1961). There can be no doubt that despite the theoretical difficulties associated with formalising the scale and category approach (Postal, 1964b:Appendix) and with certain

1. This assessment was confirmed by Professor A. Hayes of the Center for Applied Linguistics, Washington, March 1968.
(Personal communication.)

aspects of its proposals for rank (Matthews, 1966), a very important re-orientation of language teaching approaches in mother-tongue work was promoted by the insights of the theory.

There are significant differences between British linguistic approaches¹ to language description and structuralist provisions, and these are detailed by several scholars, Halliday (1961:280), Dixon (1965:2.27) and Halliday et al. (1964b:149). These distinctions centre on two issues mainly; interpretation of levels of analysis and treatment of meaning in grammar. The implications of both concepts for our own materials are dealt with in this thesis. (See levels, 5.2.2; context etc., 5.7).

Halliday is Firth's interpreter and apologist in articulating the theory of levels. Firth, as Robins notes, was a 'strong adherent of the view that analytic concepts exist only within the descriptive system of the linguist and not in the language itself'. (1967:218) Thus, there were no difficulties for him in identifying separate conceptual or organisational systems serving different parts of analysis. Halliday (1961, 1964a,b) proposed a view of levels identifying substance, form and situation, the last of these being defined in terms of the extralinguistic environment of the utterance. In practice, those levels and their linking

1. That there is a British school of linguistics is accepted by Dixon (1965), Robins (1967 etc.) and Langendoen (1968), and as Firthian linguistics the main approaches of British linguistics are widely known, cf Leroy (1967:64 foot), Dineen (1967:303 et seq.) and Mackey (1965:17).

areas have produced for teachers a notion of language having an aspect of substance (phonic and graphic), of substance being organizationally patterned (phonology and graphology) and this is a link between levels, bridging substance and form. Form is split into grammar (syntax and system) and lexis; context (sometimes interpreted as 'semantics' (see Halliday, 1961:245 foot)) links form with extralinguistic features of the situation.

The value of a scheme of this order, embracing language as a whole, cannot be over-estimated from the point of view of the cohesive grading of a school course, since a tradition of disproportionate stress on grammar studies at the expense of other levels exists in Scotland. This distortion has been held to exist in England and Wales, where traditional courses persist (Flower, 1966:204) and in America also (Gleason, 1964:268; 1965:11).

Firth's view of meaning in linguistics, 'The object of linguistic analysis as here understood is to make statements of meaning so that we may see how we use language to live' (1957:23), has done a great deal to counter the mechanistic approaches associated with Bloomfield and Fries. Firth criticised Bloomfield for his attempts to create a calculus of formal concepts separate from meaning (1964:15) implying that Bloomfield had failed to separate context from form. It is in this light that we are to interpret Halliday's remark to teachers: 'Structure without semantics is as barren as semantics without structure' (1965:9). In other statements on this topic Halliday has stressed that the relationship between a speaker (and hearer(s)) and the linguistic structure of the language used is no less important than the

structure of the language concerned (1967c). The unresolved problems of Firth's contextual meaning, discussed by Lyons (1966:288 et seq.), and the formalization problems associated with Halliday's grammatical proposals, discussed by Postal (1964b) and Matthews (1966), do not invalidate the importance of either contribution to the direction and grading of teaching.

Halliday's 'scale and category' grammar, expounded in 1961 and 1964a,b, and given extensive statement by Sinclair (1965) is of importance to the influence of linguistics on school grammar teaching, since, in Britain, and especially in Scotland, the model had currency among syllabus reformers from 1962 onwards.¹ It must be argued, with hindsight, that the 1961 grammar was taken by many teachers to be a structuralist description, like that of Fries (1952). Halliday's 1961 proposals, as a 'many I-C's' method of segmenting the surface elements of clause structure (cf Hudson, 1967, E. Davies, 1968b) may be understood as 'structuralist' only if system is misinterpreted and if meaning is isolated from form in a wholly impermissible way. The recurrence of identifiable patterns of form is a structuralist criterion, and perhaps this, together with the requirement that contextual meaning is logically dependent on formal meaning, may have confused teachers (Halliday, 1961:245; Spencer and Gregory, 1964:68). What later theory has clarified in this aspect of Halliday's work is that notions form

1. While certain articles appeared in teacher journals, among them Currie (1965, 1966, 1967a) and Muir (1966), few course books emerged until May (1967) and Currie (1967b).

an important input to a grammar and mere specification of a surface sequence of elements, say, adjective + noun + prepositional phrase states only one aspect of the syntactic analysis. Halliday's Modifier, Headword, Qualifier (where the prepositional phrase at Q. was specifically related by a notion of dependency to the nominal phrase) clearly made the distinction between surface structural analysis, where structure is an inventory of classes in sequence, and a deep structure analysis involving notional dependencies (1966b:58).

The problem of symbol meaning in Halliday (1961) affected teachers' applications of the description. Thus a plea sometimes made for S,V,O,A instead of S,P,C,A, (see Mittins, 1962:57-74) indicated a confusion of 'element in clause structure' and 'grammatical class of that element' (cf Halliday, 1961:257n.). Halliday's insistence on separating class from (element in) structure has had two good effects on school grammar (i) it has counteracted a traditional grammar which did not explicitly separate syntactic role from the class of element expounding it, as in defining a simple sentence as subject + one finite verb, (ii) it has opened up the way for subsequent deep and surface distinctions between dependencies and chains of classes in a way not unworkably distant from traditional definitions of meaning in grammar.

An explicitly useful feature of the 1961 exposition in Categories was the theory of rank. It is not an Irishism to hold that rank is useful both because it may be seen as a hierarchically related taxonomy and as a scale which permits rankshifting.

The ability to think of phrases as components of clauses by hierarchical definition focusses the attention on an important formal aspect of constituent analysis which both particular and general analysis appear to have lost in traditional school courses (see 5.5), and the ability to rankshift items which are seen to be in certain functional relationships in their syntactic environments show the importance of meaning as an input of grammatical analysis. Rank defines the morpheme in simplistic terms, but in a way which is not formally misleading. Further, the rank scale has memorability as a school 'mnemonic' and yet does not rigidify definition or function, since it permits embedding (rankshifting).

Matthews (1966) argued that Halliday's notion of rank was obscure in its definitions, and counter-intuitive in its treatment of clause and phrase. Further, it appeared to be committed to ambiguous interpretations of recursion markers such as and. It appeared to Matthews that there was no limit to rankshifting within the theory and thus there was no explanatory power in the rank scale distinctions. In a reply (1966c) Halliday raises several issues which we have already noted as being of interest to a pedagogic grammar. He argues that rank is not disproved by counter-example (1966c:112) and the value of the concept must be inferred from its usefulness in description. Knowing where a structure originates on a rank scale is a first step in identifying relationships between constituents. Taken in conjunction with his exposition of deep and surface relationships (1966b) rank can thus be seen to be neutral with regard to each stratum (1966b:66).

Rank is (albeit embryonically) represented in traditional grammar, which Matthews would seem to accept (1966:102). But tradition implied a slavish attachment to morphology, whereas an approach permitting 'item X used as Y' introduces the useful idea of characteristic function of elements, an idea which Halliday asserts is intuitively acceptable and illuminating (1966c:115), as well as pedagogically useful, as we have noted. Further, Halliday showed that Huddleston (1965), by offering a definition of rank involving a scale of depth, clarifies the concept of rankshifting.

Recent developments of Halliday's theory bring its provisions for grammatical analysis even nearer to traditional grammar than under the 1961 provisions. Since 1964, but notably since 1966b, the grammar has become known as 'systemic', since, parallel with a proposal for deep and surface stratae of grammar there has been a very considerable development of the concept 'system', which was one of the theoretical categories proposed in 1961. Recent Hallidean approaches have displayed certain features in common with both Lamb (1964,1966) and Chomsky (1966a, 1966b); principally these are the postulation as its criteria for deep grammar configurations a semantically significant array of dependencies underlying possible surface realizations in a language and linked from deep to surface layers in an aspect of the theory we might call 'realizational' or informally transformational (cf Lyons, 1968:248).

Halliday maintains (1966b:59) that 'a structure is not defined by its realizations', and in this statement he re-asserts his former criticisms of Bloomfield (cf 1961:241,279 passim)

and moves into a position of accepting that traditional grammar, which he had castigated for its lack of an adequate description of its surface structure, had a more developed description of deep relationships than of surface organization (1966b:58).

The relationships between deep grammar and surface realizations in Halliday's systemic approach are not yet formalized. Thus the grammar cannot be said to be transformational in terms of Chomsky (1959, etc.). It is interesting that the interpretation of the term 'transformational' in generative linguistics much discussed by Postal (1964a:258) and others, and embraced by such pedagogically orientated grammars as Thomas (1965), and Jacobs and Rosenbaum, Grammars 1 & 2 (1967a, b) is only minimally formalized for school use. Halliday is not explicit about the precise relationship between deep and surface stratae, leaving it merely as 'some form of realization' (1966b:59). A statement of this kind, however, is useful for the re-orientation of teachers where a more adequate formalization of T-rules may become exceedingly complex, causing confusion in application, even in simplified grammars. Consider, for example, Gleason's proposals for a pedagogical generative grammar in which there were eighteen T-rules (1965:252-3) and Roberts (1964), in which twelve single-based T-rules and twenty eight double-based T-rules were set out for a fragment of English syntax (1964:397-402). Generously assuming the theoretical status of these transformational statements to be impeccable, the consequences of using such extensive grammatical formalizations in teaching would appear to be undesirable.

The proposals for a deep/surface grammar in Halliday (1966b) build on certain concepts stated in Halliday (1961). Rank, for instance, is retained as a means of specifying the syntagmatic environment in which the data operates. The designation of rank precedes the specification of functional relations in their semantically significant dependencies within a structurally defined unit, that is, rank defines entry conditions for systems. Thus clause may be the rank designation, and systems operating there include transitivity, mood and theme (see Halliday, 1968d:5,6). Since there is no reason for assuming in the grammar that a feature of a dependency must be realized in only one constituent form (e.g. an embedded clause (rankshifted) may involve transitivity systems, etc.), a sophisticated form of rankshift is identified (1966b:65). Rank thus facilitates systemic analysis by being neutral with respect to both system and structure. (1966:66)¹

The systemic component of Halliday's grammar has only recently received formal publication and discussion (1967a,e,f, and 1968a,d) and has only appeared to date in one school course, (Currie, 1967b). While the implications for the school grammar

1. 'System' is a technical term within Hallidean grammatical theory, - defined in Halliday (1967a,e,f; 1968a,d) and elsewhere. References to the systematic nature of grammars, such as traditional grammars used in school, do not imply that these grammars are 'systemic' in the technical sense referred to above.

debate are not yet fully known, certain confident predictions may be made. Courses in which traditional grammar played a main part, e.g. traditional senior secondary school work in English in Scotland, have certain of the concepts of system and deep dependencies latent in them. Further, the urge in native speakers to use semantic criteria for at least the initial stages of a grammatical description are well known, and should adapt themselves well to an informal approach to systems. Finally, there is a heightening interest in a systems approach to learning, much of which would help to interpret systemic grammatical theory. The initial stages of such a school course are contained in the experimental materials we attach to this thesis (Appendix B) and considerations of the syntactic approach derived from the theory are given in section 5.5.

2.2.3 Transformational Generative Linguistics and School Grammar

Transformational generative linguistics has had a series of effects on attitudes to school grammar in America since the publication of Chomsky (1957) but in the British debate on the nature and applications of school grammar only minimal effect can be detected, and no extensive applications of the approach had appeared by 1969. Kreidler (1966) distinguishes two categories of application; writers who introduce the reader to the basic ideas of generative grammar and writers who make schoolroom applications of the model.¹ He lists three texts by Roberts

1. The term 'generative' in grammar is subject to two definitions

(1962, 1964, 1966-7a) and two by other writers, Rogovin (1964) and Conlin and Herman (1965), as school courses making explicit application of generative grammar, although he notes one other American school text, Wolfe et al. (1966) in which generative grammar is discussed but no applications made.

A close study of Roberts (1962) reveals that the book is an amalgam of Fries (1952), Trager and Smith (1951) and Chomsky (1957). Roberts regards Chomsky's proposals for the phrase structure component of grammar as a method of analysing text, and he interprets the transformation rules of the grammar as transformations of existing utterances, and while with Gleason (1964:276) we salute the attempt to simplify the theory for school application, we would argue that the interpretation of transformation as a manipulation of performance and not as an operation within the calculus adjusting base string symbols to output symbols is a gross corruption of the theory.

Roberts (1964) is not an application of transformational

1.(cont) (Lyons, 1968:155), (i) that the theory is maximally projective or predictive (ii) that it is explicit, i.e. is 'fully formal'. Thus a grammar that is predictive may loosely be termed 'generative' without fulfilling the criterion of explicitness. Traditional grammar is thus 'generative', as is Halliday's systemic grammar, in this partial sense. In our discussion, however, 'generative' is to be taken as meaning transformational-generative (TG), where the term implies satisfaction of both criteria noted above.

generative grammar; it is an exposition of the grammar. His recommendation that the text might be used by the sophomore stage and by the senior classes in school is implied in his acknowledgements (1964:vii) but one would assume that this is a text for university or college use rather than school. Roberts makes few attempts in this course to justify applications, although he suggests that writing might possibly be improved through its use (1964:404). The presentation of the text as an auto-instruction programme, but with the advice that the instructor may wish to expound the theory frame by frame, shows that this is a course about the theory rather than in any sense an integrated part of a school language syllabus.

The Roberts English Series (1966-7a) is a most extensive course designed to produce a comprehensive language and literature syllabus for all grades from 3 to 9 inclusive. Transformational generative grammar is used as the device for explaining sentence formation in the writing course. The lessons are very tightly scheduled and there is detailed teacher guidance on how to conduct the course contained in an explicit teachers' book. Roberts (1966-7a) has been described as 'teacher-proof' in much the same way as his previous programme purported to be (1964) and this aspect of his work, together with his authoritarian use of linguistic theory has led to unrest among educationists, culminating in the outspoken attack on the series by O'Neil (1968) in which he shows that Roberts misuses the theory, distorts applications at the expense of well established classroom reform (for example, advocating a simplified form of

literary English as the teaching model because it fits the phrase structure rules of the grammar), places lay interpretation on kudos words such as 'elegance' and 'simplicity' and, in O'Neil's view, has deluded the public.

Some remarks on the difficulties of application of generative approaches may clarify this situation. In the first place, Chomsky's view of the role of linguistics is anti-empiricist. His concern is not with empirically verified description of observed utterances, but with rationally vindicated properties of any proposed system of rules purporting to serve as the basis for a human language (1966:10). A course which expounds the theory therefore may claim to explain language form in mathematico-logical terms, but cannot be held to describe text. The 'device' proposed by Chomsky (1957, 1965) evaluates grammars, but only in the most abstract and rationalistic sense characterizes language production. Further, in concerning itself with competence it deals with language as tacit conceptual knowledge, and abstracts it from considerations of performance, which are linked with contingencies of the performer and his situation. That is, Chomsky is not concerned with utterances, but with sentences, as theoretical entities. Chomsky has himself pointed out that he is concerned with language learning in terms of epistemology (1968a,b) and he regards linguistics as a branch of cognitive theory (1968b). Using a formulation of Lees (1964:96) that structural questions get structural answers, we might argue that rationalist theories are limited to asking questions about philosophy, and are entirely unsuited to positivistic exploration

of text. This is not to deny any of Chomsky's proposals for linguistic theory at this stage, but to emphasise that theory is not pedagogic method, although pedagogic method is informed by theory (see 2.3)

The definition of generative within Chomsky's theory is critical. It implies maximal projection or predictiveness of the rules advanced and it claims to be explicit in the sense of 'fully formal' (Lyons, 1968:155). Commonly, the term 'generative' has been given a lay interpretation by teachers, who equate it with productive. Roberts (1967:T9) makes an inference of this kind in a passage in which he dismisses discussion of the generative approach as something he has no time to explain in a teachers' introduction, but he clearly equates the term 'generate' with 'produce'. Markwardt, in a parsimonious and naive passage (1966:24), discussing the 'confusion' between 'transformational' and 'generative' writes: 'The term generative applies to the aim of grammatical study . . . which is here presumed to be productive rather than analytical.' He believes that generative grammar is the latest form of descriptive approach (1966:25) and 'come(s) to grips with syntax directly'. Markwardt was either unaware of Thomas (1965) with its explicit discussion of the fault of equating 'generate' and 'produce' (1965:8) or he opted to publish his own misinterpretations of Chomsky regardless. O'Neil (1968:14) accuses Markwardt of promoting myopia and 'totally misinform(ing) the educational world about the crucial issues in linguistics and related disciplines.' P. Lamb (1967) is less incautious than Markwardt in her advice but nevertheless succeeds in equating

'transformational' and 'generative' in her exposition of the application of Chomsky for school courses (1967:120). Further, her interpretation of 'generative' as both 'rules' and 'patterns', while coarsely reflecting the formal idea of enumeration and the projective idea of a generative theory, tends to convey the view that projectiveness is merely pattern description.

Transforming one example of English sentence surface structure into a related utterance, for example, giving a pupil an active sentence and asking him to write the passive form, is a common exercise in school grammars. Lyons has suggested that the theoretical idea of transformation lies behind such operations; thus, the pedagogic rules for writing oratio obliqua from a known sentence in oratio recta in Latin teaching might be said to be an imprecise formulation of transformation rules (1968:174,253). Nevertheless, formalization of transformational theory has hypothesized that the transformational rules operate on the deep structure underlying the sentence rather than on the observed sentence (Chomsky,1957:61). The pedagogic analytic procedure of the kind outlined by Lyons, is, in terms of linguistic theory, unacceptable to Chomsky. 'It is no doubt possible to give an organized account of many useful procedures of analysis, but it is questionable whether these can be formulated rigorously, exhaustively and simply enough to qualify as a practical and mechanical discovery procedure.' (1957:56). Chomsky's insistence that grammatical theory must be non-intuitive (1957:56) clarifies the distinction between school procedures and formulations of the theory. We shall discuss below the nature of a pedagogical

grammar (2.3) but it seems already clear from a study of school interpretations of transformational generative theory that where formalizations are theoretically sound, exposition of the grammar rather than applications of the theory characterize the courses (as in Roberts, 1964, 1966-67a; and Rosenbaum and Jacobs, 1967a,b), and where intuition informs an operation on surface data, it is counter-theoretical.

It is our view that the implications of rationalist formalizations in linguistics are not well understood by school interpreters and as a consequence are not well applied. Stuart, in a lecture (1966),¹ argued that the philosophical implications of Chomsky's proposals were not understood and he implied (i) that faulty applications had resulted from a failure on the part of Chomsky and his disciples to make clear their rationalist standpoint and (ii) that interpreters had failed to see that there were three dimensions of abstraction involved in the formal proposals of transformational generative grammar (Fig.1).

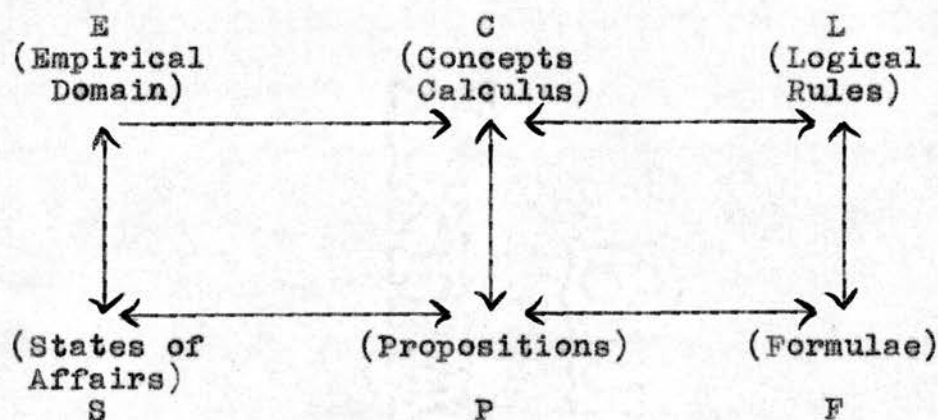


Fig.1

1. The lecture referred to was given to the Edinburgh meeting of the Linguistics Association, November 1966.

Stuart maintained that there was no reason to expect $S = P$. Thomas (1965:10) has clearly advised teachers of this difficulty by suggesting that the logic of a scientific grammar may not be classical logic, nor, we would add, the logic of common sense. Assuming that E represents texts, we must argue that a thesis in linguistics which dealt with pure theory would not embrace the empirical domain (E) but would concern itself with CLFP. Formulae (F) are derived from the Logical rules which link the concepts in the calculus (C). Propositions are valid in the light of formulae; the data of the observed event is expressed as 'states of affairs' (S). Stuart's point that science is a 'language' of some sort leads us to ask what kind of language linguistics is. In terms of the debate about transformational generative grammar and school applications we should note that Chomsky (1957) specifically set as its goal the practical evaluation of grammars by a procedure couched in terms of concepts, their rules, their formulae and related propositions (1957:52 et seq.). Teachers, being of an empirical turn of mind, and dealing with the bracketing of observed sentences rather than the rationalist formulation of theory, have commonly assumed that L, F and C were directly relatable with E along a continuum of abstraction, and that P was a generalization from S.

There is some indication that Chomsky himself does not want to encourage applications of transformational generative theory to language teaching (1966:43). He has stressed the abstractness of the theory as a drawback to effective use in courses and in recent publications would appear to be concerning himself more

with philosophical and psychological implications of linguistic theory (1968a,b). His principal effects on educational thinking include two features. The first of these is polemical; he has radically questioned the basis of behavioural learning theory as it has been applied to language. The second of these benefits derives from attempts to establish the function and nature of the semantic component in the grammar. Although Katz and Fodor(1963), Katz and Postal (1964) and Chomsky (1965) made this their concern, no widely accepted view of the formalizations of their approach to semantics has resulted (Lyons,1966a:119). This emphasis on the semantic interpretation of syntax, however, has acted in a counter-revolutionary way in theory bringing back into focus certain aspects of linguistics which structuralism had dismissed. This re-emphasis on semantics may well prove to be the most important basic idea for future pedagogic applications.

2.3 The Nature of a Pedagogic Grammar

The idea of a consumer grammar for teaching purposes has been given a degree of prominence recently by Halliday (1964a, 1968c), Chomsky (1966c), Thomas (1965), Rivers (1968) and others. While certain of these discussions are directed towards pedagogic grammars for second or foreign language teaching, a valuable consideration of concepts basic to all pedagogical grammar may be discovered in the discussions. Two terms are used widely in this debate, eclectic and pedagogic (occasionally pedagogical) and we feel it useful to clarify certain features of these at the outset.

An eclectic grammar is one built up by selection of features

of grammar from independent linguistic descriptions to form a synthesised body of description which may be applied to a specific empirical field of enquiry as the needs of the application dictate. Thus a description of Creole may require a grammar which is designed to reveal the affinities of the language with English, or French, etc., (cf Brown, 1968). Thomas (1965:5) has argued that a grammar for a native speaker is different from one designed to teach foreign learners. Further, each foreign language 'family' will require a different pedagogical grammar. Gleason has used the term 'eclectic' definitively (1964) in describing Roberts's synthesis of school grammars from three main theoretical sources. Roberts's grammars, however, qualify for the term 'pedagogic' since they all set out to be teaching instruments. We have already noted that Roberts (1956, 1962) are applications of theory while (1964, 1967b) are more expositions of the theory. But both explanation via grammar and exposition of a grammar can be used for pedagogic ends. It is in this light that we define pedagogic: when an eclectic grammar is compiled from existing grammatical theory and is applied to a previously identified teaching situation as a model useful in the teaching process, it is a pedagogic grammar.

A pedagogic grammar may be explicit or implicit. If the latter, it may inform language grading, orientation of approach and rationalization of the problems involved in the teaching and in this 'implicit' role it becomes a teachers' device, rather than a pupils' one. If the grammar is explicit in a course it is actually learned by the students, and, in greater or less degree,

becomes for them a means of articulation or structuring of their learning, providing a terminology of language description which the learner will find intuitively acceptable, rational and communicable.

There is a noted tendency in education for teachers to study a given model of grammar (or part of a model) and to expound it as a body of knowledge, feeling that the prestige of the theory itself and its own coherence as theory make the teaching of the grammar educationally respectable. Thus Thomas (1965:1) asserts that generative grammar derived from Chomsky (1957) is agreed by linguists to have 'significant application to the teaching of all languages including English, at all grade levels and to both native and non-native speakers'. While Thomas does not make clear what these applications are, and how the theory should be applied, he is obviously aware of the faults of direct application of theory to pupil study and he specifically writes his fluent and valuable simplification of Chomsky for teachers, not for pupils. Thomas (1965) and Gleason (1964, 1965:494) are agreed that teachers should know the principles of 'the best available scientific grammar' or grammars.

In a much quoted remark in 1966, Chomsky stated at the Northeast Conference on the Teaching of Foreign Languages (1966c: 43), 'I am, frankly rather skeptical about the significance, for the teaching of languages, of such insights and understanding as have been attained in linguistics and psychology'. He argued that (i) the principles of psychology are widely misunderstood by psychologists and teachers as 'habit structure' (ii) language is

demonstrably 'creative' (iii) linguistics is not about behaviour patterns, but rather, it is an explanatory device giving insights to cognition and epistemology (iv) linguistic theory is in too abstract a dimension to be relevant to pedagogic need. The general burden of this statement is that it would be premature and even misguided to expect linguistic theory or psychological theory to be directly relevant to language learning problems or to provide a method for teaching.

A significant value of Chomsky (1966c) was that it added point to Chomsky (1959) in which Skinner's view of language behaviour (1957) had been critically dismissed. Thus, structuralism and simple stimulus-response models of learning could be abandoned. Rivers (1968) replying to Chomsky suggests that a subtly constructed grammar with two levels - one behavioural (paradigms, etc.) and one 'higher' dealing with analytic aspects of syntax and variety - should be produced. She fears the reactionary inclination of some language learning scholars to substitute 'rule-governed behaviour' for 'prescriptive' approaches, leaving us no further forward than we were in the days of traditional grammar methods (cf Saporta, 1966).

If language is in Saporta's terms 'rule-governed behaviour' (1966) there is an argument that language may be taught at this level. Moulton (1966) in fact argues this point, claiming that language learning in a foreign tongue is enhanced by 'linguistic sophistication' and that this can be taught. While we have no wish to argue this from the point of view of learning foreign languages, we would suggest that Moulton appears to advocate a

study of the whole spectrum of linguistic description to produce the requisite 'sophistication', clearly an impossible task.

We must distinguish, in the course of this discussion, questions of method in a school grammar from questions of linguistic theory. The distinction is made by Allen (1957:16) as one between procedure and theory, and by Postal (1964b:25) as one between method and grammatical description. Questions of the formalization of phrase structure grammar are within theory, for example, whereas questions of how best to employ phrase structure bracketing in the analysis of texts in language study are within method. It is not unreasonable that linguistics has often felt itself unable to suggest applications of theory in practice (Bloomfield, 1933:508) although linguists could indicate certain areas where current theory might in fact prove applicable. What has been called 'missionary fervour' in linguistics (Halliday, 1966c) often attempts to foist on method aspects of theory. Allen's plea for applications of linguistics to be left to 'individual craftsmen' (1957:17) is salutary. We have to look no further than structuralism to see the strong didactic influence of clause segmentation on method of text analysis, e.g. Newsome (1961), on composition (Borgh, 1963) and on style (Christensen, 1967).

A pedagogic grammar for mother-tongue speakers is principally concerned with giving pupils the opportunity to come to grips with aspects of their own organising ability in using language. The goal of such a grammar is to produce a rational, manipulable and communicable metalanguage for the description of observed

language data. The aims of linguistic theory may be alien to these aims of education. In discussing this issue, vis-à-vis the structuralist-generative debate, Lees and Bolinger (1965) used the analogy of entomology. An entomologist, under a structuralist interpretation, is a bug collector and he devises ways of classifying his collection (perhaps including spiders as 'bugs' despite their having eight legs). Under a generative view, the entomologist is concerned with establishing the bughood of bugs. Translated into language study this may be taken to mean that the goals of teaching may be practical, but untheoretical, while remaining positivistic, but the goals of theory may be entirely abstract, e.g. 'sentencehood', and be expressed in self-defining rationalist terms, ex hypothesi. (cf Corder, 1960:95)

In mother-tongue class teaching there seems to be no good case for proposing a metalanguage which mimics rationalist theory. Assuming observed contrasts of the language to be the basis of study, it seems entirely appropriate that a simple surface segmentation of language, linked with an intuitive semantic interpretation of the utterance in situation should be used. A common 'vocabulary of mention' and a common orientation to the nature of language may be included in the course. Essentially a grammar which deals with texts in an intuitively satisfying way is called for, rather than a complex of logical rules and formulae to be learned willy-nilly by the pupils.

O'Neil's (1968) attack on Roberts (1966-67a) denounces linguistic grammar as a content component of language courses, which he describes as '. . . no more than jokes, a veneer of

linguistics, a few arrows and other symbols from the grammarian's bag of tricks:' (1968:14). O'Neil would resist any calculus of rules as class materials, and he deplores the authoritarian techniques of educationists who frighten their colleagues with linguistic theory. While the tone of O'Neil's attack is too polemical and fervent for scholarship, its issues are vital ones. An educational system dominated by lay committees and prone to accept academic theory as messianic in its importance is likely to over-apply and to mis-apply theory. Much of the debate in school grammar which we have traced in this chapter illustrates this fault clearly.

Gleason sums up the school consumer position in terms of the explicitness of grammars. '. . . for certain purposes a fully explicit grammar might be an awkward tool. It would give help both where needed and where completely unnecessary.' (1965:244). Explicitness is a goal of grammatical theory, but its attainment may be of no immediate practical value to native language teaching. For example, a generative grammar, fully formalized and maximally explicit would have no need to exploit a native user's 'feel' for appropriate construction and use of sentences. In our view, a grammar for native speakers by which they learn about their own language must necessarily compromise between explicitness and insight. The implications of this view for the construction of the experimental materials associated with this present study are dealt with in Chapter VI.

CHAPTER III

SOME PROPOSED ROLES OF LINGUISTICS IN LANGUAGE LEARNING

3.0 Introduction

The relationship between findings of general linguistic theory and applications of that theory in education cannot be stated in any known formula. A number of areas of relevance have been suggested, principally associated with the provision of 'new grammar' for syllabus reform, and with teacher guidance. These two areas of purported relevance are dissimilar. Proponents of the 'new grammar' approach have been principally associated with structuralism from Fries (1952) to Roberts (1962). A missionary fervour marked many of their pronouncements; sweeping claims were made for the efficacy of the approach, but little evidence was advanced to back these up (O'Neil, 1968). The 'guidance' school of thought is not closely associated with a single linguistic attitude, is liberally orientational in its aims (Halliday, 1968c) and has acted in many ways as an antidote to the fervour of the 'new grammarians'. This chapter deals with these two broadly defined movements, with specific reference to the teaching of English to the native speaker, in the context of general education.

3.1 Some Proposals of the 'New Grammar' Movement

Pooley (1957:61-73) presents the structuralism of Fries (1952), Whitehall (1956) and Roberts (1956) as exemplificatory new grammars for schools. He argues in terms of the replacement of existing school grammars by a movement in grammar which will reflect the radical movement towards 'usage' which the first half of the century had witnessed (1957:72). Pooley is conservative in that he thinks that conversion to the new grammar will be slow, but his ultimate confidence in the cause is firm. He advances as evidence of the need for a new grammar fourteen articles on the subject which appeared in the English Journal between January 1953 and November 1956 (1957:37-41).

Two aspects of Pooley's argument characterize the teacher demands for new grammars we have noted in the last two decades. In our view, both are unacceptable. Firstly, he identifies criticism of traditional school grammar courses as evidence that teachers want a new grammar. This interpretation of the unrest is made easy because of the attacks made on the nature of school grammar by structuralists, which we have noted in Chapter 2.2. But, structuralist denunciations of school grammar do not explicitly distinguish syllabus content from school method, and this makes them educationally weak. Diack's plea that we jettison the old grammar as a subject rather than 'making it gay' represents well the purging of syllabus content as it appeared in Britain (1956:154). He was worried by the appearance of Pink (1954), apparently a traditional grammar blessed by the English Association.¹ Diack's

1. A study of Pink (1954,1957) shows that the intention of the

new content proposals are in fact for semantics, however. The crisis in the fifties in language teaching was as much a crisis of method as of content, but structuralist proposals failed to recognise this. Newsome (1961) specifically set out to provide an expository structuralist grammar for the classroom; Roberts (1956) offered a 'content' course for college study or senior school work. Reviews and articles following Fries (1952) created an atmosphere of messianic adulation for structuralism as content (Sledd, 1955) and denunciation of traditional grammar as a subject. (Francis, 1954; Levin, 1960).

The second mistaken view identified in Pooley (1957) is that there was a new grammar available. What was presented by structuralists as a complete 'new' system of grammar was, in our view, no more than an interesting series of tracts on grammar, concerned, largely with the overall theory of the approach than with descriptive details. Mittins (1959:122) wrote as if a complete grammar was available for teachers, 'In my view, the new grammar is markedly superior to the old on practical as well as on theoretical grounds'. He modified his claims, however, in the preface to his own grammar course (1962:ix) when he spoke of the conviction of teachers that they needed a new kind of grammar, but that this reform was impeded by the lack of linguistically respectable and pedagogically usable textbooks. He proposed his

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1. (cont.) English Association was to provide a traditional course for able pupils, together with suggested methods, which would form the basis of reform discussions.

own book as an interim 'new' grammar, but he looked forward to the completion of Quirk's description of English usage to provide a 'respectable' teaching description.

The willingness of syllabus reformers in Britain, and notably in Scotland, to advocate a new grammar for schools in the late fifties and early sixties reveals three facets of teacher-attitude. Firstly, there was a genuine dissatisfaction of some sort with existing courses, although, taken in perspective, this dissatisfaction may not have been with the grammar per se but with the approach; secondly, there was a strongly marked, traditional and continuing course-centredness. Thirdly, there was a willingness to accept new grammars ex auctoritate. These three features of the educational climate of the time have now radically altered. Dissatisfaction still exists, but it is more sophisticated. Teacher-re-training programmes have familiarised many with a wider field of linguistics than was represented by Fries (1952) and Roberts (1956). Further, the movement away from set course books, well exemplified in Ministry of Education No.26 (1954) and S.E.D. (1967), show slow, but clear progress towards the teaching of grammar as an incidental part of general work with English texts, and this took effect in Britain in the sixties rather than in the fifties (Whitehead, 1966). It is interesting, however, to find the authority of Fries and Roberts, as far as the denunciation of school grammar is concerned, still occasionally being mouthed by linguistic reformers over a decade after their appearance and several years after their structuralist proposals had been severely questioned by other linguists. Thus Whitehead as

recently as 1966 evoked at one point the opinion of 'linguistic scientists who are best qualified to judge', going on to cite Fries (1952) in an argument against G.C.E. language work (1966:223). He came to the conclusion that grammar ought not to be taught in schools, save, perhaps, to the ablest pupils over sixteen years old. In Scotland, Bulletin No.1 (1967:23) gave official support to the anti-coursebook movement and to the conclusions of teachers that a new grammar would not necessarily be any improvement on the old one.

Gleason made a very important point about our terms of reference in the 'new grammar' debate (1964:273n). He detected a tendency in the discussion to apply the label 'traditional grammar' both to scholarly traditional grammars and to 'school grammars'. This led, he pointed out, to a non-sequitur, justifying school grammars on the basis of the strengths of scholarly traditional grammars. He concluded that, if schools had been committed to traditional grammar in the scholarly sense, much of the present curricular vacuity would never have arisen. One detects in this remark two things: (i) Gleason's wish to be dissociated from the more sweeping attacks made by Bloomfield, Fries and Roberts and their disciples, in which 'Latinate' grammars, loosely specified, were condemned. A 'straw man' attack on two or three loose points from a school textbook, in this unacceptable form of 'dialectic', could serve as the basis of an apparently scholarly position as if representative of applied linguistics in education. (ii) With the movement towards rationalist solutions in linguistics well under way by 1964 under Chomsky's leadership,

Gleason may have felt it necessary to embrace traditional scholarly grammars on the one hand, while, on the other, not conceding that school courses are not in need of reformation. A remark he made supports this view (1964:273). Dealing with 'new grammar' (his quotation marks) he says, 'What is new is largely the application of these methods, worked out in other contexts, to English. Though they have been designated as "new grammar", there is really none of the radical rootlessness that this term often suggests.' Further, he dissociates himself from loose use of the term 'linguistics' (1964:276), which is commonly taken to mean 'Fries's syntax with Trager and Smith's phonology'.

A consequence of the new grammar movement in schools was that renewed critical surveys were conducted of the claims made by teachers that grammar skills could be transferred positively to productive skills such as composition. Harris (1965) summarised the literature and in an experiment on the ability of grammar-trained and composition-trained pupils to detect errors in scripts and to produce error free composition, he concluded that there was no greater correlation between grammar and writing skills than between any two unrelated subjects, say grammar and arithmetic. Wilkinson (1964), in the N.A.T.E. journal, reviewed research into the transferability of formal grammar knowledge to other fields of English work and showed a corpus of research which suggested that, since no positive transfer to other skills could be shown, grammar, old or new, could be held not to contribute by transfer of training to English as a whole.

Clearly, arguments by 'new grammarians' that thirteen

research papers failed to show transfer because the 'old' grammar was faulty evoke scepticism. It would be remarkable if a new grammar were found to be free of the defects of the old, measured on the same criteria as the previous research in transfer of training. In our view the learning theory behind such research, characterizing experiments conducted from Hoyt (1906) through the twenties and thirties to Harris (1965), lacked sophistication. The implications of learning in cognitive terms is that, in Bruner's (1966) formulation, a heuristic or structuring relationship exists between previous learning and subsequent productive operations. Thus a subject like school grammar, we suggest, might act as a generic coding device, provided it were learned by discovery, and provided the pupil was intellectually mature enough to make the grammar (a) relevant to his own experience of language and (b) available for his general thinking. In short, cognitive psychology questions the crude association theory of learning where direct transfer occurs between subjects studied. Transfer of training cannot be regarded as a simple behavioural consequence of prior knowledge of facts; it is a coding feature of the whole process of learning, as Miller (et al.) argue (1960:XIII). Grammar, appropriately shaped and taught by relevant methods might well provide a significant structuring of experience ('plans') which would affect the development of thought in a way undetectable by former experiments.

Another view of the problem of the non-applicability of school grammars to the needs of mother-tongue education, which influenced the 'new grammar' debate, is given in Halliday et al. (1964b).

If grammar does not throw light on 'how language works' it is bad grammar, and the solution is to teach good grammar (1964b:157). Had the argument been left there it would have failed to deal with the criteria for 'good' grammar, would have failed to explicate problems of method as distinct from problems of course content and would have made unwarranted assumptions about the role of grammar in a language learning course. The authors argue that a pedagogical grammar is only as good as the theory informing it (1964b:158), and they suggest that much of the work they have discovered in school grammars is confusing because it has no sound basis in linguistic theory. Such an argument is vulnerable, however. When is a linguistic theory good or bad? A mathematical theory of grammar, for example, is 'good' in so far as it exhibits mathematical explicitness and consistency. That is, theory is evaluated by theory. To refer to 'how language actually works' is misleading, for this knowledge exists only in terms of theory. The so-called patterns of language are not in nature; they are in the theory used to explicate nature. In as far as the 'patterns' distinguished by a theory successfully inform teaching method, the theory is 'good' for teaching; but unformalized 'notional' theories, unacceptable to mathematical linguists, may be highly successful elements of pedagogic grammars.

In our view this section of the argument in Halliday et al. is misleading and inconsistent. It is misleading because the criteria by which we can know how language works are undiscoverable and the authors do not make clear the value they place on intuition; it is inconsistent because in a following section of

the work, where the role of linguistics and phonetics in language teaching is being examined, it is stressed that linguistic description is an informing force acting on teachers (1964b:166); that these disciplines are only relevant in teaching when they are pedagogically relevant (p.167) but that good pedagogic practice is most likely to be linked with the most powerful theory. Thus we might infer from this more acceptable argument that new grammars are necessary for teachers, although these new grammars may be irrelevant if taught.

It is interesting to compare with 1964b the arguments raised by Halliday (1968c) in a preface to the Papers of the Programme in Linguistics and English Teaching (1968), supported by the Schools Council. The papers are described as 'tentative first stage "guidance materials" indicating the general directions to be explored and the informed attitudes that may guide the exploration' (1968c:ii). There is a welcome explicit denial that the project is offering a new grammar (1968c:iv,v). Overt teaching of grammar, that is, teaching about language by classroom analysis of texts, is to be the choice of the teacher and specific reference is made to materials by which this may be done (1968c:ix). Theory is important, but it is argued to be at its most valuable for English work in school when it is a covert, orientating force.

This argument is moderate and acceptable where 1964b was somewhat 'missionizing' and strident, giving rise to school scepticism. Further, a 'new grammar' approach which both fails to describe the theory adequately, and leaves applications of it

vague, after dismissing existing school approaches, may raise school hopes high only to dash them disappointingly when teachers ask for practical help. The Schools Council materials, however, do much to remedy this situation, not only in terms of grammar, but in the more important aspect of orientation to language teaching in native speaking courses.

It can confidently be assumed that the 'new grammar' movement in Britain has lost much of its momentum. This is not true of America, if we are to interpret Roberts (1966-67a,b) as significant, and O'Neil (1968) as sincere in his polemic. Further, this is not to say that some English and most Scottish syllabus reforms are unconcerned with rationalizations about language. There may well be significant new courses in language involving linguistic description (our experimental materials exemplify this), but they will not propose doctrinaire substitution of one description for another in the way we have noted certain structuralists advocated. Grammar reform is part of reform in English; English syllabus changes are part of a wider series of reforms noted throughout the whole curriculum of the school. Method is likely to be as important as content in the shaping of new work in language.

3.2 Linguistics as Guidance for Teachers

Sinclair (1966b) has described the teacher of the native language as the first person a child meets who is professionally concerned with providing an answer to the question, 'What is the nature of those parts of our physical, mental and social

organisation which enables us to attach an arbitrary significance to utterances?' (1966b:4) With this interpretation of the responsibilities of the English teacher there would appear to be every justification for providing him with a thorough training in linguistics, psychology and sociology. Sinclair's argument suggests that minimum requirements for a teacher of English to native speakers must be that he has the ability to assess the role of direct teaching of linguistics in the classroom; to talk about language in terms of the best descriptive scholarship available; to compensate for his own cultural bias in approaching language teaching; to guarantee his students that the linguistic apparatus suggested will be as comprehensive and self-consistent as possible (1966b:7). Clearly, Sinclair envisages for his ideal teacher a full, professional background of training in linguistics, for his guidance.

Although Sinclair's requirements are, by his standards, minimum, it is clear that few teachers could be expected to be so informed. Further, there is a strong counter-argument to these explicit requirements. A teacher who is aware that he has less than a professional knowledge of linguistics, may be vulnerable to arguments purporting to be shaped in the light of authority. As we have argued (3.1), the 'new grammar' aberrations often stemmed from such misunderstandings. Strang argued at Dartmouth (where Sinclair's (1966b) paper was delivered) against a body of knowledge as a requirement for teachers: 'The essential . . . is to start from a body of questions rather than a body of knowledge. Then, whatever the teacher has learnt can be used as appropriate;

the other way the teacher is left with a fearful lack of confidence as a result of never having got beyond the threshold of a formal discipline.' (1966) Strang was specifically referring to the way teachers should be trained to meet their linguistic responsibilities. Clearly, Strang would use the curiosity of native speakers about their own language, to open up the way for a body of answers which would orientate the teacher.

In a most interesting way the issue between Sinclair's 'hard' line and Strang's more liberal approach to teacher guidance is resolved in the materials produced as Papers of the Schools Council Programme in Linguistics and English Teaching (1968). These papers cover a spectrum of topics from Albrow and Davies on general phonetic theory and general linguistic theory, and Hasan on a semantic topic, to teacher-centred discussions of correctness (Philp), initial literacy (Mackay and Thompson), general considerations of the nature of English as a subject (Hasan and Lushington) and literary considerations of the teaching of English as a humanity (Doughty). Halliday (1968c: xiii) sees the mixture as a 'deliberate blend'. It is in the light of this remark that we suggest it resolves the Sinclair-Strang issue with which we began this section; further, the nature of the blend gives us a view of guidance which, although acceptable, cannot be regarded as complete.

The approach to the problem of how much general linguistic knowledge a teacher ought to have is made by E. Davies (1968a). Her solution is to give a general sketch of a historical kind with a good bibliography in her footnotes to which teachers are

directed for further reading. Davies however has probably given too much background theory for teachers. She errs on the side of Sinclair's demands for fully professional linguistic training. Her thoroughness is scholarly and her text, although splendidly readable, often raises issues which one would doubt ever being used in teacher orientation, e.g. 'Some of the discrepancy relationships which are accounted for in Lamb's theory provide the motivation for the distinction between surface and deep grammar (or structure) which has been drawn by both Chomsky and Halliday, and, earlier, by Hockett.' (1968a:44). There may be a case for simplifying general linguistics further than this, where teacher orientation is the goal. Her treatment of Firthian linguistics is, however, a model of the approach we would prescribe. One of the obvious problems in attempting work linking general linguistic theory and teacher guidance is whether a teacher ought to be aware of theory as a flux of controversies, or as a non-controversial corpus of 'findings'. Davies (1968) has steered rather to the latter. While it would misrepresent academic discussion to say that firm conclusions were common in debates between linguistic theories, it would be cynical to deny that a body of foundational principles of theory exists. No better basis for orientation could be prescribed. It is, however, most important that a teacher approaches theory as a teacher, and not as a theorist. Teachers ask questions of theory, as soon as they are able to formulate them, as Strang (1966) suggested. Davies (1968a) would appear to be as much a course in what to ask as a history of theory itself.

In terms of a detailed approach to one aspect of description, Davies (1968b) has been referred to in the section of this thesis explaining the grammatical attitude taken up in the experimental materials (5.5). A general field of theory (as 1968a) with a specific shaft set down into clause description illustrates well the demands teachers put on theory. Albrow (1968) provides a similar coverage with a spread of general phonetics and detailed accounts of the description of rhythm and intonation in English.

Ideal teacher orientation must be concerned, at some point, with theory, but not linguistic theory alone. Doughty stresses this in (1968a). His continual reference to the teacher's own powers of judgement in facing practical classroom issues is the key to the suggestions he makes for guidance. Doughty interprets relevant disciplines other than linguistics to be educational psychology and educational sociology. Each is fundamental to orientation. Linguistic theory is necessary if we are to have more insights than an undeveloped set of native-speakers' intuitions about the mother-tongue (1968a:36). Doughty does not specify the extent to which he would agree with Sinclair's 'hard' line, but he makes out an extreme case for orientation being of primary importance to teaching English, more important, for example, than having graded materials in a textbook course.

Doughty (1968a,c) and Philp (1968) are under no illusions as to the difficulties implicit in teacher orientation programmes. Philp finds teacher attitudes to correctness complicated and ingrained; Doughty (1968c) examines the assumption in teachers' minds relative to 'Clear, simple English'

and 'Reasonable and Grammatical English'. In both papers a cultural difficulty, rather than a lack of technical knowledge alone is demonstrated as a major problem in education.

It would appear, in summary, that teacher orientation may be of several different sorts. It may be, firstly, an orientation by learning, related to an understanding of a substantial part of a body of knowledge such as psychology or linguistics. Related to this is a second kind of orientation, demanding less detailed knowledge of linguistic science (or another science) but enough linguistic knowledge to interpret and follow a course graded explicitly in the light of linguistic theory. Thirdly, there is a more nebulous cultural orientation to teaching a subject, where a teacher, although comparatively ignorant of the techniques and theory behind a course, is willing to present it. This can lead to bad teaching, but the attitude is hopeful, in that such a teacher may later, by means of further training, reading etc., become orientated in terms of the first or second classes above. Finally there is negative orientation, which results in a teacher being daunted by a technology, or a science deemed to lie behind a set of materials, or even a single lesson. O'Neil (1968) implies that antagonism follows overselling in linguistic guidance.

It would appear that guidance from a team of researchers which includes linguists and teachers presents the most useful form of orientating force for syllabus reform. While there is a tendency for teachers who work with linguists to move further towards linguistics than the linguists do towards classroom

problems in teaching, we consider it a hazard well worth risking. Perhaps the Schools Council Programme materials, which have prompted several of the remarks above, are weakest when they fail to show that within teaching circles, the minority clamouring for English as 'acculturation' (Holbrook, Clegg, etc.), are more than matched by a reforming minority intent on seriously examining the nature and content of language teaching in the English syllabus, in terms suggested by Sinclair (1966). The Programme guidance materials urgently need exemplar courses and classroom research to clarify the acceptable orientational attitude they propose.

CHAPTER IV

PSYCHOLINGUISTIC ASPECTS
OF NATIVE LANGUAGE LEARNING

4.1 General Considerations

A special case exists for the study of the mother-tongue speaker in his learning and subsequent use of his native language. In the first place, he acquires his native tongue in a way which contrasts in its nature and strategies with his learning of second or subsequent languages. In the second place, he demonstrates in the linguistic and paralinguistic features of his language that acquisition and development have provided him with a body of intuitions about the nature of his native language and these are of critical operational importance to him as a language user and a school language-learner, both in production and in comprehension. Thirdly, a native speaker of a language operates within a delicate feedback system between choice of language forms and social and environmental changes in the situation of utterance. Each of these areas of mother-tongue learning and use is of great importance to the teacher in a native-speaking language course. Effective understanding of acquisition and use are of cardinal importance to teacher orientation.

A wide, and largely intractable question raises itself in this study. What is the nativeness of the native language user? That there is a quality of nativeness is readily demonstrated;

society accepts a given range of dialects in native speech, rejecting all others as non-native; society accepts a given alphabet at a given time and rejects all other characters;¹ a certain orthography is defined; and however wide it may be, a native speaker embraces a set of acceptable forms and meanings of the language as the basis of his speech and writing operations. Language use implies language choice, and the native speaker shows that he is native by having embedded in his behaviour (including his mental behaviour) a principled network of systems within which his meaningful language operations are regulated.

There has been a tendency for this area of the mother-tongue speaker's knowledge of his language to be the subject of statements which have misled teachers. The idea that the child 'knows' his language by the time he is five, or is an 'adult' by six (Hockett, 1958:360) is misleading. The pre-school child has what Palmer called 'the complete phonetic system. . . and a most beautiful and complex system of intonation unknown to orthographies;' (1944:98); and has operational control of forms and meanings, but this statement only misleads if 'know' is read as 'is rationally aware of'. A child of three is not rational, yet he is a native speaker with an 'expert' control of language (Palmer, 1944:3). If we hold that a child of, say, five years

1. The powerful prescriptions of society on alphabet characters is clearly shown in the reading of former *p* as *y* in 'Ye Olde Tea Shop'.

old knows more English than a fifth year student of English as a foreign language, we are glossing 'know' in a special, restricted sense. With reference to native speakers, knowledge is 'innate cognitive control'. The interpretation of 'knowledge' as 'that which is consciously acquired as a rational and available resource' leads to misinterpretation of statements about mother-tongue acquisition such as Hockett (1958:360). Nativeness implies spontaneous acquisition of L as a first language in a society speaking that language as its mother-tongue. Thus, we can assume, with Halliday (1967d:1), that a native speaker brings with him 'an intuitive knowledge of what language is and an awareness of the linguistic structuring of experience'.

Certain evidence from sociolinguistics re-inforces this point. Lambert (1967) has pointed out the difficulties, if not the impossibility of belonging to two language cultures at once. Note that the issue is not principally one of bilingualism, but of bi-socialization. Again, Tucker and Lambert have argued with cogency (1966) that in mother-tongue communities a micro-nativeness exists within dialect speaking groups; strict group membership is firstly language specific, then dialect specific. Brown (1956) has given a principle which embraces nativeness as sociolinguistic 'knowledge': 'First language learning . . . (is) a process of cognitive socialization'.

It would appear to be possible, after long study, to enumerate the linguistic features of nativeness, and such linguistic description would be after the fact of social acceptance in a native group. Such an enumeration would be closely

linked with psycholinguistic aspects of development, and culture. For instance psycholinguistic and sociolinguistic indices in observed hesitation phenomena, tongue slips and voice quality, assist in the description of nativeness. The pathology of speech loss in native speakers may contribute to our understanding, and assessments of initial acquisition of the mother tongue, and help us to clarify 'nativeness'. It is the purpose of this section of our discussion to consider certain evidence of value to our study of mother-tongue teaching deriving from psycholinguistic studies of native language acquisition in young children. There are two salient reasons for choosing this area of nativeness for study: (i) initial language learning is the foundation for subsequent development in linguistic skills, with which the school is principally concerned (ii) the problems of applied linguistics in the sector of language acquisition throw light on our handling of subsequent applications in areas of native language learning.

4.2 Native Language Acquisition

It has been pointed out by Carroll (1960) that the findings of linguists and psycholinguists in the sphere of mother-tongue acquisition have been of outstanding importance for teachers of language and the language arts. In the first place, with Mackey (1965), we would stress the need for a satisfactory approach to acquisition before analysis of a subsequent language teaching method is undertaken. Without a theory of acquisition we cannot identify normal language development, and, conversely, we cannot

specify defective development in language. Further, the teaching of language skills assumes ability and readiness in the pupils being taught. Appropriate acquisition is a fundamental aspect of readiness (cf Bruner, 1966:5).

Let us take as our starting point Carroll's formulation of an orientation to acquisition studies: 'We must start with an exact description of the adult form of the language the child is learning.' (1960). This approach measures child language in terms of successive approximations to the adult model, with two advantages: (i) it is related to a common-sense view of the goal of acquisition, - identification with a linguistic community (ii) it is a developmental study and is diachronic in the sense Huxley (1966) points out. A main drawback in this approach is that there is seldom, if ever, a sufficiently detailed description of adult speech against which to gauge acquisition stages. Further, a description of an adult corpus as a state may obscure productive process. Also, descriptions of the adult language may have a tyrannous effect on deviant data, for instance, in forcing child language into categories which beg the question of structure. It is indisputable that both adult and child language have demonstrable systems, as Klima and Bellugi (1966:191) argue, but these systems are different. But there is no possible way to relate child language 'deviance' to the child's own competence (1966:183). The alternative, to relate deviance in child language to hypothesised competence in adult grammars, seems completely unsatisfactory.

It is important to recall, that, in respect of deviance

studies, the data of child language is extraordinarily difficult to collect. Before the 1940's, when reliable tape recorders first became common, there were various forms of manual transcription employed, all of low efficiency. McCarthy (1930) pointed out that aural incomprehensibility of child speech made only 26% of the observed utterances of an eighteen-month-old child eligible as data. The comprehensibility of the utterances rose to 67% at two years and 83% at three years old, but it is clear that, over the major period of language acquisition, grossly deficient data collection conditions exist for aural-transcription techniques. Betts (1934) compared transcription methods and judged that shorthand recorded 53% of the utterances, but phonetic transcription was less efficient, and longhand still more so. Lewis (1936:2) criticised 'early work' on acquisition for its lack of rigour in data collection and lack of proper statistical handling. His own phonetic and phonological studies of acquisition, however, depended on observer techniques of a single child, and they obviously suffer from the kinds of loss listed above.

Data-reduction processes of studying child language suffer from defective data in yet another way. Where tables of forms are derived, showing distributions, as in Lewis (1936), the regularities observed in well represented areas project patterns of regularity on to the gaps. It can be shown, however, that the distribution of the surface features of child language may contradict known distributions of the adult language. A counter-example to frequency studies, proffered by McNeill in discussion

of a paper by Klima and Bellugi (1966), asserted that the correct inflection of the past tense of strong verbs in English appears before the correct inflection of weak verbs in observed language acquisition. A further argument countering frequency-based findings was made by Huxley who showed negation of nouns before negation of verbs in a subject under observation in the Edinburgh survey (see Klima and Bellugi, 1966:212). These examples counter adult norms.

Pre-Chomskian research into child language acquisition displayed a diversity of approach, with only weak comparisons of theory possible in some cases. Carroll (1960) shows that radically different theoretical points of view may lie behind papers describing acquisition. Jakobson (1941, 1968), for example, uses distinctive features theory in a study of child speech, while Lewis (1936) employs general phonetic categories. In syntax we can cite Templin (1957) using traditional morphology being incompatible with Brown and Fraser (1963) employing a generative approach to syntax. We are not, in this, arguing that the entire field of work is invalid; we suggest that it is divided and weak, because the theory is weak. Decisions taken on single papers, or on confluations of findings of papers with at best only a weak comparability of theory can only reinforce the ad hoc nature of teaching assumptions on the nature of language acquisition. Clearly, the nature of the theory used in investigation of child language determines the nature of the discovery.

Many suggestions exist as to the most useful categorization of stages of development in child speech. For example, Jespersen

(1922) distinguished screaming time, crowing or babbling time and talking time, and this last category was divided into 'little language' and, later 'common language'. Carroll suggests (1960) a fine grading of six stages from the earliest vocal noises through to speech manipulation. Others have distinguished similar categories, coarser or finer as the observation dictated (cf Travis, 1957; Mackey, 1965). These are typical data-reduction approaches to the study of language acquisition and they appear, as we have pointed out, to lack a coherent basis in either linguistic or psychological theory, and as models from which teachers may infer educational processes, such approaches to acquisition are either weak or misleading. As Marshall and Wales have said, 'As there is no evidence that our linguistic knowledge can be characterized by grammars stated in terms of directly-observable regularities, the psychological performance theory is shown to be fundamentally inadequate as an explanation of the child's acquisition of language.' (1966:184)

Marshall and Wales (1966) express their dissatisfaction with data-reduction theories of psychology and data-centred theories of linguistic description on the grounds that the linguistic theory based on observed regularities of text can be held to be inadequate in rationalistic explanation of the processes of language rather than perceived aspects of the performance. This distinction stems from changes in the approach and aims of general linguistic theory dating from Chomsky (1957). As Thorne has put it, 'Chomsky's great innovation was to shift

the centre of interest from language as organized data to the organising power capable of producing that data.' (1965:73) This shift, which has been identified in the Lees-Bolinger dispute (1965) as a change from data-centred to model-centred linguistics, is a change in scientific and philosophical attitude. The model itself, in Chomsky's transformational generative approach, is a mathematico-logical calculus, whose 'correctness' is defined within the theory as a descriptively and explanatorily adequate statement of the properties of the symbols manipulated by the rules (1966a:10). A new approach to the study of native language acquisition has been produced by this model-centred emphasis (cf Bellugi and Brown (eds.) 1964; McNeill, 1966a,b; Smith and Miller (eds.) 1966, and others) but it is an approach which has led to some difficult experimental problems (Ingram, 1968) and in one important research project¹ has been subjected to considerable modification (cf Huxley, 1966; van Buren, 1966, 1967). Certain of these issues are important for our understanding of the nativeness of the mother-tongue speaker.

Chomsky has suggested that the native speaker has within him a 'language acquisition device' (LAD) which has an input of random sentences of the language and, from this corpus, which cannot be held to exemplify a correct grammar of the language, the LAD invents a grammar (Chomsky, 1965:30-33). Linguistic

1. The Nuffield Foundation Language Development Research Project in the Department of Child Life and Health, University of Edinburgh. 1965, continuing. See Ingram, T. (1966).

theory specifies certain conditions which the LAD is required to meet if it is to use primary linguistic data and produce a grammar of competence. Since the device is common to all human beings, it is not specific to a given language. Therefore one facet of its nature is that it contains a theory of linguistic universals. It is one of Chomsky's claims (1965:27-30) that linguistic theory which aims for explanatory adequacy must incorporate an account of linguistic universals. It is in interpreting the implications of this aspect of the theory in language acquisition that certain difficulties arise for experimental work.

Ingram has argued (1968) that McNeill (1966a) proposed as linguistic universals (i) the P-rules of generative grammar (after Chomsky, 1965) and (ii) a hierarchically classificatory system of pivot and open classes of sentence. In 1966b, however, McNeill rejects the pivot/open classification of 1966a and proposes only the 1965 P-rules as the linguistic universals of child language. Ingram (1968) points out, justly, that without a classificatory system we cannot classify types of sentence under the theory. Thus we meet the basic implausibility of all child language stemming from one basic sentence type. Further, since McNeill has derived two sets of universal postulates from a study of two children, may we not assume that three children would produce three sets of universals? (1968:320)

Van Buren (1967) has pointed to a basic difficulty in the way generative grammar approaches the problem of linguistic universals. He holds that it is self-evident that the linguistic

theory should be empirically validated by the study of language acquisition. This validation, however, is impeded (a) by child speech not being simpler than adult speech vis-à-vis universals (cf Lees, 1964:93) and (b) by Chomsky equating linguistic universals and innate ideas (1966b:59-73; 1968b:I).¹

Experimenters thus may opt for a number of courses in describing child language. They may accept Chomsky's theory as linguistically valid, but ontologically invalid, or they may accept Chomsky's theory as one of language and mind. Van Buren holds that it is most reasonable to adopt the latter point of view, despite the lack of empirical vindication of the approach. Assuming that it is trivial to use innate ideas as a methodological assumption only, and assuming that linguistic theory which is ontologically neutral is powerless, he argues that we should regard Chomsky as both linguist and psychologist. Several remarks in Chomsky (1968b) show that current philosophical attitudes within generative theory incline towards the view that linguistics is a facet of cognitive theory (1968b:7). That is, linguistics is concerned with mind. Further, it is circular to

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1. The equation of linguistic universals and innate ideas is implied in Cartesian Linguistics (1966b:59-72) but Chomsky admits that certain distortion may be involved in this since he has projected backwards certain ideas of contemporary (grammatical) interest. Van Buren, however, bases his argument on Chomsky (1965). The developments of Chomsky (1966b) and (1968a,b) were not included explicitly in his discussion.

adopt a linguistic theory which assumes universals, as the justification for the existence of linguistic universals in child speech.

The best model for the description of child speech would appear to be one in which there are meaning relations interpreted by the observers. Thus, a situationally orientated approach, allied to the competence of the observer is proposed. The description used must be transformational, that is, it must formally link deep and surface levels, although the rules devised may not necessarily be maximally generative. For instance, a child making a certain mistake in tense may not have this as a predictable systemic fault in his grammar. A transformational, situation-specific model based on Fillmore (1967) has been proposed by Van Buren and Huxley (1966) and Clark (1967). The description regards an observed utterance as one possible realization of the deep dependencies judged to be implicit in the situation. Van Buren refers to this approach as a data-reduction generative grammar (1967:11), or a production grammar.

Theoretical unanimity did not characterize work on acquisition in the pre-Chomsky era; nor has it been noted post-Chomsky. Nevertheless, the Chomskian approach has raised several important issues and has brought certain insights. The creative or non-imitative aspect of child language has been stressed. Lists of recorded phonetic or phonemic data are seen to be inadequate to characterize the organizing process of language. Light has been thrown on the faculté de langage; further, attention has been drawn to the possible existence of an

ontogenetically relevant set of universals operating on language data. In terms of organizing power, we may think of the child employing a matrix of principled rules through which the sentences of language are given realization in speech utterances at the surface of language.

On the point that children have a faculté de langage we incline to what Ingram (1968) has described as the 'weak argument', that is, that language is human-specific and children demonstrate this by learning what apes do not succeed in learning. The 'extreme' argument is that the child is 'born with the insights of Chomsky's Aspects (1965 version) in its head'. The cogency of the former argument contrasts with the fatuousness of the latter. Consider, in respect of the 'extreme' argument, Sutherland's point (1966:157-159) made in discussion of Fodor and Garrett (1966). An analogue and a digital computer may be deemed to have a common competence in addition; they are patently different in mechanism. 'Knowing the ideal tasks that an organism can perform does not in itself tell us what is the mechanism mediating any given task.' (1966:159). It is argued that, in respect of language acquisition, it would be unreasonable to foist on to the unknown mental processes of individuals a single, highly formalized theory of competence, if that theory limits our view of mechanisms. That the child automatically acquires language insights is a valuable orientation of acquisition study, but the 'extreme' view of what these insights are seems an impediment to research.

The argument that a child possess a priori ideas in

learning is by no means a modern one. In essence it is Platonic and such distinguished English Platonists as Lord Herbert of Cherbury argued for the pre-existence of a faculty necessary for the initial and subsequent learning of language. Speaking of the interpretative principles of thought, he says, '(They) are so far from being drawn from experience or observation that, without several of them, or at least one of them, we could have no experience at all, or be capable of observations. . . . If we had not been endowed with common notions . . . we should never come to distinguish between things or grasp any general nature We possess hidden faculties which, when stimulated by objects, quickly respond to them.'¹

What the underlying faculties deal with in the learning and use of language is of cardinal importance. At this point in our knowledge they appear to deal with universal ideas of language which, we argue, may best be thought of as semantic notions. By these we organise the deep dependencies and relationships of our language (and other aspects of our cognitive life) and thus, a teacher orientating himself to the language learning of his mother-tongue pupils can find some support for the view that we cannot teach what is not already present in the mind as an

1. See Chomsky's quotation from Herbert in Cartesian Linguistics, (1966b) Ch.5, pp.60-61. He refers to Herbert's De Veritate (1624), pp.105-106. In the context of language learning we should interpret 'objects' as 'language in use' (cf Halliday, 1967d:8).

innate idea. Leibniz has put it clearly, 'Nothing can be taught us of which we have not already in our minds the idea' (in Chomsky, 1966b:63). While teachers today might not quite see their role as 'reminding the soul of what it already knows', they would derive much support for a teaching technique involving eliciting of internalised views, and of making clear the heuristic devices which help us to understand the basis of action.

In making children aware of their own language in use teachers will of necessity have to have recourse to a language description. Whether this description is purely for the teacher's own use in the interpretation of language processes, or in planning graded syllabuses is a matter for individual cases. The general principle of being able to propose a rationalization of the data-processing that might translate universals of language into surface organisation of language is acceptable. Clearly this approach must somehow involve transformation, for the very definition of formalization we have given above implies this (Lyons, 1968:155-156). Many formalizations can be stated transformationally and the more powerful of these descriptions may be said to be generative, that is, maximally predictive of the sentences of a language and fully explanatory. Teachers themselves need not be involved in the theory of formalization and of the debates which it produces within academic circles, but the role of description as a rational network of principled choices should be understood. For teachers there is no call for any one of the available theories to be fully understood, provided the main orientation

to language is maintained.

It is likely that we will never satisfy ourselves completely on the precise nature of language competence and of the relationships which exist with performance. Work in investigation of the task continues. In the meantime, guided by applications of linguistics in fields such as the description of child language acquisition, teachers are justified in accepting the idea of universal categories, broadly conceived and characterized in an informal semantic way, and of tendencies to process linguistic data in certain ways and realize an output of utterances. This is a principal step towards inductive approaches in language teaching and the insightful handling of mother-tongue language learning in schools.

4.3 Psycholinguistic Considerations of Method

There is a three-cornered relationship between educational method, teaching technique and lesson materials. Methodology is an area of theory in which the abstract relationship between educational aim and lesson materials is formulated. Method is classified by its mode of formulation, thus, an expository method, a heuristic method, an activity method, etc.. Teaching technique is concerned with a realization of method in practical terms for a given group at a given stage and for specific materials (Mackey, 1965:V). Thus discussion, exercise writing or note dictation are teaching techniques. Technique is secondary to method in syllabus planning.

The course materials (Appendix B) represent data deemed

useful for class use in attaining the educational goal, that an educated child ought to be able to be rational and incisive about his language environment and the human situation of which language is a part (cf Gleason, 1964:267). Method is reflected in the materials in their grading and in their handling techniques. Considerable open-endedness exists in class handling and in interpreting the relevance of psychology to practices of course work. In sections 4.3, 4.4, 4.5, 4.6 we deal with the formulation of the method, the technique of handling the materials and questions of the psychology of learning which arise in our consideration of mother-tongue learning.

A crude, but useful, distinction exists within educational method between expository and heuristic approaches in teaching. Expository approaches have been caricatured as 'tell-and-do' methods and Gage (1963) analyses the expository method thus:

- (i) Stating the item of knowledge to be taught
- (ii) Clarifying the terms of the exposition,
e.g. grammatical terms
- (iii) Justifying the value of the item
- (iv) Reinforcing the exposition by exercises
- (v) Making transition easy to the next expository stage.

The exercises related to this typical expository process often turn out to be little more than rote learning.

Many English language textbooks, designed for use by mother-tongue speakers, make maximum use of the expository method. Trotter's textbook, which we might take as typifying the general run of language textbooks still in use in many Scottish senior

schools, shows the expository approach clearly. Teaching the rules of syntax, Trotter divides his lesson thus:

RULES OF SYNTAX

Rule 1: The subject of a finite verb must always be in the nominative case; as, John comes. I teach.

Observation 1: The subject may be -

(1) A noun; as, Andrew is a clever boy

(2) A pronoun; as, They are expected today

(3) An adjective with the definite article; as, The dead shall rise

(4) An infinitive or infinitive phrase; as, To err is human

(5) A gerund or gerundial phrase; as, Teaching attentive boys is a pleasant occupation

(6) A clause; as, That he has been rash is apparent to all

(A second rule with observations follows, showing that there is concord in number and person between subject and verb.)

Then follow exercises

EXERCISES

1. Correct where necessary: The stars twinkle. Was you there? I never speaks in class. etc. etc. etc.

2. Parse the words in italics: How can I be merry when you are sad? God save the Queen! etc. etc. etc.¹

Trotter goes on in this way with rules and observations, using exercises to reinforce his expository points. He states,

1. A.M.Trotter, A Manual of English Grammar, London and Glasgow, (No date but probably 1938-40) pp.54-55.

clarifies and reinforces in his teaching without explicitly justifying the rules he advocates and, in this case, without attempting to recapitulate or bridge the gap between one island of exposition and the other. Yet Trotter is by no means an example of the method at its most parsimonious. Some textbooks show only rules and sparse exercises.¹

To argue that this method is now discredited would be ingenuous. Modern textbooks such as Robbie & Hutton (1958),² in use with senior classes in Scottish schools throughout the kingdom, follow much the same plan. For example, in dealing with types of subordination the adverbial clause is defined, notes on some difficult analyses are given (He was not as clever as his father was. He was not as clever: principal clause as his father was: subordinate adverbial clause of degree modifying as clever). Exceptions and unusual configurations of the adverbial clause are then alluded to and exercises, postponed to the end of the chapter, are given to reinforce the exposition. These exercises are largely parsing and general analysis of given texts.

1. See J.C.Nesfield & F.T.Wood, A Manual of English Grammar and Composition, London, 1964. This is the fourth edition of a text originally published in substantially similar form in 1898, in the intervening years running to thirty-two printings of the four editions. It is a text still relied on in many schools.
2. H.J.L.Robbie & P.E.M.Hutton, English Principles and Practice, London, 1955 (1958 edition), p.49 et seq.

It would appear that an expository method would rely on an axiomatic and formalized view of English grammar (Dixon, 1964), and it might be thought to have an affinity with mathematical scholarship and to reflect the once fashionable way of teaching mathematics. An axiom is stated; a deduction permitted by logic maps out the consequences; there is empirical confirmation of the rule in a simple operation and, in exercises, further deductions are asked for, or simple productive operations involving applications of the principle are expounded. In fact, we misrepresent modern mathematics teaching by citing this method as typical, for mathematics in general and geometry in particular have moved forward into new methods many years in advance of arts subjects in schools. As early as 1927, for instance, Austin was saying:

'Geometry is essentially an experimental science like any other, and . . . it should be taught observationally, descriptively and experimentally. . . The child to whom the subject is taught is fundamentally a scientist who lives and learns by experimentation and observation in a wonderful world laboratory.'¹

One is tempted to take this quotation entire and substitute the words 'English language study' for 'Geometry'. It would substantially characterize one of the objects of our work and would emphasise an important role of linguistics in language teaching, as the science by which the observer is orientated.

1. Austin (1927:286).

Heuristic methods in education are often nicknamed 'discovery methods' and they are of two main kinds. Both kinds centre on problem solving in language study and involve discussion as a main teaching technique. Heuristic methods may be inductive or deductive. Taking the latter first, a principle discovered or given can lead pupils by a more or less strict series of logical inferences to a conclusion. A typical deductive method might employ in its teaching techniques a formula, a mnemonic and a rule of thumb for deduction. Patterned composition work is often deductive in this way (cf Fraser, 1967). It is also possible in this field to begin from the given phrase structure of two kernel sentences, to apply the right transformational rules for embedding one sentence in the other and adjusting the output, and to arrive at compound sentences by deduction. Paul Roberts makes much of this suggestion in English Sentences (1962), although, as we have noted (2.2), the transformation of utterances is not embraced by TG theory.

Deductive rules are heuristic in that they make apparent in a rational form the underlying structure of language. In addition, if such abstractions assist in the production of well formed sentences in composition, say in remedial education, they may form the basis of a mechanistic composition scheme (Fraser, 1967, 1969:121-139).

Inductive methods are characterized by Gage in these terms:

- (i) We present data leading the pupil to hypothesise.
- (ii) We present the learner with evidence of the hypotheses acted on.

- (iii) We state, or have the learners state, the principle learned inductively from operations (i) and (ii).

Inductive methods stand the cone of learning on its base, beginning from the broadest experience of the data and refining the pupils' reactions to the experience of the data until the principle, or such part of it as we need, emerges. Expository methods stand the cone of learning on its head, making the learning depend on the abstract understanding of the expounded principle before examples can be meaningful, before exercises can be properly done and before the pupil can move forward to the learning of the next principle. Only the most intelligent child could handle a subject presented by a series of expositions. Exposition, however, can lead to very fast learning and may be highly efficient with intellectually gifted children and may be economical both in textbook space and in teaching time. The method is, however, anti-experiential, axiom-bound and abstract and it is usually associated with linear grading. It can be very wasteful in that pupils who fail to grasp one aspect of a principle or one principle in a series may be robbed of the results of the course as a whole.

Inductive methods begin from native experience, derive their main educational dynamic from insightful discussion and by refining the heuristic can produce a principle. Some of the most impressive statements in the whole of education have been made in support of inductive processes. Fisher (1935) states that: 'Inductive inference is the only process. . . by which new knowledge can come into the world'. In a more strictly

educational field, William James held that learning only takes place when the learner can say, 'Hollo! Thingumbob again!'. This implies recognition of the essential features of a previous experience and inductive grouping of the two experiences as 'the same'. The 'electric sense of analogy' signals inductive learning of equivalence grouping (Bruner, 1956, 1957).

In all educational consideration of inductive methods in learning there is an element of experience, of operation and of externalising the structure of the topic implied in the operation. Claparède's suggestion that the functional question fertilises the structural question is a basis for the inductive method; the same point put in a simpler form in Bruner's terms propounds that doing is often a means to understanding (Bruner, 1960).

4.4 The Psychological Status of 'Discovery'

A considerable weight of evidence clarifying inductive learning processes is available from work by educational psychologists and others in the field of cognitive theory. Much of it has special references to discovery learning. Two early papers in this field were those of Katona (1940) and Hendrix (1947). Katona studied groups solving simple geometrical puzzles. He found that the group which memorised the answers was significantly poorer on invention and transfer to new problems than the subjects who were able to help themselves in the discovery of solutions. The 'memorisation' group had rules given, while the 'self help' group had only examples to work

from. Katona concluded that 'formulating the general principle in words is not indispensable for achieving application'.

Hendrix stated similar findings in a clearer way. 'Groups that discovered the principle independently and left it unverbaised exceeded those who discovered the principle and then verbalised it, and both exceeded in transfer those who had the principle stated for them and then illustrated.' Katona showed that self-help plus unverbaised awareness produced maximum transfer. Both papers dealt, to some extent, with the problem of Einstellung or mechanical rigidity of learning produced by rules, which impedes the transfer of training (Miller, K.M., 1947). More significantly, both seem to provide clinical evidence for general teaching methods involving discovery in the learning process.

In a paper whose results were held to support Katona and Hendrix, Haselrud and Meyers (1958) showed that transfer was dependent on discovery. They gave two dictums: 'Fast learning under guidance is no guarantee of transfer', and 'As naivety is lost, probability of transfer is increased'. These results seem to suggest two things about discovery; firstly, the rate of learning by discovery may be varied by giving more or less guidance in the teaching; secondly, that transfer of training from textbook work to other, wider fields of application may depend on the stage of development of the pupil as much as on the teaching technique used.

The factor of guidance during discovery touched on by Haselrud and Meyers (direction) is a very important one in the

experimental work of the late fifties. Craig (1953, 1956) investigated the effect of guidance in learning. He found that the more guidance the learner received the more efficient his discovery would be; the more efficient his discovery was, the more learning and transfer would occur. Craig derived an extreme conclusion, that the principles of solutions should be stated above the problems to produce the optimum conditions for learning by discovery and transfer afterwards. This is strangely like expository teaching.

If Craig shows the extreme view, Kittell (1957) displays the classical 'middle-of-the-road' attitude. Kittell judged that too much direction damaged the learning process by inhibition; too little failed to exploit the discovery to the maximum; but an 'intermediate' amount of direction was significantly superior to both extremes. His work was done with sixth grade school pupils. Craig's subjects (1953, 1956) were college students studying psychology. There may well be a maturation factor to be considered in evaluating the results of these two papers.

How does a teacher guide discovery in this way? One researcher, Della-Piana (1957), studied the way manipulation of 'feed-back' to the pupil affected his approach to the lesson material. He found that a learner who was deprived of signs of encouragement from the teacher, and from comparison of his progress with a standard, set up a 'searching orientation' - a state of mind in which the subject turned to the teacher (or in this case the experimenter) for direction. Thus the

indication of errors without other guidance brought out the learner's urgent need of direction in the discovery process. There is a practical limit to how long a learner will try to discover relationships in, say, a text, without direction.

The investigation of discovery learning was taken further by Kersh (1958,1962). In his 1958 paper he showed that learners who had been taught by directed discovery were superior in learning rate and immediate recall, but those who had had no help were better in retention and transfer after one month had elapsed.

In his second paper on this theme Kersh (1962) investigated the differences in learning two processes of arithmetic under different conditions of direction. He compared the quality of learning that followed three different presentations of the material: (a) After a thorough course on how the rule itself was formed; (b) After a method using directed discovery on the patterns of the material itself (the data as opposed to the rule); (c) After rote learning of the processes. He found that if the initial state of learning was considered, rote learning was at least as good as discovery learning. The group that learned about the rule were poorer on initial learning than either the discovery or the rote learners. In terms of learning for long term memorisation, discovery was superior to rote, and from the point of view of transfer of training, discovery was markedly superior to rote.

Kersh draws attention in his discussion to two weaknesses in the experimental work on discovery training. One, it is

exceedingly difficult to employ explicit terms in reporting an experiment. Terms like 'maximum direction', 'directed learning' and 'intermediate direction' become confusing. For example, does directed learning eventually become exposition or rote?

Secondly, Kersh asks if we can be sure when insight to the principles of a lesson happens. Superficial insight may be added to the learning, but does this make it discovery? He warns that attempts to superimpose 'relevance' on materials may lead quickly to inhibition of the transfer of training.

We would add a third comment on the weakness of the evidence, specifically from the point of view of applied linguistics. Can we be sure that principles discovered in experiments dealing with arithmetical symbols, geometrical patterns, code arrangements, etc. are directly relevant to the much more complex field of English mother-tongue learning? Two points arise in answer: (i) the materials taught have demonstrated, through the tests, that 'discovery' methods are relevant (ii) the rejection of all non-clinical evidence on the value of discovery would be fruitless agnosticism. It would be entirely negative to disregard the basic work in cognitive processes on the grounds that it might not be relevant to another field of cognition, without supplying evidence of a radical difference in cognition between language learning and learning in other fields, or a clinically acceptable set of findings to show what work in learning is relevant.¹

1. cf. Podor & Garrett (1966) who warn against inferring linguistic competence as separate from general intellectual competence.

The vagueness in terminology that we have noted may well stem from theories of cognition which are themselves not fully explicit. Wittrock (1963) observes: 'A sophisticated theory of concept formation is needed not only to supply (these) terms and labels but also to account for the phenomena observed in research on learning by discovery'.

The work he carried out in this field is important for us. College students were taught by one of four methods to decipher codes: (i) Rule given and answer given (ii) Rule given but not the answer (iii) Answer only given (iv) Neither rule nor answer given. The greatest initial learning came from the group with the maximum direction (rule and answer given); minimum direction (neither rule nor answer) gave least effective initial learning. The best conditions for long term learning came from the 'intermediate direction' represented by groups (ii) and (iii).

The distinction between learning conditions for initial responses and those for long term learning which facilitates transfer and retention is a just and valuable one. Clearly the conditions leading to successful learning for one end may not apply to successful learning for another. Parts of the English syllabus may be handled well by initial fast learning, while other parts may need to produce learning of maximum retention and transfer characteristics. 'When the criterion of learning is initial learning of a few responses, explicit and detailed direction seems to be the most effective and efficient. When the criteria are retention and transfer, some intermediate amount of direction seems to produce the best results.' (Wittrock, 1963)

Without doubt, one of the first matters to be settled in applying discovery learning principles in the methodology of English teaching is to decide where initial fast learning is required and where the priorities are memorability and transfer.

4.5 The Contribution of J.S.Bruner

Bruner has made a significant contribution to our understanding of inductive learning and to our application of cognitive principles in mother-tongue methodology. In an article dealing specifically with the principles of discovery learning (1961) Bruner seems rather to have oversold the idea that discovery learning facilitates transfer and recall. Kersh (1962) and Ausubel (1963) examined Bruner's findings on discovery techniques and concluded that clinical evidence was largely negative on his claims that discovery learning (a) increases transfer (b) makes learning a self-reinforcing activity (c) is fruitful in problem solving and (d) makes recall easier. Neither Kersh nor Ausubel wished to discontinue investigation, however, since both felt learning benefits to be associated with discovery. Their point is rather that vagueness of terms led to equivocal findings in investigating the intuitively acceptable ideas of discovery learning.

One of Bruner's most popular earlier works, The Process of Education (1960), is an account of a conference on new educational methods held in 1959 at Wood's Hole, Massachusetts under the auspices of the National Academy of Sciences, at which he was chairman. He lists four main themes in the book: (a) the

of structure (b) the concept of readiness (c) the nature of intuition (d) the place of interest in learning. His principal hypothesis is that any subject can be taught effectively in some intellectually honest form to any child at any stage of development (1963:33). Bruner proposes that teaching should aim at producing in learners an awareness of fundamental principles which would structure further learning, aid memorisation, facilitate transfer and have other benefits.

Bruner is clearly influenced by Piaget in his exposition, and his consideration of the stages of readiness pre-operational, concrete operations, and formal operations (1960:33) confirms this. In a modification of these categories, Bruner (et al.) (1965:Chs 1,2) proposed forms of presentation of learning tasks for the enactive, econic and symbolic stages of mental growth. This classification of development offers a concept structure whereby teachers may grade materials, or devise modes of presentation appropriate to stages of mental growth. Bruner maintains that there is a mental need at the stage of symbolic operations for calculation and practice in manipulation, such as segmentation and other analysis. From our practical teaching of the experimental materials we would confirm this necessity. It is not an either/or question of whether to operate via rote drill or discovery. Deduction may be used as an adjunct of inductively established principles, or as a confirmatory device in operations carried out on the materials, say as analysis of aspects of texts where a certain structure of the noun phrase is concerned. These deductive operations are economical in

terms of syllabus time. Bruner dissociated himself from Wertheimer's (1945) coarse division between rote and understanding and proposes in what seems to be a wholly acceptable argument that the question for method and for teaching technique is how much drill and how much formal practice is needed at the symbolic stage of mental operations to establish discovered principles (1960:30).

There is a clear link between the lines of thought of Bruner (1960) (a conference report) and the ideas put forward by Bruner (et al.)(1956). Produced in the other direction, there is a clear thematic development traceable from (1956) to Bruner (1957,1960,1961 and 1965). Bruner claims that learning is a process by which we structure the world, but it is a process conditioned by our cultural and personality background. We are the inheritors of a Newtonian culture which leads us to expect Nature to produce truths as things or relations which exist within it. Science (and common sense) invent ways of grouping 'truths'. Bruner argues that these groupings may be naturalistic, that is, intended to reflect the groupings we think we find in nature. Education is seen by Bruner (et al.) (1956), somewhat lyrically, as a voyage on enchanted seas seeking islands of truth. When we make our discovery landfall we are satisfied if our structuring of the situation appears to be applicable and manipulable and if our intuitive structuring of the observed data produces workable or useful discriminations and distinctions. We think this way, he argues, because, psychologically speaking, we have no other way to work. Thus,

Bruner's (1956) view argued, the case that structuring is a primary necessity of learning, and that the nature of the structuring is individual and justified pragmatically. Clearly, this principle is of considerable significance for the 'heuristic' study, by mother-tongue speakers, of their language.

The concept of structuring in learning is dealt with in terms of codes in Bruner (1957). Spearman (1923) suggested the fundamentals of organisms being capable of comprehending their world in terms of 'same' and 'different' relations educted by the organism. Further eduction of correlates followed these if the learner was capable. Bruner interprets Spearman's point in this way: that going beyond the information given in learning is the most important characteristic of human mental life (1957:41). If there are 7.5 million physically discriminable colours, he argues, it is significant that human communication manages to operate with only a dozen or two categories. In language, mother-tongue speakers can predict with high accuracy co-texts for certain words, and, using a simple argument of collocation, Bruner postulates that in language as in other fields of learning the probability texture of the environment helps us to go beyond the information given and form codes which structure reality for us, making it manipulable and memorable.

In Bruner's view what are often wrongly thought of as cases of transfer of training should be thought of as the presence or absence of effective coding devices. Cognitive coding suggests a view of language as something more than Markov chains of words or phrases. The application of a grammatical principle therefore

must be seen as a form of a generic coding which relevantly allocates structure to other parts of language, other languages, or other aspects of experience. Positive transfer is finding a suitable coding for a new array of information; negative transfer is a case either of misapplication of a code or absence of a suitable one.

These reflections of Bruner (1957, 1960 and 1965) raise methodological questions for teaching of the mother-tongue learner. What kind of experiences and what kind of approaches will lead to coding of a generic sort? Secondly, how can the most efficient use of existing codes be made? Thirdly, what codes are best for given syllabuses? In our view, the application of a coherent body of linguistic theory to the description of texts is a heuristic coding force acting externally on the language and being internalised where that description accords with intuitively acceptable groupings already in the repertory of the mother-tongue speaker.

Bruner (et al.)(1965) contains clear evidence of the author's psycholinguistic orientation, of Bruner becoming centred on Chomsky (1957 etc.) in a way reminiscent of a similar affiliation shown in Miller, Gallanter and Pribram (1960). In Bruner, this use of transformational generative grammar should be interpreted, not as an abandoning of the 'positivistic' empirical approach in learning theory (1956, 1957, 1960) research and his eclectic view of the structuring model, but as an embracing of Chomsky's rationalism as a powerful theoretical metalanguage which makes discussion and communication of the problems of

language learning more possible (1965). Further, the field of language acquisition is one of Bruner's interests and by discussing his theories in the terms of TG he would clearly find discourse on the topic more profitable.

The empirical approaches which marked Bruner (1956), together with a certain visionary quality, are still present in much of the practical work and in the suggestions of his later book (1965). His interpretation of the need in learning for categories and sub-assemblies in the 'architecture of complexity' (1965:46) gives direct methodological advice to teachers of the mother-tongue. In his theory, Bruner (1965) becomes virtually Cartesian (1965:48), but in his discussion of the practical problems of learning as they refer to cases and syllabuses he remains both empiricist and eclectic.

4.6 Applications to Teaching Technique

In considering the applications of psychological evidence in a mother-tongue language teaching situation there is one main principle to be upheld. A heuristic study of language cannot exist except in terms of contrasting language patterns and this clearly involves projection of patterns from the learner on to the subject in the way envisaged as obligatory by Bruner (et al.) (1956). In considering this principle we are made aware of Allen's (1957) point, that patterns 'of language' are not patterns of nature; we impose them from within ourselves. Precisely what strategies a mother-tongue speaker uses in making

his language world objective, manipulable and communicable are not known to us. The selection of a directed discovery procedure for classwork assumes that a coherent description fed into the natural process of induction may act at least as a vehicle for remembering the strategy, or for communicating the discovery, but it does not become the strategy itself. Thus there is no real restriction on the type of description for school language work, save that coherence, consistency and manipulability are qualities that a model should display.

The economy in terms of time-tabling which results from assisted discovery of the sort we have used in fashioning our course is described by Gleason (1965:490n) as a practical necessity. It does not war against learning, but makes discovery communicable and concise. The initial stage of our experimental course (2/A/1 - 2/A/10) makes a simple appeal to native speaking pupils' abilities to perceive substance, to recognise organisation and to appreciate context of language. Nothing further than initial recognition is called for at this stage. These early lessons represent discovery learning of an inductive sort. There is reaction (to texts), discussion of contrasts and externalisation of the principles used in the discussion. Katona (1940) and Hendrix (1947) would leave recognition unverballed. In practice, working in the secondary school with a Scottish population we find that the giving of the rule at the end of the lesson acts as a mnemonic device and consolidates the discovery. Further, should a pupil (say, because of inattention) fail to recognise the principle by

personal discovery, the rule can act as a hand-hold on the lesson and subsequent revision might be made through it. We believe, further, that a good rule, following 'awareness' is in the nature of a teaching reinforcement. An adequate rule formulated in a class atmosphere of contact with real texts in use, offers an intellectual satisfaction which backs up discovery. Rules of this sort are important elements in motivating pupils to progress, as Della-Piana notes (1957).

A rule formed or presented after discovery is in no way a tyrannical fact. It merely formalises what is already 'known' and what is, in the course of the lesson, discovered to be known. The rule is the servant of the discovery and not its master. Discovery orientates the pupil to the language study and fosters individual activity and independence. A rule induced or deduced is a valuable mnemonic of discovery; a rule expounded may be an inhibiting instrument of prescription.

In this view we share in some measure the principle adduced by Craig (1956) that the more appropriate guidance the learner receives the more efficient his discovery will be. We subscribe however to the post-statement of rule, as we have argued above. We do not agree with Craig's second principle (1956), however, that the more guidance and discovery, the more efficient is the learning. Guidance can readily become exposition and our aim is to foster active discovery as an alternative to rote or rule prescription. Della-Piana (1957) used the term 'searching orientation' to describe a feature of learning behaviour produced by radically reduced feed-back. This is germane to the goal of

the course we have provided and a good teacher with a class engaging in open discussion in our opinion should reflect this manipulation of feed-back which produces a 'searching' learning situation. The directed discovery technique that we advocate provides for this manipulation.

The techniques associated with the teaching of form embraced by Section B of the experimental course, lessons 2/B/12-2/B/16, illustrate the difference between applications of more inductive approaches (Section A) and more deductive approaches (Section B). Deductive discovery operates by logical sequences of inference from discovered principles. It is not exposition, since the principle is itself induced and is not prescribed and since the deduction is carried out as a class activity. The economy of this technique reduces the number of lessons on the noun phrase to two (B/12, B/13), and allows simple constituent analysis of clause chains by the end of the fifth lesson of the section (2/B/16). It should be remembered that this section on form is introductory, and under the provisions of the syllabus developments envisaged by Bulletin No.1 (1967) is adequate. A considerable volume of implicit work on form is covered, however, by Section A, for example lesson A/6 (syntax), A/7 (systems), A/8 (word classes) and A/9 (lexical form). We would advance this principle in applying discovery methods to language courses: that inductive work is best suited to orientation while deductive techniques are most useful in detailed study of form.

The third section of the course (C) deals with English

language variety and it offers opportunities for both orientation by inductive discovery and more detailed work using deduction. Since we argue that work on language varieties is part of a rhetoric of an Aristotelian sort, - a rhetoric which we find advocated by Grierson (1944), - there is an approach to description expounded by deductive techniques in lessons C/18 and C/19 (speech forms), an inductive orientation to source in C/20, to social relationships in C/21 and to intention and goal in C/22,23. A deductive mode characterizes the summary, C/24.

In practice, in the classroom, in the handling of the materials there were many instances in lessons in the 'Levels' section (Section A) in which blackboard examples, often provided by the class, were retained for deductive reinforcement of the general orientation. The more sophisticated classes in the experimental work showed a strong urge to rationalize in a deductive way and where this was encountered as a genuine form of searching orientation it was used to consolidate the discovery. This urge was most clearly shown in the sections on form (A/6,7,8) and it made for rapid progress through these lessons, allowing more time for the work sections and the class research topics.

Clearly it is impossible to legislate in a course for all the forms of learning enquiry one is likely to meet in teaching native speakers about their own language. A great many ad hoc approaches common to all kinds of class teaching regardless of subject are valuable. For example, class activities may show that varieties study reveals social class indices and aesthetic

evaluation; a class's sense of humour may characterize their reaction to texts and become a dynamic in the learning. The plethora of teaching variables is not reduced because a course book offers coherent grading. It is critical, however, that any course in a subject as dynamic as English language work must leave many open-ended exits to side issues in language not specifically provided for by syllabus coverage. The heuristic method is ideally suited to allow these fruitful side issues a place in the teaching, thus catering for both personal and group differences in the classroom where these are valuably related to a coherent, explicitly graded course.

4.7 Summary

The acquisition of language by a mother-tongue speaker finally resolves itself into questions of linguistic process and cognitive development. Similarly, later learning of and about language may profitably be thought of in terms of a process which linguistic and psycholinguistic theory helps us to characterize. While there are difficulties associated with the application of linguistic theory to initial acquisition, and while there are problems of extrapolation of psychological theory into education in general and linguistic education in particular, a clear orientation to inductive method in school learning is possible via these disciplines. This orientation can produce a course in which native intuitions about language become the dynamic of a rational and articulate body of knowledge about the mother-tongue in use.

CHAPTER V

A LINGUISTIC CONSIDERATION
OF THE EXPERIMENTAL MATERIALS

5.0 Introduction

This section is principally concerned with the justification of the materials, Discovering Language II (Appendix B), in terms of linguistic theory. Linguistic theory provides (i) a general orientation to the study of natural language, and (ii) a grading of sequence and difficulty in the materials of the course. Grading assumes an aim. Thus, it is appropriate to consider the aim of the course materials as a necessary starting point. This is succeeded by a statement of grading policy and means and a discussion of the linguistic aspects of the course devised.

5.1 The Definition of the Teaching Goal

We have argued in this study (1.1;1.2;1.3) that the traditional teaching of English language in schools has suffered from a diffuse aim; the mother-tongue is studied as language to benefit writing, reading, speech or general thinking. Where the aim is at all clearly formulated, there is an implicit acceptance of transfer of training from grammar as a study of principles to practice in a language skill. The experimental evidence available to teachers relative to this transfer is either negative or inconclusive (Hoyt,1906; Symonds,1931; Segel and Barr,1926; Macauley,1947; Robinson,1960; Harris,1965 and Currie,1965a).

This points to the need for research (a) into whether the acquisition of language skills is a specific case of transfer of training from learned principles, or (b) whether associative chain theory is capable of providing an adequate theory of learning for language learning experimentation (cf. Lashley, 1951). Both fields of enquiry are beyond the scope of this thesis, although an opinion on (a) is discussed in 3.1. It is our purpose to argue that the aim of mother-tongue language teaching is mistakenly held to be concerned with specific transfer. We propose a change of goal as part of the rationalization of the mother-tongue language syllabus. In this rationalization linguistics plays a principal part.

Gleason defined the principal goal of education in these terms: 'An educated man should be able to think rationally and incisively about his environment and about his human situation.' (1964:267). This general principle might be held to apply to both the sciences and the arts. Gleason, however, notes that in terms of orientation to language, this goal is significantly missed by educated people. We take up the view in this present study that Gleason's axiom is a valuable statement of the goal of a language syllabus for mother-tongue pupils studying their own language, and the course attached to this thesis has this as its aim, that an educated native speaker ought to be able to be rational and articulate about the nature of his mother-tongue, and about the relationships which exist between a user of the language and his society.

In practice, the course devised is a collection of texts to

which mother-tongue pupils react. Contrasts implied in pupil reaction are investigated by a discovery technique (4.3-7) and from these discussions a body of description emerges which is articulated by guidance as a linguistically relevant rationalization of the speaker's language. This approach depends heavily on native speakers' intuitions about their own language. We hold that the mother-tongue speaker, in normal social adjustment, is in possession of a vast range of insights to the nature and use of his language. He has 'an intuitive knowledge of what language is and an awareness of the linguistic structuring of experience'. (Halliday, 1967d:1). This knowledge is not conscious, but it informs operations in language activity. It is the basis of the principled choices which characterize the systemic networks of language. It is intended, in the course of teaching the materials, to externalize certain of these native insights and make them part of a rational and incisive description of the mother-tongue in social use. The method fashions homo sapiens from homo loquens by approaching language as one would approach a science, that is, the manifold of the pupil's experience is reduced to order, and the understanding of order is made part of a communicable description which is consistent with an overall linguistic theory. Inductive learning of linguistic relationships and projection of the principles derived are informed by general theory.

5.2 Grading Policy

Mackey (1965) has argued that method assumes grading, but

it is our view that grading is independent of method. Grading articulates the sequence of elements in a course; method defines the teacher-pupil-text relationship in abstract terms. Technique of teaching is the technology derived from the orientation which method defines. We have discussed our method in Chapter IV, and indicated certain practical teaching techniques associated with it. Grading is first dealt with (below) as a broad scheme for the year's language work, based on language levels (5.2.1;5.2.2) and is subsequently dealt with as a set of aspects of language description defined by the theory of levels and complemented by a study of language variety.

5.2.1 Overall Sessional Plan

The areas defined in the broad pattern of the course are three: (i) there is an area concerned with language levels; (ii) there is an area concerned with selected specific patterning, mainly of one of these levels, viz. grammar; (iii) there is an area concerned with the study of language variety. In the experimental materials these are coded /A/ , /B/ , and /C/ respectively (see Appendix B). Within the sequence A, B, C, there is necessary precedence for A. The study of language levels is thus a foundation to the course. Section B develops one of the levels in more detail in terms of its descriptive patterns, and Section C makes use of both levels and patterns. Nevertheless, the study of varieties is in some ways independent of the other two sections. It might reasonably be undertaken either as one term's work (and in the experiment for this study

it was used as the work of the summer term of the classes taught) or it might be used parallel with lessons of B (pattern study). It would not be acceptable, however, to study varieties initially and deal with levels and grammar as they emerge, i.e. C, A, B.

5.2.2 Language Levels

The theory of levels of analysis is seen in the European tradition of linguistics as a heuristic device invented by linguists to help them to make scientific statements about language and languages (Robins, 1964:11; Halliday, 1961:252; Catford, 1965:3). Dealing with levels from the point of view of the teaching of languages, Halliday (et al.)(1964:95) refer to the antiquity of the idea of 'aspects' of language, to the usefulness of the concept in linguistics and teaching and to the extensive area of common ground between linguists on this topic. Mackey (1965:38) supports this by drawing up a chart analysing the extent to which language analyses may differ and using Brondal, Firth, Halliday, Pike, Chomsky, Ullman and Harris he characterizes the view of levels of analysis each suggests. The degree of common ground in this study of differences is remarkable.

Mackey shows the greatest accord to be in the areas of phonology and grammar as levels. Thus Firth, Halliday and Pike agree largely on a levels distinction between phonology and an area of form broadly called grammar. All three linguists would sub-divide the area of grammar into smaller or co-existing parts, for example Firth and Halliday provide for a level of lexis

(see Halliday, 1966:148) and Pike makes provision for a specific level of morphology. Firth and Halliday, however, are alone in seeing phonetics (Firth) and phonic/graphic substance as a level (Halliday). Chomsky, on Mackey's analysis, is shown to have only phonology and grammar as 'levels' (although he would not use the term 'level' in this way). Harris suggests phonology/morphology as the only levels. In semantics there is the greatest variance. Halliday proposes an inter-level of context embracing part of form and part of extra-linguistic 'situation'. Chomsky, Ullman and Harris propose no level of semantics at all.

It is our intention in the syllabus of experimental language materials to embrace a coherent view of language as a whole. One very important aspect of carrying this out is that a view of language be used which embraces a linked set of levels, and this acts as a general orientation grid for the learners. In the past, courses in language for the mother-tongue speaker have concentrated on syntax and morphology with related work in semantics, with few overt references to phonology, with little attention to graphology save through rote or rule spelling work and with a disregard for substance which not only marks the thinking of the course as pre-Sweet, but displays a lack of awareness of a fundamental aspect of human speech which is of key importance for the study of the social use of language.

5.3 The View of Substance

The terms 'graphology' and 'grapheme' in this discussion derive from the work of neo-Firthian linguists and they are well

glossed by McIntosh (1961b). Graphology is to written language what phonology is to spoken; graphemics answers to phonemics and grapheme to phoneme. Thus, graphemes are the units out of which morphemes are built. They are minimal meaningful units of the writing system. For this reason graphology is sometimes equated with orthography (Halliday, 1961:1.7) or writing system although it should be noted that the two last terms are confusing in the context of educational research since certain of their uses confuse the linguistic issues involved. Nineteenth century school textbooks follow a Johnsonian classification of work into orthography (observations about spelling, syllabification and letter combination), etymology (the parts of speech and word derivation), syntax (arrangements of words) and prosody (rules of versification and correct oral reading). Orthography is still thought of by educationists and certain linguists as dealing narrowly with the art of spelling correctly and the conventions of combination of letters is defined with correct spelling only in view (Pei and Gaynor, 1960). The term graphology, however, subsumes the concept 'graphic substance' (cf. Abercrombie, 1967:1; Bolinger, 1968:13; Mackay and Thompson, 1968:5) and embraces the concepts of an accepted writing system and conventional spelling system. The term also extends, interestingly, to cover the idea of the marks of written language as information. Since there is a finite restricted alphabet, its symbols form a closed system in terms of which Halliday's concept of information (1961:1.8) (cf. Cherry, 1963:177-180) would seem to be relevant. The adoption of the term graphology then, widens

the scope of discussion of the written medium in a useful way. It does not exclude, for instance, a discussion of conventional writing systems in the manner of Firth (1937:IV), Barber (1964a:II), Chao (1968:8) and others.

In the approach to graphology implicit in our materials we intend to go further than identification of the grapheme. We are concerned with perception of the physical characteristics of the written medium by which marks are invested with the distinctive features of the graphology of English, - an area little explored by rigorous linguistic description. Quirk (1959:30) points out that, because of redundancy in written language, it is not always necessary to see with equal clarity all the distinctive parts of letters (graphic information) to comprehend their graphological meaning. Perception theory and information theory are thus at least partly relevant to the handling of the graphology of language. These are both areas of paralinguistic importance. We find, however, that theories of perception and theories of information make bad bedfellows since they are, generally speaking, in sharp contrast with each other. Information theory has a well documented mathematical dimension involving considerable rigour of approach discussed by Cherry (1963:2.2, 3.2.1) but there is good reason for not involving these considerations in graphological discussion of linguistics, since, despite the rigorous mathematical apparatus of information theory, there is no clear application of it in dealing with distinctive features of graphology. The use of both the psychology of perception (after Vernon, 1962) and the ideas of recent

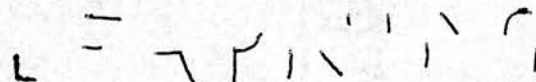
work in information theory (cf. Miller, 1951; Cherry, 1963; Lyons, 1968) are secondary to our intuitive recognition of what might be called the 'graphologicalness' of a written item.

For example, Cherry has argued that the ability to predict word boundaries increases as the number of known letters increases. The mathematical implications of the choice of a succeeding letter are known as transition probabilities in a stochastic process whose mathematics are proposed by Shannon (1948) to be those of guessing probabilities. These are catered for by Zipf's law. Cherry (1963:106) and Lyons (1968:90, 94) point out weaknesses in Zipf's law in linguistic applications, however. Information theory is worked out largely in terms of digraphs, that is sequences where two information units are involved. Cherry clearly sees language in Zipf's terms as a Markov chain only. The limitations of this view of language have been exposed by Chomsky (1957:23) and are admitted by Cherry (1963:181). It must not be assumed, however, that the successful handling of the mathematics of trigraphs, whose difficulties are referred to by Cherry, would solve the information problems associated with the native speaker's recognition of graphic form. Natural languages have a wide and variable range of choices involved in their systems; for example, there are visual, syntactic, systemic and semantic cues involved in recognition as well as broader features of situation. Clearly the mathematics of this processing of information would be far beyond present techniques and, further, even if they were available, would not necessarily clarify the speaker's response to

graphology in an educationally interesting way.

The view taken in the teaching of our course is eclectic. We should derive what orientation to graphology we can from information theory and apply it to linguistic elucidation of the graphological medium in our work with native speaking children, fully recognising our pupils' superiority in language prediction and choice over any system yet formalized as transition probabilities.

In the educational use of perception we have found it useful to demonstrate to native speakers that there is a minimum level of graphic information required before we can structure marks into a recognisable word. Thus a 'fading' technique is used in 2/A/2. The pupil is asked to read off this word:



Other blackboard examples reinforce the point that the physical marks of language must (a) be sufficiently rich in information for the distinctive character of each symbol to be appreciated and (b) reveal a sufficient number of characters in the word for the 'gestalt' of the word to be discovered.

The distortion of graphic form adds 'noise' to the information of the graphology (cf. 2/A/2: Work 1). Idiosyncratic formation of the characters leads to loss of information, e.g. in signatures, yet the social information of the scrawl is high. We know ideographically whose signature it is, but the language information of the graphology is low since we cannot make out the name itself (see Work 1(c)).

The addition of information of a contextual kind via graphology is introduced in 2/A/2;(Work 2). How a text is set down may give the reader an impression of the worth or significance of the text in socio-semantic terms. This emphasises conventional aspects of graphology such as lay-out and typography which the experimental work with these materials confirmed was a fertile source of mother-tongue reaction. The consequences of lay-out changes are introduced in 2/A/2;(Work 3 and Research); the fresh and dynamic contact with the materials is used as the discovery key to a class study of intonation and meaning in 2/A/3.

5.4 Phonology/Graphology

The relationship between graphology as a technical term and phonology has been briefly referred to in 5.3. Taking medium, as Abercrombie uses the term (1967:I) as a grouping of the level of substance, and a level at which substance is seen to be systemically patterned, we can identify phonology as the patterning of sounds in a meaningful way in language. Halliday (1961) regards phonology as the linguistic link between phonic substance and form. Phonology is linguistic as opposed to phonetic and it enters into a patterned relationship with form, for example in the relationship set up between systems of intonation and systems of grammar (Halliday, 1963b; 1966e:VII; 1967b). Within this methodologically useful area several different language systems are described; the phonemic relationship of the sounds of a language; the intonation patterns and the stress patterns of a language. It is important to emphasise

that these realms of phonology are aspects of sound patterning sufficiently distinctive for different descriptions to be used in handling their functions, but linked in the most abstract way in that all are organizational patterns of language sound. This grouping is a key factor in the organization of materials in this course and, as 2/A/3 confirms, involves intonation and stress features of language as general discoverable features of the language which are intuitively objectified as significant aspects of the medium.

The link between graphology and phonology has been exploited by means of a convenient use of the redundancy features of written language. The semantically suggestive effects of certain graphic manipulations are well known to typographical designers and lay-out designers.¹ Words can become pictographic by manipulation of the graphological symbols. Ideally, a moving medium such as film offers the best resources for exploiting the word as a pictograph, but there are enough redundancy features in printing to establish through the printed page (a) that there is a level of language organization concerned with sound patterning and (b) that this level may be seen as being in contrast with the semantic level of the language. To tease out referential meaning, for instance, from graphological and phonological organization is a very useful operation in teaching the native speaker. The initial process in becoming rational and articulate about language is to categorize language in an analytically

1. See Typographica (1962) No.6 (Supplement).

meaningful way; separation of levels is fundamental to this. Analysis in this fashion must not be taken to destroy the unity of language. If levels are presented as intuitively satisfying aspects of language the undifferentiated lump of language will both be analysed and be seen to be coherent within one overall view of language.

The semantic role of graphic manipulations is an area of the course in which, in the teaching, there was strong evidence of intuitive recognition of the semantic issue. Children quickly recognised the principle involved and produced their own designs; classes laughed readily at the examples and there was little doubt that the laughter was a clear evidence of insight. In the materials the semantic role of manipulations precedes the more abstract role of the graphic manipulation as a visual device marking intonation. Section (i) of 2/A/3 involves four words as pictograms of their own meanings; Section (ii) uses the same four words manipulated in another way to show intonational profiles, two for rising intonational patterns marking questions (tone 2); two for intonation over a word normally spoken in declarative vein (tone 1). Section (ii) somehow makes words 'look like' their sounds, while (i) makes them somehow 'look like' their meanings. In the latter part of the work section of the lesson we draw attention to stress features and meaning by the more conventional recourse to underscoring.

The idea of the 'bent' word as a marker of intonation patterns is well known to teachers. Bolinger (1964:282ff.) and Thomas (1965:136) illustrate its use clearly; in many

pronunciation courses diacritics marking intonation affect the shape of words used, for example the device of marking words with graphs of intonation running through the type is a common feature of second language learning texts, e.g. Stevens (1968); In its most exotic form the diacritic becomes pictographic, as in Palmer (1933) when pattern forms give intonation patterns said to be like 'a swan', 'a ski-jump', etc..

The succeeding lesson in the course (2/A/4) reinforces the distinction between patterns of the medium and semantics by exploiting the onomatopoeic ability certain 'words' have to indicate in their pronunciation something of the sound of the event in the world. This feature of pronunciation gives us two dimensions of item; the spelling which attempts to characterize a sound without the graphology itself necessarily being a spelling of a common lexical item, as Ai...i...eeee in 2/A/4(11), and the accepted word spelling which carries some accepted features of 'onomatopoeia'. It would be difficult to establish the point at which a conventionally acceptable symbol like 'Atishoo' ceases to be a mere 'sound picture' and becomes accepted as part of the English lexicon. Yet the existence of a set of items in distinction to onomatopoeic usage of common words is clear to native speakers. Often additional features of graphic substance are added to 'sound pictures' to make them more realistic, e.g. lines of dots, increase of the size or boldness of certain letters or semantically significant graphic substance such as smoke wisps writing the sound of gunfire in strip cartoons etc.. While it is one valuable by-product of the lesson that native speaking

children should discuss these features as observed phenomena of their language world, we recognise the 'art' dimension of graphics as peripheral. The central teaching issue of this lesson (2/A/4) is that the word as symbol may carry situationally meaningful features in its graphic substance and form.

The obvious opportunity to link this area of discovery with descriptive prose and literature is taken, and the resourceful use of onomatopoeia in excerpts from five poets is studied by the pupils (2/A/4). These examples are in a progression of difficulty, with Spender stretching even the most able child of 13-14 years of age (see 2/A/4, Work 3). We do not apologise for making pupils reach up to knowledge, however, since the subjects tested included pupils of high I.Q. and the mean intelligence overall was above the average.

5.5 Grammar (2/A/6,7; 2/B/12,13,15,16)

The background of traditional grammar exercises in the schools under experiment may best be illustrated by a quotation from an examination paper set to a control group in the ordinary run of classwork in 1967-68.

- (a) Analyse in a table the following sentence:

While he was recovering from a serious illness, the architect came to realise with gratitude that God, whom he had admired as the great builder, was also the great healer.

- (b) Name the kind of sentence in (a)
 (c) Parse fully the five words underlined in (a)

This test embraces the general analysis of a sentence into clauses, the identification of sentence type in terms of number and kind of clauses involved, and the parsing of parts of speech.¹

General analysis subsumes particular analysis of simple sentences, as single-clause sentences are called in traditional courses. In practice, particular analysis is disposed of in the late primary and early secondary school and is never used as an adjunct of general analysis.² The pupil is required in

1. The response to the questions would be these:

(a)	CLAUSE	KIND	RELATION
	1.The architect came to realise with gratitude	Principal Clause	Independent
	2.while he was recovering from a serious illness	Subordinate Advb. Clause of time	Modifying 'came to realise'
	3.whom he had admired as the great builder	Sub. Adjective Clause	Qualifying 'God'
	4.that God...was also the great healer	Sub. Noun Clause	Objective after 'realise'

(b) This is a complex sentence.

(c) he: Pronoun, personal, 3rd person, nominative, subject of 'was recovering'.
from: Preposition governing 'illness'.
gratitude: Noun, abstract, singular, 3rd person, objective after preposition 'with'.
that: Conjunction, subordinating, introducing noun clause.
also: Adverb, modifying 'was'.

2. 'The old man with the money quickly entered the dining room.'

SUBJECT		PREDICATE			
The old man with the money		quickly entered the dining room			
SUBJECT WORD	ENLARGEM'T OF SUBJECT	VERB	EXTENSION OF PREDICATE	OBJECT	ENLARGEM'T OF OBJECT
man	the old with the money	entered	quickly	room	the dining

particular analysis (a) to identify simple sentences, (b) to make a logical analysis of the actor/action/goal type, and (c) to classify modifying elements of the units of the clause isolated. It should be noted that this procedure places heavy reliance on semantic definition of 'sentence', and on mother-tongue comprehension of the text. It ignores word order as a syntactic feature, and in its 'bracketing' fails to leave text order undistorted. Further, ambiguities, e.g. 'dining room' embedding etc. are left unanalysed.

A definitional confusion exists between particular and general analysis. A sentence is taken to mean 'a combination of words expressing complete sense', and, while this definition is applied to the simple sentence without attendant structural criteria, the clause in a complex or compound sentence is identified by grammatical method. Pupils involved with general analysis are taught to identify finite verbs and to assume that for every finite verb there is a clause. Occasionally a count of conjunctions and relative pronouns is used as a measure of subordinate clauses. Principal clauses are identified as distinct from subordinate clauses by their semantic independence, but this criterion is not applied to subordinate clauses, which are clearly dependent.

'Sentence type' in traditional school work means labelling the sentence as simple, complex (one or more subordinate clauses) and compound (two or more co-ordinate principal clauses). The double, multiple or compound-complex sentence classifications of more involved forms are largely ignored in schools.

Gleason has shown that the traditional definitions of sentence type do not effectively describe the eight main sorts of sentence met in English analysis (1965:331). Further, the distinctions between principal and subordinate clauses, although prescriptively defined, do not stand up to practical inspection. They are general terms which grossly over-simplify the description. These blanket terms imply basic similarity within each group, yet a consideration of the three sentences given below will confirm that subordination is a far from satisfactory term.

1. The old man who had the money arrived.
2. The old man, who had the money, arrived.
3. The old man arrived, and he had the money.

To identify, as traditional school grammar does, both sentence 1 and 2 as having the same structure of clauses not only ignores clearly indicated phonological criteria differentiating them, but connives at their essential difference semantically. To identify sentence 2 as a complex sentence, with one principal clause and one subordinate clause is anomalous in view of the strong structural and semantic similarities between 2 and 3. Yet sentence 3 by traditional criteria would be classed as compound, with two principal clauses.

Considerable difficulties arise in class practice when so, for, yet and still are proscribed as subordinating conjunctions. These and further considerations do not exhaust the pedagogic problems arising from the traditional view of analysis in schools, but they do clearly indicate certain directions in which reforms which we have suggested bear on the handling of the syntactic

side of the experimental course.

A pedagogic grammar for mother-tongue applications should be cognizant of pupil intuition of dependencies, and one particular interpretation of this axiom is that a pedagogic model should identify a deep grammar as a semantically characterized array of relationships, for example in the manner specified by Halliday (1966b, 1967a, 1967e passim). Traditional grammar in schoolwork, such as general and particular analysis, clearly attempts to specify the deep stratum of grammar, and where work in developing awareness in this field is proposed, because of existing attitudes, there is little difficulty in orientation experienced by the pupil. For example, transitivity relationships which identify subject as initiator, subject as actor and initiator, subject as actor only etc. (Halliday, 1967e:42) and the concept of the clause as organized message (Halliday, 1967a:1) are perfectly compatible with the semantic orientation of particular analysis and the parsing operations associated. However, just as we might argue that 'a structure is not defined by its realizations' (Halliday, 1966b:59), so we might hold that a clause is not adequately analysed by deep structure dependencies alone. In mother-tongue pedagogic method, a segmentation of the clause showing surface structure is an important complementary process to semantic awareness of dependencies in the deep grammar. A purely surface bracketing by Bloomfieldian approaches, exemplified by Fries (1952), Wells (1947), Bloch and Trager (1942), and their followers, involving listing of surface signals, and a limitation of grammatical description to

distributional issues is neither intuitively satisfying to native speakers (e.g. in ambiguity) nor powerful as a descriptive theory, but, as we have argued above, surface and deep analyses must both contribute to an effective school grammar.

The description of syntax in terms of a chain of events, in the manner suggested by Nida (1960) and Fries (1952), has been shown to be inadequate in psychological terms by Lashley (1951) and in linguistic terms by Chomsky (1957). Lashley (1951:181) showed that language as an aspect of human action cannot be explained in terms of a succession of external stimuli (as Watson, (1920) had suggested) and, further, cannot be explained as a simple associative chain, psychologically, since speech involves the interaction of several neurological systems and since it is demonstrable by considering a word like / rait / that a lexical item has no temporal 'valence'. That is, it may occur as right, write, wright, rite, in many grammatical roles. Meaning for an utterance is not determined by sequence alone, but by a deeper set of relationships not characterized by chain association (Bar-Hillel, 1954:230). Chomsky (1968b:2) has referred to Lashley's critique of chain association theories in most favourable terms, holding that he showed clearly that, contrary to the prevailing psycholinguistic and linguistic ideas of the forties (and fifties), there must be abstract mechanisms of some sort underlying language use, and these underlying mechanisms are not analysable in terms of association; nor could they have developed by any such simple means. Chomsky held that Lashley's perceptiveness went unnoticed for a decade

and he seems to suggest that until the publication of Syntactic Structures (1957) linguists, psycholinguists and psychologists ignored the strong case against association models for the description of syntax.

Chomsky's case against finite state Markov grammars (1957: 18 et seq.) is carried in a consideration of three simple languages whose 'alphabet' contains only the symbols a,b. He demonstrates that a finite state grammar will not characterize even these simple 'languages' and by inference English may not be so described. 'Hence it seems quite clear that no theory of linguistic structure based exclusively on Markov process models and the like, will be able to explain or account for the ability of a speaker of English to produce and understand new utterances, while he rejects other new sequences as not belonging to the language.' (1957:23).

Constituent analysis concentrates formally on a segmentation of sentences in which there are layers of immediate constituents, 'each lower-level constituent being part of a higher-level constituent'. (Lyons, 1968:211). From an original Bloomfieldian notion, constituent analysis developed as a formal statement of distribution of constituents in structures, and, as the phrase structure part of transformational generative grammar, has been further formalized and expressed in terms of a rigorous mathematical re-write system of rules. Chomsky's expressed goals for linguistic theory concern themselves principally with these rules (and transform and output rules) in a highly abstract way. (1966:10). In terms of method of segmentation, however, a

linear bracketing or 'parsing' operation performed at various levels of generality and yielding a tree diagram (a hierarchical branching diagram) is a model available for pedagogic use.

Pooley (1957) demonstrated a school grammar scheme based on a slot-and-filler technique together with an immediate constituent analysis; Postman (1963-66), Mende et al. (1961), Bowden et al. (1963) and others discussed by Kreidler (1966) make specific use of phrase structure grammar as a classroom method of analysis and Roberts (1964), in so far as his programme is a school text, and Thomas (1965) in his teachers' book, make use of phrase-structure grammar as a principal component of a statement of Chomsky (1957) for school orientation.

Criticisms of phrase-structure grammars have centred on their formal inadequacies. Postal (1964b:Ch.7) examined the weakness of the model and, in the light of his consideration of eight main conceptions of phrase-structure grammar, he made ten points in which all the models examined failed on formal grounds, e.g. Wells (1947) 'proveably assigns the wrong P-markers to co-ordinate constructions'. (1964b:73). The dialectic of Postal's thesis is mathematical. Given a set of formal properties which a phrase-structure grammar is required to fulfil, he attempts to show that the major approaches to segmentation of sentences in linguistics, in recent times, do not fulfil the formal requirements, i.e. do not match Chomsky (1957). These are then, by definition, inadequate characterizations of phrase-structure grammars. Halliday (1961) is surveyed in an appendix of this critique as if his proposals were a phrase-structure

grammar of the Chomsky (1957) order, and is rejected because of formal inadequacies (1964b:113-114). We must note at this point that attacks on phrase-structure grammars (and on grammars asserted to be such by Postal) do not constitute an attack on pedagogic method. They represent a debate within linguistic theory. The goals of linguistic theory may be entirely alien to educational aims in the use of that theory. Thus, in the description of a grammatical model for use in the experimental course attached to this thesis (Appendix B) our discussion of a 'many I-C's' approach and a 'few I-C's' approach (after Hudson, 1967) does not constitute a discussion of theory, but of application.

In our view, it is inappropriate to examine data-centred descriptions in terms of criteria designed to evaluate generative grammars. In the first place a data-centred analysis of text is a characterization of a language without claiming to be a maximally generative statement of speaker-hearer competence. Thus an application of a Hallidean model with surface segmentation and a deep characterization of syntagmatic and systemic dependencies cannot be taken to be either descriptively or explanatorily adequate in Chomsky's terms since it is not a formalized generative statement within rationalist theory. Further, as a positivistic characterization of language generalized from performance (text), it makes distributional and projective statements only of text characteristics in which situation, dialect and diatype play an important interpretative role. Generative grammar would purport to be a theory of language and mind, to be concerned with formal properties of the

symbol systems of grammar, to be idealized as to situation and participants and maximally projective in characterization of the grammatical sentences of a language. This is not to deny that Halliday's model (1961, 1966b etc.) is theory based, but to suggest, in the terms of his remark (1961:241, foot 2) that this particular grammar is not stated in Chomsky's generative terms. It may be that formalization of the grammar we have used would prove difficult, in these generative terms, but this debate would belong to theory, and cannot concern us, in detail, here.

Hudson (1967) has argued that approaches to the segmentation of the English clause centre on two methods of analysis, the 'few I-C's' method and the 'many I-C's' method. Wells (1947), Chomsky (1957, 1965) and Postal (1964) are typical of the 'few I-C's' approach, as indeed are all expositors of transformational generative grammars, where the P-rules are expressed as a constituency grammar in which the immediate constituents of S are normally two, but a relatively large number of further segmentations is required before the ultimate constituents are reached. The second approach, the 'many I-C's' method, segments the clause into a relatively large number of immediate constituents, 'each of which then requires a relatively small number of segmentations before the ultimate constituents are reached.' (Hudson, 1967:1). 'Systemic' grammars, such as those proposed by Halliday (1966b, 1967e, etc.), Huddleston (1965), also Longacre (1960) are of this order.

The approach to surface bracketing used in the grammar work of the experimental course has much in common with Davies (E.)

(1968b). Her exposition of a 'many I-C's' segmentation is based on Halliday (1961) principally, but the wider orientation of her approach to text as observed surface structure clearly implies a systemic deep grammar after Halliday (1967e,f,etc.). The method used is that of an informal semantic entry to a set of tests for structural function. Thus, Davies advocates two phases of structural analysis of the clause and its elements, (i) recognition of clause elements (ii) informal tests to establish the constituent role of the element identified. In (ii) a strong appeal to the native speaker's sense of grammaticality is made, e.g. in adverb-insertion tests, where initial surface recognition (under (i)) recognises 'a nominal group following the last word of the predicator in its clause (1968b:14), the test asks whether it is possible to insert an adverb word ending in -ly immediately before this nominal group without making the whole clause unacceptable as English (1968:15). The results of this test, expressed as a yes/no flow chart, leads to the identification of the recognised nominal group as either 'complement' (a 'yes' answer) or adverbial element (a 'no' answer).

Davies places more reliance on structural criteria than we would think appropriate for mother-tongue teaching method, although our materials show that simple identification of 'given' elements in sequence is used as a starting point both of clause analysis (2/A/6; 2/B/15-16) and nominal phrase analysis (2/B/12-13). The concept of the syntagm being a chain (after Halliday, 1963c) is used in the teaching, both in the handling of the segmentation (2/A/6) and in the establishment of syntax as an aspect of

grammatical form. The chain is shown to be a chain of places, with classes of element in these places (2/B/15). Unusual ordering of elements is embraced (2/A/6, Work3) and the difference between grammatical class of elements and semantically appropriate elements is distinguished (2/A/8).

It should be stressed that the stage taught in this experiment ($13\frac{1}{2}$ to $14\frac{1}{2}$ years old) is initial and the approach to the surface organization of the clause is introductory, although it is assumed that in the experimental groups, certain work in general and particular analysis will have been undertaken in the primary school and in the first year of secondary school. Introduction to surface segmentation is necessary to distinguish surface from deep analysis, and to identify a stratum which may be thought of as output or realization, at later stages of grammar work.

The more complicated issues associated with surface analysis are dealt with by a process of mention. For example, in 2/B/12-13, where the analysis of the nominal phrase by a synthetic method is given, in the chain structure noted (after Quirk, 1962:182 and Halliday, 1961:257) mention is made of recursion (2/A/12, Discussion 3). The dependencies in the deep grammar of pre-head elements in the NP are introduced in 2/B/12, Discussion 4. This orientation process is essentially one of familiarization at this stage, and one of our most important goals is to give only as much overt grammar work in the course as an initial stage demands, but to set the grammatical scene in such a way that natural development into more detailed analysis,

and into different strata should be possible.

A segmentation for school use must be relevant to the texts encountered and must be capable of replication on a characteristic selection of texts in the language. The memorability of segmentation, in our view, relates strongly to its relevance to native speaking problems of interpretation. Where ambiguity is known to exist in a text, and where a handhold on the ambiguity is made possible not only via meaning, but by synthetic segmentation of the structure, a memorable and relevant method is established (2/A/6, Panel (c), Work 2/B/14, Work 1). Further, where the segmentation can be shown to be helpful in literary analysis in at least a contributory way, the memorability of the approach is reinforced. Thus, Stephen's The Main-Deep, a poem from a school anthology, can be shown to have a close inter-dependence of structure and meaning (2/B/13). A noun phrase is co-extensive with the first stanza, and we can argue that this verse is also semantically complete. The following two verses display an arrested noun phrase structure with extensive use of recursion at the pre-head stage, which continues to the end of the poem. Just as no psychological 'rest point' is reached in the structure, we can suggest that no semantic finality is reached in terms of a description of the wave action. The wave seems to gather prior to breaking, but consistent with the structure of the phrase, never completes its cycle, continuing timelessly, unbroken.

The role of rank in the grammar of the course is that of a frame of reference for syntactic operations. Rank specifies

the syntactic environment for segmentation at the surface and it locates the point of origin of given systemic networks in the deep grammar in the way Halliday envisaged (1966b:65). For example, the number system is given its point of origin at word level (2/A/7, Work 1) and from this point the gender system also begins (2/A/7, Work 3). The stage of work involved in the experimental course provides for the institution of the concept of system, but not for any extensive consideration of this feature of the grammar. In work designed for pupils of 16 years of age some attention is given to clause systems (imperative/indicative; interrogative/declarative; transitive/intransitive) with success (Currie, 1967b:51-61;75).

Further, a 'neutral' concept of rank (Halliday, 1966b:66) defines sub-strata of syntax and systemic origins in a way which counteracts an inexplicit system of rank in traditional school grammar. School grammars based on Nesfield and Wood (1964) distinguish sentence and word as ranks. Clause is regarded as sentence, syntactically, but as word in classification (thus, adverb, adjective clause etc.). Phrase is regarded as word grammatically (in classification) and syntactically. Thus by semantic classification of unit, sentence and clause are linked and are distinguished from phrase and word, whereas in functional terms within the syntax, clause, phrase and word are linked and distinguished from sentence. Sub-word elements are not treated as syntax by school grammars of a traditional character. They are included in dictionary work, with 'derivation', meaning of affix, prefix, suffix and root, dealt with by a process taken

from semantics and historical morphology.

Matthews' criticisms of Halliday's proposals for rank (1966) do not invalidate the usefulness of the concept for a pedagogic grammar. Halliday (1966c) emphasises the evolutionary nature of the proposals for rank within a systemic grammar, holding that a rank scale of five units makes explicit what has been latent in European traditional linguistics in sentence-clause analysis. A rank scale which permits rankshift and which is relevant to both surface and deep grammars is an invaluable framework for a school grammar, and, together with the concept of levels, constitutes the most important element in the grading of a course for native speakers. It is rank which gives the 'many I-C's' approach much of its cogency in the context of our experimental materials.

The concept of a notional deep grammar and a surface structural grammar, which our proposals embrace, derive mainly from work published by Halliday between 1961 and 1968. Lyons (1966, 1968) suggests an approach to syntax of the same order. His proposals (1966) indicate a sympathy with traditional 'parts of speech' and his suggestion that the base component of a transformational grammar should distinguish two different kinds of elements, 'constituents' and 'features', which he explains as bracketed categories and systemic categories (my term) respectively. (1966:210). There are clear (and acknowledged) affinities between Lyons's proposals and those of Halliday (1966b) and Lamb (1964). While Lyons proposes his 'notional grammar' in terms of a generative theory, however, Halliday does not formalize his grammar in this way. But, as we have

argued elsewhere, Halliday has transformational implications, even if not formalized in terms of a phrase structure grammar and rationalist rules characterizing realization. Lamb's proposals, we should note, are also couched in realizational terms (1966:5). Huddleston (1965) and Hudson (1967) both expound aspects of Halliday, and use has been made of them in this discussion.

In our submission these features emerge as important re-orientational concepts in a pedagogical grammar. Levels of analysis provide a broad frame of reference and rank provides a critical structural grid within grammar; surface and deep distinctions within the grammar help to counteract the unco-ordinated proposals of traditional school grammar. But we note that the provision of a deep level in the grammar counteracts the mechanistic proposals of Bloomfieldian constituent analysis, and continues in an evolutionary way the role of informal semantic classificatory notions which form one point of entry into systemic analysis. The door is not closed to consideration of universal features of grammar under this framework, in terms of Chomsky (1965:118; 1968b). Finally, the important operational value of the segmentation of real texts, gathered from extant social and cultural uses in a language, is catered for. We would argue strongly that it is an important goal of the mother-tongue language syllabus, of which the experimental materials (Appendix B) are part, to promote an orientation to surface and deep layers in the grammar, of the sort proposed in this section, in the belief that this is consistent with mother-tongue insights to the nature and use of the native language.

5.6 Lexical Choice (2/A/8, 2/A/9)

The axiom which characterizes the attitude to lexis taken up in this section is stated thus by Halliday (1966f:149): 'When the most delicate distinctions and restrictions in grammar have been explained. . . there will still remain patterns which can be accounted for in formal linguistic terms but whose nature is such that they are best regarded as non-grammatical, in that they cut across the type of relation that is characteristic of grammatical patterning.' Halliday argues that these patterns are not only to be accounted for in semantic terms, but that a linguistic level of lexical choice is to be distinguished as part of the level of form 'complementary to, but not part of, grammatical theory'. Firth had made several references to lexis as a formal level as early as 1935 (see Firth, 1957:13) when he had referred to the formal scatter of words and contended that the function of the lexicographer was not to be found in historical semantics but in a more empirical form of language study which embraced contexts of situation and distributional occurrence of both grammatical and lexical items in them.

Halliday (1966f) did not set out principally to demonstrate that formal statements about lexis could be made and could be distributionally handled, but to argue that linguistic theory could embrace lexical statement at a level of abstraction far greater than that already made by dictionaries (1966f:150). The meaning of a word like strong does not lie principally in the original 'true' etymological derivation of the item studied as Skeat envisaged (1891:462), but also in predicting the frequency

with which it might collocate with argument in the context of the description of a debate, or with drink in the context, say of the discussion of drunkenness in certain social situations. The idea of words having patterned relationships with each other and ranges of choice associated is discussed by McIntosh (1961a) as a relevant aspect of lexis, and by Sinclair (1966a).

Research into the statistical side of this theory continues and need not concern us in detail here. Sinclair, who is conducting the statistical research, however, has attempted to sketch out a methodology (1966a) which we have largely followed in our own applications in schoolwork despite the fact that the method is not yet wholly confirmed by statistics. Taking Halliday's work as the justification of lexis as form, Sinclair offers us an interpretation of the terms collocation and set of considerable practical value. If a lexical item is taken to be a formal item whose pattern of occurrence can be determined in terms of 'a uniquely ordered series of other lexical items occurring in its environment' (1966a:412), collocation may be said to be the predictability of linear sequential occurrence of lexical items in the series and set the range of items available at a given point in that series for selection as lexis in the utterance. Thus we have a two dimensional relationship between collocation and set, the former being, like syntax, on a 'horizontal' axis, and set being, like paradigmatic relationships, on a 'vertical' axis (cf. Saussure, 1959). This set apparatus has been described by Halliday (1966f:153) as analogous with, but simpler than, system in grammar. Further, it is a principle of organization

well known to lexicographers, as the groupings in Roget's Thesaurus show.

Sinclair proposes node and span as technical terms of the study of lexical distribution; collocates are items within the span (1966a:415). In exemplifying the pedagogic value of these notions, while recognizing their embryonic nature statistically, we draw attention to the text below. The critical importance of selecting a span of sufficient size for a given test may be emphasised by considering such fertile metaphorical language as:

My salad days / When I was green in judgement

(Antony and Cleopatra, I.v.73)

If the span were two lexical items salad would be virtually unpredictable with days (but for the memorability of this metaphor itself and for its selection as the title of a recent musical); days would not readily be seen as a likely collocate of green and green would be seen as of statistically low probability as a collocate of judgement. With a span of three, salad and green, days and judgement are seen to collocate more predictably and the double, crossed metaphor is revealed as describable in lexis in distributional terms.

A native speaking child has, as it were, a cline of reaction to collocation in lexis. At one end is the easily recognized, banal cliché; at the other is the sense of surprise, or even shock, that the striking use of metaphor may produce. This reaction range is both essential to the proper reading of resourceful texts in English and a confirmation of the latent awareness in native speakers of relative predictability of lexis as a

feature of their language in use. One is impressed by playground riddles involving collocations in certain contexts (see 2/A/10) and with the thesaurus-like development of vocabulary in young learners in the primary school as discussed by S.E.D.(1956).

It appears likely, however, that social class language background is a vital factor in the adolescent's development and use of the resources of lexis. Bernstein (1965) summarized an attitude he had developed through socio-linguistic observations and intuitions in which he identified two main types of speech code, elaborated and restricted, in which different cultural uses of language according to social status involved different degrees of lexical and syntactical predictability. This socio-linguistic work confirms lexical restriction associated with social class.

The technique of dealing with the issue of lexical description in the experimental materials is handled in two main lessons, A/8 and A/9. The first of these lessons deals with the difference between the right kind of word for a sequence as opposed to the most effective choice of word for a message. Lesson 2/A/8 involves the idea of hesitation in speech being associated with range searching, after McIntosh (1961), not for the kind of word but for the best lexical item from a set. The pause attitude derives from work done in hesitation phenomena by Goldman-Eisler (1961) and discussed by Boomer (1962, 1965) and from observations which we have made in the Nuffield texts of child language under the Foreign Languages Teaching Materials Project in which eight and nine year old children show range-searching associated with pause phenomena within what appear to

be pre-selected syntactic frames in which grammatical classes of item searched were not at issue. For example, a range-search for a nominal like 'expedition' may recur in the child's speech but lead after a filled pause (...em...) to a selection of 'thing', and again be repeated within a few lines as a frame with 'expedition' as its nominal. This feature of native use of language is exploited in the grading of lesson A/8 in which a distinction between levels of grammatical choice and lexical choice is made.

It would be wrong to impute from this treatment of the language that English was being presented as a Markov chain of events as discussed by Chomsky (1957). Rather, it should be seen that the pre-existence of the 'frame' of syntax implies that the deep grammar dependencies are specified and a selection of lexis for the realization at the surface is being undertaken. This we call the stage of lexical search. For example, the search for a word like 'spline' might take place, credibly, after the selection of the appropriate transitivity system and mood system (etc.) purely as a realizational feature of the output.

Hadn't the...em...thingummy broken by then?

In terms of selectional rules (Chomsky, 1965:IV; Katz and Postal, 1964:12 ff.) a range-search might be thought of as a semantic process in language generation. Thus thingummy has semantic features very similar to, but not identical with the missing word spline. Chomsky has recognized that lexical selection is only marginally involved in syntax (1965:163) and he proposes that selectional rules be dropped from the syntax and that their functions be taken over by the semantic component

and within this component what might be termed degrees of deviance of lexical (as opposed to syntactic) choice are accounted for. There are difficulties in this, however. Katz and Postal propose semantics as interpretation, whereas the Firthian scheme we have discussed sees semantics as input. Further, we are principally concerned in schoolwork with 'dictionary' items' rather than projection rules for lexis based on hypothesized underlying semantic features.

Within the terms of our study, we feel that Firth's basic ideas of collocation and set present an intuitively satisfying approach to the study of lexical choice, even if the formal claims of Sinclair and Halliday have not yet been fully worked out. Further, the strong analogy between syntagmatic and paradigmatic treatment of grammatical features implicit in the linguistic background to our course offers a weighty strategic reason for adopting the same abstract organization for a study of lexis. That this study is catered for by a broadly Firthian view of language makes for a degree of coherence in the grading of the course which we believe to be valuable, although many of the linguistic features may be described by way of other theories.

In the two lessons under discussion, 2/A/8 and 2/A/9, the texts studied and the work undertaken range from the idea of collocation in colloquial utterances, to jokes of wrong collocation and finally to a study of metaphor in a Keats sonnet. Only the most able can satisfactorily handle A/9(Work 4).

5.7 Description of Language Variety (2/C/18-24)

Language is peculiar among systems in that it abuts on reality in two places instead of one.¹ That is to say, language has a formal component of organization, which might be said to carry the information of information theory (Halliday, 1961:246), and a context of use which is principally non-language in character. Firth's view was that both form and context were modes of meaning (1964:190) and principally from the semantic theory of context which he proposed (after Malinowski) a description of 'register' or language variety study has grown up. A definition current in register studies is, 'Register is the general term used for the varieties of language, or sets of language patterning obtained by relating situational and linguistic groupings' (Ure, 1965). The correlation of situation and form in description of varieties is an important field in mother-tongue language courses.

Varieties of language, in the sense of the term described above, are intra-lingual phenomena; they presuppose une langue. Catford (1965) and Gregory (1967) and others in the literature have pointed out that a 'whole language' is not an operationally manipulable concept. Varieties then may be regarded as sub-languages, and various proposals have been put forward giving a basis for recognition of the variety. Catford

1. This remark owes much to M. Joos, quoted by W.S. Allen in his inaugural lecture (1957) On the Linguistic Study of Language in P.D. Stevens, Five Inaugural Lectures, Oxford, 1966, p.22.

(1965) and Halliday et al. (1964b) and Halliday (1966a) show that a user's variations in language variety may be regarded as dialect in the broadest sense. Variation of language according to the use has been called diatypic variety by Spencer and Gregory (1964:100), Gregory (1967:185). Halliday et al. (1964b:77) and Halliday (1965:6) specifically refer to this approach to the sub-language when they use the term 'register'. In school courses, both user and use distinctions are valuable, but it is principally the latter which provide a pedagogical procedure for class work.

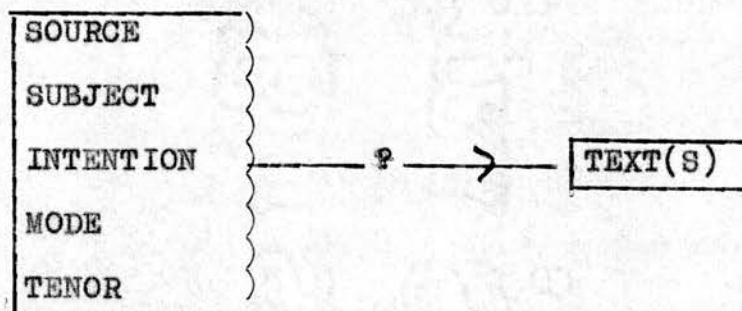
Studies in language variety find their greatest theoretical difficulty in the classification of situation. Grammars of various kinds, together with associated phonological description and graphological considerations may be held adequately to categorize form, but there are semantic difficulties in describing situation. It is indisputable that we cannot completely describe situation, but our inability to describe it fully is an insufficient reason for not describing it at all. Firth's notion of situation may be difficult, as Lyons (1966a: 288) notes, but there are clearly very many identifiable features of situation which we find valuable in a descriptive sense. In grappling with situation it is very much a case of clothing the universality of situation with categories in much the same way as Ullmann (1962:246) noted we categorized the spectrum into wavelengths. The extent of situation is discussed by Lyons (1963:85) and although he takes basically the same point of view as Firth, he expresses it more abstractly, with little direct advantage to the teacher. Both speaker and hearer and

events and objects and 'various factors and features relating to these objects and events' are situational features taken into account by the speaker (1963:85). This very broad treatment of situation increases the difficulty of description of utterances (cf. Lyons 1968:413). For pedagogical reasons, we are obliged to be relatively crude in categorizing situation for the purposes of the teaching of varieties.

Halliday et al. (1964b) propose a workable classification: 'registers. . . may be distinguished according to field of discourse, mode of discourse and style of discourse' (1964b:90). Spencer and Gregory (1964:86) confirm this tripartite division of situation in their method, suggesting field, mode and tenor, the latter difference being a terminological one only. That is, we are limiting the pedagogically interesting features of situation to questions about the purposive role of language (field), the utilization of different aspects of media organization in contexts (mode) and the addresser-addressee relationships between participants (tenor). These have been argued to be the more 'linguistic' aspects of situation by Ure (1965:3.5), contrasting with the more 'intuitive' statements about register, which depend on experience of language (Ure, 1965:4.2).¹ We

1. Miss Ure appeared to retain this distinction in a discussion of my paper 'Some Linguistic Aspects of Rhetoric' given at the Edinburgh conference of the British Association of Applied Linguistics, 1968. She suggested that teaching English as a mother-tongue gave one the right to use intuition as a key to variety; teaching English as a second language had the development of such intuitions as a goal.

propose source as a contextual pointer to variety, of value where mother-tongue speakers are involved. Further, intention is proposed as a widening of the concept of field. The scheme used takes the following form:



In a linguistic description of variety, and in the associated approach to literary style, we take up an Aristotelian viewpoint; that is, we concern ourselves with the speaker, his subject and his audience. Field, as the technical delimitation of subject, is split into subject (matter) and intention; source is a contextual link between the type of text studied and the experience of the observer. In this aspect of variety it is interesting to quote a remark of Lyons (1963:83), 'The context of the utterance must be held to include, not only the relevant external objects and the actions taking place at the time, but the knowledge shared by the speaker and hearer of all that has gone before. . . In particular, the context of a sentence in a written work must be understood to include the conventions governing the literary genre of which the work in question is an example.' (1963:83). Further, Lyons argues that context also includes 'the tacit acceptance by the speaker and hearer of all the relevant conventions, beliefs and presuppositions "taken for

granted" by the members of the speech-community to which the speaker and hearer belong' (1968:413). This is a very important issue, not confined to literary genre. The non-art conventions of a text in journalism, advertising or commercial use are equally relevant to variety, and are coarsely similar to conventions of literature in that they are recognised intuitively (Leech, 1964). This aspect of variety study has been little dealt with in previous schemes, but not only pedagogical justification for its use is advanced here. Recognition of, let us say, journalistic use by intuitive recognition of a style is analogous to dialect study. As an aspect of user-based choice of variety it offers a development of the concept 'dialect' (Halliday, 1966a). Further, as an aspect of use-based variety study, it offers a socio-linguistic index with classificatory value for contemporary texts.

Intention was the key to traditional rhetoric: Campbell, for instance, held purpose to be the main factor in rhetoric, adopting a definition from Cicero, 'Rhetoric is the art or talent by which discourse is adapted to its end' (1776). Grierson's more extensive definition also singles out purpose (which glosses our intention) as 'the main determinant' of rhetoric (1944:24). In bringing this concept into a scheme for the description of varieties we wish to suggest that in some measure the features of descriptive rhetoric, which we identified in Chapter I of this thesis with the revived Aristotelian approach set out by Grierson (1944), is well handled by a linguistic view of variety. The idea of a linguistic rhetoric

is here presented as a descriptive device, not as a prescriptive instrument in the manner of idealistic nineteenth century approaches on the one hand, for example Bain (1869, 1887), and modern American rhetoric approaches where composition is presented prescriptively, as in Borgh (1963) and Christensen (1967). It is not a misrepresentation of Borgh and Christensen to maintain that they prescribe. It is true that they derive the patterns they teach from analysis of intuitively acceptable passages, but it is incontestable that these become for them 'correct' and are applied consciously as directives. Our study of varieties is rhetorical in that it employs objective techniques of description, including intention, and it is Aristotelian in the sense emphasised by Grierson (1944), when he held that Aristotle approaches rhetoric like a man of science, not for what ought to be there, but for what is.

There is confirmation of this view in the work of certain modern scholars of rhetoric, and in references to style in recent literary criticism. Ohmann (1964) put forward the thesis that contemporary ideas of rhetoric, however disparate, had more in common than they had in their differences. This common ground was detected as an attention to 'the whole spectrum of linguistic process' (1964:18). Ohmann saw this as lowering the barriers between speaker and hearer or writer and audience and shifting the emphasis of rhetoric towards ideas of co-operation, and social harmony. The consequences of this, one would argue, are seen in aspects of linguistic variety study. Modern rhetoric no longer approaches a text with the preformed idea of 'goodness'

and 'truth' as social values which a text must display. Social qualities, and the language vehicles which carry them, must be regarded as discoverable within, and inseparable from discourse. Frye (1963,1964) argued this case from the literary critic's point of view. Rhetoric is social and objective (1963:39) and in discourse it 'creates a community' (1963:41). An investigation of a user's knowledge of and about his language embraces both the nous and the dianoia of knowledge. Clearly, a linguistic approach to variety, such as we have exemplified in section C of the materials, makes use both of nous, which one would gloss in this context as insight, and dianoia, which one would interpret as knowledge of how language works.

One of the broad links between linguistics and philosophy which we would like to draw attention to in this thesis is that linguistic theory seems to fall within the province of necessary fact, while practical description is more concerned with the province of contingent fact. In a word, theory deals with sentences, and description extends to utterances. Necessary fact is amenable to questions of a rationalistic sort, that is, questions motivated by the aims of theory, - principles, relations, adequacy, economy, power, self-consistency etc.. Text description may be informed by theory, but concerns itself with many aspects of language which are in flux in a way not explicitly catered for by theory. Thus, the alternative surface realizations of a single set of deep dependencies may be seen as the concern of practical description while a specification of the underlying relationships, and their link with the realizations

may be held to be the concern of theory. Variety studies recognise this distinction in a way reflected in modern rhetoric. Nichols (1963) argues this point for style: 'It works in the area of the contingent, where alternatives are possible'. Two of the ways in which this feature of variety is used in the course may be seen in how intention is presented, and how mode is identified.

Intention is first explicitly dealt with in 2/C/20, where source is the principal focus of the lesson. One aspect of source discrimination is that graphological and cotextual evidence may, in certain cases, give a misleading effect. What appears to be a text set down in the style of subject A may, on deeper evidence, involving our experience, our matching of style to subject and our sense of extent of stylistic usage and other experiential aspects of stylistic usage, prove to be a text in field B. This constitutes parody (see 2/C/20, Work 3). The critical aspect of a text which identifies parody is writer or speaker intention. This aspect of style is further treated in 2/C/23 where an attempt is made to isolate the recognisable features of a style, and to identify cases of these features, deemed to be the norm for one field, being used as if appropriate for another.

We should note here that intention is closely related to the mood system of grammar and may be described either in terms of Halliday (1968d) or generatively in terms of 'speech acts' proposed by Thorne (1969). Clearly, what we describe as a contingency of utterance may eventually be resolved as a necessary feature of theory. The theoretical issue does not concern us here, however.

A report on classroom practice in intention is appropriate here. The age group taught in the experiment ($13\frac{1}{2}$ - $14\frac{1}{2}$ years old) may barely have been mature enough for parody. The two experimental classes under my own care showed themselves expert in identifying styles (food advertisement in a magazine, various obvious literary forms such as story, song, language phrase book and many others) but found themselves unable to produce parody easily. I would interpret this as a composition fault, and, while not wholly within the purview of this experiment, an interesting reminder that recognitory work in the mother-tongue is often deemed in a teacher's mind to be related to production at the same stage of maturity. One would argue that in the case of style, production lags well behind recognition. Further, it may be possible to show in subsequent experimentation that practice in 'creative' writing of the kind advocated by S.E.D. (1967:13) complements recognitory activity in language work.

Spencer and Gregory defined mode as 'the dimension (of discourse) which accounts for the linguistic differences which result from the distinction between spoken and written discourse'. Other definitions which substantially agree with this include Bowen (1966:39), Ure (1965:5) where the term used is medium, Halliday et al. (1964b:91) and Catford (1965:85). A distinction of kind exists between mode and either field or tenor. Whereas field and tenor may be envisaged as clines, that is continuums with known extremities, mode is an either/or distinction. A piece of discourse is either spoken or written. A very wide inter-relationship exists between spoken and written forms,

however. Written text may convey the qualities of spoken language, and speech may 'sound like a book'. The ability of discourse in either medium to evoke the characteristics of the other medium is a significant feature of variety and has been discussed by the principal writers on this topic. The view of mode informing the linguistic grading of the experimental materials attached to this thesis is in the tradition outlined below.

Basic to the distinctions of mode is a view of the relationship between writing and speech. The term mode implies more than a substance distinction; it infers a systemic distinction. Thus, speech and writing are taken to be semi-independent systems. McIntosh, in discussion of the relationships of speech and writing rejects the linear model of relationship expounded by Aristotle, - that there were mental events which were reflected in the symbols of speech, and these in turn were reflected in the symbols of writing (1961:99). While it is true to argue for diachronic speech primacy, and further, to argue as Abercrombie does (1965:84) that the letter is basically phonemic in origin, it would be misleading to regard writing as a second-class utterance system derived from and dependent on speech. Palmer argues extensively for speech and writing to be regarded descriptively as 'essentially two different languages' (1965:3). He shows media differences, spelling and pronunciation differences and formal grammatical differences indicating differences of paradigmatic structure and system. The view taken up in our own work is not so extreme as Palmer's, but is

close to McIntosh (1961); speech and writing as parole are sufficiently different from each other in form to be regarded as contrastive in their characteristics. The contrasts referred to operate at different linguistic levels and in the case of pause phenomena may be regarded as marginally paralinguistic (Crystal and Quirk, 1965:I). We do not doubt that many linguistic parallels exist in the description of spoken and written texts, and we recognise in terms of studies of langue, and competence grammars, that neither speech nor writing is language in the deeper sense, but that both are realizations of underlying forms. In a text-based study of varieties of language, however, as Gregory has pointed out (1967:197), the situationally specific description of styles is complementary to statements of competence. His view is one well recommended to education: 'the language event (is) both a manifestation of competence and an instance of performance (and it) must remain our point of departure and return' (1967:197).

The markers of spontaneous monologue and spontaneous speech in dialogue include various classes of pause. A study of pauses in transcriptions of speech reveals two broad classes (i) extra syntactic hesitations (breathing gaps, linking cadence pauses) and (ii) intra-syntactic hesitations (truncation, rejection, elaboration and range-searching). Rejection pauses may be followed by replacement of a structure or an item, or may involve no replacement. Intra-syntactic pauses may be filled or unfilled, that is, a random utterance (um, em, eh) may take up the gap in syntax. My hypothesis of pause classes has been derived from

an examination of texts of transcription of child and adult speech, a proportion of which was specially recorded. Extensive use of the transcriptions of eight and nine year old children's speech made by the Nuffield Foreign Languages Teaching Materials Project (Leeds) (1964) has been made, however.

A pause classification of these dimensions is too elaborate for the initial stages of mode recognition. Pause is one marker in spontaneous speech utterances, and although it is a salient feature, it would be wrong to suggest that it monopolised the description of casual colloquial speech. We have abstracted a simplified classification of pause phenomena for use in the recognition of speech text and these are exemplified in 2/C/18-19.

- (i) A gradation from transcribed speech to a written record within the conventions of written text is given as the first contact with the area, an initial filled pause, a very common opening characteristic of speech, is followed by a filled rejection pause and a cadence linking pause. In conventionalised 'direct speech' (ii) punctuation begins to take over the marking of the gaps, with the dash as the coarsest indication of pause within the syntactic frame. In (iii) no pause phenomena are noted, and punctuation alone gives a residual impression of the sound of the utterance.

Some exploration of the relationship between punctuation in conventional dialogue representation, and the features of spontaneous speech is valuable in schools, where writing has been dominant in the syllabus in the mother-tongue. The degree of 'realism' of a dialogue may ultimately depend on the extent to

which pause phenomena are represented. Timing of dramatic dialogue also depends on a productive interpretation of hesitations. In this stage of school work, knowing that pupils find the study of varieties a very new experience, no consistent exposition of characteristics of speech is undertaken in the two lessons under discussion, 2/C/18-10. Familiarization with the phenomena of speech, and active research in collecting evidence seem much more justifiable parts of a 'discovery' course. Further, comic texts with 'realistic' speech 'bubbles' can be used to raise issues such as transcription abstracting from the whole spectrum of speech in an utterance (2/C/19, Discussion, 1-3); the same lesson can deal with the conventional difference between speech transcription (or representation) and written text (Discussion 4, and Work 1). Productive reinforcement of the principle may be undertaken by asking pupils to interpret a short play extract from the point of view of making the actors (other pupils) sound realistic. The features of realism in this timing of dramatic text may be abstracted and discussed as far as the teacher requires.

One cultural-educational feature often encountered in resistance to this descriptive approach to speech text is that texts which do not appear to have the cohesion of writing are to be denounced. Hasan (1968) has discussed this point in guidance materials for teachers. Her argument that cohesion is to be interpreted by external (utterance) means, rather than internal (syntactic-grammatical) criteria in variety study is correct.

By criteria of internal cohesion, virtually all spontaneous speech text would be rejected. The 'deviations' would include subject drift, multiple subject reference (e.g. divorce, gas fires and tea pouring instructions) in one dialogue (Hasan, 1968: Text 3), broken syntactic patterns (2/C/18(1), 2/C/18 Work 1). These features are in fact not deviant; they are standard. One has noticed the similarity between academic discussion, like Davies (1965:28-29) and much of the discussion in the Nuffield F.L.T.M. materials (1964) from the point of view of mode characteristics.

One further outstanding feature of speech texts, and a prominent marker of the spoken mode, is the use of reduced forms of verbs (he's; shd've; 'll). Phonologically these are transcriptions of weak stress over the items; graphologically they may appear to conventional eyes to be aberrant. 'Proper' speech shuns the reduced form, not so much because the full form will communicate better (Halliday, 1966a:54) but rather, we suggest, because of the dominance of written conventions in the schools. Conventions of this nature are clear markers of both mode and tenor (degree of formality of participants).

The linguistic items Davies calls stabilisers (1965:29) are usually related to B. Malinowski's socio-linguistic term 'phatic communion'. These items, which are lexically recognisable (I mean, as a matter of fact, in fact, well) are, semantically, virtually empty in the dictionary sense of meaning, although clearly they have register meaning. In some cases they are pause fillers. An example of this is well used initially in an utterance; it might equally predictably be em. We must note

however, that well and em are not equally predictable. Thus meaning relations of some sort must be concerned in the choice. Our classification phatic is coarse, but pedagogically useful.

The reflection in the variety of degrees of formal relationships between participants is dealt with in 2/C/21 principally. No simple classroom gloss of tenor better than 'relationships' was discovered. Tenor is a cline with extremities of maximum and minimum formality between participants. In class discussion, 'more friendly' and 'less friendly' was an adequate key, although a great deal of the social conventions of 'formality' are lost in this over-simplification. We must again stress that the initial stages of variety study, which these lessons represent, centre on a continuing interest in fairly easily recognised features of variety differences. Interpretation in terms of who might use a style, and to whom; of 'inferior' and 'superior' status of participants and of what action might follow an utterance if it were disobeyed, etc. served to illuminate the area sufficiently for the beginning of variety study.

We have already discussed intention, source and the implications of parody (2/C/20,22,23). These are not rigorous features of variety description, belonging, as we have noted, rather to a descriptive rhetoric than any systematic analysis of the linguistic features of register. Yet, it seems clear that no description of 'register' (in Halliday's sense (1964b:87)) can be valuable in the English syllabus as a whole unless it caters for that aspect of utterance meaning which lies in the speaker and his experience (cf. Lyons, 1968:413). This involves knowledge

of sources, of purposes of language and recognition of shams and jokes in language. One of the pedagogic problems in the juxtaposition of the more 'linguistic' register features with the more 'intuitive' features (intention and source) is that there may be lack of coherence in the course. In our submission, the concept of rhetoric embraces both. Further, in its new habit, rhetoric, as a competent descriptive instrument involving formal linguistic criteria, is a welcome, evolutionary revival in the English course.

CHAPTER VI

THE EXPERIMENTAL TESTING OF THE COURSE MATERIALS6.1 The Population

The pupils chosen for the experimental teaching of the course materials represent a cross section of the age group encountered in senior secondary schools throughout Scotland. All pupils in senior secondary schools are of academic ability, although the intelligence range might normally be expected to run from 100 to 140+. The lowest I.Q. in the groups tested was 92 and the highest 140+. The mean I.Q. of experimental subjects was 118.4 and of controls was 116.2. The Standard Deviation of the I.Q. of experimental subjects was 8.411 and of controls 10.543.

Senior secondary schools are selective (Appendix A). At the age of 11+ pupils in territorially eligible primary schools select promotion candidates on a combination of I.Q. and school-work tests and place the pupils in appropriate streams of secondary schools. Those placed in a senior secondary are expected to take 'O' level subjects, and the more able take 'H' level subjects in the Scottish Certificate of Education. Broadly, the population tested might be thought of as being from the top thirty-five percent of the ability range in Scottish secondary schools.

The stage selected for the experiment was the second year of the senior secondary course, that is, pupils who had successfully completed their first year, and whose ages on average ran from $13\frac{1}{2}$ to $14\frac{1}{2}$ years during the session. The second year was

chosen for experiment because that stage is deemed to be the beginning of the 'academic' education of the secondary pupil (see S.E.D., 1967). The first year often results in some internal re-streaming of classes; further, a part of the syllabus in the first year is given over to orientation work of a 'common course' kind. Thus, intellectual and administrative factors located the experiment in the schools.

A total of seven schools took part in the experiment, involving initially 381 pupils as experimental subjects (S) and 197 pupils as controls (C). Wastage over the session reduced this to an effective 302 subjects and 166 controls. Wastage resulted from class transfers and absences during the final tests. Thus the aggregate initial population (S + C) was 578 pupils, and the final (S + C) was 468.

The seven schools were varied in type within the category 'senior secondary'. A short description of each one is given below:

Knox Academy, Haddington. An East of Scotland rural senior secondary school drawing principally on the non-industrial county town of Haddington. Co-educational.

Holyrood Secondary School, Glasgow. A Catholic secondary school with a streamed layer, situated on the south side of the city in an area between an industrial centre and a residential area. Because it is Catholic, the population tends to be drawn from a wider area than a similar non-denominational school. Girls only in classes tested.

George Heriot's School, Edinburgh. A direct grant school of

considerable antiquity and distinction. This is a selective school with traditions of scholarship. Boys only.

Douglas Ewart High School, Newton Stewart. A rural senior secondary school drawing principally on the small county town and its agricultural hinterland. Co-educational.

Boroughmuir Senior Secondary School, Edinburgh. A large city senior secondary with pupils drawn from territorial neighbourhood, after selection. Co-educational.

Aberdeen Academy, Aberdeen. A large city senior secondary school drawing from the business and industrial population of central Aberdeen. Co-educational.

Kelvinside Academy, Glasgow. An independent 'Grammar' school, selective, with a senior secondary structure and courses. Boys only.

The seven schools in the experiment might be grouped informally into three classes:

1. Rural Senior Secondaries (Knox; Ewart)
2. City Senior Secondaries (Boroughmuir, Holyrood, Aberdeen)
3. Independent 'Grammar' schools for boys (Kelvinside, Heriot's)

6.2 The Experimental Model

The materials were designed to be used for one school period in each week throughout the school session, except for periods lost through examinations, school functions, holidays and other contingencies. All schools finished the course. In each school an experimental class (or classes) was chosen after consultation with the headmaster and the principal teacher of the English

department. Further, in each school a control class was selected, as close as possible in nature and ability to the experimental group. In Boroughmuir one control group and two experimental groups were selected; in Aberdeen Academy there was one control group and six experimental groups. An attempt was made to ensure that teachers did not automatically suggest the top class for experiment and the next lower class as control. In Boroughmuir and Aberdeen Academy the 'best' class was made the control. In the statistical handling of data a pooling of gains and co-variance results eliminated the individual school differences of region, sex, group selection and other contingencies.

The test 2/T/1 (Appendix C) was set initially and finally to all groups, both experimental and control. I.Q. was taken from school files, since all groups (with the exception of Heriot's) had I.Q. scores dating from the first year senior secondary stage. No other tests were necessary since a pooling of scores in the final analysis eliminated local variables, and I.Q. was dealt with by an analysis of co-variance (see 6.4 below).

The experimental subjects were given the normal course in English designed by the department of the school concerned, except for one period in each week, during which they would normally have studied English language. By arrangement with the schools the experimental materials, made up into a course called 'Discovering Language II', was used as the textbook for the language period by the normal class teacher. In Boroughmuir I took over the two experimental classes and in Heriot's I taught several of the lessons either for demonstration purposes (the

experiment had several interested visitors) or because of staff illness. All schools in the experiment had teacher briefings and demonstrations.

The control groups in each school pursued the normal English scheme of work together with the prescribed course in English language. This component of the syllabus varied from school to school, in some schools being a traditional grammar course and in others a text-based course of language instruction supplemented by the teacher's own grammar course. Over the whole group tested a thoroughly representative picture of the existing provisions for English language work for the second year senior secondary school was shown.

6.3 Test Construction

The purpose of a testing procedure is to measure in quantifiable terms the performance of individuals or groups in the attainment of a specified learning goal. An ideal assessment would include the following characteristics in its test: (i) that the content would be representative of every aspect of the domain in which achievement is to be assessed, (ii) the evaluation of the test should yield an ordered series of scores, valid in respect of some acceptable criterion and statistically relatable, score to score, as a true basis of comparison (Pilliner, 1968).

Clearly, practical limitations exist for test construction. No domain can be totally represented, and time for testing is short. Therefore, a test must make a principaled selection of

relevant matter from the area to be tested. In selection, however, the domain must be adequately mapped. In this selection, two very important questions must be discussed: one, what is the relationship between the test and the experimental materials; two, what is the role of linguistic theory in mapping the domain?

Wiseman (1961) has categorized tests into (i) syllabus-specific tests and (ii) achievement or goal-specific tests. The former sample and measure what has been taught, that is, they are geared to the syllabus; the latter measure the degree of achievement of the educational objectives proposed. The goal stated for the experimental materials was that they might, in part at least, make a native speaker able to be rational and articulate about the nature of his mother-tongue, and about the relationships which exist between a user of the language and his society. In terms of measurable achievement, this implies that a native speaker becomes more aware of the contrasts within texts, and more able to externalize intuitive and experiential responses to these contrasts, which we have argued are implied in native language behaviour.

The test used, 2/T/1 (Appendix C), attempts to measure native speaker awareness of the nature and social function of language. The course of experimental materials attempts to develop a rational awareness of English in use. The content of the course, viewed as a syllabus, is merely a means to an end, a way in which the specified aims of language education are to be achieved. In Wiseman's words, we hold that the test 'evaluates learning - and teaching - in terms of the aims of the curriculum,

and so fosters critical awareness, good method and functional content.' (1961:Ch.6)

In specifying the aim in detailed terms, to analyse and clarify the goal, linguistic theory is a necessary instrument. Linguistics is a descriptive instrument in parallel with the language. It maps the domain; without linguistic theory no description could be made of language other than in terms of broad social or cultural phenomena. In our view, the role played by linguistics in the field of specification of goals in language learning and in the assessment of progress towards them is comparable in importance to the grading of materials for teaching. Grading of materials and test items is the major point of contact between a linguistic description and the technology of education.

In summary, what we hold we have done in this experimental testing situation is three-fold: (i) we have made concrete what we state as our goal in teaching the language course (ii) we have explored the insights of the population by the test 2/T/1, by demonstrating firstly that these insights exist in the population tested and, secondly, that the experimental subjects advanced in these insights significantly more than the controls, (see 6.4), (iii) by setting up objectives and testing them successfully in vindication of our initial hypothesis we have implied content validity in the testing and teaching, which strengthens the claim that the linguistic grading employed is relevant to the insights of the native speaker and his needs in mother-tongue language learning.

The test, 2/T/1, is a multiple choice instrument whose

frames are graded by two aspects of linguistic theory to present a reasoned selection representative of the domain in which the learning is held to take place. (i) The concepts implicit in a theory of levels (2.2.2, and 5.2.2) grade the selection of the frames concerned with substance, form and aspects of context; (ii) the theory of variety ('register') informs the semantic side of the test. Two other kinds of frame may be identified; firstly, the initial set of three frames in an objective test of comprehension (Pt.2; Fr.2) and two frames (20,21) involved with reaction to deviant utterances.

The first four frames (Part B:1-4) in the body of the test make use of a taped cue, and they test the candidate's ability to hear contrasts in the language and to select a written answer relevant to the aural contrasts distinguished. Frames 5 and 6 deal with reaction to distinctive graphological presentation of text in set contexts; Frame 7 explores dictionary attitude, and opens up the way for Frs. 8, 9 and 10, which present homographic and homophonic items which can be semantically distinctive in different environments. Since no indication of how many contexts are right for each item is given, the candidate is required to be both productive and restrictive. A mark was given for each correct response, and a mark deducted for each wrong response in these frames.

The area of grammatical response was tested in two ways. Firstly, by an objective 'odd-man-out' technique. An introductory frame confirms the technique for pupils. The areas tested cover verbal phrase form (Fr.11), clause y. phrase form (Fr.12),

noun phrase modification (Fr.13), active passive construction (Fr. 14) and a reverse check on clause y. phrase form (Fr. 15). Frames from 17 - 19 inclusive use a technique of identifying from a given list of texts similarities to a pattern stated. Thus, Subject + Indirect Object + Subject Complement is tested (Fr. 17); Complex sentence structure with the advancement of the Adverbial clause is tested in Fr. 18; Adjective complement structure is identified in Fr. 19. Note the use of semantic distracters in Frs. 17, 18 and 19. The 'error correction' frames identify ability to allocate error to a specific area of language patterning, Frs. 20, 21.

Varieties of language are specifically tested in Frames 22 - 24. Ostensibly source is tested in all three, the styles are graded in difficulty in the following way: Fr. 22 presents a formally presented piece of document; Fr. 23 uses a grapho-logically distinctive lay-out for a text whose meaning relations may not be clear from the co-text; Fr. 24 offers an orthographic transcription of a piece of conversation, with pause phenomena marked and fillers indicated.

The basic hypothesis in using this test is that a linguistically guided course in the mother-tongue yields an awakened or proportionately more developed awareness of English as a language system, together with a proportionately increased ability to communicate the awareness of these language contrasts. The results computed for the testing (6.4) indicate that this hypothesis has been established as a feature of language learning under the influence of the materials produced. The test shows

proportionate initial awareness, together with control and subject gains. The subject gains over the pooled population (see Table 1) significantly exceeded the control gains over the same period. These results imply, inter alia, the content validity of the test used.

6.4.1 Analysis of Gains

The statistical technique used for gains analysis is analysis of variance (see Appendix D).

(a) Treatment of each School

1. A list of S and C gains was made and n(number) recorded.
2. An analysis of the differences between S and C groups, and within S and C groups was made and a significance factor was calculated.¹
3. This significance factor was checked by a t-test on the main gains and the significance calculated above was verified. (See Appendix D for 'significance'.)

-
1. The symbols used in the analysis of variance tables and in the t-test calculations are: df (Degrees of Freedom), SS (Sums of Squares), MS (Mean Squares), F ('Fisher' Significance Factor), NS (Not Significant), D (Difference), EV (Estimated Variance), se (Standard Error).

(b) Sample Treatment: Knox Academy. See Appendix E for other schools.

Gains from initial to final score for S and C

(Note: a negative sign means a gain from initial to final score.)

<u>S</u> (Subject)	<u>C</u> (Control)
-8	-4
-3	-8
0	-1
2	0
6	5
0	4
-2	-2
-2	2
-1	-4
-4	-3
-1	0
-4	5
-2	-5
-3	-4
-1	1
-1	-1
-2	-1
-6	-1
4	-1
-4	-1
-1	
-5	
-1	
<hr/>	
-39	-20 -59
n = 23	n = 20

	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Between Groups	1	5.947	5.947	.592
Within Groups	41	411.82	10.044	
<hr/>				
Total	42	417.767	15.991	.592

NS

Check by t-test. Mean Gains

The significance of the results by analysis of variance was checked by an alternative statistical procedure.

$$\text{Subjects } n = 23 \quad -39/23 = -1.695652$$

$$\text{Controls } n = 20 \quad -19/20 = 0.95$$

$$D = 0.64302$$

$$\text{EV of } D = \left(\frac{411.82}{41} \right) \left(\frac{1}{23} + \frac{1}{19} \right) = 0.938929$$

$$\text{se of } D = 0.968983$$

$$t = \frac{D}{\text{se}_D} = \frac{0.745652}{0.938929} = 0.76955$$

NS

Note: F should equal t^2

$$t^2 = (0.76955)^2 = 0.5922 = F$$

Conclusions for Knox Academy: mean gains higher for subjects than for controls, but not significantly so.¹

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1. The statistics model for this experiment was devised in consultation with Dr A.E.Pilliner of the Godfrey Thomson Unit for Educational Research. The computation was done by machine under Dr Pilliner's supervision. This part of the research was supported by a grant from Jordanhill College of Education research fund.

(c) The above calculations were done for each school (see Appendix E) and it was noted that the mean gains varied from school to school.

(d) The results were collected for all schools and are shown on Table 1 below:

TABLE 1

SUMMARY OF RESULTS OF GAINS

<u>Source</u>	<u>Subjects</u>	<u>n</u>	<u>Controls</u>	<u>n</u>	<u>Diff.(S-C)</u>	<u>Signif.</u>
Knox	-1.69565	23	-0.95000	19	-0.74565	N.S.
Holyrood	-3.80645	31	-2.14286	14	-1.66359	N.S.
Heriot's	-2.61111	18	-1.83333	30	-0.77778	N.S.
Ewart	-3.78947	19	-1.37500	24	-2.41447	Sig.at 1%
B'muir	-2.11667	60	-1.62500	32	-0.49167	N.S.
Kelv'de	-2.05882	17	-0.90000	20	-1.15882	N.S.
Aberdeen	-2.67164	134	-1.55555	27	-1.11649	Sig.at 5%
Totals*	2.636	302	1.506	166	1.130	

*Totals to three places.

(e) A groups x school interaction was carried out to discover to what extent the difference in the grand total mean gains between subjects and controls was reflected in each school. The individual mean gain (i.e. amount of rise) was consistent and very satisfactory. All schools showed S gains over C.

(f) A final analysis of gains was made taking in all schools in a pooled calculation.

TABLE 2 POOLED RESULTS OF TEST SCORES (GAINS)

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	
Subjs.v.Cont.	1	140.197	140.197	147.711	Sig. at 1%
Schools	6	127.702	21.284	22.310	Sig at 1%
G x S	6	5.725	.954	.115	N.S.
'Residual'					
Within Grs.)	455	3762.244	8.269		
Within Schs)					
Total	468	4036.588	170.704	170.136	

N.B. Within Grs. = Within Groups
G x S = Groups times Schools

Notes

1. Interaction of MS is small. This reflects the fact that in all schools the pattern was similar in that subjects gained more than controls.

2. To check the interpretation of the significance test, since interaction of MS is below expectations, G x S and 'Residual' (i.e. Within Groups/Within Schools) were pooled to give:

<u>df</u>	<u>SS</u>	<u>MS</u>
461	3767.969	8.173

This gives revised F's of 17.242 (1,461) for S and C, and 2.604 (6,461) for Schools. In both cases the verdict is the same as before, - both are significant at 1%.

3. Although, school by school, some of the significance tests are negative, nevertheless, when all schools are pooled, the overall effect is highly significant in favour of subjects.

4. The reason for the less significant results in the smaller groups is a statistical one (i) smaller groups do not give a reliable picture of the gains reflected in the scores (ii) a pooled treatment of gains eliminates random group variables effectively.

6.4.2 Analysis of Co-variance

(a) The analysis of gains does not take into account I.Q. as a variable, group by group and school by school. It is conceivable that the excess of S over C is entirely attributable to the differences of mean I.Q., group by group and school by school. Thus a co-variance analysis was undertaken. (See Appendix D)

(b) Treatment of each School

1. A list of S gains and C gains was made for pupils and I.Q.'s set down in a column beside each.
2. A calculation to show the significance of gains within groups and between groups was carried out (Table 3).
3. A calculation to show the significance of I.Q. within groups and between groups was carried out (Table 4).
4. An analysis of co-variance between SP, i.e. sums of products (Gains x I.Q.) and within SP was carried out (Table 5).
5. An aggregate table showing sums of the squares and sums

of the products was made for Gains and I.Q. and SP, between groups and within groups (Table 6).

6. An adjusted table with the effect of I.Q. removed was drawn up and the significance calculated (Table 7).
7. These adjusted values were then transferred to a pooled analysis.

Knox Academy: Co-variance (Sample of Treatment)

Table 3 (Gains)

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	
Betw. Grs.	1	2.210	2.210	.259	
Within Grs.	40	341.956	8.549		
Total	41	344.166	10.759		N.S.

Table 4 (I.Q.)

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	
Betw.Grs.	1	812.634	812.634	6.925	
Within Grs.	40	4693.846	117.346		
Total	41	5506.48			Sig. at 5%

Table 5 (Analysis of Co-variance)

<u>Source</u>	<u>df</u>	<u>SP</u>	<u>MS</u>	<u>F</u>	
Betw. SP	1	-63.967	-63.967	4.468	
Within SP	40	-572.652	-14.316		
Total	41	-636.619			Sig. at 5%

Table 6 (Sums of Squares and Sums of Products)

<u>Source</u>	<u>df</u>	<u>SS(G)</u>	<u>SS(IQ)</u>	<u>SP(GxIQ)</u>
Betw. Grs.	1	4.302	812.834	63.967
Within Grs.	40	407.817	4693.846	572.652
Total	41	412.119	5506.48	636.619

Table 7 (Adjusted Analysis)

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. Grs.	1	.565	.565	.065
Within Grs.	39	337.953	8.665	
Total	40	338.518		N.S.

(c) An analysis table of all adjusted scores was made and the results were pooled, as in Table 8, below:

TABLE 8 ADJUSTED CO-VARIANCE ANALYSIS (POOLED WITHIN SCHOOLS)

<u>Source</u>	<u>Betw. Gps.</u> <u>df</u>	<u>SS</u>	<u>Within Gps.</u> <u>df</u>	<u>SS</u>	<u>F</u>	<u>df</u>	<u>Significance</u>
Knox	1	.565	39	337.953	.065	(1,39)	N.S.
Kelv'ide	1	.084	23	229.753	.0084	(1,23)	N.S.
B'muir	1	18.099	76	729.872	1.875	(1,76)	N.S.
Ewart	1	18.659	40	267.961	2.785	(1,40)	N.S.
Aberdeen	1	40.290	150	929.245	6.504	(1,150)	Sig. at 5%
Holyrood	1	36.179	38	354.282	3.881	(1,38)	N.S.
ALL	6	113.876	366	2849.066			

TABLE 9 GRAND ABSTRACTION OF TOTALS

<u>Source</u>	<u>df</u>	<u>Adj. SS</u>	<u>Adj. MS</u>	<u>F</u>
Between Groups(S v.C)	6	113.876	18.979	2.44
Within Groups	366	2849.066	7.784	

Sig. between 5%
and 1% level.

6.5 Conclusions

In the practical testing situation associated with the experimental materials we have exemplified the use of a goal-specific test procedure. We have made aspects of our goal explicit and have (a) established by initial testing that the population was in possession of the insights deemed to be represented by the test. (b) We have subjected an experimental population to the materials asserted to deepen these insights and make pupils more articulately aware of their language in use. (c) We have retested the experimental population and the controls, and have established that a gain in the insights tested by us may be distinguished for the experimental subjects; this gain is significantly greater than the gain noted for the controls. (d) To eliminate the major variable of I.Q. an analysis of co-variance was carried out, and the results show conclusively that, over the whole population tested, I.Q. cannot be held to be a significant factor in the gains noted in the test. (e) To eliminate as many of the minor variables as possible, the significance of the gains analysis and the significance of the co-variance analysis was taken from the pooled scores of the appropriate tests.

The conclusion, in broad general terms, is that the materials under test produced the increase in awareness of language which we predicted in the theory, and thus may be considered as a manifestation of the approach in achieving the stated goals. The course materials may be regarded as a contribution towards a wider revision of the English syllabus in which applied linguistics has a major role to play.

APPENDIX A

THE SCOTTISH SCHOOL SYSTEM

In its organization, the Scottish school system is divided into a primary stage and a secondary stage. The former is, generally speaking, a comprehensive stage in which there is minimal streaming. Entry age to the primary school is 5 years; the age of promotion to secondary school in the seventh primary class, is about twelve to twelve and a half, although promotion depends more on class than on chronological age.

Secondary school organization in Scotland is at present in transition between the existing selective pattern of secondary education and the proposed comprehensive pattern. The selective senior secondaries cater only for the brighter pupil and provide a traditional academic course leading to 'O' and 'H' grade examinations of the Scottish Certificate of Education. Non-academic schools are called junior secondary schools and they present candidates for a range of technical and commercial qualifications. These schools are now obsolescent.

Comprehensive secondary schools are becoming more common in Scotland as current educational reform is achieved, but a large number of senior secondary schools remain, and, apart from minor changes in the first year of the secondary course, little has been done to change the essential streamed character of the schools.

It is important to note that the experiment in this thesis was devised with the senior secondary, second year class in mind;

the schools selected for the experiment were all run on a senior secondary basis and the pupils were all products of the selective system described above.

DATA Selective Schools in Scotland (After Hunter, 1968)

CLASSIFICATION	No.of Schools	No.of Pupils
Selective Certificate Schools	70	62,000
Comprehensive Schools with an unspecified component of certificate pupils	134	95,000
Part-selective schools with specified academic streams	66	30,000

1. The total number of pupils in all secondary schools in Scotland was approximately 275,000 in 1965. (Hunter, 1968)
2. The figures in the table above refer to 1965.

APPENDIX B

The materials of the experimental course were duplicated by multilith and presented between manila covers as a school textbook to all the pupils of the experimental classes. The course was given the title 'Discovering Language II'.

JORDANHILL COLLEGE OF EDUCATION

DISCOVERING LANGUAGE II

by

William B. Currie

A linguistically graded course for second year senior secondary English language work, or for the stage immediately following the common course.

(C) William B. Currie, 1967
Department of Applied Linguistics,
Jordanhill College of Education,
Glasgow, W. 3.

KEY TO THE LESSON CODING

Each lesson is headed by the stage of the course thus: 2/

The part of the course involved is then given by a letter thus: /A/

The series number of the lesson is then given by a number thus: /5

e.g. 2/A/5

Course Sections

- A: This part of the course deals with the levels at which language can show its patterns. Thus, children's attention is drawn to the fact that language has substance (sound and marks); that language has organisations of its substance in intonational and stress patterns, writing patterns, etc.; that language has form in its grammar and in its dictionary items; and that language has a context in which the patterns are shown to have situational meaning.
- B: This part of the course takes a closer look at language form, - grammar patterns and dictionary patterns. In the early stages of language study in the senior secondary school this is a very light section with little depth of detail.
- C: This part of the course deals with language varieties and an attempt is made to describe them using the ideas generated by the first two sections, A and B.

(OVER

Further Information

Teachers who would like to read something of the linguistic approach behind this work should read The Linguistics Sciences and Language Teaching by Halliday, McIntosh and Stevens, (Longmans) 1964.

Further, the author of these drafts would be glad to help in any way possible, and information on the usefulness of the lessons would be very much appreciated.

DISCOVERING LANGUAGE II

2/A/1

THE SOUNDS OF LANGUAGE

Here are three statements about spoken language. Read them carefully:

- (a) At its simplest level, speech is just noise - organised noise.
- (b) One of the oldest tricks of the trade of the professional spy is to put a handkerchief over the mouthpiece of the telephone to blur the speech and conceal the speaker's identity.
- (c) When astronauts speak on the two-way short-wave radio link from space their speech is barely recognisable to the ordinary listener. Trained radio operators at the base, however, have no difficulty in interpreting the messages, despite the distortion and interference.

DISCUSSION

1. These three statements about speech draw attention in different ways to the fact that spoken language has a basic raw material. What is this 'material' that all speech is built from?
2. If we were to agree that speech sounds reaching our ears are really only disturbed air, could you give a simple

(OVER

account of how the air becomes 'disturbed' when a person speaks? In other words, what makes the air between speaker and hearer 'go thick and thin'?

3. When we hear speech through a radio, or through the public address system of a large hall or a sports ground, we hear speech through loudspeakers. Can you tell when the speech you hear originates from a loudspeaker? Discuss the clues that mark out some 'loudspeaker speech' you have heard recently.

WORK

1. Have you ever thought you heard a word spoken:

(a) In an animal or bird call?

(b) In a stray noise in the night?

Recount briefly what happened, saying what you thought you heard and what eventually made you decide that the noise was not speech.

2. There are at least two reasons why it is difficult to make out the words of a hymn when you hear a congregation singing in a broadcast church service. Write down two of the reasons that occur to you.

Would television make it easier for you to decide what the words were?

3. Every language has families of sounds which we can hear, and which make speech meaningful. For instance, English has a family of 'l' sounds and a family of 'r' sounds. Imagine a speaker of English who could not make his 'l' sounds different

(OVER

from his 'r' sounds (a Chinese speaker of English might be an example). What would he mean in this telephone message that someone received?

Where can I buy some suitable crows for frying?

Think about this confusion of the 'l' family of sounds with the 'r' family and write down a list of phrases where this would be likely to cause difficulties.

RESEARCH

There is a common saying, - 'To keep your ear to the ground'. Find out what it means as it is used in everyday speech.

Now, try this experiment. Press your ear flat against the wood of a door and notice what effect this has on how you hear the sounds from the other side of the door.

Try this on different surfaces, - glass, brick walls, metal walls, etc.. Is there any difference in what you hear through them?

Now can you say why Red Indians were said to be able to hear a horse's hooves beating on the ground several miles away, by putting their ear flat against the ground and listening carefully?

DISCOVERING LANGUAGE II

2/A/2

THE MARKS OF LANGUAGE

Here are four short passages about writing. Read them before tackling the Discussion topics below.

- (a) DO NOT DEFACE THIS WALL WITH BILLS was written in bold letters of white paint all over the cathedral wall, defacing it badly.
- (b) I hear that the more extreme rites require the believers to sign their names in the holy books in their own blood.
- (c) 10,000 schoolchildren took part. They were drilled so that, on a signal, some of them showed a red card and some showed a white one. As a result, there appeared in enormous white letters on a red background the message YOUTH SALUTES THE CITY.
- (d) It's surprising that advertisers today don't make more use of the sky. Now there's a clean sheet ready for writing on, if ever I saw one. I can remember in the thirties it was quite common to find a stunt pilot, in a small biplane, writing the name of a product in coloured smoke across a still summer sky.

DISCUSSION

1. Read through the four passages given above and say what they show to be different in the writing referred to above.

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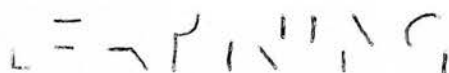
Now could you say what the passages say that writing of all sorts has in common, that is, something they all share.

2. Discuss any unusual examples of writing materials that you have come across.
3. Sometimes the raw materials of writing, that is, the actual marks that make up the words, can be closely related to what the writing says. E.g. young people were actually used to write the word YOUTH in (c) above. Discuss ways in which you might make the marks of an advertising text help to sell (i) tyres (ii) fishing tackle (iii) books. Choose one other commodity and suggest a way of advertising it using this idea.

WORK

1. The marks of writing (or printing) must be sufficiently clear for us to make sense of the message, just as the sounds of speech must be sufficiently clearly heard for communication. Try to read these:

(a)



(b)



- (c) If you are working at home, ask your parents to let you study a Bank of England ten shilling or pound note. Whose signature is on it?

2. Sometimes the kind of marks we make in writing suggest clues to the wider meaning of the text, e.g., they might suggest

(OVER

who wrote it, and whether their authority was worth considering, etc..

What possible sources and importance would you guess to lie behind these texts? Write a note outlining your suggestions, with reasons.

(a) PASSED *passed* *Passed*

(b) APPEAL *appeal* *Appeal*

3. It is very important to set down the right marks in writing or printing, but it is also very important to lay out the whole text in a suitable way. Below we give a badly laid out text. Study it and organise it in the way you think it would be most acceptable to readers.

the finsbury hotel menu breakfast 7.15 a.m. to 9.00 a.m.
choice of weetabix shredded wheat porridge cornflakes
or fruit juices choice of poached haddock grilled
kippers grilled bacon and egg grilled sausage and
tomato or eggs fried or scrambled also toast rolls
bread and butter marmalade honey or jam coffee or tea
to taste patrons are reminded that breakfast must
finish by 9.30 a.m. on all weekdays.

RESEARCH

Take a poem from your poetry book and write out one of its stanzas

(OVER

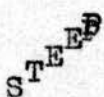
in your own handwriting, giving it a new lay-out pattern. Try the same stanza in several ways and write a short report on what effect your re-writing has on the stanza you have treated in this way.


DISCOVERING LANGUAGE II

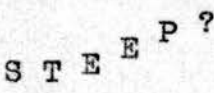
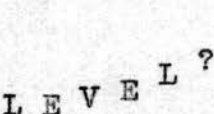
2/A/3

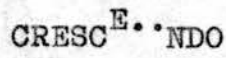
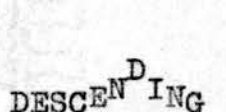
MARKS, MEANINGS AND SOUNDS

Words can be written in many different ways. Here are two groups of words written in special ways. Look at each carefully and try to work out what point the designers were trying to make.

(i) 
LEVEL




(ii) 


DISCUSSION

1. Where do you think 'bent' words like these come from?
 - (a) From a five-year-old child who cannot yet control his pencil effectively?
 - (b) From someone who had intentionally 'bent' the words to make a special point about the meaning of the language?

(OVER)

Put up one argument against (a)

Put up one argument in support of (b)

What is special about the word LEVEL as it appears in (i)?

2. Look at the texts in (i). What feature of language is emphasised by the way the words are set down?

Consider these: (a) That language has 'TUNE' in speech?

(b) That written words have a SPELLING SHAPE?

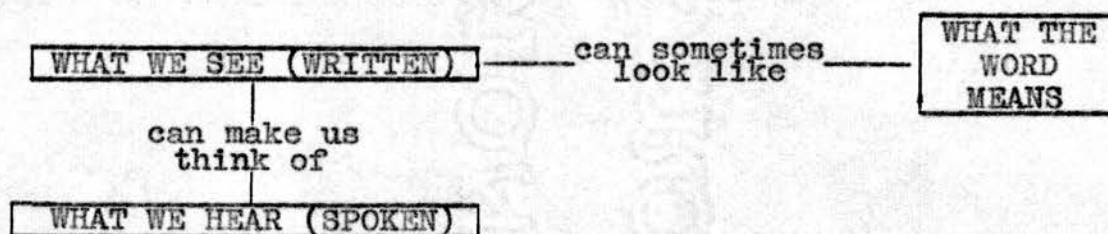
(c) That words can be a part of the GRAMMAR of a sentence?

(d) That words have the power to REFER to the real world around us?

Look at the texts in (ii).

Using the same four possible answers listed in Question 2 above, try to say what feature of language is emphasised by the way these texts are set down.

Discuss this point. Are you prepared to argue from the ideas you have discussed that a word can sometimes be written to 'look like' a sound, and sometimes may be written in such a way that it recalls the meaning the word usually has for the real world around us?



(OVER

WORK

1. You are contributing a short ghost story to your school magazine and the editor wants you to use one of these three titles:

- (a) A Trembling Tale
- (b) A Weird Experience
- (c) A Spooky Situation

You are asked to design the title so that it conveys the idea of ghostly horror. Give the editor a design of each title, making the letters convey this idea. Select the title you consider to be the most successful and say why it pleases you.

2. Take the three examples of the words 'the deep end' from this text; write them down in such a way that the 'tune' with which each use of the phrase would be spoken is made clear to the reader. Use any method you can devise to show this 'tune'.

"Jones, you are to dive in at the deep end and Smith at the shallow end."

"The deep end?" said Jones incredulously.

"Yes, the deep end," said the games master firmly.

3. Sometimes when we speak we try to make one of the words specially prominent so that the language may carry a particular meaning. Here are four sentences with no special marks to show where the STRESS would fall. After each sentence is a clue to what the speaker could have meant. Devise a way of showing where the stress would fall in each sentence.

(OVER

I didn't go to the station	(John did)
I didn't go to the station	(I went to the airport instead)
I didn't go to the station	(I was kidnapped and taken there by force)
I didn't go to the station	(I absolutely insist. The witness is lying.)

4. Taking a simple underscoring to mark the probable stress of the words in the sentences listed below, write short commentaries on the possible context in which the language could be meaningful.

- (a) I have a little money
- (b) Do you think I'm lying
- (c) My wife has a little copper coffee pot like that.

RESEARCH

Television and cinema advertising has the advantage of using sight and sound together in their communication with the public. Make notes during a 'commercial' of any advertisements which alter the shape of a word to match either a special meaning of the text, or a special way of speaking part of the text (or both).

DISCOVERING LANGUAGE II

2/A/4

LABELS AND SOUND PICTURES

We are going to talk about the words in these columns.

Look carefully at them before we begin.

A	<div>(i)</div> sneeze scream explosion weeping laughter	<div>(ii)</div> "Atishoo" "Ai...i...eeee" "Boo...oom" "Boo-hoo; boo-hoo" "Ha,ha,ha; ho,ho,ho"
B	<div>(iii)</div> croak roar murmur moan whisper sigh	

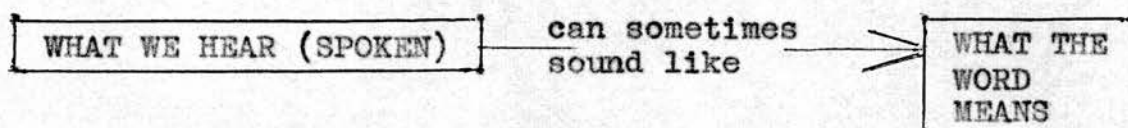
DISCUSSION

1. You can see in A, column (i) that we have a list of labels that we give to happenings. These happenings all include a particular sound, for example, a sneeze makes a 'sneezing' sound etc.. Look across at A, column (ii), and discuss where you would expect these 'sound pictures' to be used instead of the label.
2. Assuming that the words in A, column (ii) are trying to make particularly clear to the reader one of the parts of the word meaning. What is that part?

In what ways has the writer tried to make this part of the meaning very clear to us? Could you improve on the 'sound pictures' we give above in A (ii) ?

3. Now look at the words in B(iii). Why is there only one column, placed in the middle of the page?
4. Discuss the use of words like A (ii) in comics.
5. Let's try to bring together what we have been discussing above. Some words (labels) stand for a happening without going out of their way to sound like the happening; some words, like those in B (iii) are both labels for the happenings and quite good sound pictures of the events too.

Look at the diagram below and discuss the words 'can sometimes sound like', giving examples of what this could mean.



WORK

1. Here are several labels for events that might be referred to in a comic strip. They are of the same sort as A (i). How would you write 'sound pictures' (like A (ii)) to make the sound of the events vivid to young readers?

A rifle shot

A ricochet

The trumpeting of an elephant

The call of a raven

The cry of a lost child

The cry of a baby

The sound of a jazz trumpet

The sound of a rusty hinge opening

(OVER

2. What descriptive labels would you give to these 'sound pictures'? Clues are provided of the activity each is connected with.

Archery

THUUUNNK

TWANNGGG

The Orchestra

PLINK, PLINK, PLONK

KISSSSHHHH

Traffic

BRAAA...MMM, BRAAA...MMM

PAAA...PAAA...P

3. Poets often make use of words which not only label the events they are talking about but paint a sound picture of what might be heard if you were present at the happening. Here are several short quotes from poems. Can you write notes on how far the poets have successfully 'painted sound pictures'?

- (a) The moan of doves in immemorial elms
And murmuring of innumerable bees

TENNYSON

- (b) I heard the water lapping on the crag
And the long ripple washing in the reeds

TENNYSON

- (c) What bird so sings, yet so does wail?
O 'tis the ravished nightingale.
Jug, jug, jug, jug, tereu, she cries.

LYLY

(OVER

- (d) The trumpet's loud clangour
Excites us to arms,
With shrill notes of anger
And mortal alarms
The double double double beat
Of the thundering drum
Cries 'Hark! the foes come;'

DRYDEN

- (e) More beautiful and soft than any moth
With burring furred antennae feeling its huge path
Through dusk, the airliner with shut-off engines
Glides over suburbs.....

SPENDER

RESEARCH

Look up the word ONOMATOPOEIA in any good dictionary.

DISCOVERING LANGUAGE II

2/A/5

A REVIEW OF WORK

At this point in the course it is appropriate to carry out revision of the first four weeks of work.

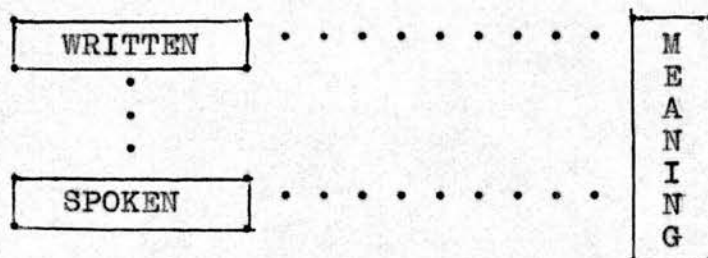
DISCOVERING LANGUAGE II

2/A/6

CHAINS

What we have discovered so far in this course might be stated like this:

LANGUAGE PATTERNS



Let's take this study of the patterns of language a step further. In addition to the patterns of writing (and speech), are there any other ways in which language can be seen to have patterns?

Look at this panel of examples; note that there are six examples, grouped in three pairs.

PANEL OF EXAMPLES	
(a)	i. The dog chased the cat
	ii. The cat chased the dog
(b)	i. The tope chased the burbot
	ii. The burbot chased the tope
(c)	i. The fax chased the pog
	ii. The pog chased the fax

(OVER

DISCUSSION

1. Look at (a) i. Are you quite sure which animal did the chasing and which was chased?
 (b)ii. Are you again quite sure which animal did the chasing and which was chased?

No doubt you could picture the events quite clearly.

2. Do you know what a burbot and a tope are? Both are kinds of sea fish. Look at the pair of sentences marked (b) i. and ii, and discuss the idea that you don't really need to be able to picture the fish to know which is doing the chasing and which is being chased.
3. You certainly won't know what a pog is and what a fax is since both were invented for the example. How do you know in this case which chased which?
4. Would you agree that the order of the elements is critical in these examples in making the sentence yield its meaning?

WORK

1. Elements in a chain order, like:

(1)	(2)	(3)
The dog	chased	the cat
The cat	chased	the dog

give us a pattern of places in the chain.

place (1) \rightarrow place (2) \rightarrow place (3)

Look back at the panel of examples given and say what chains of places they all show.

(OVER

2. Look again at the panel of examples given above.
 (a), (b) and (c) all show pairs of sentences with the same places. What makes ii. different from i. in each case?
3. English relies heavily on the pattern of place-following-place in chains, like this

place 1 ---> place 2 ---> place 3 --->

Here are some examples of English where the usual order of places is changed. Try to say what is unusual about these examples. Have the chains of places in the panel examples made you expect something else? You may ignore for the present the language in brackets.

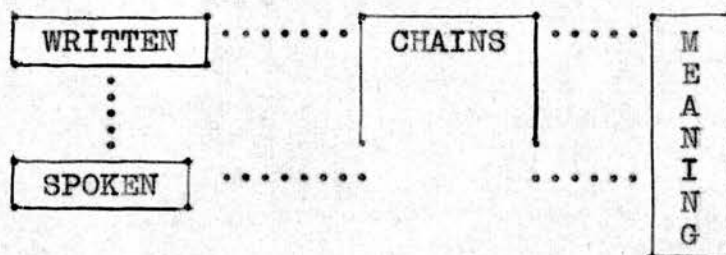
- | | |
|-------------------------------|---|
| (a) (Still) falls the rain | (b) (Into the valley of death) rode the six hundred |
| (c) ('Really'), said he | (d) Bread have I |
| (e) That wild lion Tom caught | |

Note: If any of these examples can be read in two ways, that is, having two possible meanings, make a special note of this.

4. Here is a map of what we have so far discovered about the way language can pattern. If you compare this 'map' with the one we began this chapter with, you will see that we have placed CHAINS between the patterns of written (or spoken) English and the meaning.

(OVER

LANGUAGE PATTERNS



RESEARCH

Look for any unusual order of language in chains (like WORK 3 above). Poetry may provide some good examples, but watch for other examples elsewhere.

DISCOVERING LANGUAGE II

2/A/7

CHOICES

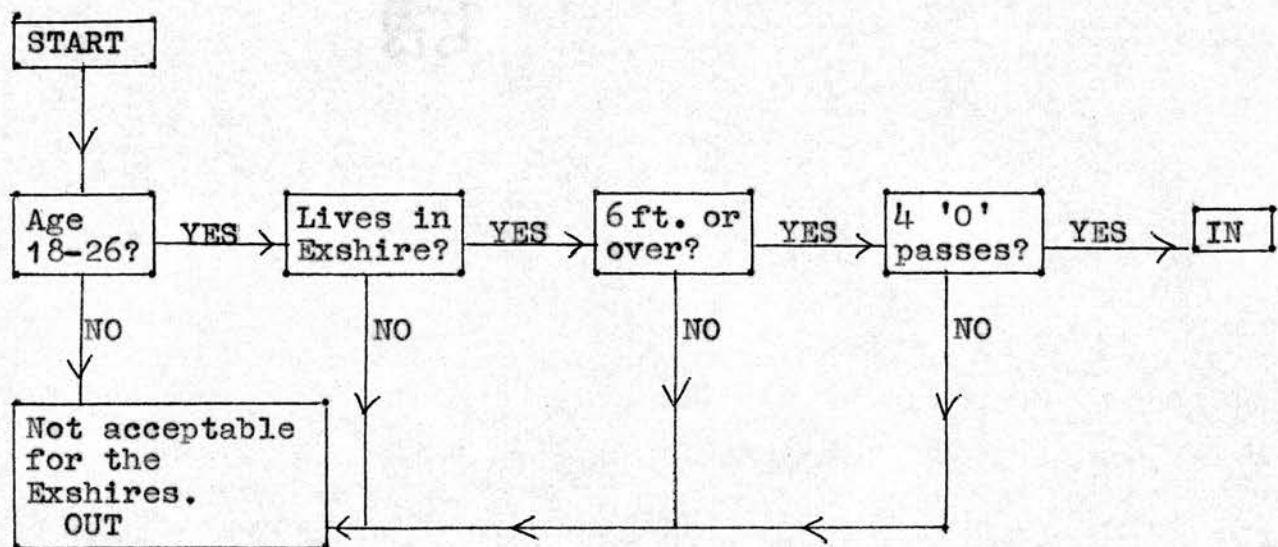
Not every man who applies to join the Exshire Regiment is accepted. To be acceptable, a man must be between 18 and 26 years old, must be at least six feet tall, must live in the county of Exshire and must have passed at least four 'O' levels at school.

Here are some details of two men who wanted to join the regiment.

1. TOM is 24 and lives in the main town of Exshire. He has a good educational record with six 'O' passes and two 'A' passes to his credit. He is exactly six feet tall.
2. TERRY is 18, is 6ft. 2in. in height, has three 'O' passes and lives in a remote little Exshire village near the borders of the county.

The process by which we select recruits for the Exshires can be shown to be a network of choices. Look at this diagram of the network of choices and discuss the topics listed below:

(OVER



DISCUSSION

1. To decide whether Tom or Terry was IN for the Exshires we had to look carefully at the qualifications of the two men and make a series of choices based on them. Invent at least two other would-be recruits for the regiment and steer them through the network of choices to IN or OUT.

2. Make up a network of choices for entry to one or more of these:

The School Cricket Team; The local Male-Voice Choir;
 The Guild of Master Carpenters; The Association of
 Secondary School English Teachers; The Boy Scouts or the
 Girl Scouts; the 'top twenty' pop records of the week;
 The Corps of American Astronauts.

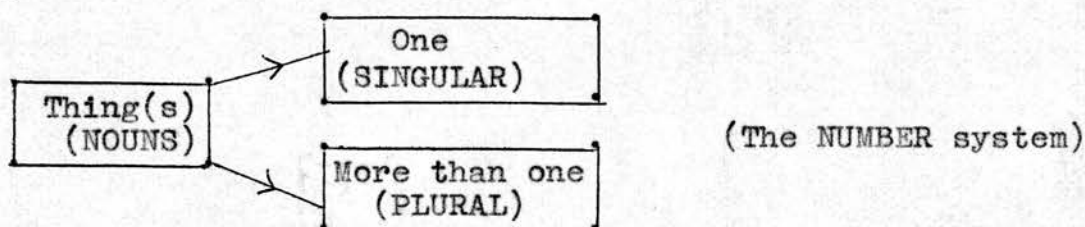
Notice when you are doing this how you must make your would-be members pass through a series of tests before they are chosen finally. Some of the networks would be easy to pass through; some would be difficult. Some would have only a few choice points; some would have many.

(OVER

3. Consider together whether language would also show networks of choices which would decide what particular pattern of language we actually used when we were writing or speaking. For example, consider the case of words referring to ONE or MORE THAN ONE thing, or words referring to happenings in the PAST or in the PRESENT etc.

WORK

1. One of the choices we make when we write or speak English deals with whether we are referring to ONE or MORE THAN ONE thing, thus:



Look at the following sentences. One word is missing from each. Rewrite the whole sentence, adding a suitable word in the blank. Below each say why you chose SINGULAR or PLURAL forms for the Nouns you inserted.

(a) He loved his _____, for she was his only child.

(b) All the _____ were eaten.

(c) The explosion frightened several _____.

It might be interesting to compare what each pupil has done here. There will be different words added, but everyone should have the same NUMBER choice.

(OVER

2. Other languages may make quite different choices in NUMBER.

Study this:

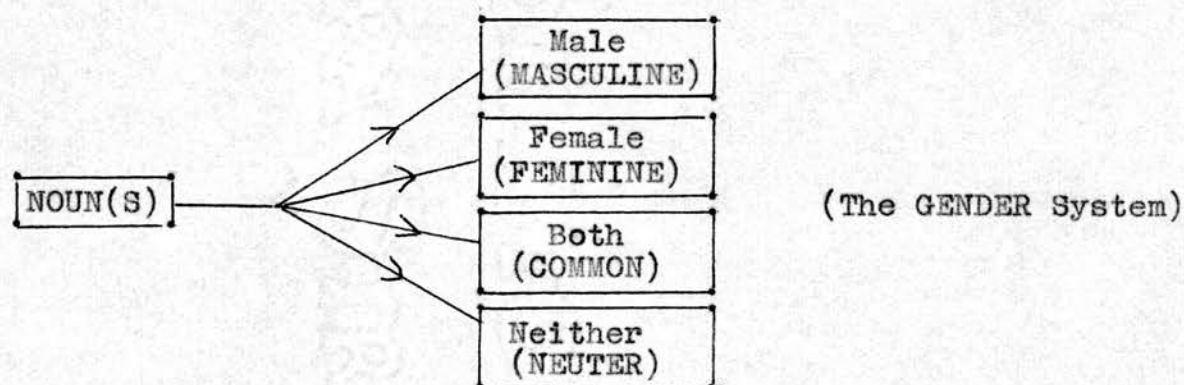
GREEK NUMBER SYSTEM	ENGLISH NUMBER SYSTEM
(One) SINGULAR	(One) SINGULAR
(Two) DUAL	(More than one) PLURAL
(More) PLURAL	

(a) In English, PLURAL can be said to mean 'not singular'. What could PLURAL mean in the Greek Number System? Write down a statement similar to the one we have made for English.

(b) In English, SINGULAR can be said to refer to 'not more than one'. Can the same be said for the Greek system?

Give the reasoning behind your answer.

3. Another of the choices we are continually making in English deals with whether the Nouns we are using refer to male, female, both together, or neither. We call the system dealing with this kind of choice, GENDER.



We have a choice from four possibilities in this system.

(OVER

Here are several sentences with nouns underlined. Steer each one through the network of GENDER choices and give it a label. What 'signals' in the sentences helped you to make the right choice in each case? List the clues you acted on.

- (a) Every man should do his duty.
- (b) A servitor gets his orders from the Bedellus.
- (c) A Bedellus usually takes his duties seriously.
- (d) Doctors who feel grieved should complain.
- (e) A stenographer who raises her typing speed to 100 is good.

DISCOVERING LANGUAGE II

2/A/8

CHOOSING WORDS

Sometimes, in conversation, we find ourselves at a loss for a word:

"He drives the...em...excavator."

We could say that the speaker was doing two things. He was looking for the right kind of word to fit into a particular place in the chain. He was also looking for the right word to describe most effectively what the man in question drove.

That is: the right KIND of word
the right MEANING

DISCUSSION

1. One particular word in the example signals that the speaker is intending to use a NOUN after the pause. What is that signal? Can you think of any other ways in which a speaker might signal that a noun was to follow?
2. Here are three chains with gaps in them. Read each one carefully and say how you would know what KIND of word was wanted to fill the gap. Produce a completed utterance for each sentence outlined.

- (a) _____ left his job last year.
- (b) All the _____ have become infected.
- (c) I like _____ with my fish.

(OVER

3. Although we are fairly sure what KIND of word should fill each blank above, would you agree that it is more difficult to find the most effective word to complete the statement until more is known about the subject the speaker is dealing with?

4. Sometimes we use words of the right kind, but they are words which are almost empty of meaning.

(a) The thing on the car in front is blinking.

(b) It's making a woozy sound.

(c) Somebody said something like that somewhere or other.

Have you heard people using 'empty' words like these? Perhaps you could mention some in the kind of sentences you have heard them in.

5. Have a class discussion on why it is usually easier to choose the right kind of word than to choose the word with the best meaning. Give examples to support your points.

WORK

1. Sometimes unusual words are used in speech or writing, and we may not know the meaning of them. Often we are able to see at a glance what kind of word the unknown item is. Look at the sentences below and say how you can tell what kind of words the underlined items are.

(i) Shads are common in the Thames estuary.

(ii) An old grey gaflar was used.

(iii) He gave a uvular roll.

(iv) The Hopis said nothing.

(v) They were gravid, and were returned to the water.

(OVER

2. You may already know the meaning of the underlined items in WORK 1. They are all real words with the exception of (ii) which we made up for this exercise. Look up the others in a good dictionary and, in the light of what the rest of each sentence says, write down a probable meaning for each. Add a label which would name for each sentence the broad field of human activity or knowledge the sentence might have been used in discussing.

3. In our lessons we have seen that language MEDIUM (that is, the sounds and marks of language) and language MEANING are separate aspects of language. CHAINS of language and CHOICES of language are also different aspects of language patterning from either MEDIUM or MEANING.

Look at these four sentences, noting particularly the way we have laid them out.

1. A man / read / a dissertation / for four hours
2. A licentiate / read / a missive / for four hours
3. A proselyte / read / a text / for four hours
4. A galacite / read / a plax / for four hours

Now do two things before you write anything.

- (a) Satisfy yourself that these sentences have all the same CHAIN structure, have all the same CHOICES of system and have all the same KINDS of words.

(You should see this, more or less at a glance.)

- (b) Now, with a good dictionary look up the meanings of any words in the first three that you were not familiar with.

(OVER

Write down a short argument for the view that the choice of KIND of word is a different aspect of language from MEANING.

The last sentence may help to confirm your view. 'Galacite' and 'plax' are nonsense words, yet are clearly of the right kind.

DISCOVERING LANGUAGE II

2/A/9

WORDS FALLING TOGETHER

If you were describing a tree in summer you might well use words like 'trunk, branches, bark, leaves, twigs' etc. in your language.

Similarly, in describing a football match you might use 'player, ball, field, half, goal' etc..

These are words we would expect to be used near each other in writing or speaking on these subjects.

DISCUSSION

1. What subject might be under discussion if these words were used near each other in the passage?

(a) Road, hole, spade, earth, pipe, gas, smell

(b) Taxi, take off, runway, power, roar, lift, climb

Invent other lists for yourselves and have the class guess the subject likely to be under discussion when such words as you list are used near each other in a passage.

2. What words would you expect to be used near each other if you were describing:

the stars on a clear night; a gale at sea; a trapeze
act in the circus; a spectacular flood on a river;
an orchestral concert.

(OVER

3. What makes these phrases interesting to us, and even a little surprising in terms of the words used?

oceans of paper; pools of light; rods of sunlight;
the poor millionaire

Can you suggest any other phrases like these?

4. We could say that words are used with each other in word chains and for some subjects certain words were more likely to be chosen to fit the chains than others.

Can you think of a way of saying how much more likely one word is for a certain chain than another?

Discuss the possibility of using percentages, or of 'high' and 'low' likelihood, or of 'degrees of chance' and select a 'language about language' for your own use in describing this feature of word use.

WORK

1. (a) 'My Lords, Ladies and Jellyspoons.'

(b) 'Give me the old-fashioned life,' she said. 'I only want an old fashioned house with an old fashioned chair and an old fashioned millionaire in it.'

Look at each statement above. If each has any humorous 'surprise' in it, could you use the idea of the way we expect words to be used near each other to explain the joke?

2. In some passages you have no difficulty in seeing clearly almost all the choices of words that carry the meaning. Look at the passage below and see if you can answer the questions asked after it.

(OVER

As the stringed instruments in an orchestra do not individually possess the same tone-power as the other instruments there are always more of them and they are always placed near to the audience. As the sound produced radiates from the sound holes in the bellies of stringed instruments, the orchestra is so arranged that as many string players as possible have their instruments facing the audience.

(i) What words at the beginning of the passage made you expect a certain subject to be under discussion? Name three.

(ii) If you had come across the word 'bellies' in a chain which included 'snouts, muzzles, backs' what do you imagine might have been being discussed?

Would you give a reason for saying that the meaning of a word partly depends on 'the company it keeps'?

3. Look at these short texts and consider the way the words fall in chains:

The strands drifted away, intermingling on the current and merging into patterns of sound that filled the hall with such music as the audience had never before heard from the orchestra.

(a) Up to the word 'sound' what subject might the chain of words have been describing?

(b) From 'sound' on, the meaning of the whole passage became clearly concerned with what subject?

(OVER

4. Below is a sonnet by John Keats. It deals with the poet's delight on reading a certain translation of the Greek poet Homer for the first time. Read it carefully several times, then write a short note on the way words that normally deal with other subjects have been used to make the poet's feelings more vivid to us.

ON FIRST LOOKING INTO CHAPMAN'S HOMER

Much have I travell'd in the realms of gold,
 And many goodly states and kingdoms seen;
 Round many western islands have I been
 Which bards in fealty to Apollo hold.
 Oft of one wide expanse had I been told
 That deep-brow'd Homer ruled as his demesne:
 Yet never did I breathe its pure serene
 Till I heard Chapman speak out loud and bold:
 Then felt I like some watcher of the skies
 When a new planet swims into his ken;
 Or like stout Cortez, when with eagle eyes
 He stared at the Pacific - and all his men
 Looked at each other with a wild surmise -
 Silent, upon a peak in Darien.

fealty: loyalty

demesne: kingdom

RESEARCH

Find out all you can about Cortez and his discovery of the Pacific.

DISCOVERING LANGUAGE II

2/A/10

MEANING IN CONTEXT

At the beginning of lesson 9 we suggested that a description of a tree might use words like 'branches'. But look at this sentence:

That branch of the tree has my uncles on it
and that one my granduncles.

Do you imagine a family picnic with the senior members of the family risking life and limb? Or, perhaps 'tree' means something special in this case? Could you make a suggestion, and perhaps draw the kind of tree concerned?

DISCUSSION

1. "This tree has many more branches than that one."

Discuss the idea that we cannot be sure of the meaning of this remark until we know something more about the topic under discussion. Give as many possible interpretations of this sentence as you can.

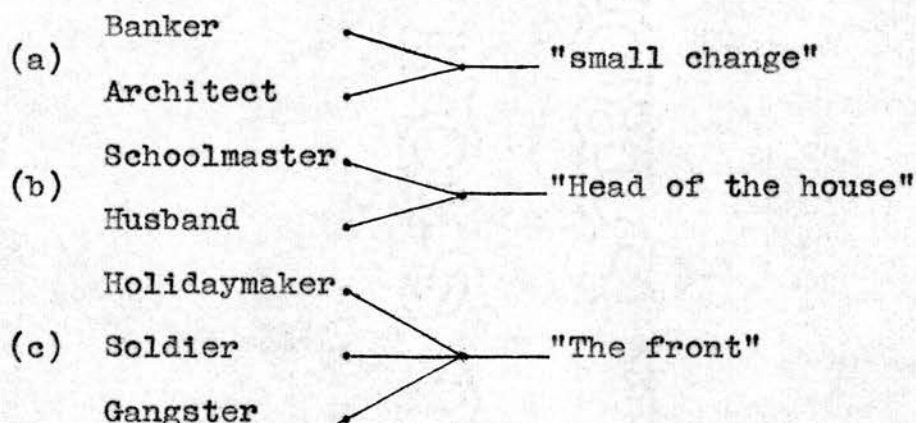
2. Here are several phrases with clues in brackets after each one suggesting what kind of situation each could be meaningful in. Think about the clues given, and enlarge on them to give as clear a meaning as possible to the phrases given.

- (i) A vessel full of oil (...sailing up the Thames)
- (ii) The McNab home (...for old people)
- (iii) It's in the net (...and it's a whopper)

(OVER)

Could you suggest any other situation in which each of the above phrases could have a meaning?

3. What would the likely meaning of these phrases be if they were used by the people suggested?



4. Talk among yourselves about what we have seen happening in this Discussion section. Is it true that we need to know more than the words themselves to be sure we get the right meaning?

WORK

1. Some kinds of joke depend heavily on whether we can see that one word or a phrase or even a longer stretch of language can have more than one situation in which it can have a meaning. Here are some suggested beginnings. Can you make up a joke for each one which would depend on the language having more than one context in which it could be meaningful?

The bride's train

A tap on the head

A very dear relative

The late Mr Bloggs

(OVER

2. We can never be quite sure what certain words refer to until we know more about the situation they were used in. Here are several words. Choose any situation in which each could refer to something and write fifteen to twenty five words about the situation that gives the words meaning.

crane	film	snap
slip	beat	grab

3. One of the oldest word games in English is the making and solving of riddles. For instance, 'A riddle, a riddle as I suppose; forty eyes and never a nose.' is a riddle about a gardener's riddle. The holes are the 'eyes'.

Another example of a riddle is that an egg can be thought of as a small round safe with no doors in it; yet thieves still break in and steal the gold.

Thinking along the lines of this lesson, - that you can guess a word's meaning when you know enough about the situation in which it could have meaning - try to solve some of these riddles. Choose TWO and say how context (facts about the situation) helped in finding the solution.

(a) Riddle me, riddle me,
riddle me ree,
I saw a nut cracker
up in a tree.

(b) What looks most gay in spring,
wears most clothes in summer
and goes naked in winter?

(OVER

(c) It's born below the water,
 Yet it isn't flesh or bone:
 It is sand and shell's daughter,
 Yet it isn't shell or stone.

 You must take it from its mother,
 Though it isn't like her child,
 And to find them both together
 You must search the seas wild.

(d) He caught it in a wood and at once sat down
 and looked for it; but he failed to find it
 and had to go home with it.

RESEARCH

Try to compile a small collection of riddles you have heard your friends asking. Some of them may be well worth bringing to the notice of your teacher, for we are still finding that schoolchildren ask riddles of each other which you will not find recorded in any book.

DISCOVERING LANGUAGE II

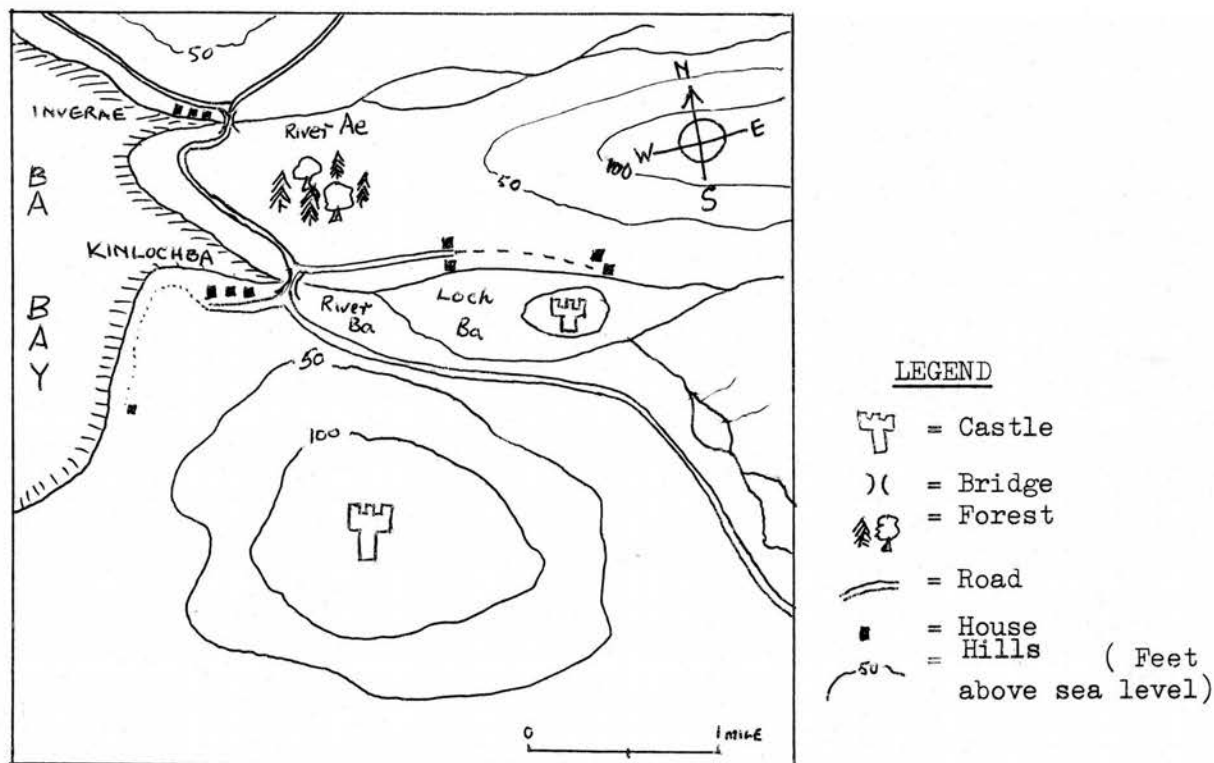
2/A/11

A REVIEW OF WORK DONE

DISCOVERING LANGUAGE II

SECTION B

2/B/12

LABELLING AND DESCRIBING THINGS

This is a sketch map of a Highland area in which you could spend a camping or fishing holiday.

DISCUSSION

1. The 'Legend' beside the map will help you to identify and talk about some of the features of the area. Using the single-word labels in the legend, very quickly point to some of these features.

(OVER

Suggest a few other features of the map that might have been listed in the legend.

2. Suppose we said that single-word noun labels like 'Castle' were not precise enough for what we wanted to describe about this area on the map. Suggest suitable words that we could add before the legend 'headwords' to produce more accurate descriptions.

e.g. The northern village

The island castle etc.

Try to construct these larger labels on the pattern suggested:

Pre-head word(s) / Headword

The class can check the descriptions from the map.

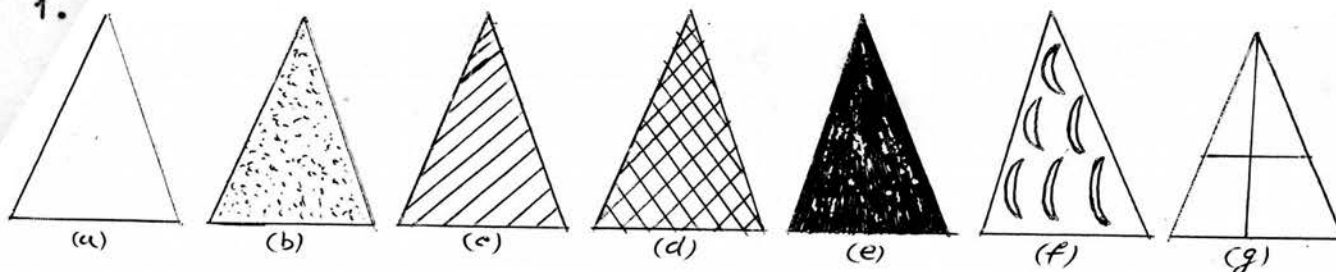
3. How many words can we reasonably add to the pre-head place in our description of one feature? Can we have 'The + two words + head' ... or + three words, or + four? Experiment with suggestions and let the class as a whole decide which phrases they would accept and which they would reject because the strings of pre-head words were too long.

4. Talk together about the idea that there are more applications of pre-head words like 'northern', 'seaside' etc. than there are applications of nouns like 'castle' 'river' etc.

This is really saying that pre-headwords are more general in their application than headwords.

WORK

1.



Using the headword 'triangle', add words before it (pre-head words) to produce phrases to describe clearly each triangle given. Don't be afraid of using any suitable pre-head words that seem to you to be useful.

When you have done this, look at all the triangles together as ONE group and write down one phrase which describes them as a group. Be a little more exciting in your phrasemaking than merely to say 'The seven triangles' !

2. Here is a short passage about the dangers which face a trout. Read it through and think briefly about the difficulties of life in the river. Then look at the way the passage uses again and again the pattern pre-head words + noun headword. Select three of these and show that this pattern is in fact there. As a fourth one show that the same pattern is in the phrase whose headword is the noun 'engineers'. (Line 8)

The brown trout has many natural enemies. Riverside birds eat the eggs; winter floods sweep the ova away; waterborne fish diseases attack the fry and predatory fish-eating birds devour them. But the main enemy of the trout is mankind. The two worst effects man has on the trout are (a) sewage; filthy, untreated, germ-laden sewage pollutes the trout stream, and (b) water abstraction; thoughtless local-authority water engineers drain streams until they are almost dry.

When you read the passage through and thought about the 'message' it contained, did the pre-headwords help in a special way in understanding it? Discuss this afterwards.

(OVER

3. We often find that we have to sit down and make lists of things to help us to remember them, to order them from shops etc. etc. Below we give a selection of topics which would probably need a list made if you were planning to buy materials for them. Make up a list for TWO of these, naming six items that you would expect to be necessary. Use the pattern, Pre-head words + headword.

A motorist's first-aid kit

A picnic basket for four schoolboys

A polar explorer's equipment

A bicycle puncture repair outfit

A catalogue of antiques for a sale

The ingredients for making cakes, scones or bread

RESEARCH

During the week, before your next English language lesson, try to spot examples of phrases which have items after the noun headword. Make a note of some and bring your sample to class next week.

DISCOVERING LANGUAGE II

2/B/13

MORE ABOUT LABELS

These book titles appeared on the shelves of a school library. The language patterns they show can help us to take our knowledge of the noun phrase a step further. We have already seen that we can have phrases which have a noun headword, and that we can add words before the headword to produce a phrase whose pattern can be described as pre-head elements + headword (see lesson 12).

Now look at these book titles:

The Great Admiral

Disease

The Silver Sword

The Story of Ancient Egypt

Folk Tales from Chile

Children of the Wind

The Young Pathfinder's Book of Birds

A Child's Garden of Verses

The Red Badge of Courage

DISCUSSION

1. Look back to Lesson 12, Discussion point 2, and remind yourself of the labels we gave to features on the map when we were keen to say more about the feature in question than merely

(OVER

to name it with one word. Remind yourself of the structure 'Pre-head / headword' and then decide which of the book titles above show this same pattern in their language.

2. What structure does the book title 'Disease' have?

Now invent several phrases with 'disease' used as the headword and with different words filling the pre-head place in the pattern. You may find it helpful to suggest the phrases as titles of books about particular diseases.

3. Are there any book titles given in the list above which show words falling after the headwords? Discuss together the idea that the words after the headwords help in making the titles concerned more pointed and informative as titles.

4. Make up a series of book titles using these patterns:

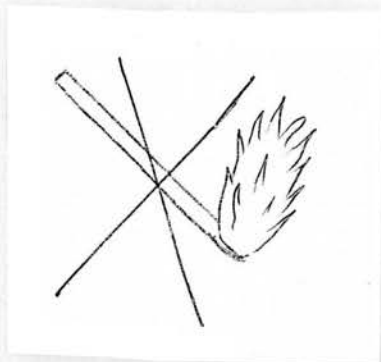
- (a) Headword alone
- (b) Pre-head / head
- (c) Head / post-head
- (d) Pre-head / head / post-head

WORK

1. Because we can make up noun phrases filling not only the headword place, but the pre-head and post-head places with suitable words, we are able to describe things quite clearly. Try it. We give below a number of fairly common signs and symbols. Study them, and (a) write a suitable noun phrase describing the drawing itself, i.e. the actual shapes or objects that the lines depict, then, (b) write down, if you can, what meaning you would give to these signs, normally, if you met them in the course of ordinary daily living.

(OVER

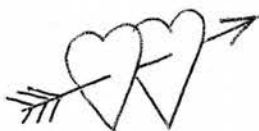
e.g.



- (a) A lighted match with a cross over it.
- (b) This symbol would usually mean that it was forbidden to light matches in that area because of fire danger.

Now try these:

1.



2.



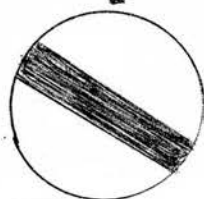
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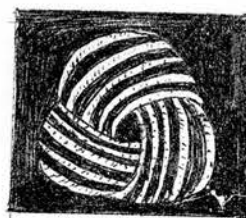
4.



5.



6.



2. Look back to the list of book titles we gave at the beginning of this lesson. Pick out the little 'binding' words that tie the post-head part of the pattern on to the headword. List them. Now look at your own phrases in WORK 1. Did you use any binders like these? If so, make a list of them.

Could you add a short list of other similar little binding words that might be used in English to tie on the post-head part of a noun phrase pattern?

(OVER

3. The poem given below gives a word picture of ocean waves rolling and breaking. Read it carefully and say

(a) whether you can see the first stanza as one noun phrase. Identify its structure, paying particular attention to the headword.

(b) Would you say that stanza two completed the pattern of another noun phrase? Give a reason for your view.

(c) Looking carefully at the second and third stanzas of this poem about waves breaking, say how the way the pattern of the language which runs through these stanzas helps us to form a picture of the ceaseless surge of the sea. What you know about the noun phrase should help you in this.

The Main-deep

The long-rolling,
Steady-pouring,
Deep-trenched
Green billow:

The wide-topped
Unbroken,
Green-glacèd
Slow-sliding,

Cold-flushing,
- On - on - on -
Chill-rushing,
Hush-hushing,
....Hush-hushing....

James Stephens

(OVER

RESEARCH

You might have been interested by the titles of some of the books we listed at the beginning of this lesson. Here they are with their authors. Take at least one of them out of the local or school library and see what it is about.

The Great Admiral by A. Dingwall (The story of Horatio Nelson)
Disease, by F. G. Kay; The Silver Sword, by I. Serrailier;
The Story of Ancient Egypt, by B. Sewell and P. Lynch;
Folk Tales from Chile, by B. Hughes; Children of the Wind,
by R. Guillot; The Young Pathfinder's Book of Birds, by
H. Simon; A Child's Garden of Verses, by Robert Louis
Stevenson; The Red Badge of Courage, by S. Crane.

DISCOVERING LANGUAGE II

2/B/14

PROCESSES

Look at a single English word, written down without any language or other clues to tell you what it might mean.

CRASH

It could either be a label of a thing, A CRASH

Or, it could be a word referring to a process, I CRASH

Here are three newspaper headlines:

1. LONG DISTANCE COACH TOUR BUS CRASH
2. LONG DISTANCE COACH TOUR BUS CRASHES
3. LONG DISTANCE COACH TOUR BUS HAS CRASHED

Let's think about the item 'CRASH' in each.

DISCUSSION

1. Would we be right to treat headline 1. as the label of a thing? If so, we are saying that it has a noun headword and other language either at the pre-head place (before the headword) or at the post-head place (after the headword). Say what the headword of this phrase is, if you agree that it can be the label of a thing.
2. Can the second headline be the label of a thing or things? Give the structure of this label, if you think it is one. Be particularly careful in your discussion to identify the headword and to show that it is in fact a noun.

(OVER

Is there any possibility that this could be a chain of language with a noun phrase 'LONG BUS' and that 'CRASHES' labels a 'process' . . . something the bus did?

3. Can there be any doubt about the meaning of the words 'HAS CRASHED' in the third headline? Show clearly that you know that this is a piece of language with the elements Noun Phrase (NP) + 'Process' (which we shall call 'Verb Phrase' (VP)).

Therefore NP + VP.

4. Now discuss what clues in the spellings of the words helped you to argue that they were not noun labels, but verbs (labels of processes) and, separately, what importance for your decision the meaning of each headline had.

Note: You are distinguishing in this discussion between what you can SEE marking out the verbal phrases, and what you UNDERSTAND of the meaning of the language.

WORK

1. Headlines in newspapers and telegrams and some other special uses of English often cause difficulty in understanding precisely what the text means, and also in knowing precisely what kind of structure (chain) the text has. This is largely because they condense the language, dropping out valuable words which would give us clues to both structure and meaning. Here are several condensed texts of this kind which you should re-write, bringing back in the missing 'clues'. Naturally, you will want to show two ways in which each can be understood.

(OVER

Headlines: (a) GIANT WAVES AT LIGHTHOUSE
 (b) DANGER OF SAILING SHIPS
 (c) AMERICAN CRANES OVER NEW LINER

Telegrams: (i) BACK HOME TOMORROW
 (ii) LEAVE STOP LONDON TOMORROW

2. The time of a process and the time of the making of a statement about it are linked, and to understand the language properly we need to know when the speaker made his remark and when the process was to happen. We call this time relationship tense. Here are three sentences about the naming of a ship. Read them carefully and imagine where and when each might have been said. Then write as detailed an account as possible of when the statement was made in relation to when the action of naming the ship took place. Indicate the clues in the sentence concerned which help you to be certain of the times.

- (a) I will name her 'Sylvania'.
- (b) I name this ship 'Sylvania'.
- (c) I named her 'Sylvania' and broke a
 bottle of champagne over her bows.

3. Sometimes we look for a tense signal (a time marker) only in the Verbal Phrase of a sentence and we are misled. We look for an -ed, or an -s or an -ing, or we look for a helping word (auxiliary) like will, have, etc. and we miss the real meaning. The tense of the whole sentence is only clear sometimes when we have read and understood all the phrases concerned. Below we

(OVER

give some examples of this happening. Study them and try to say (i) what the tense signals of the verb suggest and (ii) what the rest of the sentence tells you about the time of the action concerned.

- (a) I go to France on August 24th.
- (b) I'm going tomorrow.
- (c) Around New Year time I always visit my father.
- (d) I'm staying in London then, so I'll probably contact you.
- (e) I'm staying here for the time being.

4. Take a newspaper account of a piece of news of your own choosing and write about it as if you were writing the history of the event, looking back twenty years. Have you had to consider making changes in the VP's? What changes? Why? If you decide to make no changes at all, say why you thought the account should stand as it was.

RESEARCH

What tenses do you see used most regularly in modern advertising? Make a notebook survey of advertisements that catch your eye during this week and make a note on your findings. Were there any unusual ones?

DISCOVERING LANGUAGE II

2/B/15

CLAUSE CHAINS

The game of 'Consequences' is still played at parties, and it may even be a class lesson in the Primary School. You remember it? A piece of paper is passed round the group and the first player writes down someone's name. The paper is folded over, concealing what the player has written, and the paper is passed on to the second player who writes down a Verbal Phrase (VP). This in turn is concealed by folding the paper and the third player adds a nominal phrase (NP) - that is a label of something. Thus we have at this stage:

A Name label + a Process + a Thing label

i.e. NP (Name) + VP (Process) + NP (Label)

Usually the result of making up such a chain of language is ludicrous for each stage has been written without knowledge of the previous parts of the chain.

But let's think about the results, because they may throw light on the way we make clause chains and on how we can make these work effectively for us.

DISCUSSION

1. What makes a chain like this funny?

John Jones was chewing a lamppost.

(OVER

- (a) Is it the kind of phrases in the chain? (NP + VP + NP)
 or (b) Is it something to do with the way the right kinds of
 words fall together to make up chains of meaning?

(See Lesson 2/A/9)

2. Could 'Consequences' be an amusing game at all if the clause chain itself (NP + VP + NP) were made nonsensical? Try it for yourself

e.g. Was eating / a blue door / Mary Smith

Try to come to grips with the difference between an odd, but acceptable chain like 'John Jones was chewing a lamppost' and the unacceptable (?) 'Was eating a blue door Mary Smith'.

3. Take the clause chain NP + VP + NP and make several sensible single-clause sentences of this pattern, with NP's and VP's of your own choosing.

4. We have been thinking about chains of phrases of certain kinds (NP, VP, etc.). Discuss the idea that to recognise a clause chain pattern we must be able to classify phrases as Noun Phrases (and Pronoun Phrases), Verb Phrases etc. We need to know the kind of phrases in the chain, even if we are not always certain of the meaning of the phrases.

WORK

1. We can describe the structure of a clause chain as NP + VP + NP, and in making this description we give a simple, but very useful pattern that the English clause can use. It's not, by any means, the only pattern of the clause, but it is a basic one. To prove this, let's carry out an operation.

(OVER

Take the basic pattern NP + VP + NP, and think of it as 'places' in a chain; take a word store; take a store of systems - tense, number, gender etc. - from which to make choices and consciously select words from the word store, the relevant systems from their store, and make up half a dozen sentences. Build up your NP's as imaginatively as you care with as much pre- and post-head expansion as you wish. If you want to add noun headwords for the NP after the VP, do so. All you are doing is adding to the word store from your own experience, - something we do often.

PATTERN

NP / VP / NP

WORD STORE

NP: Head Words

manager, president, master, clerk,
 wizard, general, judge, chemist,
 philosopher, soldier, woman, man

VP: Head Words

steal, eat, have, save, pull, acquire,
 prosecute, symbolise, produce, design,
 devise, guarantee, supervise,
 announce, compose

SYSTEMS STORE

Tense

Number

Gender

2. One of the commonest patterns of clause uses part of the verb 'to be' as its VP. It is very commonly used in definitions:

A powan / is / a member of the whitefish family.

(OVER)

Try defining five of these, using the NP + 'is' + NP pattern.

Mileometer, barometer, screwdriver, mute, radio valve,
hinge, brake lever, safety catch, buoy, leaf spring,
pelmet, castor, road map, passport.

3. Choose any one of the definitions you have given and write about fifty words on any special associations it has for you.

For instance, where did you see the thing defined; where did you use one; happy or sad memories; looking forward to using or seeing another? Be as free as you like in this writing.

DISCOVERING LANGUAGE II

2/B/16

WHEN, HOW, WHERE ?

A time-table of events can look like this:

- (a)i 5.40 THE NEWS and THE WEATHER
- 5.50 Dr WHO
- 6.15 DIXON OF DOCK GREEN

. . . or like this:

- (b)i 9.00 - 9.45 Breakfast
- 10.00 -11.00 Visit to Cathedral
- 11.00 -12.00 Free
- 12.00 - 1.00 Museum Lecture Tour
- 1.15 - 2.00 Lunch

Imagine both time-tables being recalled the following day. Suppose, in the case of the time-table of television broadcasts, that you were giving details of your viewing to a B.B.C. researcher. It might go something like this:

- (a)ii "First of all, I watched the news and the weather. Afterwards, I watched Dr Who. Then I saw Dixon of Dock Green."

If you were recalling the time-table of visits in the second list above you might have said something like this:

(OVER

(b)ii "In the morning, at nine, I had breakfast. I visited the Cathedral early in the forenoon. Immediately after that, I did a little shopping in the old market. Then I attended the special museum lecture tour and afterwards had a marvellous lunch at my hotel."

DISCUSSION

1. Look at (a)ii. How has the idea of 'when' been fitted into the clause chains? How does he indicate the beginning of the series of events? How does he indicate that the events are continuing?
2. Suppose we agreed to write 'when' over each part of the chain dealing with the time of the happening. The first part of (a)ii would look like this:

(when) /NP / VP / NP + NP

First of all / I / watched / the news and the weather

Look at the other sentences in the text (a)ii and, on the blackboard, label all the other 'when' elements in the same way.

3. Passage (b)ii has a number of 'when' elements in its chains too. Point them out. Are they all in the same places in the chains? Do some chains have more than one 'when' element in a chain?
4. We have so far only written 'when' above certain elements in the chains. Look at passage (b)ii and say whether there are places you could write 'where' (i.e. place) over a part of each chain.

(OVER

5. Would you agree that 'when' and 'where' elements were similar in the way they work in the clause chains? They both give information on the process (the action) of the VP of the chain. Other words and phrases can tell you 'how' and 'why' an action took place in a similar way. To save time, we can label all these parts of a chain that tell us more about the process (the action) of the chain, A, short for Adjunct.

WORK

1. Here is a diary entry, written in this style because of lack of space. Read it through carefully.

Got up - ate an expensive breakfast in hotel - dashed out to meet J & T - saw their marvellous new house - took them to lunch at Scott's - just managed to catch the afternoon plane home.

Could you write part of a letter to a friend describing these events as if they had happened to you, adding any words or phrases in your sentences which tell when each event happened?

2. Identify when and how words and phrases in the passage below. Which of them are single words and which are phrases? Say what kind of phrases you see used.

(OVER

Silently, in the early hours of the morning, the camp was struck. Men worked quickly, efficiently and with extreme care. By four o'clock all was cleared and the company of troops rapidly began to march out. In some haste, the rearguard carried out their duties, but, by first light they too had vanished like ghosts. All that remained was an empty field, where, twenty four hours before, there had been a bustling army camp. The retreat had been carried out like clockwork, with great efficiency.

DISCOVERING LANGUAGE II

2/B/17

A REVIEW OF WORK DONE

DISCOVERING LANGUAGE II

SECTION C

2/C/18

SPEECH AND WRITING

We can write down what people say in many different ways.
Here are three different ways of writing down what TOM said:

TOM TALKS ABOUT A CAR

- (i) BOB wrote down exactly what he thought Tom said:
Em...the car's a Ford and it's...em...I think
it's fairly old...it's got a sun roof and it
only has two seats.
- (ii) JEAN used what Tom said as part of a story:
"Em, the car's a Ford," Tom said, "and it's, em, -
I think it's fairly old. It's got a sun roof
and it has only two seats."
- (iii) BILL took down the message on a pad when Tom told
him over the telephone:
The car is a Ford. I think it's fairly old.
It has a sun roof and only two seats.

DISCUSSION

1. Do you think BOB has succeeded in showing all the sounds of the actual spoken English Tom used, or can you suggest some he has probably missed out? Give him credit for what he has done in your discussion.

(OVER

2. What did BOB intend to convey by the lines of dots used? How has JEAN suggested the same thing in her version?

Has JEAN changed much of the actual speech in her way of writing it down?

3. BILL's version is rather shorter than the other two. Look at the way he has changed what BOB heard and say how BILL has reduced the passage as he wrote it down.

4. Would you agree that all three, BOB, JEAN and BILL have tried to write down the same speech, but each has changed it for the special purpose they had in mind?

Can you suggest another way the same speech might be written down for yet another purpose, and be changed slightly in the writing?

WORK

1. This is what actually seemed to be on a tape recording of part of a conversation in which a nine-year-old boy was describing how to get to his house.

- erm - you just go straight on until you see a road that goes along that way that still is bumpy and then you - erm - well - erm - my house is the - erm - fourth house along the road.

Pick out any points in this passage as it is written above which seem to you to make you think specially about the actual sound of the speech.

2. Suppose we had the task of making up a telegram giving someone the instructions contained in the passage above (WORK 1.).

(OVER

What would the telegram say? Remember, words cost money in telegrams, so be brief.

3. How would the contents of the passage in WORK 1. appear as part of a letter written to guide a rather important visitor to the house?

Note two of the changes you have made in the passage for this particular job.

4. In a short story by H. G. Wells, The Man Who Could Work Miracles, Mr Fotheringay was convincing Mr Maydig that he had quite remarkable powers.

"Is that - the only thing. Could you do other things beside that?"

"Lord, yes!" said Mr Fotheringay. "Just anything." He thought and suddenly recalled a conjuring entertainment he had seen. "Here!" He pointed. "Change into a bowl of fish - no, not that, change into a glass bowl full of water with goldfish swimming in it. That's better! You see that, Mr Maydig?"

"It's astonishing. It's incredible. You are either a most extraordinary.... But no - "

Look carefully at this passage and say how an attempt has been made to make the written word convey several important reminders of the way the actual spoken conversation might have gone.

RESEARCH

(OVER

RESEARCH

Listen carefully wherever you can to what people actually say in conversation. Listen for the gaps and pauses they make, for the repeated words and phrases and for any other mark of the sound of conversational language. Try to write one small part of a conversation down, complete with the pauses etc. you thought you heard in it.

DISCOVERING LANGUAGE II

2/C/19

MORE ABOUT SPOKEN ENGLISH

If we were writing a strip cartoon, say, retelling the story of 'Kidnapped', we would probably put some of the actual speech involved in 'bubbles' and we might also include other language on the pictures. Look at these two pictures, dealing with part of the siege of the round-house on the brig Covenant.



DISCUSSION

1. What do we put in a speech 'bubble'? Is it exactly what we might have heard, if we had been present, or something quite close to it?

(OVER

2. Why not put everything into a 'bubble', - noises, gaps, splutters, breathing etc.?
3. Suppose you were writing a fifty word account of the action represented in the two pictures given, would you change the 'realistic' speech of the 'bubbles' in any way? Run through in discussion the sort of text you might write.
4. Look at the comment texts on each picture above and compare them with the kind of text we put in the 'bubbles'. What are the differences?

WORK

1. Here are three texts. Each has some degree of speech patterns written in. Study each one and try to say what degree of speech patterns show in the writing. It will help if you recall what we discussed in lesson 18.
 - (a) I'll have to apologise...have to...em...eat humble pie.
 - (b) "I'll have to apologise, - have to eat humble pie," he said.
 - (c) "I will have to apologise; I will have to eat humble pie," he said.
2. Here is a short extract from a play. Imagine that you are the producer and that you have to guide the actors playing John and Mary so that their speech will sound as realistic as possible in the scene. Stress, speed and 'tune' are all important features to remember in making your advice useful.

(OVER

After a local jewelry robbery, John and Mary are on a school picnic in a neighbouring seaside town when a stranger offers them a diamond ring very cheaply. John and Mary talk urgently about the situation after he leaves.

JOHN : But we can't go to the police yet! It would spoil everything. He might only be a fence, - or whatever they call a crook who buys and sells stolen stuff.

But he might lead us to the - to the boss.

MARY : All the more reason to tell the police.

JOHN : The police! They'd want proof, and there'd be all sorts of fuss and . . . and they'd get all the glory . . . and . . .

MARY : Look, idiot, you're not - I mean we're not Sherlock Holmeses or Maigrets - at least I'm not -

JOHN : Me-gray, you stupid nut, - not Me-grets. It's French, you know.

3. Sometimes people are said to be 'speaking like a book'. What do you think that could mean? Here are three texts which might help you to say what 'speaking like a book' could mean. What you know about the conversational style of speaking might also help you in this.

(a) QUEEN VICTORIA SENDS A TELEGRAM

Thora went to Lord Stamfordham with this message, and on her return said: 'Grandmama, Sir Arthur says it is only customary for the Sovereign to telegraph to the troops if they win a victory, and this is not a victory.'

(OVER

(b) POLYPHEMUS, THE UGLY CYCLOPS, TRIES TO WIN GALATEA
FROM ACIS

'If only you knew me well you would wish that you had not fled from me. I have a whole mountainside to live in, deep caves where the sun's heat never comes in summer, nor does the cold in winter.'

(c) 'Anything on the news, old chap?'

'There is a communication to the effect that the Ministry has approved an increase in the emoluments of employees in the banking services.'

'Lucky dogs, these bankers. Always in the money.'

RESEARCH

How do advertisers address us? Do they tend sometimes to be colloquial (using more spoken features in their language) and at others to be more 'written' in their approach? Take a sample of advertising that your eye catches this week and make out a case based on what you find.

DISCOVERING LANGUAGE II

2/C/20

NOW, WHERE WAS THAT WRITTEN ?

When you see a piece of written English for the first time, you can often make a good guess at where it might have been quoted from. The source of a piece of writing is quite often indicated by clues in the passage itself. Sometimes these clues are in the way the text is printed and set down; sometimes the clues are in the way the language is organised; sometimes the clues are in the way words are chosen. Often all these things, and your own experience, work together to tell you the source of a quoted text.

We are often far more expert than we think in working out where a text might have appeared. Let's try a few.

(i)

SLEEVES

Using No.11 needles, cast on 36 sts.

Work in K.1, P.1 rib for $2\frac{1}{4}$ ins.

(ii)

'Stand!' cried Alan, and pointed his sword at him.

The captain stood, indeed; but he neither winced nor drew back a foot.

'A naked sword?' says he. 'This is a strange return for hospitality.'

(OVER

- (111) I staggered ashore with my nine fish weighing just over twenty seven pounds in all. The fishing had taken one hour, and it remains in my mind as perhaps the finest hour of my fishing career.

DISCUSSION

1. The way the texts are laid out and printed helps us to place two of these three passages. Discuss this, pointing out the features of the appearance of the texts concerned.
2. One of the texts given is clearly a little bit old fashioned in its use of language. Which? Just say what seems to you to be old fashioned. You needn't go deeply into the question.
3. Each text has a special vocabulary. List the main words briefly and say whether they help you to be sure of what was being dealt with in the text concerned and where such a text might have appeared.
4. Talk together about unusual pieces of writing you have seen. Perhaps someone has seen the Lord's Prayer etched on a silver threepenny piece, or someone may have seen the instructions given on the controls inside an astronaut's space capsule.

WORK

1. Sometimes the way a text is written down gives you a very good clue to where you would find a similar piece of language in use. Here are several passages which you should examine carefully. Write notes on the features of the appearance of the text that helped you in deciding the source of each. Give the source you thought of.

(OVER

(a)

HELP!

(b) The pi - per came to our town, To
 our....town, to our....town, The
 pi - per came to our town, And
 he play'd bon - nie - lie

(c) HIGHGATE: s/c flatlet. c.h.w.,
 4 gns plus baby-sitting. ABB 6499

2. These passages (below) may have appearances which help you to tell where they might have been used, but it is more likely that you will find the clues you seek in the patterns and words used in the texts. Look over the passages carefully and write down a source and a use for each. Then try to explain in a note what features of the language (patterns or words) helped you most in coming to a decision.

(i) U S buyer found for Queen Mary

(ii) CASTLE COMBE - (Rail to Chippenham, then by bus)

Countless photographs have been taken of the ancient three-arched bridge, backed by the picturesque house of Castle Combe, for it is one of the most enchanting villages of Wiltshire.

(iii) There was once a little sparrow

3. It is possible to find a passage that looks as if it should deal with subject 'A', but in fact, on reading it carefully,

(OVER

one finds it deals with quite another subject in the style we would expect to be typical of 'A'. This is called parody, and it can be used to give a humorous effect. Naturally, when we are guessing the source of texts, we have to know whether the author was intentionally writing one text in the style of another.

For example, here is one man's description of an army:

'Take ten thousand discontented men, one thousand overbearing aristocrats determined to be leaders, and dress all in uncomfortable clothes. Mix the men thoroughly and allow to stand for several years cooling off, then agitate under the conditions of war.'

This bitter comment on the army is in the form of a cooking recipe.

Try a parody of your own, not necessarily a bitter comment, of course. Think of a clearly marked style, perhaps one of the styles we have used in this chapter, and use it for an unusual purpose. If you can think of nothing, try writing some of the rules of the Highway Code in the fashion of a very religious sermon.

RESEARCH

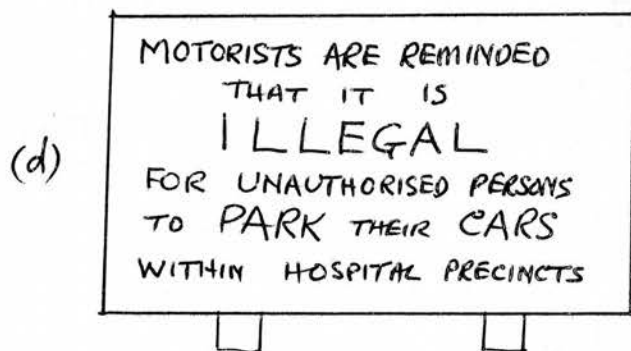
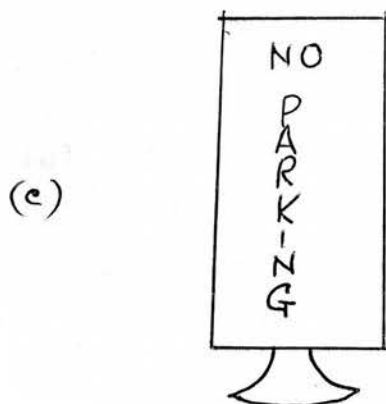
Look during the week at the captions (texts below) pictures. Note any special features that arise in the language because it is used with 'visual aids'.

DISCOVERING LANGUAGE II

2/C/21

WHAT RELATIONSHIPS ?

There may be scores of ways of asking motorists not to park their cars on a certain spot. Here are a few of the possibilities. Each suggests a different relationship between the motorist and the people requesting him not to park.



DISCUSSION

1. Which of the notices given above suggests the friendliest relationship between motorist and authority, and which suggests the unfriendliest? Back up your choice by suggesting what might happen if the motorist parked his car, regardless.

(OVER

2. Talk about other ways of communicating (a) a friendly, informal 'no parking' order and (b) a severe, threatening, formal 'no parking' order to the motorist.
3. Would you agree that the degree of 'friendliness' or 'unfriendliness' is conveyed in each of the notices discussed (and invented by you) purely by the kind of language used, and the way it is communicated?

WORK

1. Take the idea of 'no trespassing' and write a letter to a schoolboy who had said he was going to camp on Glen Estate policies. Write it first as a good natured, easy-going farmer would write; then try to write a letter to the boy as if a crusty old retired lawyer were warning him off.
2. Sometimes there is a very clear relationship of 'inferior' to 'superior' revealed by language. Look at the following texts and say to what extent you think each displays this superior-to-inferior relationship in its choice of language.
 - (a) When Atlanta asked the oracle about whom she ought to marry, the god replied: 'Do not take a husband, Atlanta. If you do, it will bring disaster on you. You will not escape, and though you will continue to live, you will not be yourself.'
 - (b) Now gentlemen, if I have your attention I will go on to demonstrate the mode of dissection I recommend.
 - (c) No, darling, not until you are older.

(OVER

3. What special relationship do you imagine the author of this passage intended to convey to her reader? Can you say how she set about achieving this?

Now, my dear, don't you pay any attention to these old, superstitious tales. You're intelligent enough to realise that there are no such things as ghosts, really. All of us get a fright sometimes, and if I had been with you on that evening and had heard the strange noise, I should have 'jumped' a tiny bit too. But the tales the farm boy told you about it being an evil omen for you are just naughty nonsense. It was probably an owl.

DISCOVERING LANGUAGE II

2/C/22

THE ART OF PERSUASION

When a writer (or a speaker) intends to sell something to you he may try to persuade you to buy in one (or more) of several ways:

e.g. He may try to state convincingly that his product has very special qualities.

There is no better bread than Bakey's

This is not the only way a writer may try to persuade a reader, of course. Look at this short list of texts and try to explain the method of persuasion used. Your knowledge of how language utterances are built up in patterns may help you to talk about each item.

- (a) Bakey's Bread is Best.
- (b) You need Bakey's Bread.
- (c) What has Bakey's Bread got that no other has?
- (d) Buy Bakey's Bread.
- (e) Bakey's Bread - the bread for modern living.
- (f) Bakey's; consistently, - the best in bread.

DISCUSSION

1. Which of the above advertisements has a clause pattern to carry a statement about the bread for sale?

(OVER

2. Which clause makes a statement about the user rather than about the bread?
3. Compare (c) and (d) above. Both are clauses, but each is different in its purpose. What are the differences? A good way to answer this might be to discuss how people are expected to respond to (c) and to (d) in some kind of action.
4. Which of the above examples try to draw attention to the product by suggesting a label for the bread. Is this label in each case some kind of NP, or more?

WORK

1. Invent a few more advertisement texts for selling Bakey's bread showing at least two statement types of persuasion; two question types of persuasion; two command types of persuasion and two label types of persuasion.
2. Using the types of persuasion outlined above (and in Work 1) to guide you, write a note on each of the following advertisement texts, saying how each sets out to persuade its would-be-buyers to act.

- (i) Give your wife a super new fully automatic push button dish washer for Christmas.
- (ii) Why not own a car that gives you forty miles to the gallon with big-car comfort?
- (iii) This is the best washing machine made - a remote controlled, electrically operated capstan winch model.

(OVER

Now....invent for yourselves an example of a selling text which uses at least two of the persuasion techniques we have outlined above, - statement, question, command and label.

3. The language of advertisements usually tries to persuade you, in some way or other, to buy something. In their language they often indicate quite clearly what kind of relationship they want to exist between the seller and the buyer. For instance, one may want to convince the buyer that he is a very knowledgeable chap already and has only to use his vast store of knowledge about cars to choose car X; another seller may take the opposite line and instruct the buyer in the complicated research which has gone into the design of the car etc.. There are many ways of setting up special relationships with the buyer and they are often indicated to the reader by the way the language is used.

Here are three texts. Read them carefully and write an account of what relationship you think the language indicates between seller and buyer.

- (i) You're no fool. You know a good washing machine when you see one. You can see that the Bexer is just what you've been waiting for.
- (ii) Scientists agree that a tungsten ionised finish with chemically sealed paint is the most resistant coating for the laboratory rust test.
- (iii) When does a home become a palace?
Your own comfortable home, with its gracious furniture and its own charm will become a palace when you use Monarch wall paper.

(OVER

RESEARCH

Are these techniques of persuasion that we have noticed used in the advertisements you see in your newspapers and magazines? Collect some examples of statements, questions, commands and labels this week. How do illustrations help in the persuasion?

2/C/23

IMITATING STYLES

Most of us would recognise text (a) as a Will.

- (a) I, MRS. MARY SMITH, Widow, residing at One Hundred Alma Road , Lennox, do hereby Dispone and Bequeath to my two grandsons, John Dow and James Dow share and share alike and the survivor of them, my whole means and estate.

A label attached to a Christmas present could read:

- (b) I, ROBERT JOHN JONES, Husband, residing at Ten Oak Road do hereby Give and Donate to my wife, Janet Joyce Jones this gold watch, face and case, hands and dial to be enjoyed by her as a timepiece or portable clock.

DISCUSSION

1. Text (b) is clearly meant to be a joke. Why is it funny?
Giving a present is not in itself a joke.
2. How does the language of the Christmas present label make you think of the language of the will ? In your discussion you might want to think about the use of capital letters, unusual words, pairs of words and care in expression.
3. Can you think of another 'joke' way of labelling a gift ?

WORK

1. (a) Write down instructions for boiling an egg.
(b) Now write the same instructions in the style you would use if you were writing rules for a game, like Ludo.

2. A straight line has been defined as 'the shortest distance between two fixed points'. Invent two 'mathematical' definitions for very non-mathematical activities such as eating, singing etc.

3. Look at these texts. Try to use the style of three of them in a 'joke' way, for a subject not normally dealt with by the pattern style.

(i) To dismantle this device, proceed as follows: Place the hand firmly on the forward projection of the cylinder and twist in a clockwise direction.

(ii) Squad! Squad will advance by the left. By the left....
Quick March ! Left, Right, Left, Right.

(iii) The management cannot undertake to accept responsibility for items of personal property left on the premises.

(iv) Rule 1: All pupils must wear school uniform on all school days and to all school activities.

RESEARCH

Look up the definition of PARODY in a good dictionary

Answer this question to your own satisfaction. Would a parody of a style be possible at all if certain varieties of language were not clearly associated with well defined uses ?

Note: 2/C/24: A Summary of Section C (Review).

APPENDIX C

Test 2/T/1, together with the initial record sheet for the candidates, was duplicated by multilith and presented to pupils as a quarto booklet of nine pages. The same test was used as a final assessment, but the essay question in Part A was omitted.

DISCOVERING LANGUAGE II

2/T/1

INITIAL TEST AND RECORD SHEET

PLEASE USE BLOCK CAPITALS

NAME

CLASS SCHOOL

AGE (Years and Months)

WHERE WERE YOU BORN?

WHERE WERE YOU BROUGHT UP?

WHERE DID YOU ATTEND PRIMARY SCHOOL?

.....

WHICH SCHOOL DID YOU ATTEND LAST YEAR?

WHICH CLASS WERE YOU IN LAST YEAR?

Overleaf you will find the first page of a short test. Do not begin until your teacher tells you to. Listen carefully to the instructions you are given. Be particularly careful in recording your answers. Write clearly; draw clear lines. If you have to change any answer, make sure your first answer is well crossed out.

DISCOVERING LANGUAGE II

2/T/1

Part A

NAME SCHOOL

1. Imagine that you are on a camping holiday and that you have to telephone home in rather unusual circumstances. You have difficulty in making yourself understood in the telephone call. Write about some of these difficulties of 'getting the message over' by telephone.

Write no more than a page and a half. (Maximum time 20 minutes.)

2. Read this passage very carefully, at least twice, and try to understand it. Answer the questions below by underlining clearly what you think is the right choice.

The effect of one language on another, and the effect of dialects on the mother tongue can account for some changes in pronunciation, but not all. Another cause of pronunciation change that has been suggested is the fact that children grow. The speech organs of children, it is argued, are a different size from adult speech organs; children learn to mimic the noises their parents make, but on their smaller speech organs this really amounts to their using a different instrument. As they grow up, children go on moving their speech organs in the way they learned in their younger days, but the sounds they produce become different as they become adult, because the size of their speech organs is changing. But, if this were true, we should expect all changes in pronunciation to be of the same sort, and this is clearly not the case. This theory also assumes that people stop using their ears to correct their pronunciation after they grow up, which is surely untrue.

1. Which ONE of these statements about the passage is true? Underline it.

- (a) The passage is mainly concerned with the effects of dialects on the pronunciation of the mother tongue.
- (b) The passage is mainly concerned with an argument that children grow up.
- (c) The passage is mainly concerned with an argument that

(OVER

changes in pronunciation are linked with the way adults make the same speech movements as children, but with different voices.

- (d) The passage is mainly concerned with the fact that one language does not affect another, and dialects do not affect the pronunciation of the mother tongue.
2. The author rejects the 'growing child' argument because:
- (a) Pronunciation changes are not all of the same sort, and adults do not stop using their ears to correct their pronunciation.
 - (b) Speech organs do not grow in the way described.
 - (c) Adult speech organs are the same size as children's, but different in the way they move.
 - (d) Adult movement of speech organs and adult size of speech organs are different from those of a child.
3. When he wrote this passage, the author probably wanted . . .
- (a) To show that the effect of one language on another and of dialects on the mother tongue accounted for all changes.
 - (b) To suggest that the growth of children in speaking was out of the question.
 - (c) To discuss briefly and reject one of the arguments people put forward to account for pronunciation changes.
 - (d) To discuss briefly and accept the 'growing child' argument as a valid reason for pronunciation changes.

(Max. time 15 mins.)

End of Part A of test 2/T/1

Do not turn over to Part B. Wait until your teacher instructs you.

DISCOVERING LANGUAGE II

2/T/1

Part B

NAME SCHOOL

In this part of the test many of the questions ask you to make a choice of answer from a short list of alternatives. Choose the answer that seems to you to be the most correct one, and underline it clearly. If you cannot be absolutely sure of the right answer, choose the one that seems more right than the others. If necessary, guess which answer to choose. You must answer each question.

EXAMPLE: Which of the following language patterns is the 'odd man out' (i.e. does not seem similar to the other three)

- (a) Seven men from Skye
- (b) All the women from Cyprus
- (c) Eight soldiers were from Aden
- (d) Nine boys from Madagascar

START

The first four questions make use of a tape recorder

1. Listen carefully to the words that follow, and underline one of the answers listed. We want to be able to say whether the words you will hear are meant as a question or as a statement. You will hear the words twice. Underline the answer.

(OVER

- (a) The words ask a question
- I was the cause of it (b) The words make a statement
- (c) I cannot tell what the words do.

2. Listen carefully to the words on the tape and underline what you think you heard. You will hear the words twice.

- (a) A man-eating fish
- ***** (b) A man, eating fish
- (c) I cannot tell what was said.

3. Listen carefully to the words on the tape and underline what you think they meant.

- (a) He finished what he was doing although it was difficult
- ***** (b) He did not do it because of the difficulty
- (c) We cannot tell whether he did it or not.

4. Listen to the words on the tape and underline clearly what you think you heard.

- (a) Boys, keep quiet
- (b) Boys keep quiet
- (c) We cannot tell which one was said.

END of questions on tape

(OVER

5. Look at this name:

Mr. John Jones

- (a) Mr. should obviously be spelled 'Mister'.
- (b) Mr. is the usual way of spelling 'Mister' when you write an address on an envelope.
- (c) Mr. is an abbreviation, and good English never uses abbreviations.
- (d) Mr. is just a short form of 'Esquire'.

6. What makes this a joke?

"An estate agent's assistant, whose job was to write the advertisements for houses for sale, wrote a proposal of marriage to the girl in the office upstairs, -

O Eth. wl. y. mry. me? Lf. wd. be wrthls. wtht. y.."

- (a) He has mis-spelled it all.
- (b) He could easily have spoken to her.
- (c) He has used the spellings for advertisements for an unusual purpose.
- (d) He must be illiterate.

7. When we look up the meaning of a word in a good dictionary we find:

- (a) The true and only meaning of the word.
- (b) The meaning of the word as it would be used by a few highly educated people.
- (c) A list of the most common meanings of the word as it is used by speakers of English
- (d) The correct spelling of the word and nothing else.

(OVER

8. How many of the meanings listed below can the phrase 'the bench' take? Underline all possibilities.

- (a) The sudden whitening of the skin.
- (b) A name for the judge or judges in a court of law.
- (c) The padded dual seat of a motor cycle.
- (d) A digestive noise.
- (e) The work table used by a carpenter.

the bench

9. How many of the meanings listed below can the phrase 'a hand' take? Underline all possibilities.

- (a) A unit of measurement for describing the height of horses.
- (b) A hired worker.
- (c) A peninsula with sandy shores.
- (d) A country word for 'calf'.

a hand

10. How many of the meanings listed below can the phrase 'a diversion' take? Underline all possibilities.

- (a) Part of a coat of arms.
- (b) Two forms of the same story.
- (c) A road round an obstruction.
- (d) An amusement, taking your mind off more serious things.
- (e) A 'road up'.

a diversion

(OVER

PATTERNS OF LANGUAGE

Different pieces of English can sometimes be constructed in quite different ways. In the questions which follow (questions 11 - 15 inclusive) you will be given a 'family' of four pieces of English, ONE of which is different from the others. This is the 'odd man out'. Underline it.

EXAMPLE: Underline the odd man out in the following language patterns:

- (a) I have flown over the Arctic
- (b) You have sailed the seven seas
- (c) Don't ever forget this
- (d) We have had unforgettable adventures together

((c) is the odd man out because it is the only command

(Imperative). All the others are statements (Indicative/Affirmative))

Note: You are not asked in every case to say why the odd man out is different; you are merely to notice which one is different and underline it.

11. Underline the odd man out in these patterns:

- (a) John will go north
- (b) Jean will mend her dress
- (c) Tom will have eaten his supper
- (d) Bill will read a book

12. Underline the odd man out in these patterns:

- (a) All the cleverest boys
- (b) The eight most successful girls
- (c) Most of the lazy ones
- (d) All my classes are gifted in some way

(OVER

13. Underline the odd man out in these patterns:

- (a) My old country home in Ireland
- (b) Land in the Irish Free State
- (c) Our ancient family castle in Kerry
- (d) My traditional homeland in the
Emerald Isle

14. Underline the odd man out in these patterns:

- (a) I have had a shock
- (b) I have been given two tonics
- (c) One has had no effect
- (d) The other has had a little effect

15. Underline the odd man out in these patterns:

- (a) Marvellous fresh country food
- (b) I enjoy fresh fruit
- (c) Jane loves freshwater fish
- (d) We both buy berries.

16. Choose any ONE of the above 'odd man out' questions (11 - 15 inclusive) and say in not more than twenty words why you chose your answer.

(OVER

17. Here is a language pattern. Look at it carefully and underline in the list given below the piece of language most like it in construction.

Pattern: The tailor made her a good husband

- (a) Her husband made her a hamburger
- (b) The tailor made him a good suit
- (c) The soldier made him a good offer
- (d) She made him a splendid servant

18. Underline the piece of language in the list most like the pattern given.

Pattern: When I come home, I'll tell you.

- (a) He came home when he could
- (b) When I meet you and talk to you, I'll explain it all
- (c) When he reaches London, he'll ring you
- (d) I'll tell you when I can find time

19. Underline the piece of language in the list most like the pattern given.

Pattern: My old aunt is fit.

- (a) Her young son is sick
- (b) My old aunt has good health
- (c) My old school sent me a magazine
- (d) The fresh air gave me strength

(OVER)

20. An African boy who was learning English wrote this sentence:

An elefant have a long nose.

Look carefully at his sentence and underline the statement which you think most true of it.

- (a) The boy has used the right order of words in the sentence.
- (b) The boy has made a mistake in grammar, so his sentence is impossible to understand.
- (c) The boy has made mistakes in spelling and grammar, so his sentence is impossible to understand.
- (d) The spelling, the grammar and the order are all wrong in this sentence.

21. Look again at the sentence the African boy wrote, An elefant have a long nose. Which of the statements below seems to you to be the most true.

- (a) You would not expect the word 'nose' to be used in describing an elephant. It should be 'trunk'.
- (b) 'Long' does not go well with 'nose' when you are describing an elephant.
- (c) 'Long' comes as a surprise in a description of an elephant's trunk
- (d) You cannot make any attempt at all to say what words would be likely to fall with 'elephant' in a description.

(OVER

22. Here is a quotation. Choose a likely source for it from the list below.

Quotation: 'That on copies given away to the author or for the purpose of aiding sale or for review or on copies accidentally destroyed the Publishers shall be free of any liability to pay royalty.'

- (a) From a friendly letter written by the author to his mother
- (b) From a publisher's contract with an author
- (c) From a story about the romance of writing
- (d) From an author's writing diary.

23. Here is a quotation. Choose a likely source for it from the list below.

Quotation: ' Where shall we go?

What is the way to?

Where does this road lead?

Where can I get a bus to? '

- (a) From the words of a traditional song
- (b) From a foreign phrase book for travellers
- (c) From a travel article describing cheap holidays
- (d) From a textbook on polite English tea-table conversation

(OVER

24. Here is a short passage. Read it carefully and note how it is printed. Then choose from the list given below ONE correct statement about it.

Passage: tell you what happened...em...last summer which..
eh..eh..startled me a bit...m.eh.n.not..em..not
being..em a native of this part...em I've not seen
many deer...and...eh...when we were walking up this
...eh..eh...the Rinns of Kells..em..there was a
big fence...and as I as we crossed it...a deer
ran...bounding away.

- (a) This is what a halting foreigner actually said over the telephone
- (b) This is a true piece of ordinary conversation
- (c) This is the conversation of an illiterate speaker
- (d) This cannot be conversation because you cannot understand it.

End of Part B of the Test.

When you finish, do not go back over your answers and do not alter anything. Put your pencil down and wait quietly for the others to finish.

APPENDIX D

(i) Analysis of Variance

This statistical procedure is an analysis of a particular test score in the light of other measured variables of a given population. It is a particularly useful and elegant treatment of quantities when it has been found impossible to hold certain variables constant to leave only one free variable for analysis (i.e. by matching). The technique allows simultaneous consideration of several factors.

The sources of variance used in our experiment were scores achieved in 2/T/1 before and after the teaching of the materials, grouped to show the variance within the groups in the schools tested and between the groups in the schools tested. Thus the treatment of variance we adopted produced a table of quantities for each school similar to that for Knox Academy (6.4.1), showing degrees of freedom (df), sums of squares (SS), mean squares (MS) and the 'Fisher' significance factor (F). (See Appendix E for details for each school tested.) The significance of the test in the light of the variables noted was calculated (see below) and a pooled table of these results was drawn up (Table 1) and an abstract of the pooled test scores was made (Table 2).

The summary of the analyses of variance for the schools in the experiment (Table 1) showed that only two schools, taken individually, showed a significant gain in the tests. When the scores of all schools were pooled, however, (Table 2), there was a highly significant result in favour of the subjects.

(ii) Significance

The term 'significance' in statistical processing calculates what measure of certainty we can allocate to the results. Two sets of results (say, the initial and final scores in 2/T/1) are thought of as not being different, - that is, they are thought of as showing zero significance - until they are shown to be significantly different in terms of the likelihood of these results being produced by chance. The assumption that there is no difference is called the null hypothesis. It is accepted that we reject the null hypothesis only if the observed difference could occur by chance 5 times or less in every 100, i.e. 5%. The significance tests were carried out in the analysis of variance and on the check t-tests included in the body of the thesis (in the case of Knox Academy) and in Appendix E (for the other schools).

(iii) Analysis of Co-variance

An analysis of co-variance accounts statistically for differences noted between groups on test A in the light of subsequent variation in performance in test B. In our experiment, groups differed in ability in terms of a test of I.Q. The experimental and control subjects drawn from this tested population again differed in the final scores of the language awareness test, 2/T/1. An analysis of co-variance answers the question, 'In how far can we account for the differences in final performance on 2/T/1 in terms of the I.Q. differences noted?'.

The procedure adopted is as follows: an analysis of variance (q.v) is made for I.Q. scores and for 2/T/1 scores (Tables 3 and 4). The sums of squares and mean squares for each analysis of variance are brought together in a conflated summary (Tables 5 and 6). From this it can be seen that there is a difference between groups tested initially for I.Q. and finally for language awareness in 2/T/1. To test whether the final scores of 2/T/1 are in fact accounted for by I.Q. we compute the adjusted sums of squares for 2/T/1, arrived at by 'adjusting out' the effect of I.Q. differences (Table 7). Where this produces a factor F which is not statistically significant, we can say that the scores finally in 2/T/1 are wholly explained by I.Q.

It should be noted that only one individual school (Aberdeen) in fact showed that I.Q. could not be held to explain 2/T/1. However in pooling all scores (Table 8) and making a grand abstraction of totals (Table 9) it was shown that, taking the test and control population as a whole, there was a highly significant result (1 - 5%) confirming that, overall, I.Q. could not be held to account for the scores on the language test. The explanation of Aberdeen being a-typical in the separate schools' test was that the population there was the largest of the school groups (grand total 161) by a large margin. It is statistically unsatisfactory to perform variance analyses on small groups.

APPENDIX E

Source Statistics for All Schools
(see Table 1 and Table 2; 6.4.1)

HOLYROODSubjects

n = 31

Raw Gain Diff. = -118

Controls

n = 14

Raw Gain Diff. = -30

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. grs.	1	261.691	26.691	2.439
Wthn. grs.	43	470.553	10.943	
Total	44	497.244		

(Note: Betw. grs. = Between Groups Wthn. grs. = Within Groups)

Significance: N.S.

t-Test Check: Mean GainsSubjects: $-118/31 = -3.80645$ Controls: $-30/14 = -2.14286$ Difference: = -1.66359 Significance: N.S.

Conclusion for Holyrood: Mean Gain higher for subjects than
for controls but not significantly so.

HERIOT'SSubjects

n = 18

Raw Gain Diff. = -47

Controls

n = 30

Raw Gain Diff. = -55

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. grs.	1	6.805	6.805	.965
Wthn. grs.	46	324.445	7.053	
Total	47	331.250		

Significance: N.S.

(over

Heriot's (contd.)t-Test Check: Mean GainsSubjects: $-47/18 = -2.61111$ Controls: $-55/30 = -1.83333$ Difference: $= -0.77778$

Significance: N.S.

Conclusion for Heriot's: Mean Gain higher for subjects than for controls but not significantly so.

EWARTSubjects

n = 19

Raw Gain Diff. = -72

Controls

n = 24

Raw Gain Diff. = -33

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. grs.	1	61.822	61.822	9.157
Wthn. grs.	41	276.783	6.751	
Total	42	338.605		

Significance: Sig. at 1%

t-Test Check: Mean GainsSubjects: $-72/19 = -3.78947$ Controls: $-33/24 = -1.37500$ Difference: $= -2.41447$

Significant

Conclusion for Ewart: Mean Gain for subjects significantly higher than for controls.

BOROUGHMUIRSubjects

n = 60

Raw Gain Diff. = -127

Controls

n = 32

Raw Gain Diff. = -52

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. grs.	1	5.045	5.045	.502
Wthn. grs.	90	903.683	10.041	
Total	91	908.728		

Significance: N.S.

t-Test Check: Mean Gains

Subjects -127/60 = -2.11667

Controls: -52/32 = -1.62500

Difference: = -0.49167

Significance: N.S.

Conclusion for Boroughmuir: Mean Gain higher for subjects than for controls but not significantly so.

KELVINSIDESubjects

n = 17

Raw Gain Diff. = -35

Controls

n = 20

Raw Gain Diff. = -18

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. grs.	1	12.340	12.340	1.275
Wthn. grs.	35	338.741	9.678	
Total	36	351.081		

Significance: N.S.

(over

Kelvinside (contd.)t-Test Check: Mean GainsSubjects: $-35/17 = -2.05882$ Controls: $-18/20 = -0.90000$ Difference: $= -1.15882$

Significance: N.S.

Conclusion for Kelvinside: Mean Gain higher for subjects than for controls but not significantly so

ABERDEENSubjects

n = 134

Raw Gain Diff. = -358

Controls

n = 27

Raw Gain Diff. = -42

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Betw. grs.	1	27.992	27.992	4.295
Wthn. grs.	159	1036.219	6.517	
Total	160	1064.211		

Significant at 5%

t-Test Check: Mean GainsSubjects: $-358/134 = -2.67164$ Controls: $-42/27 = -1.55555$ Difference: $= -1.11609$

Significant

Conclusion for Aberdeen: Mean Gain significantly higher for subjects than for controls.

ABBREVIATIONS USED IN BIBLIOGRAPHY

Archivum Linguisticum	Arch.L.
British Journal of Psychology	Brit. Jour. Psychol.
British Journal of Educational Psychology	Brit. Jour. Educ. Psy.
British Journal of Statistical Psychology	Brit. Jour. Statistical Psychol.
Bulletin of the National Associa- tion of Secondary School Principals	Bull. Nat. Assoc. Sec. Sch. Princ.
College English	Coll. Eng.
Educational Review	Educ. Rev.
Education Studies of the University of Iowa	Univ. Iowa, Stud. Educ.
Elementary School Journal	Elem. Sch. Jour.
English Language Teaching	E.L.T.
Harvard Educational Review	H.E.R.
Journal of Child Psychology and Psychiatry	Jour. Ch. Psychol. and Psychiatry
Journal of Educational Psychology	Jour. Educ. Psy.
Journal of Educational Research	Jour. Educ. Res.
Journal of Linguistics	J.L.
Journal of Social Issues	Jour. Soc. Issues
Language	Lg.
Language and Speech	Lang. and Sp.
Lingua	Ling.

Linguistic Reporter	Ling. Rep.
Modern Languages Association	M.L.A.
Modern Languages Journal	M.L.J.
National Association of Teachers of English	N.A.T.E.
Quarterly Journal of Speech	Quar. Jour. Sp.
Review of English Literature	Rev. Eng. Lit.
Scottish Council for Research in Education	S.C.R.E.
Scottish Education Department	S.E.D.
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