THE USE OF COMMUNICATION STRATEGIES

BY

GERMAN SCHOOL LEARNERS OF ENGLISH

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ABSTRACT

This thesis is a study of communication strategies. Its aim is to increase our knowledge of how school learners use strategies to overcome problems encountered in foreign language communication. The learners are 232 German secondary school pupils learning English as a foreign language. They represent the full age and ability range. In addition, a peer group of 54 native English pupils are studied. The data provided by these subjects are their performances on two tasks of spoken communication, one descriptive and one interactive.

The data are assessed on a number of linguistic measures - message content, key vocabulary, text size, speech rate, and error. Learners' strategies are identified from their intended meaning and performance features such as hesitation, and classified according to a taxonomy. The identification procedure is validated using introspective data from six supplementary pupils. The results of all these assessments are analysed to establish the extent, distribution and success of the learners' strategies and to relate their strategic to their linguistic competence.

The principal findings are that learners make limited but effective use of communication strategies, choosing to employ an achievement strategy rather than abandon their message when encoding problems arise. Their use of communication strategies is related to their proficiency in the target language in both frequency and distribution, with L_1-based strategies decreasing as proficiency increases. It is also related to the kind of problem encountered and to the task being performed. Finally, the implications of the findings for further research and for the classroom are considered.

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PREFACE

In November 1978, Prof. Eric Hawkins, Director of the Language Teaching Centre at the University of York organised a seminar for language teachers in the UK to discuss language teaching in the sixth form in the light of proposed changes to the A-level examination. At that meeting, I met for the first time Prof. Karlheinz Hecht of the University of Munich, who had been invited to the seminar to speak on the German experience of changes in the *Abitur* examination. We discovered a mutual interest in a somewhat neglected area of study, the interlanguage of school learners of foreign languages, and shortly afterwards agreed to establish a joint research project. It was the beginning of a firm friendship and fruitful collaboration. Over a period of some fourteen years, the Munich-York project "Learner Language" built up a large corpus of school learner performances, and by the time the project came to an end when we both retired, almost every aspect of the learners' language had been the subject of both short research papers and in-depth investigations, all perhaps except the subject of this study - *communication strategies*. I owe therefore a large debt of gratitude to Karlheinz Hecht, not only for inspiring the project on which this study draws but also for all I have gained over these years from his wide knowledge and stimulating ideas.

I am indebted too to Eric Hawkins, who, although he was not directly involved in the Munich-York project, has greatly enriched my teaching and research with his unstinting support and encouragement in thirty-five years of friendship and collaboration.

It has been my very good fortune to have Dr Chris Kyriacou as a supervisor. He brings an ideal combination of talents to the job - a keen eye for the essence that lies (or should lie) beneath the detail, an ability to conceive and explain how the difficult business of presentation might be structured, and an impressive intuition about areas that lie outside his own field. With it all come a great sense of humour, the nicest way of prodding to keep things moving forward, and great generosity with his time. I thank him warmly.

Without the support of Brita Green, this thesis would not have seen the light of day. She encouraged me first to take it on and then to stick with it. She has been ever willing to read yet another draft of chapter after chapter as they were written and the whole thing again when it was finally complete. Thanks to her helpful and perceptive criticism, the final result is much less convolute in both ideas and expression than it might otherwise have been.

Finally, my thanks *unbekannterweise* to the many teachers and pupils who together provided the whole basis for this study – the data.

CHAPTER ONE

INTRODUCTION

This thesis deals with the problem of how you say what you want to say in a foreign language when you do not have full command of it. The problem is age-old, as is its solution - resorting to such strategies as gesturing, appealing for help, paraphrasing, reducing the message or, if the worst comes to the worst, avoiding a topic altogether. A familiar problem, and yet interest in it as a field for research has developed only in the last twenty or so years, when a name for the strategies has also emerged - *communication strategies*.

That a problem so central to learning a foreign language should not have received attention sooner is probably because foreign language teachers until recently tried to avoid putting learners into situations where they might have to compensate for inadequate resources. The content of what was said was carefully controlled to match the language that learners had learned (or were supposed to have learned): the focus was on the *medium* not the *message*. In classic question-and-answer exchanges in the classroom, the teacher, asking a question, was not seeking information (the answer was usually known to the teacher already) but looking for confirmation that the pupil, answering the question, could remember and manipulate the language appropriately. As there was no real message the pupil had to get across, no actual *information gap*, there was no pressure on the pupil to find a way of negotiating any *language gap* that might open up. In fact, any attempt to do so was sometimes positively discouraged. In free composition - a hazardous area, since content could not be tightly controlled - learners were often exhorted not to say anything they did not know how to say.

Now, however, there has been a shift in the attitude towards message in the foreign language classroom. Whilst few teachers might want to go as far as some theorists in claiming that focus on message is all that is required for successful foreign language learning, most language teachers would probably now subscribe to a *communicative approach* to language teaching. Though what they meant by that might vary greatly, public policy towards language teaching would probably ensure that they included some form of

natural communication in their teaching. Thus, the DES document Modern Foreign Languages for ages 11 to 16 has at the top of its list of "the educational purposes of modern foreign language teaching":

> to develop the ability to use the language effectively for purposes of practical communication;
>
> (DES, 1990, p.3)

An implication of this, it later states, is:

> Communicating in a foreign language must thus involve both teachers and pupils using the target language as the normal means of communication.
>
> (p.6)

and the document recognises the need for communication strategies:

> operating with a more limited stock of language ... brings out the need for strategies for communication ...
>
> (p.3)

The developments that have led to this interest in communication strategies are examined in greater detail in Chapter Two.

Communication strategies is a deceptively simple term and seems readily understandable. However, when one examines the definitions that have been offered for it in the literature, one discovers a lack of agreement. The very term *strategy* turns out to be problematic. Further lack of agreement is found when it comes to establishing whether a specific instance of linguistic behaviour is strategic or not. Finally, when strategies have been identified, there is disagreement about their classification. These problems are addressed in Chapter Three, which looks in detail at other research into communication strategies and outlines and justifies the solutions adopted in this research.

Previous research on communication strategies has suffered from a number of drawbacks, which arise largely from its preoccupation with theoretical questions at the expense of pragmatic investigation. When the strategic behaviour of actual learners has been studied, it has often been of rather small numbers, indeed, of single figures in some cases. If only few learners are studied, then their use of communication strategies has to be maximised. That has often meant deliberately putting learners into situations where their linguistic resources are likely to be overtaxed and they will be forced to have frequent recourse to communication strategies. The tasks they have been given to achieve this have sometimes been remote from

everyday language communication, e.g. describing abstract or unusual shapes. Moreover, the learners have for the most part been adults, often operating in the target language environment.

This investigation seeks to avoid those drawbacks. Its aim is to study the strategic behaviour of learners who are performing a normal communicative task, one in which communication strategies are purely incidental, not central to the task. That means that there must be an adequate number of learners if a range of strategies is to be identified, since the individual need for them will in most cases probably not be high and in a few cases no doubt non-existent. This aim is set out in detail in Chapter Four, where the research methods are elaborated and a number of research questions posed.

The data for the investigation are provided by the corpus of the Munich-York project "Learner Language", which I conducted from 1979 to 1993 with Professor Karlheinz Hecht of the Lehrstuhl für die Didaktik der englischen Sprache und Literatur (English teacher-training department) of the University of Munich. The principal purpose of the project was to investigate the many aspects of *interlanguage* (Selinker, 1972), the language variety of learners which manifests features of both their native language and the target language they are aiming at. The corpus consists of a large number of oral and written performances by school learners of English as a foreign language (principally in Germany, but also in France, Hungary, Italy and Sweden) on a number of communicative tasks - writing a letter, giving a verbal report of an incident observed or making a telephone call. There are also tests of the learners' competence in grammar, vocabulary and style. All the tasks and tests are also performed by peer groups of native English pupils.

The project data that I have used for this study are the recordings of the oral performances - the verbal report and the telephone call - made by the German and English pupils, 286 in all, and the competence tests. For logistic reasons, we were only able to obtain written performances from the pupils in the other countries. Oral productions lend themselves particularly well to the investigation of communication strategies, because the speakers' hesitations and false starts not only provide clues to where they may be encountering difficulties but can be recorded for systematic study.

More details of the data, their collection and processing are given in Chapter Five. Chapter Six is the core of this thesis. In it, the strategic performance of the German and English pupils is analysed in detail. Chapter Seven is concerned with pupil introspection about their use of strategies. In Chapter Eight, the learners' grammatical and sociolinguistic performance is examined. Chapter Nine evaluates the research questions in the light of the data analyses of Chapters Six and Eight. Chapter Ten, finally, considers what conclusions can be drawn from the research.

There have been many studies of communication strategies in the past twenty years. The particular contribution of this further study is first and foremost that it investigates the natural and spontaneous strategic behaviour of learners performing tasks devised for the study of their overall ability to communicate in a foreign language. Secondly, it is unusual in the large number of learners involved, learners moreover learning a foreign language in school in a native language environment - a group that has been largely overlooked in previous research. Noteworthy, finally, is the use the study makes of peer group native speakers of both the learners' target language and their own language.

My particular interest in the study of communication strategies arose from my belief that recent research attention to communication strategies has largely failed to affect classroom practice despite policy statements like that quoted above and despite the considerable contribution that strategic competence has to make to communication in a foreign language. That may be because research into communication strategies has so far largely neglected classroom learning. My hope is that this study may be able to offer something of relevance to foreign language learners in school classrooms.

CHAPTER TWO

GENERAL BACKGROUND

> Research is not prompted by idle, whimsical, or unspecified curiosity. The 'review of the literature' which usually introduces a research report is therefore not a research ritual. It provides necessary information on the background against which a new investigation makes sense.
>
> (Stern, 1983, p.62)

2.1 INTRODUCTION

The language-teaching background against which this investigation endeavours to make sense is principally one of the post-war years, and especially of the last twenty years. Of course, developments in those years were, in their turn, influenced by what went before them, and in broad outline they can be seen as part of an on-going "language teaching controversy" (Diller, 1978) or "pendulum swing" (Hawkins, 1981, p.98) between language-teaching methods that emphasise rules and insights and those that stress habit-formation through use and practice.

It should be borne in mind that a review of the literature is in essence a review of theory. What happens in practice is by no means so well documented. To the limited extent that it is - and the classrooms that have been described (e.g. Sanderson, 1982; Peck, 1988) are hardly run-of-the-mill - the relationship between theory and practice is revealed as a very complex one. Whereas theories can be clearly outlined, their implementation in practice is often very diffuse (cf. Allwright, 1972).

2.2 LANGUAGE TEACHING IN THE POST-WAR YEARS

The increased demand for speakers of foreign languages brought about by the war in both the United States and Great Britain led to a new approach to language teaching, which was employed in intensive foreign-language courses run by the armed services in both countries. After the war, the methods were crystallised and

rationalised by a number of writers, foremost among whom was Nelson Brooks in an influential book called Language and Language Learning (1960).

The main tenets of the *audio-lingual* method, as Brooks called it,[1] were

- the primacy of the spoken over the written language (and the separation of the so-called *four skills* of listening, speaking, reading and writing);

- the *target language* seen as a set of new habits to be acquired by mimicry and memorisation (*mim-mem*);

- the grammar of the language seen as a set of patterns or structures to be induced by learners in *pattern practice* or *structure drills*.

The audio-lingual method (and its European counterpart, the *audio-visual* method)[2] had a powerful impact on language teaching, especially at the beginners' level. This is perhaps to be explained by what appeared to be the strength of its theoretical credentials. American *structural linguistics* (deriving principally from Bloomfield's Language, 1933) provided descriptions of the target language structures on a hierarchy of levels from phonology to syntax, whilst the *behaviourist* school of psychology, particularly as expounded by Skinner (1957), provided the theory of how the structures were to be learnt.

Further theoretical support came from *contrastive linguistics*, which was initiated as a formal discipline by Lado's Linguistics across Cultures (1957). Lado's position as regards language teaching was that systematic comparison of native (L1) and target (L2) languages, to identify where they coincided and where they differed, would reveal where learners could be expected to make positive and negative transfer between languages. Points of difference, especially where there was some similarity at the same time, could be expected to be points of learning difficulty. Course-writers and teachers would know that these were the points on which to concentrate practice. This position chimed in well with teachers' experience of learners' errors, which seemed typically to reveal negative transfer or *interference from L1*. Lado's work led to a series of contrastive

studies, such as those on the sounds (Moulton, 1962) and the grammatical structures (Kufner, 1962) of English and German.

Lado took his contrastive-analysis theory into the area of language testing in another seminal work Language Testing (1961). He proposed that foreign-language competence could be measured by testing the learner's control of the "difficulties" established by contrastive analysis. These were ideal for *discrete-point* testing using objective techniques such as *multiple choice*. Traditional language-testing techniques, such as translation, dictation and composition were dismissed as *unreliable* and therefore *invalid*. Lado's book ushered in what Spolsky (1976) called the *psychometric-structuralist* trend in language testing.

The apparently solid theoretical basis of the audio-lingual method was complemented by the new technology of the time. The tape-recorder was ideally suited to bringing a variety of native voices into the classroom, whilst the language laboratory was the perfect drillmaster for individualising and tirelessly practising the *stimulus-response-reinforcement* paradigm on which the *three*-(or *four*-)*phase* structure drills were modelled that were popularised by Stack (1960) in a book that became known as "the Gospel according to St Stack".

New course materials based on the audio-lingual and audio-visual methods appeared in both the United States and Europe, produced for the first time by teams of writers consisting of linguists, teachers and artists, e.g. the A-LM courses in French, German, Italian, Russian and Spanish (1961-6) in the US, Voix et Images de France (CREDIF, 1961) in France, the Nuffield Foundation/Schools Council courses in French, German, Russian and Spanish in the UK (1963-72).

New language-teacher associations were founded to break away from the conservatism of the existing associations and to discuss and promote the new methods, e.g. The Audio-Visual Language Association founded in Britain in 1962 "with the aim of fostering the study and promotion of language teaching by means of audio-visual and audio-lingual methods and the use of the language laboratory and other teaching aids ... " (Audio-Visual Language Journal, inside cover).

What caused such a powerful new trend in language teaching to fall so rapidly into disrepute as did the audio-lingual method at the end

of the sixties?[3] The answer lies both in attacks on the theories underlying the method and in controlled studies that were undertaken to test its effectiveness.

2.2.1 Attacks on the theoretical bases of audio-lingualism

What had seemed the great strength of the audio-lingual method was in fact its fatal weakness - its theoretical foundations in linguistics and psychology. Both structuralism as an account of the functioning of language and behaviourism as an explanation of how it was acquired came in for fundamental criticism in the late fifties and early sixties, in particular from one man - Noam Chomsky.

Chomsky's slim and innocuous-looking study in the Janua Linguarum series Syntactic Structures (Chomsky, 1957) was the first of a number of writings that led to a rejection of the structuralist notion that an adequate account could be given of a language from an analysis of a finite set of actual utterances. Instead of proceeding from the outside in, *transformational-generative grammar*, as the new approach came to be called, proceeded from the inside out, attempting to discover the rules that a native speaker must have internalised in order to be capable, using finite means, of producing (and interpreting) an infinite number of sentences which are recognised as grammatical by another native speaker.

In 1959, in a devastating review of Skinner's Verbal Behavior, Chomsky specifically took to task the attempt to understand human linguistic behaviour in terms of the behaviourist paradigm of stimulus-response-reinforcement that had been derived from animal experimentation. Chomsky wrote:

> We constantly read and hear new sequences of words, recognize them as sentences, and understand them. It is easy to show that the new events that we accept and understand as sentences are not related to those with which we are familiar by any simple notion of formal (or semantic or statistical) similarity or identity of grammatical frame. Talk of generalization in this case is entirely pointless and empty. It appears that we recognize a new item as a sentence not because it matches some familiar item in any simple way, but because it is generated by the grammar that each individual has somehow and in some form internalized.
>
> (Chomsky, 1959, p.338)

Thus, against Brooks' idea that acquiring a new language was acquiring a new set of habits, Chomsky strongly set the idea of the creativity of language from underlying rules. Young native speakers or foreign-language beginners who say things like "they goed" are unlikely to be demonstrating a habit they have acquired through repeatedly hearing or saying "they goed". They are much more likely to be demonstrating that they have acquired an underlying rule for generating the past tense that is as yet inadequate and which therefore leads them to create a non-existent form of the verb.

Chomsky's theories seemed apt to demolish all the principal tenets of audio-lingualism: language was not a set of patterns passively acquired by habit formation in structure drills; it was a set of rules for generating sentences, which learners acquired actively by creating and testing hypotheses. The idea of linguistic universals stressed what languages had in common rather than where they differed and this caused a decline in the fortunes of contrastive linguistics. Even the great stress laid by audio-lingualism (and inherent in its very name) on the prime importance of spoken language was called into question, since the written form of a language was seen as a separate system that was in some respects independent of the spoken form.

A much less fundamental critique of audio-lingual methods of language teaching, though at the time it was seen as a very devastating one, was The Psychologist and the Foreign Language Teacher (Rivers, 1964). Rivers did not refute the importance of habit formation in language learning, but she severely criticised the narrow behaviourist approach to it adopted by the audio-lingualists. The book perhaps owed its great influence to the fact that its author was herself a language teacher and many of her criticisms were aimed at aspects of audio-lingualism that had never been popular with a broad base of language teachers: the early emphasis on the spoken at the expense of the written word, the stress on analogy to the neglect of explanation, and the heavy dependence on formal drill to the detriment of meaning, situational context and interpersonal relationships.

The audio-lingual movement was also criticised by the eminent psycholinguist J.B.Carroll in a paper presented at the International Conference on Modern Foreign Language Teaching held in Berlin in

1964 (Carroll, 1966). Carroll brought into focus the controversy mentioned at the beginning of this chapter by giving names to the opposing approaches:

> Examination of the practices of foreign language teachers and the writings of several theorists suggests that there are today two major theories of foreign language learning. One may be called the *audiolingual habit theory*; the other, the *cognitive code-learning theory*.
>
> (Carroll, 1966, p.101)

He criticised both theories for failing to take "adequate account of an appreciable body of knowledge" that had "accumulated in the study of verbal learning" (p.104). In particular, he found the audio-lingual habit theory guilty of overstressing frequency of practice and neglecting contrast, of playing down meaningfulness, of leaning too heavily on aural learning and of neglecting conscious attention to the critical features of a skill to be learned.

Carroll, too, was less fundamental in his criticism than Chomsky, who returned to the attack in an address to the American Northeast Conference on the Teaching of Foreign Languages (Chomsky, 1966). Just as categorically as Brooks had stated the fundamental principle of audio-lingualism:

> The single paramount fact about language learning is that it concerns, not problem solving, but the formation and performance of habits.
>
> (Brooks, 1960, pp.46-7)

Chomsky rejected it:

> Linguists have had their share in perpetuating the myth that linguistic behaviour is 'habitual' and that a fixed stock of 'patterns' is acquired through practice and used as the basis for 'analogy'.
>
> (Chomsky, 1966, p.154)

Whilst declaring himself not competent to make proposals about language-teaching, Chomsky's standing was by this time such that audio-lingualism as a theory was set reeling. It might have recovered from the blow if a number of empirical attempts in the sixties to establish its superiority over other methods had given it wholehearted endorsement. Such was not the case.

2.2.2 Comparative method studies in the sixties

The first notable comparative method study that investigated the practical effectiveness of the audio-lingual method compared with traditional methods (in the teaching of German) was the study by Scherer and Wertheimer at the University of Colorado. It concluded that "the two methods ... result in comparable overall proficiency" (Scherer & Wertheimer, 1964, p.245).

Scherer and Wertheimer's experiment was conducted with university students. The best known and largest scale study of the effectiveness of the audio-lingual method with school learners was the Pennsylvania Project. Classes learning with an audio-lingual approach were known as *functional skills* classes. The results of this research were described as "personally traumatic to the Project Staff, deeply committed to a Functional-Skills philosophy" (Smith, 1970, p.271):

> "Traditional" students did better than "Functional Skills" classes in reading and writing and as well as the more modern approaches in listening and speaking.
>
> (p.233)

In Sweden, a series of small-scale but carefully controlled studies at the University of Gothenburg, known as the GUME Project,[4] conducted at both school and adult levels, also failed to establish any consistent superiority of what were there called *implicit* over *explicit* methods (Levin, 1972).

The audio-lingualists found no comfort either in investigations of the effectiveness of language laboratories, which had seemed the ideal teaching aid for intensive and individualised practice of patterns.

The first large-scale study was that conducted by Raymond Keating in 21 school districts of Metropolitan New York in 1961-2 (Keating, 1963). The performance in French of over 5000 pupils, some using, some not using a language laboratory, was compared at four levels (= years) of learning. The results seemed to suggest not only no superiority of the lab pupils but indeed that they were at a disadvantage compared with those with no lab experience. These shattering results for proponents of the language laboratory, appearing at a time when lab installations were enjoying mushroom growth (the first of many school laboratories in England was installed in 1962), were, however, rather easy to dismiss on many

grounds, such as the inadequacy of the tests used and the lack of information on the teaching, course materials, kind of installation, pattern of usage, etc.

The study conducted in England at the University of York (Green, 1975) could not be so readily dismissed. It was a small-scale study involving around 100 school pupils but was remarkable for the degree of control achieved over such variables as experimental and control group composition, teacher, amount and timing of teaching, pattern of lab usage, teaching materials and the fact that the groups were held constant without significant attrition for three years and the pupils studied overall for five years. The testing of performance and attitude was extensive and thorough. The external validity of the study rested on the ability of the project team to demonstrate that the pattern of language laboratory usage they had investigated was typical for school labs throughout the country. The evidence of the study pointed to no significant difference in performance or attitude over a three-year period between pupils using a language laboratory as a regular aid in their learning and those using only a simple classroom tape-recorder.

Whilst the York Study was widely accepted to have high internal validity, its external validity could be questioned on the grounds of the representativeness of the pupils involved, who were all boys at the upper end of the ability range (grammar school). However, a replication with secondary pupils of both sexes covering the full ability range (comprehensive school) again found no advantage for the language laboratory (Winter, 1982).

Reviewing the important method comparisons of the previous decade, Allwright (1972) concluded, on the one hand:

> Variables in educational experiments are notoriously resistant to proper experimental controls, and global comparisons offer the largest number of variables to control.

and, on the other hand:

> ... the methods to be compared were not really derived at all rigorously from the competing theories claimed to underlie them.
>
> (p.154)

He recommended that there should be "a moratorium on methodological comparisons" (p.164) and that research efforts should be di-

rected towards what actually happens in classrooms - a move from prescription to description:

> ... we need descriptions of classroom events, descriptions that are sufficiently comprehensive so that we stand a chance of discovering, by correlating observed events with performance criteria, the variables that really matter in the classroom.
>
> (p.159)

Certainly, after the failure of the major projects which have been briefly described here to establish any advantage of methods like the audio-lingual approach, interest has shifted to a certain extent to descriptions of language classrooms (e.g. Mitchell, Parkinson & Johnstone, 1981; Sanderson, 1982; Peck, 1988) but much more to a more theoretical investigation of foreign language learning in what has become known as *second language acquisition* research.

2.3 SECOND LANGUAGE ACQUISITION

Second language acquisition is sometimes distinguished from foreign language acquisition. For Ellis, this is not so: he defines second language acquisition as "the sub-conscious or conscious processes by which a language other than the mother tongue is learnt in a natural or tutored setting" (Ellis, 1985, p.6). Thus, for Ellis, the term subsumes foreign language acquisition. This study is concerned only with the learning of a foreign language by learners who are surrounded by speakers of their native language and whose formal contact with the foreign language lies in the classroom, and informal contact in radio, TV and literature. Their opportunity for natural interaction in the target language is chance encounters with native speakers of it who happen to be visiting their country and visits they themselves may make to a country where the target language is spoken. A further restriction is that the classroom is the school classroom and the learners are therefore young people who have not themselves chosen to study the foreign language and who do not necessarily have any strong integrative or instrumental motivation for doing so.

Ellis goes on to say that the "study of SLA [second language acquisition] is directed at accounting for the learner's competence, but in order to do so has set out to investigate empirically how a learner performs when he or she uses a second language" (p.6).

Here, he is contrasting *competence* with *performance* in the special sense proposed by Chomsky for first language acquisition:

> We thus make a fundamental distinction between *competence* (the speaker-hearer's knowledge of his language) and *performance* (the actual use of language in concrete situations). ... The problem for the linguist, as well as for the child learning the language, is to determine from the data of performance the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance.
> (Chomsky, 1965, p.4)

By "knowledge of his language" Chomsky meant his mental representation of the linguistic system - the grammar of the language. As we have seen, it could not have been arrived at solely by a behaviourist stimulus-response paradigm. How, then, was it achieved? Chomsky, with others, held that

> the child must have a method for devising an appropriate grammar, given primary linguistic data. As a precondition for language learning, he must possess, first, a linguistic theory that specifies the form of the grammar of a possible human language, and, second, a strategy for selecting a grammar of the appropriate form that is compatible with the primary linguistic data.
> (p.25)

This innate predisposition he elsewhere calls a *language-acquisition device* (p.32). A child is thus born with a knowledge (in a deep unconscious sense) of how a natural language can function together with a hypothesis-forming and testing mechanism that is triggered by the sentences the child hears into assigning possible structures to them, which may or may not be confirmed by sentences heard subsequently.

The idea that the child is somehow pre-programmed for language acquisition and not dependent in any behaviourist sense on the quality and quantity of the data reaching it sparked a surge of interest in the sixties in child language acquisition. Broadly, the research seemed to provide evidence for the existence of innate language structures in that children appeared to follow a rather invariate pattern of development irrespective of the nature of the input they received or the reaction to their output (in the shape of reward or correction):

> The order of progression in knowledge of the first language, both semantic and grammatical, will prove to be approximately invariant across children learning the same language and, at a higher level of abstraction, across children learning any language. (Brown, R., 1976 p.456)

> The possibility that the frequencies with which either specific utterances or construction types are modelled for small children affects order of acquisition has been exhaustively probed in Stage II. The upshot of the several kinds of test made is that, for the fourteen English grammatical morphemes, there is no evidence whatever that frequency of any sort is a significant determinant of order of acquisition.
>
> (p.462)

Inevitably, the question was posed: Does the same hold true when a second language is being learned? Is there evidence there, too, of innate structures at work in processing the incoming data, resulting in similarity of output whatever the nature of the input? Studies of children, and later adults, acquiring second languages in both natural and taught settings seemed to confirm that such was the case. Dulay, Burt and Krashen, who were themselves responsible for some of the main studies, summarise the findings:

> Is there an acquisition order for certain English structures which is characteristic of L2 learners? As we have seen, nearly every soundly designed study has answered this question in the affirmative. An L2 acquisition order has been discovered which is characteristic of both children and adults, and which, for as yet unknown reasons, holds for both oral and written modes, provided natural communication tasks are used to elicit the language data.
>
> (Dulay, Burt & Krashen, 1982, p.229)

It is important to point out that the evidence for a natural order in second language acquisition is by no means as strong as that for first language acquisition. Firstly, it is not based on samples of spontaneous speech; secondly, a much more restricted area of language has been investigated, namely grammar, and even within that area mainly morphology; and finally, and perhaps most critically, accuracy of use established in cross-sectional studies has been equated with order of acquisition - there are few longitudinal studies, especially of classroom second language acquisition (cf. Ellis, 1985, p.221).

The Chomskyan notion of the child devising a hypothesis about the grammar of the language on the basis of input and subsequently revising it in the light of further input was also applied to second language acquisition in the suggestion that, when learners make errors, they are in effect revealing the current state of their underlying foreign language competence - their current hypothesis about its grammar, which does not yet match that of a native

speaker. Corder (1967) called this the learner's *transitional competence* and saw errors as its systematic product. In doing so, he drew a distinction between *errors* and *mistakes*, the latter being the unsystematic product of *performance*, caused by memory lapses, tiredness etc. This view was quite the opposite of the audiolingual view of errors, which, as Brooks (1960) expressed it, "like sin" were to be avoided because by hearing them the learner might learn them. Instead, they were an inevitable part of the dynamic process:

> A learner's errors, then, provide evidence of the system of the language that he is using (i.e. has learnt) at a particular point in the course (and it must be repeated that he is using some system, although it is not yet the right system). They are significant in three different ways. First to the teacher, in that they tell him, if he undertakes a systematic analysis, how far towards the goal the learner has progressed and, consequently, what remains for him to learn. Second, they provide to the researcher evidence of how language is learnt or acquired, what strategies or procedures the learner is employing in his discovery of the language. Thirdly (and in a sense this is their most important aspect) they are indispensable to the learner himself, because we can regard the making of errors as a device the learner uses in order to learn. The making of errors then is a strategy employed both by children acquiring their mother tongue and by those learning a second language.
>
> (Corder, 1967, pp.10-11)

Nemser (1971) coined the term *approximative system* and Selinker (1972) *interlanguage* to describe the learner's developing language. Selinker believed that L2 learners, like L1 learners, activated a genetically determined structure. However, it was not Chomsky's *language-acquisition device* (or Lenneberg's 1967 *latent language structure*). It was what Selinker called a *latent psychological structure*, which embodied five central processes: (1) *language transfer*, (2) *transfer-of-training*, (3) *strategies of second-language learning*, (4) *strategies of second-language communication*, and (5) *overgeneralization of TL* [target language] *linguistic material*. Errors might have any of the above as their cause. Those attributable to L1 are examples of language transfer. Those caused by over-emphasis in textbooks or teaching of a particular structure (e.g. the progressive in English) are examples of transfer of training. A strategy of second-language learning might be matching adjective endings in German with noun or article endings (e.g. die *alte Leute). An example of a strategy of second-language communication might be the avoidance of certain language forms (e.g. the passive). Finally,

overgeneralization of TL linguistic material could give rise to an error such as "catched" for "caught".

Selinker added another important mechanism to his latent psychological structure - the concept of *fossilization*. Whereas the child's competence continues to develop towards full mastery, the L2 learner's interlanguage often fossilizes. Thus, a German speaker of English may still, after long years of residence in an English-speaking environment, retain a uvular r-sound or fail to mark the future (e.g. "OK, I tell him.").

Not all researchers were willing to accord L1 transfer the prominent role as a source of learner error that Selinker did. Dulay, Burt and Krashen claim, for example:

> Researchers have consistently found that, contrary to widespread opinion, the great majority of errors in the language output of L2 learners is of the developmental type.
>
> (1982, p.164)[5]

That is to say, they are the results of the learner's built-in syllabus. If foreign language learners, in common with first language learners, did indeed have an innate grammatical syllabus, even if it was not an identical one, then the sort of grammatical syllabus that was found in most foreign language courses, namely one based on some sort of a progression in structural complexity, might be a hindrance rather than a help to the learner. Newmark had suggested as much in 1966 in a paper entitled "How not to interfere with language learning".

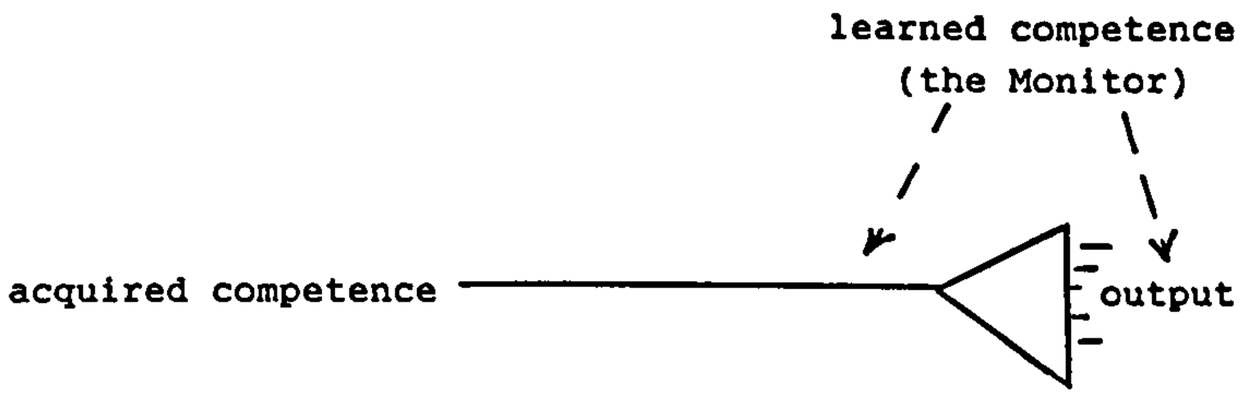
The best known attempt to apply a theory of second language acquisition based on a language-acquisition device to practice in the classroom is the work of Krashen. The theory, which has been called the *Monitor* model or theory, accepts the idea of innate structures for language learning and claims that competence in a foreign language is gained by *acquisition*, that is, through creative construction by the learner engaging in meaningful interaction - natural communication - with speakers of the language, when the learner's attention is focused on the message and not the form of utterances. Acquisition is a subconscious process and the competence gained from it is intuitive and implicit - a feel for the language:

> Error correction and explicit teaching of rules are not relevant to language acquisition ... Conscious language *learning*, on the other hand,

> is thought to be helped a great deal by error correction and the presentation of explicit rules ... The fundamental claim of Monitor Theory is that conscious learning is available to the performer only as a *Monitor*.
>
> (Krashen, 1981, pp.1-2)

That is to say, the acquired system of rules is what "initiates" utterances, whereas the learned rules can only be used to alter (improve the accuracy of) the output, as visualised in Figure 2.1 - Krashen's *Monitor Model* (Krashen & Terrell, 1983, p.30):

Figure 2.1: The Monitor Model



[The twin arrows on the right of the model indicate that the Monitor operates on an utterance after it has been initiated by the acquired system but either before or after it has actually been produced.]

The Monitor can only operate when three conditions have been fulfilled:

1. the learner has sufficient *time* (since the conscious application of rules is a relatively slow process);

2. the learner is attending to *form* (or accuracy) rather than meaning;

3. the learner knows an appropriate *rule* (and Krashen points out that even sophisticated linguists have only succeeded in analysing quite limited areas of the rule system of any natural language).

A rider to Krashen's theory (adopted and adapted from Newmark, 1966) is that if learners are pushed into language production (as opposed to comprehension) at too early a stage, before they have had sufficient time for any build-up of acquired competence, they will fall back on their L1 competence to initiate utterances with a resulting high degree of "interference" in their output.

A central tenet of Krashen's theory is that there is no *interface* between learning and acquisition, i.e. learning rules explicitly does not facilitate their becoming internalised as part of the implicit system: "learning does not 'turn into' acquisition" (1982, p.83).

What then is the role of the classroom? Krashen is optimistic: "the classroom should be viewed as a place where the student can get the input he or she needs for acquisition" (1981, p.10). What the learner needs for acquisition is *comprehensible input* and in the classroom the teacher can ensure that what the learner hears is comprehensible. In order for the input to be accepted by learners - for it to become *intake* - they must not be put on the defensive: their *affective filter* must be kept as low as possible. This, too, the teacher can facilitate by lowering the level of anxiety in the classroom, e.g. by sensitive use of error correction or by not making too early demands for speech production (Krashen & Terrell, 1983).

Krashen's theory has had many critics (e.g. McLaughlin, 1978; Rivers, 1980; Gregg, 1984). Much of the criticism centres on the unfalsifiability of the acquisition-learning dichotomy (e.g. Hulstijn & Hulstijn, 1984; Sorace, 1985; McLaughlin, 1988; Green & Hecht, 1992). Evidence from the Munich-York Project that can be related to specific claims of the model does not tend to support them (Green & Hecht, 1985, 1993a; Hecht & Green, 1991b).

2.4 COMMUNICATIVE COMPETENCE

When Krashen speaks of *acquired competence*, he is using the term very much in the Chomskyan sense of the learner's knowledge of the grammar of the language. Hymes argued that this view of competence was far too narrow. It was necessary also

> to account for the fact that a normal child acquires knowledge of sentences, not only as grammatical, but also as appropriate. He or she acquires competence as to when to speak, when not, and as to what to talk about with whom, when, where, in what manner.
>
> (Hymes, 1972, p.277)

This competence Hymes called *communicative competence*. Its acquisition was a result of social experience and it could not, therefore, be properly analysed without due attention to sociocultural factors. Chomsky's competence was *grammatical competence* and that was only

one component of communicative competence. Hymes identified four areas that had to be considered:

> 1. Whether (and to what degree) something is formally *possible*;
>
> 2. Whether (and to what degree) something is *feasible* in virtue of the means of implementation available;
>
> 3. Whether (and to what degree) something is *appropriate* (adequate, happy, successful) in relation to a context in which it is used and evaluated;
>
> 4. Whether (and to what degree) something is in fact done, actually *performed*, and what its doing entails.
>
> (p.281)

(Hymes cited as a linguistic illustration of the above that a sentence could be grammatical, awkward, tactful and rare.)

Communicative competence consisted for Hymes in *tacit knowledge* and *ability for use* in each of these four areas.

The role of communicative competence in second languages is considered in a very useful paper for the language teacher by Canale and Swain (1980). In it they discuss the theoretical bases of communicative approaches to second language teaching and testing. Assuming communication

> to be based in sociocultural, interpersonal interaction, to involve unpredictability and creativity, to take place in a discourse and sociocultural context, to be purposive behaviour, to be carried out under performance constraints, to involve the use of authentic (as opposed to textbook-contrived) language, and to be judged as successful or not on the basis of behavioural outcomes
>
> (Canale & Swain, 1980, p.29)

they propose a framework for communicative competence that, as with Hymes, includes grammatical and sociolinguistic competence and adds a third component *strategic competence*.

Grammatical competence includes not only rules of morphology, syntax, semantics and phonology but also knowledge of lexical items. It equips learners with the means to understand and produce sentences and their literal meanings.

Sociolinguistic competence has two sub-components, which together permit learners to interpret the social meaning of utterances:

1. *sociocultural* rules enable utterances to be related appropriately to sociocultural contexts (topics, settings, roles of participants etc.);

2. *discourse* rules are concerned with how sentences are appropriately linked (*cohesion*) and how groups of utterances hang together communicatively (*coherence*).

Strategic competence provides learners with strategies for coping with inadequate competence in the other two components. Examples of such *communication strategies* might be, in the area of grammatical competence, finding a paraphrase for a missing (unknown or forgotten) lexical item and, in the area of sociolinguistic competence, avoiding a direct form of address when unsure of an interlocutor's social status.

Canale and Swain's paper concludes with a section called "Directions for Research". Among those suggested is the one with which this investigation is concerned, namely "the explicit statement of ... communication strategies considered relevant to learners' communication needs" (p.36).

2.5 CONCLUSION

This chapter has been an attempt to outline the broader context of post-war language teaching into which *communication strategies* fit. Starting in effect with a wide-angle lens, it has zoomed fairly rapidly through time and the field of second language teaching and research until communication strategies have come into view. The next chapter switches to the macro lens and looks at writing and research concerned specifically with communication strategies.

2.6 NOTES

1 Other terms were *aural-oral*, *New Key*, *functional skills*, *mim-mem* (mimicry-memorisation).

2 The *audio-visual* method in Europe derived largely from the *méthode audio-visuelle structuro-globale* developed at CREDIF (Centre de

Recherche et d'Étude pour la Diffusion du Français) in France. It attempted to give meaning to utterances through filmstrip presentation of visuals. Though relying less heavily on structure drills than the audio-lingual method, its structural view of language and behaviourist approach to learning meant that its theoretical base was largely shared with the audio-lingual method.

3 Symptomatic of the decline was the decision taken by the Audio-Visual Language Association (AVLA) in the seventies to change its name to the British Association for Language Teaching (BALT). Later, it changed the name of its journal from the Audio-Visual Language Journal to the British Journal of Language Teaching. Another symptomatic change came in 1990, when BALT merged with the other UK foreign language associations to form the Association for Language Learning (ALL) with its publication the Language Learning Journal: the focus had shifted from teaching to learning.

4 GUME stands in Swedish for Göteborg, Undervisningsmetoder i engelska (Gothenburg, Teaching Methods in English).

5 This claim is not substantiated by a table in Ellis (1985, p.29) showing the percentages of L1 interference errors reported by seven studies of L2 English grammar. There, Dulay and Burt (1973) have by far the lowest figure with 3%, the next lowest being 23% and the highest 51%. Green and Hecht (1985, p.85) quote 43% for the early stages of the Munich-York Project. Later, in a study devoted specifically to L1 interference, which encompasses oral and written production and pupils in five countries, we give figures ranging from 19% to 53%, with a mean of 38% and a standard deviation of 6% (Hecht & Green, 1993b).

CHAPTER THREE

PREVIOUS WORK ON COMMUNICATION STRATEGIES

3.1 INTRODUCTION

Though the problems of speakers trying to communicate with inadequate resources and the ways they find of overcoming them must go back to the origins of language itself, it is only very recently (in the last twenty years or so according to Bialystok, 1990, p.vi) that they have been considered worthy of study and given the status of a term: *communication strategies*.

The term can be found in Selinker's seminal paper on *interlanguage* (1972, p.220), where "strategies of second-language communication" are one of five processes central to second-language learning (p.229). However, in the more problem-orientated interpretation which is adopted in this thesis, the first formal investigation of communication strategies was probably the paper given by Váradi at the VI Meeting of the Rumanian-English Linguistic Project at Timisoara in 1973 on "Strategies of target language learner communication: message adjustment" (Váradi, 1973). By *message adjustment* Váradi meant that target language learners reduce or replace an *optimal meaning* - what they really want to say - because of a *hiatus* in their knowledge of the target language and produce instead an *adjusted meaning* - what they actually say. In the process "a great variety of communicational strategies can be envisaged" (p.85). Reduction of meaning can be *intensional*, defined as a "relaxation of precision" (p.92) through *generalization* or *approximation*, or it can be *extensional*, whereby part of the meaning is eliminated. Replacement of meaning may be by *paraphrase* or *circumlocution*. Váradi found that his theoretical presuppositions concerning message adjustment were confirmed by a pilot study he undertook with 19 Hungarian learners of English.

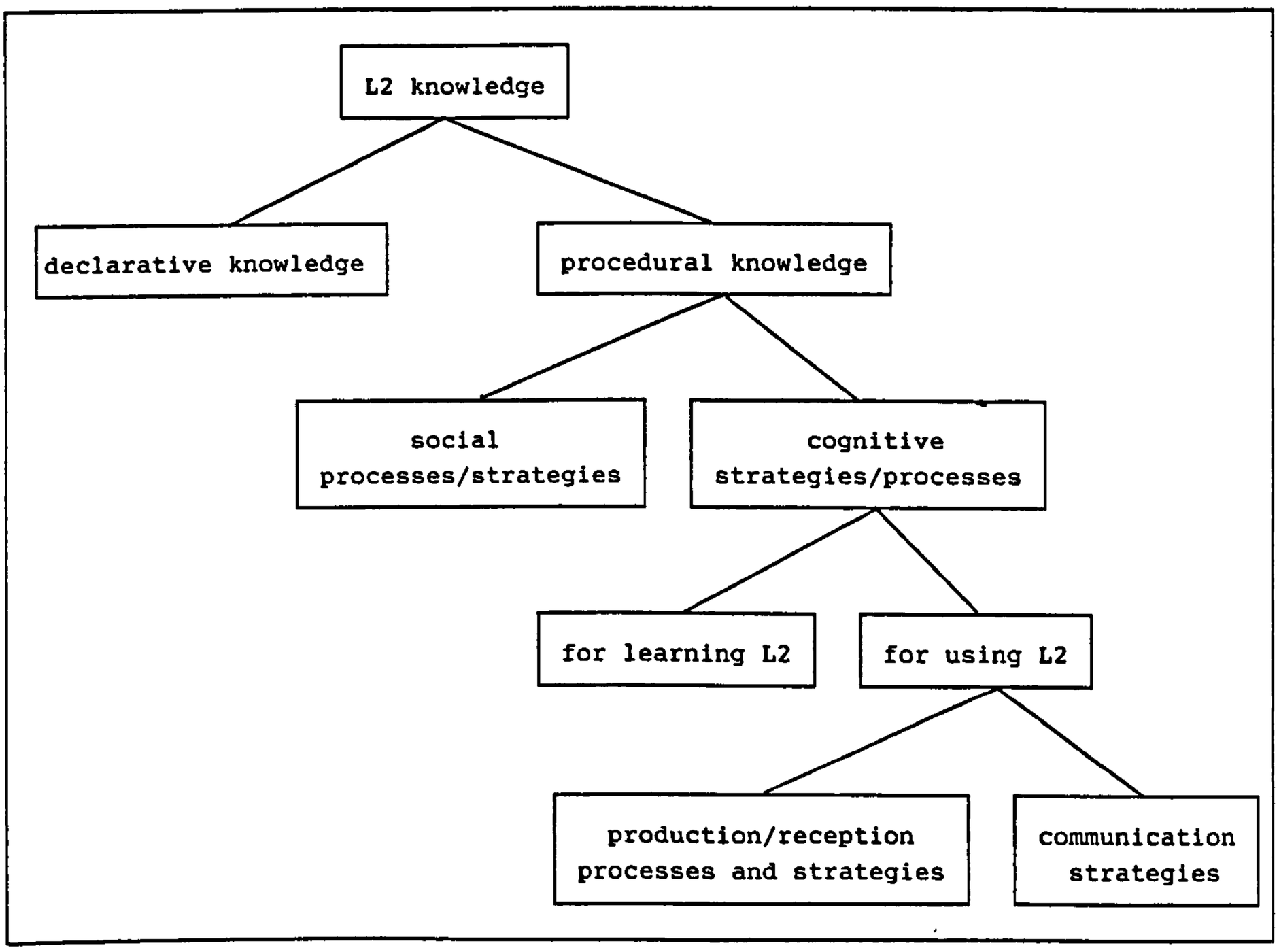
In the many studies of communication strategies which have followed Váradi, certain problems, questions and centres of interest recur which can be brought together under a number of headings. It is

proposed to discuss them here under those headings and to indicate, as appropriate, the stance taken in this thesis.

3.2 TERMINOLOGY AND DEFINITION

Selinker's use of communication strategy seems to have more to do with acquiring an L2, Váradi's with using it. Ellis (1985) locates communication strategies in a hierarchy of types of L2 knowledge which distinguishes between acquisition and use. Following Færch and Kasper (1984), he divides such knowledge into *declarative* (knowing that) and *procedural* (knowing how) knowledge. Procedural knowledge is then subdivided into *social* and *cognitive* components. The cognitive component in turn is further subdivided into *learning* and *using* L2. Finally, the using component is subdivided into *production/ reception processes and strategies* and *communication strategies*. Figure 3.1 shows these types of L2 knowledge as a tree diagram.

Figure 3.1: Types of L2 knowledge



(Adapted from Ellis, 1985, p.165)

According to this scheme, what Selinker calls "communication strategies" would be strategies for learning rather than for using L2. However, since one view of language learning is that it is a process of hypothesis-testing (see Chapter Two, Section 2.3), learning may well result from some communication strategies and the distinction between learning strategies and communication strategies cannot therefore be sharply drawn. The blurring between them becomes much greater when classroom discourse is considered, where the goal of the discourse is at least as much learning the language as communicating a message. (Cf. Corder, 1978a; Tarone, 1981; Bialystok, 1983; Færch & Kasper, 1983a; Harding, 1983; Ellis, 1985; Bialystok, 1990)

It is noticeable that Ellis varies the terminology at different levels of the hierarchy and even on the same level: "processes/strategies", "strategies/processes", "processes and strategies" and finally "strategies". He comments himself on the metalanguage, remarking that "researchers do not use terms like 'process', 'strategy', or 'principle' consistently" (1985, p.166). He does not, however, abandon any attempt at a definition of strategy, as Selinker does:

> Concerning the notion 'strategy' little is known in psychology about what constitutes a strategy; and a viable definition of it does not seem possible at present.
>
> (Selinker, 1972, p.219)

Instead, Ellis adopts the distinction that Færch and Kasper attempt between strategy and process (Færch & Kasper, 1983a). After considerable discussion of other categorisations, Færch and Kasper take the general sense of process to be a "continuing development involving a number of changes" (Brown, 1976, p.136) or "a dynamic sequence of different stages of an object or system" (Klaus & Buhr, 1976, p.990). They see the planning phase of speech production as a process which results in a plan to control the execution phase and strategies as a sub-class of plans. When speakers encounter a problem of insufficient linguistic resources at either the planning or the execution phase of speech production, then a plan is produced for overcoming the problem. It is this strategic plan that Færch and Kasper see as a communication strategy. They stress that

> 'strategic plans' are <u>not</u> identical with plans established in order to reach a communicative goal: the goal of a strategy (the 'strategic goal') is the <u>problem</u>, and the product of the execution phase controlled by the strategy is a <u>solution</u> to the problem.
>
> (Færch & Kasper, 1983a, p.33)

Other writers too have recognised the difficulty of distinguishing strategies and processes. Bialystok, for example, notes that there is "confusion in the literature between strategies and processes" (1983, p.100). She does not, however, at that stage propose a solution. Blum-Kulka and Levenston define *strategy* as "the way the learner arrives at a certain usage at a specific point in time" and *process* as "the systematic series of steps by which the learner arrives at the same usage over time" (1978, p.125). Wagner appears to make no distinction between the two concepts when he writes that "statements on communication strategies are ... hypotheses about the underlying process" which brought about an utterance (1979, pp.159-160). Dechert, on the other hand, equates procedures and strategies and, citing Simon (1979, p.85) defines them as "means for 'performing a task as being composed of a fixed set of elementary information processes that are evoked by both aspects of the external environment and the internal representation of the problem'" (Dechert, 1983, p.176). Here, strategies/procedures appear to be superordinate to processes.

Bialystok later examines the various "critical parameters" that have been suggested for distinguishing between the strategies and the processes of language learning and language use, such as temporality, optionality, problem-relatedness, consciousness and level of analysis, to see if they satisfy the criteria of "behavioural evidence and objective measure" (1990, p.23). She finds that they fail to satisfy one or both of the criteria and concludes that the "strategies and process of language production" may prove to be "ultimately not different events" (1990, p.25).

To the layman, strategy suggests a plan for overcoming a problem, as Færch and Kasper see it (and Bialystok finds that their approach comes closest to meeting her criterion of behavioural evidence), at a specific point in time, as Blum-Kulka and Levenston argue. That is how the term is interpreted in this thesis whilst recognising both the lack of rigour of definition and the absence of any consensus in the literature.

Whether or not writers on communication strategies specify the meaning they attach to the concept, or construct, *strategy*, they usually offer a definition of *communication strategies*, though they may call them something else. Váradi (1973) refers to *communicational*

strategies, whilst Corder (1978a) calls them *communicative strategies*. Harding (1983), for reasons which she clearly sets out, prefers *compensation strategies*, and Poulisse et al. (1990) *compensatory strategies*.

Other global terms which are sometimes associated with communication strategies are *learning strategies*, *production/productive strategies* and *reception/receptive strategies*. The difficulty with distinguishing learning and communication strategies has already been discussed. For some writers, e.g. Ellis (1985), production and reception strategies are concerned with using L2 knowledge but are separated from communication strategies by the lack of problematicity. For Corder (1978a), Færch & Kasper (1983a) and Harding (1983), production/productive and reception/receptive strategies are subdivisions of communication strategies, depending on whether the production or the understanding of speech is being considered. For Tarone, Frauenfelder & Selinker (1976) and Tarone, Cohen and Dumas (1976), production strategies appear to be equated with communication strategies, whereas Tarone (1981) treats them as similar but separate strategies of language use, the difference being that production strategies are not focused on the negotiation of meaning. Tarone also introduces the term *perception strategy* and defines it "as the attempt to interpret incoming utterances efficiently, with least effort" (Tarone, 1981, p.68). All the writers who mention reception/receptive strategies point out the dearth of research into strategies concerned with the reception as opposed to the production of speech.

This study is concerned exclusively with the use of strategies in speech production. Notwithstanding that fact, the more generally used term *communication strategy* will be used in preference to the more equivocal *production strategy*.

Here, irrespective of the terminology, are some of the definitions that have been given of the concept *communication strategy*:

> A working definition of communicative strategies is that they are a systematic technique employed by a speaker to express his meaning when faced with some difficulty. Difficulty in this definition is taken to refer uniquely to the speaker's inadequate command of the language used in the interaction.
>
> (Corder, 1978a, p.16)

By choosing those elements from his repertoire by means of which he can reach his goal in the most optimal way, relative to a specific situation, the speaker proceeds strategically from the very beginning. Communication strategies predetermine the verbal planning, they serve the function of adjusting the plan to the situation, i.e. each individual utterance is to be seen as strategic.

What is specific for IL [interlanguage] users is that plans of action cannot be directly converted into verbal plans because of gaps in the speaker's (and hearer's) linguistic repertoire. The primary function of communication strategies in the speech of IL users is to compensate for this deficit.

(Wagner 1979, p.167)

Communication strategy (CS) - a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared. (Meaning structures include both linguistic and sociolinguistic structures.)

(Tarone, 1981, p.72)

... 'communication strategies', i.e., techniques of coping with difficulties in communicating in an imperfectly known second language.

(Stern, 1983, p.411)

The domain of compensation strategies must be precisely defined. It is the domain of attempts made by non-native speakers of a language to remedy the disparity that exists between their communicative needs and the linguistic tools at their disposal.

(Harding, 1983, p.1)

... the definition of communication strategies followed in the present study includes all attempts to manipulate a limited linguistic system in order to promote communication. Should learning result from the exercise, the strategy has also functioned as a learning strategy, but there is no inherent feature of the strategy itself which can determine which of these roles it will serve.

(Bialystok, 1983, pp.102-103)

... communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal.

(Færch & Kasper, 1983a, p.36)

Communication strategies (CS) have generally been defined as the means that speakers use to solve their communicative problems.

(Paribakht, 1985, p.132)

Compensatory strategies are strategies which a language user employs in order to achieve his intended meaning on becoming aware of problems

> arising during the planning phase of an utterance due to his own linguistic shortcomings.
> (Poulisse et al., 1990, p.22)

The common ground in these definitions is to be found in expressions like "inadequate", "deficit", "imperfectly known", "disparity", "limited", "shortcomings", i.e. communication strategies are called upon when linguistic resources do not match up to communicative goals. Further, most see strategies as responses to the mismatch in "a specific situation" or "in reaching a particular communicative goal" or when there are "difficulties in communicating" or "communicative problems". In other words, they see strategies, like Blum-Kulka and Levenston above, as being applicable on specific occasions.

It is clear that most of the definitions are referring to the need for communication strategies arising in a second or foreign language, even if only Wagner, Stern and Harding make that explicit. However, whilst mismatches between linguistic resources and communicative goals are most acute in a non-native language, they are by no means restricted to it: appeals for tolerance such as "I don't quite know how to put it", "the word escapes me", "it's on the tip of my tongue", "what I am trying to say is ..." and "you know what I mean" reveal us encountering difficulties in expressing meanings in our own language. Corder (1978a, p.15) specifically acknowledges this when he writes "it is now fairly clear that all language users adopt strategies to convey their meaning", though he goes on to say, "but we are only able more or less readily to perceive these when the speaker is not a native speaker".

Bialystok (1990, p.4) claims that "consciousness is implicit in most of the definitions proposed for communication strategies", and indeed the use of words like "designs, "plans", "techniques" supports that view, as does the everyday use of the word "strategy". She goes on, however, to dismiss consciousness as a defining criterion for communication strategies since she does not find it self-evident that speakers are always aware when they have made a strategic choice in their use of language. Certainly, there are many problems in using terms like "conscious/unconscious" (see McLaughlin, 1990, for a thorough discussion) and Poulisse et al. prefer "awareness" (1990), p.22). The only definition that specifically addresses the problem is that of Færch and Kasper, who call communication strategies "potentially conscious plans". This may seem at first like an

unwillingness to commit themselves but is intended to reflect the view that "consciousness is perhaps more a matter of degree than of either-or", i.e. only certain elements in a plan may be consciously selected (they cite, for instance, "high-level elements" like vocabulary). Further, the degree of awareness of the employment of strategies may vary from individual to individual and, for the same individual, from occasion to occasion. There are, they postulate, three kinds of plans:

1. plans which are always consciously employed;
2. plans which are never consciously employed;
3. plans which to some language users and/or in some situations may be consciously used and which to other language users and/or in other situations are used unconsciously.

(Færch & Kasper, 1983a, p.35)

It is Færch and Kasper who offer the most useful definition of communication strategies for the purposes of this study. They associate communication strategies firmly with solutions to problems arising for an individual trying to achieve a particular communicative goal. They do not, like Tarone, restrict communication strategies to interaction between speakers, nor do they, like Stern or Harding, look for communication strategies only in non-native speakers: they say specifically that their definition "is meant to apply to L1 users as well" (p.36). The data from the Munich-York corpus, which are the basis of this thesis, lend themselves well to the investigation of communication strategies as defined by Færch and Kasper. The speakers' communicative intention is nearly always clear from the task they have to perform. There is evidence in the data of problematicity but only rarely of awareness of the problem. The data are largely non-interactive but are available for both native and non-native speakers aiming at the same communicative goals.

A radically different approach to communication strategies is taken by Bialystok (1990). We have already seen that her 1983 definition was a very broad one, in which she was unwilling to see communication strategies as inherently different from learning strategies. In the much fuller treatment of her 1990 book devoted specifically to communication strategies, she goes further and denies "special status to communication strategies. Strategies are a normal and fundamental aspect of ordinary language processing. They are rooted in the same processing mechanisms as is nonstrategic language." (1990, pp.146-7) Two of these mechanisms, which she sees as

fundamental to an understanding of communication strategies, are: *analysis of linguistic knowledge* and *control of linguistic processing*.

Analysis of linguistic knowledge is the process by which the initially implicit knowledge that governs language performance (in young children, for example) is analysed into symbolic representations. Symbolic knowledge can be inspected and made explicit. It enables language structures to be detached from meanings and allows linguistic knowledge to be used for purposes which are not accessible to unanalysed knowledge. For example, learning to read requires a degree of analysis of linguistic knowledge, e.g. the recognition that language has separate words and that the continuous sound sequence of spoken language can be represented graphically by discrete letter symbols.

Control of linguistic processing is concerned with the ability to control attention to different aspects of linguistic and non-linguistic information in order to focus on relevant and ignore irrelevant information. Reading, again, is a skill requiring selective attention - attention to the appropriate line of print, to words and word groups rather than individual letters, and so on. Time constraints play an important role in this process of selective attention: the greater the amount of information competing for attention, the slower the rate of processing.

An example, to illustrate the roles of both components, might be the following sentence taken from a student's essay, in which the grammatical structures of English and Swedish were being compared:

In English, the adverb always follows the verb.

The student demonstrated a high level of analysis of linguistic knowledge, not only in the ability to write but in being able to handle the metalanguage of grammar. This was not matched, however, by her level of control of linguistic processing, since she was clearly unable to direct her attention away from the meaning of the words to their order. Had she done so, she would have noticed that the word order of the sentence contradicted its propositional content.

For Bialystok, language processing is an interaction between the analysis and the control functions, and communication strategies are simply an enhancement of one of them. We shall see the consequences of this view later in this chapter, in Section 3.7.

3.3 TAXONOMIES

Váradi (above) envisaged "a great variety of communicational strategies", but they were of two basic types - a *reduction* or a *replacement* of an optimal meaning resulting in a message adjustment.

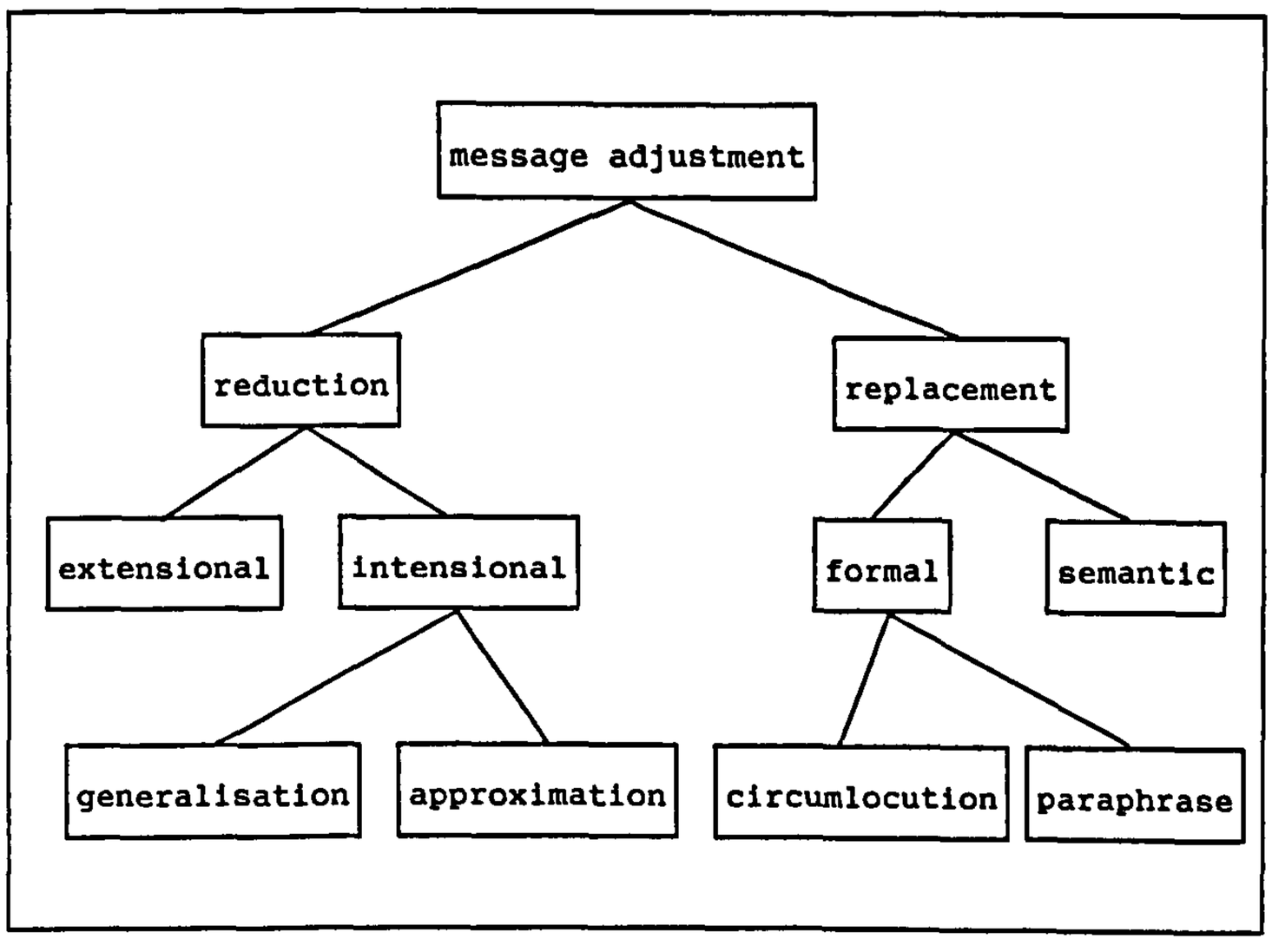
For Corder (1978a), message adjustment was one group of strategies in a dichotomy related to the balance of ends and means in communication, ends being the desired message and means the linguistic resources available for encoding it. When the two are out of balance, speakers have two options: they can tailor their ends to their means by employing *message adjustment* strategies, such as avoiding the topic altogether or reducing the message, or they can try to remedy the imbalance from the other end by endeavouring to increase their linguistic means by *resource expansion* strategies, such as borrowing from L1, appealing for help or paraphrasing. Message adjustment strategies are seen by Corder as risk-avoiding, whereas resource expansion strategies are risk-running in that they aim at success but may fail to get the message across or result in a misunderstanding or provoke amusement.

There is an obvious similarity between these two dichotomies: Corder's message adjustment strategies correspond more or less to the reduction side of Váradi's message adjustment and his resource expansion strategies to the replacement side. A paraphrase is clearly a replacement of an optimal meaning and therefore a kind of message adjustment. Reality is not as dichotomous as the terminology imposed upon it.

Færch and Kasper also propose an initial dichotomy of strategies, similar again to Váradi and Corder. They see the options open to the speaker faced with a problem as being avoidance or achievement behaviour. The problem can either be avoided by changing the communicative goal in some way through *reduction* strategies, or it can be overcome by trying to find alternative plans for achieving the goal in *achievement* strategies.

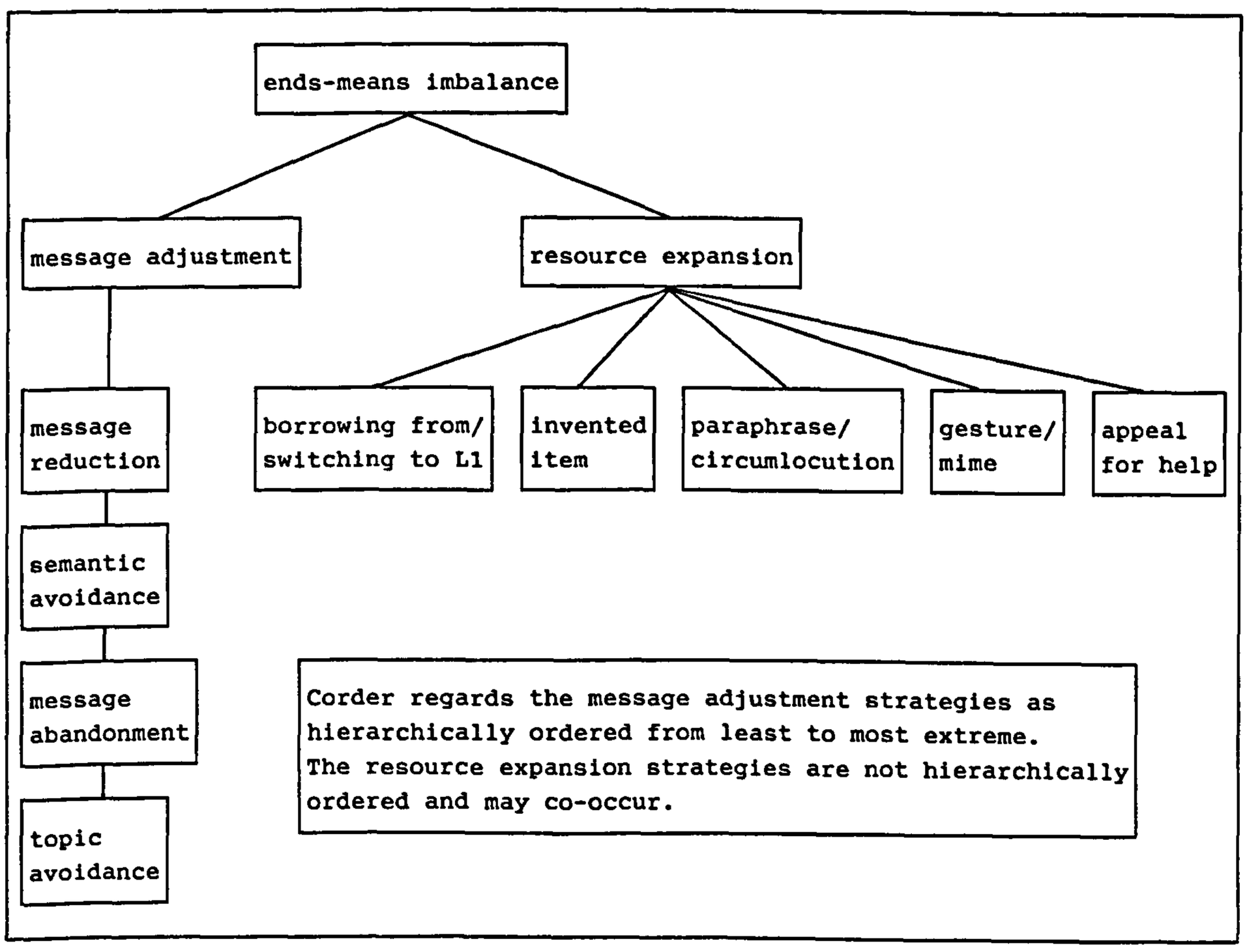
The hierarchies proposed by the four writers beyond their basic dichotomies are shown diagrammatically in Figures 3.2–3.4.

Figure 3.2: Váradi's taxonomy of strategies



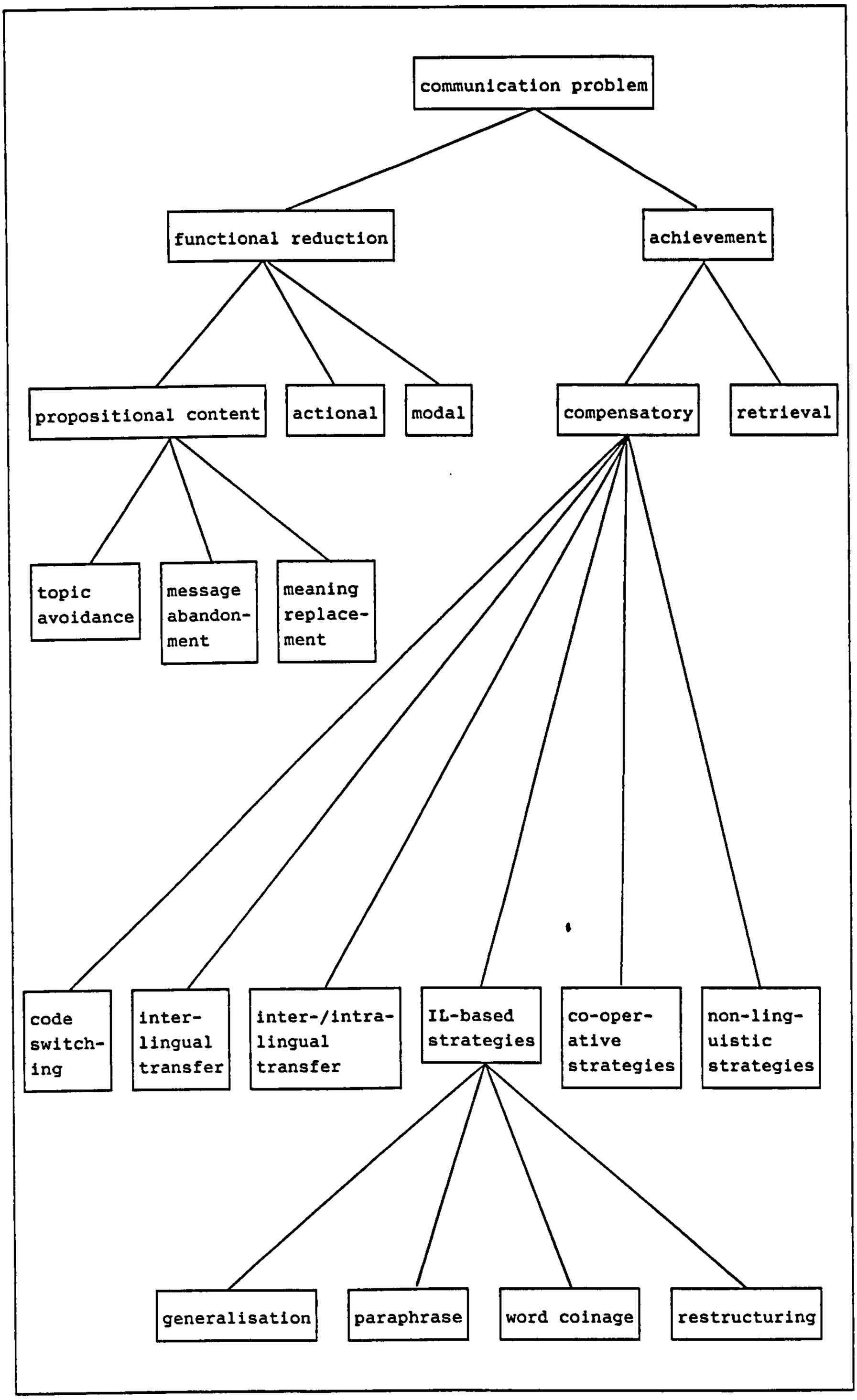
(adapted from Váradi, 1973, pp.94-5)

Figure 3.3: Corder's taxonomy of strategies



(adapted from Corder, 1978a, pp.17-8)

Figure 3.4: Færch & Kasper's taxonomy of strategies



(adapted from Færch & Kasper, 1983a, pp:36-53)

It is not proposed to define here all of the terminology in the figures, though the authors, particularly Færch and Kasper, are careful to do so. However, some of the terms are not immediately obvious in meaning.

Váradi's use of *extensional* and *intensional* has already been dealt with (Section 3.1).

Færch and Kasper define *functional reduction* as reducing "a communicative goal in order to avoid a problem". *Actional* and *modal* reduction occurs where "learners experience problems in performing specific speech acts [e.g. giving instructions] and/or in marking their utterances appropriately for politeness/social distance". They also have a category of strategies termed *formal reduction*, defined as "learner communicates by means of a 'reduced' system, in order to avoid producing non-fluent or incorrect utterances by realizing insufficiently automatized or hypothetical rules/items". Váradi uses the same term with a similar meaning. Tarone's *production strategy* (see above, Section 3.2) appears to be comparable. Neither Váradi nor Færch & Kasper give any actual, as opposed to theoretical, examples of formal reduction, no doubt because speech resulting from the use of formal reduction strategies would be unlikely to appear deviant. Formal reduction has not been included as a category in either Figure 3.2 or Figure 3.4.

Compensatory strategies are achievement strategies "aimed at solving problems in the planning phase due to insufficient linguistic resources". Of them, *code-switching* means switching directly from L2 to L1 (or sometimes another foreign language), whereas *interlingual transfer* involves a combination of L1 and L2 features. *Inter-/intralingual transfer* is "a generalization of an IL rule ... , but the generalization is influenced by the properties of the corresponding L1 structures". This strategy would seem difficult to distinguish from the IL-based strategy of *generalization*. *Cooperative* strategies include appeals to an interlocutor. *Non-linguistic* strategies include mime, gesture and sound-imitation. *Retrieval* strategies are used when learners "have difficulties in retrieving specific IL items and may adopt achievement strategies in order to get at the problematic item". Finally, *restructuring* is the abandonment of a plan in the course of its execution, because it cannot be completed, and its substitution by an alternative plan to achieve the same message.

The communication strategies that form the bottom line of these hierarchies are very similar in the three taxonomies. The differences lie mainly in the higher level categories to which they are allocated. Thus, generalisation is a reduction strategy for Váradi and an achievement strategy for Færch and Kasper. The latter tackle this problem by pointing out that the classification depends upon the perspective:

> If ... the learner, in using a lexical substitute to fill a gap in his vocabulary believes that the substitute will convey his intended meaning, this implies that the learner's underlying behaviour is achievement, rather than reduction, and that lexical substitution is a generalization strategy. (That the effect of lexical substitution may be that the intended meaning does not get across to the interlocutor is irrelevant in the context of the present article, in which we take the learner's, and not his interlocutor's or the analyst's, point of view.)
>
> (Færch & Kasper, 1983a, p.48)

There have been several other taxonomies of communication strategies: see, for example, Tarone, Cohen & Dumas (1976), Tarone (1977), Tarone (1981), Harding (1983), Bialystok & Fröhlich (1980), Bialystok (1983), Paribakht (1985), Nayar (1987). Whilst they differ in their organisational structure (but are generally less complex and detailed than Færch and Kasper's), their ultimate categories are, not surprisingly, very similar. Tarone has been particularly influential. The 1981 version of her taxonomy is cited in extenso in Table 3.1 for several reasons: it is less hierarchical than many others; it gives brief definitions of the individual strategies with actual examples; and, finally, it has formed the basis for the taxonomy used in this study.

The kinds of taxonomies described above have been criticised in the various reports on the Nijmegen project "The use of compensatory strategies by Dutch learners of English" (e.g. Poulisse, Bongaerts & Kellerman, 1984; Bongaerts, Kellerman & Bentlage, 1987; Bongaerts & Poulisse, 1989; Kellerman, Ammerlaan, Bongaerts & Poulisse, 1990; Poulisse et al., 1990; Kellerman, 1991). They accuse such taxonomies of communication strategies as being "essentially descriptive in nature" and concerning themselves only with "linguistic form and not with the nature of the processes underlying them" and, further, of confusing "the linguistic realization of the referential strategy with the strategy itself" (Kellerman, Ammerlaan, Bongaerts & Poulisse, 1990, pp.164-5).

Table 3.1: Tarone's taxonomy of strategies

Paraphrase

Approximation — use of a single target language vocabulary item or structure, which the learner knows is not correct, but which shares enough semantic features in common with the desired item to satisfy the speaker (e.g. *pipe* for *waterpipe*)

Word coinage — the learner makes up a new word in order to communicate a desired concept (e.g. *airball* for *balloon*)

Circumlocution — the learner describes the characteristics or elements of the object or action instead of using the appropriate target language (TL) item or structure ('She is, uh, smoking something. I don't know what's its name. That's, uh, Persian, and we use in Turkey, a lot of.')

Borrowing

Literal translation — the learner translates word for word from the native language (e.g. *He invites him to drink*, for *They toast one another.*)

Language switch — the learner uses the native language (NL) term without bothering to translate (e.g. *balon* for *balloon*, *tirtil* for *caterpillar*)

Appeal for assistance — the learner asks for the correct term (e.g., 'What is this? What called?')

Mime — the learner uses non-verbal strategies in place of a lexical item or action (e.g. clapping one's hands to illustrate applause)

Avoidance

Topic avoidance — the learner simply tries not to talk about concepts for which the TL item or structure is not known

Message abandonment — the learner begins to talk about a concept but is unable to continue and stops in mid-utterance

(Tarone, 1981, pp.62-3)

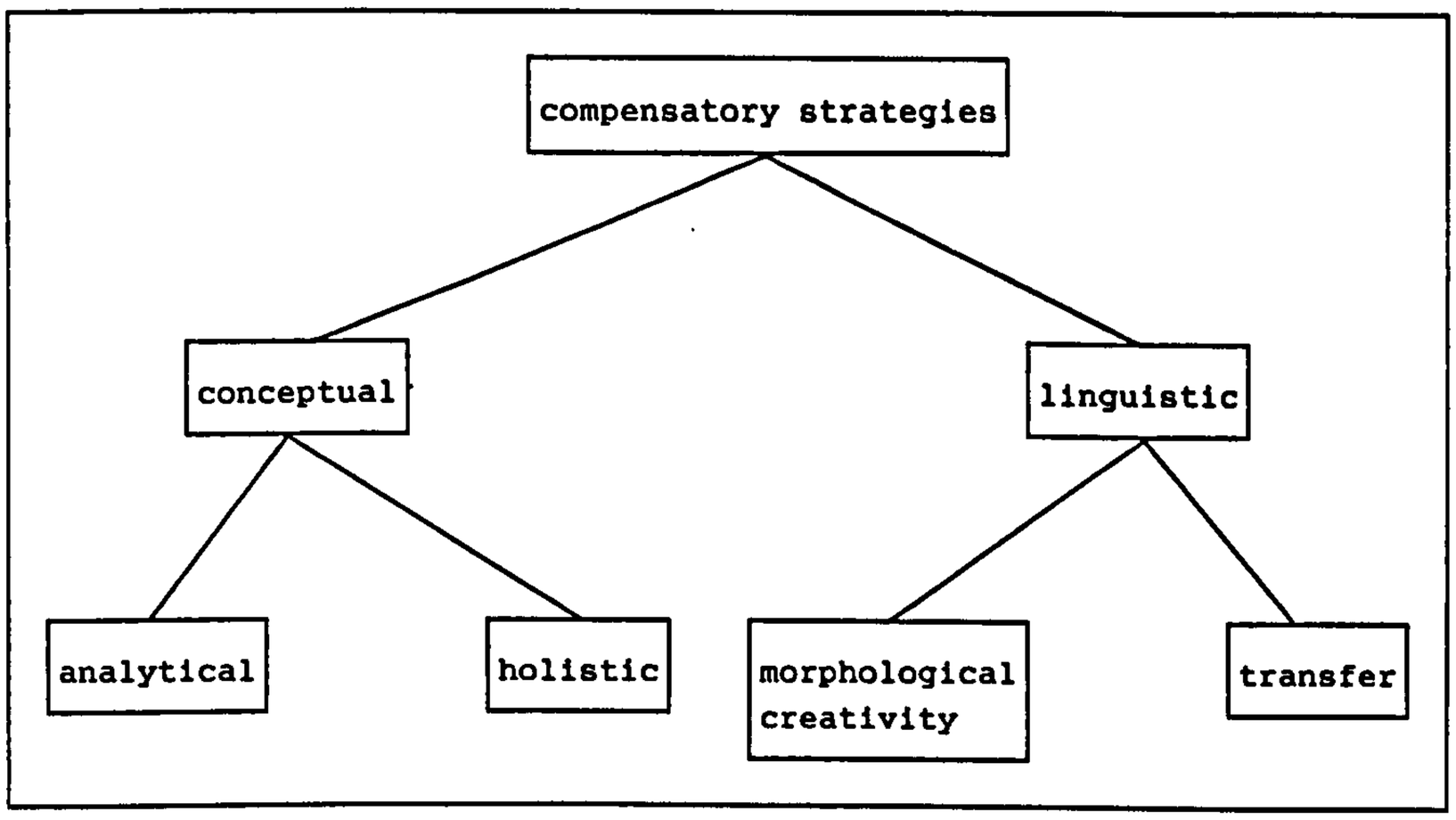
They take the example of a learner who produces "figure with three sides" for the unknown word "triangle" and "airball" for "balloon" (the latter an example from Váradi, 1973). In most taxonomies, they rightly claim, the former strategy would be classified as a *paraphrase*, or *description* and the latter as a *word coinage*. However, had the strategies instead been "three-angle" and "ball with air in it" or "ball in the air", the classification would have been reversed. "To label such outcomes separately is to assume (as descriptive taxonomies do) that differences in linguistic encoding per se are evidence for differing strategies. ... In fact, both 'airball' and 'ball with air in it/ball in the air' are descriptions" (pp.165-6).

This criticism seems rather to overlook the context in which these different solutions to a common problem occur, and which might make one or the other more appropriate or likely to succeed. For example, "airball" might be more appropriate than "ball with air in it" if the optimal meaning were something like "balloons with faces painted on them". "Figure with three sides" might well be more readily understood by a native speaker of English than "three-angle".

The system that is proposed in the Nijmegen project consists of two main strategies - *conceptual* and *linguistic* (later renamed *code*). "The conceptual strategy entails analysis and manipulation of the intended concept." The linguistic strategy exploits "knowledge of the rule systems of the native language, the target language, or any other language [the speaker] happens to know" (Bongaerts & Poulisse, 1989, p.255). Later, Kellerman writes: "So as to come as close as possible to expressing their original intention, learners can either manipulate the concept so that it becomes expressible through their available linguistic (or mimetic) resources, or they can manipulate encoding media" (Kellerman, 1991, p.149). This is very reminiscent of the dichotomy proposed by Corder and quoted above, where, in an ends-means imbalance, either the ends (what the speaker wants to say, the concept) can be adjusted or the means ("encoding media") can somehow be expanded.

Kellerman (1991) demands that a taxonomy be *parsimonious*: "Given a choice between two descriptively adequate frameworks, we should always prefer the one that posits the fewer strategy types, provided these are consistent with the data" (p.145) and the Nijmegen two-strategy taxonomy, he claims, "could hardly be more parsimonious" (p.151). In practice, however, like the other dichotomous systems mentioned earlier in this chapter, it represents just the highest level of a hierarchy of strategies that are identified by the Nijmegen research. The terminology shifts somewhat in the different reports, but the 1990 report by Poulisse et al. suggests a hierarchy like that shown diagrammatically in Figure 3.5.

Figure 3.5: The Nijmegen taxonomy of strategies



(based on Poulisse et al., 1990, pp.60-3)

Poulisse et al. explain these categories as follows:

> The speaker who uses a conceptual strategy may refer to the intended concept by listing (some of) its properties or by substituting the word for a related concept which shares some of its criterial properties. We have referred to these strategies as *Analytic* and *Holistic Conceptual Strategies* respectively.
>
> (p.60)

> The speaker who uses a linguistic strategy manipulates his linguistic knowledge. ... One can distinguish two sub-types of the 'Linguistic Strategy'. One is the use of L2 rules of morphological derivation to create (what the subject assumes to be) comprehensible L2 lexis. ... *Morphological Creativity*. ... The other 'Linguistic Strategy' exploits the similarities between languages. If, for instance, two languages are closely related, words or phrases may be transferred from one language to the other ...*Strategy of Transfer*.
>
> (p.62)

This scheme, with only four strategies, appears indeed to be very parsimonious by comparison with most taxonomies, but later Poulisse admits that "some of the distinctions made in traditional taxonomies bring out differences in the encoding of CpS which are not without interest either" (p.110), and in fact a number of sub-categories are introduced "at the encoding level" (as opposed to "the process level"), which bring the taxonomy up to seven categories, all of which are familiar from other taxonomies.

Kellerman also demands "that a taxonomy should be *generalisable* across tasks, items, languages and learners" (1991, p.145). In fact, whilst some of the bottom-line categories mentioned above are very familiar from other taxonomies and clearly have wide applicability, it is difficult to imagine how others, introduced elsewhere, e.g. the *geometrical*, *partitive*, or *linear* strategies (Bongaerts & Poulisse, 1989) would apply to data other than the description of abstract, non-conventional shapes, which is a central task in the Nijmegen research (cf. Bongaerts, Kellerman & Bentlage, 1987; Kellerman, Ammerlaan, Bongaerts & Poulisse, 1990; Bongaerts & Poulisse, 1989; Poulisse et al., 1990).

3.4 IDENTIFYING STRATEGIES

A problem area in the study of communication strategies is how they are to be identified. If their study is limited to interaction between two speakers and they are restricted, as in one of Tarone's definitions, to "a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared" (Tarone, 1981, p.72), then the problem does not arise, for the strategies identify themselves. However, a great deal of communication takes place in which problems arise and strategies are found for dealing with them without the active intervention of an interlocutor (even when one is present, help may not be offered or sought). In those cases, knowing that a problem has arisen and that a communication strategy is being employed is by no means straightforward.

To take an example from this study: in a narrative task about a shoplifting incident, learners needed a word like "accidentally" to use in a context such as "He [the shoplifter] accidentally switched the radio on". Very few actually produced such a word. Can we assume that the learner who said "Then he did what he didn't want to do; he switched the radio on" was employing a strategy of circumlocution to cope with a deficit? Might the learner not have known some expression like "accidentally" or "by mistake" but chosen the formulation as a more vivid description of what happened (especially as the action led to the shoplifter's being apprehended)?

Though this problem is not always overtly addressed and some researchers simply report the strategies they have found (e.g. Corrales, 1985), there are a number of approaches to the study of communication strategies that imply that the problem has been taken into account.

The first, in general terms, is to compare performances in L1 and L2. Thus, Váradi (1973) has his learners perform the task (a written description of a related series of pictures) in both their native language Hungarian and the target language English. Later, they are asked to translate their two versions into the other language. "Our overriding concern ... was to ensure that differences between the two versions could be attributable to adjustment phenomena resorted to by the learners under the compelling force of their imperfect competence in T" [target language] (p.88). In one of the Nijmegen project tasks, the learners were asked to perform twice in Dutch (the first time to accustom them to the task) and then in English (cf. Bongaerts & Poulisse, 1989; Kellerman, Ammerlaan, Bongaerts & Poulisse, 1990; Poulisse et al., 1990). A variant of this approach is where separate groups of native and non-native speakers perform the same task (e.g. Yule & Tarone, 1990).

The second approach is to control very rigidly what the learners are asked to express, or indeed to put them into a communication situation where it is highly unlikely that they will know the kind of language required, or to impose artificial restrictions on how the communication is to proceed. In the first of these alternatives, the researcher can at least be sure what the learners' communicative intent is. In the second and third alternatives, the learners are forced into using strategies. Paribakht (1985) required her non-native learners to communicate isolated lexical items, such as "palanquin" and "martyrdom" to native interlocutors "without using the exact target words" (p.134). Yule and Tarone (1990), in one of their tasks, had learners describe objects to listeners who were "not allowed to ask the speaker for any clarifications or to provide any verbal feedback at all" (p.186).

It is clearly possible to elicit communication strategies by means of the task, but what of the problem of identifying them in ordinary communication? Færch and Kasper (1983b) discuss the problem at some length, pointing out the different consequences of an *interactional* definition like Tarone's (above) and a *psycholinguistic*

one like their own ("potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal" (p.36)):

> One significant difference between the two definitions of communication strategies is hence that communication strategies can be directly identified in performance data according to the interactional definition, whereas this is not always the case with strategies defined on the basis of the psycholinguistic definition. In the latter case, the analyst is forced to rely on indirect evidence to a very large extent.
>
> (pp.212-3)

As the present study is concerned with communication strategies in ordinary communication and Færch and Kasper's psycholinguistic definition is the one adopted (see Section 3.2, above), I shall report their discussion in some detail. A key word in their definition is "problem", and they consider what surface features of speech production may indicate an underlying problem of planning or execution. Looking first at the evidence from L1 studies, they identify three classes of performance features that indicate where planning is taking place or being revised, or execution is proving problematical. They are *temporal variables*, *self-repairs* and *speech slips*.

3.4.1 Temporal variables

(1) *Rate of articulation* is a function of the degree of automatisation of the language used, so that routine phrases are articulated faster than more creative stretches of speech.

(2) *Pauses* occur not only for phonetic reasons, such as drawing breath, articulating stop consonants and marking the contours of utterances, but also because of hesitations. The latter may occur mid-sentence at constituent boundaries and at content words, indicating respectively syntactical and lexical planning. Pauses can be either *silent* or *filled* with non-lexical sounds, such as "er" or "um", or with gambits, such as "well", "you know".

(3) *Drawls* are abnormal lengthening of a syllable as a time-gaining device.

(4) *Repeats* may take the form of a single phoneme or anything up

to a whole string of words being repeated. They, too, are devices for gaining time.

3.4.2 Self-repairs

Self-repairs are points at which speakers modify utterances they have already produced or begun to produce. They are often, but not always, preceded by a pause, which may be silent or filled. They can be divided into three classes:

(1) In *false starts unretraced*, the correction occurs immediately after the rejected word or phrase.

(2) In *false starts retraced*, the correction does not follow immediately. Instead, the syntactic unit in which the rejected text is embedded is repeated.

(3) In *new starts*, a longer section of text before, and sometimes after, the trouble source is repeated in order to change or expand a syntactic unit.

3.4.3 Speech slips

Slips of the tongue, or *lapses*, can affect speech production at the phonetic, grammatical or lexical level. They are characterised by the fact that they can be corrected instantly if observed.

All the above L1 phenomena can be observed in L2 learners' speech, and indeed to a greater extent: the rate of articulation is slower, and there are more pauses, drawls, self-repairs and speech slips. All of these, except slips, may be indications of learners having problems in planning or executing L2 production, but they remain indirect evidence and do not constitute proof that communication strategies are being employed. Færch and Kasper conclude:

> No performance feature can itself be taken as unambiguous evidence for strategic planning - what indicates a communicative problem is the increased frequency and the co-occurrence of performance features, making it likely that the subsequent utterance is the result of a communication strategy.
>
> (p.224)

They do not include slips amongst the performance features that may indicate problem points for L2 learners, firstly, because slips are difficult to identify in interlanguage performance (since one cannot make the same assumptions about underlying competence as one can with native speakers) and, secondly, because "they reflect the direct opposite of strategic planning, namely the execution of already planned - and possibly highly automatized - speech segments". To that extent, they can be "indicators of *non-strategic* performance" (p.228).

Bialystok (1990) discusses Færch and Kasper's use of performance features as evidence of communication strategies (though she fails to notice that they exclude speech slips). She points out that, whilst they "may well signal strategic intervention, ... it is not inevitable that they do". There are two other possibilities. On the one hand, "one would have to allow that these performance features may indicate strategic intervention on some occasions, but that strategies may well have motivated utterances that occur in the absence of such features". In other words, using such features will not enable the analyst to pick up <u>all</u> communication strategies. On the other hand, "the presence of such performance features may be related to such phenomena as attention gaps, change of intention, and other forms of distraction, none of which are notably strategic" (p.24).

A final indication of communication strategies may be the learners' own insights about their performance. Are they conscious, or "potentially conscious" (cf. Færch and Kasper's definition of communication strategies above) of the problems they encounter and their strategies for dealing with them? Tarone (1981) considers this possibility and cites unpublished research by Aono and Hillis, in which an advanced learner of English as a second language recorded his speech in conversation with native speakers and then made notes about his intentions and problems at different points in the discourse. Aono and Hillis argue positively for such introspection, finding that, through it, they could not only identify traditional communication strategies, such as approximation, circumlocution and message abandonment, but they discovered a new strategy, which the speaker himself called a *rehearsal* strategy. This was the use of segments of speech which had been used successfully before and which could be produced more fluently. An interesting finding of this research is that the strategies used were influenced by whether the learner perceived his interlocutor as sympathetic, interested,

relaxed etc. Tarone also points out that a restriction on the use of introspection is that it demands a fairly sophisticated learner. She warns, too, "that there are as many pitfalls inherent in the use of informants' introspection as there are in relying on observational data" (p.71).

Raupach (1983) used learner introspection to illuminate the interpretation of hesitation phenomena, and Færch and Kasper themselves say, "The identification of communication strategies on the basis of the occurrence of strategy markers in performance data therefore has to be supplemented by other techniques, for instance by introspection" (1983b, p.235). The Nijmegen project, too, found introspective data to be helpful in identifying strategies (Poulisse et al., 1990).

This section has looked at the role of four approaches to the problem of identifying communication strategies:

(1) a comparison of learner performance in L2 with the performance of native speakers or the same learners' performance in L1, all with reference to the same task;

(2) control of what the speaker is trying to express;

(3) the use of performance features as indicators of problem points;

(4) the use of speaker introspection.

As no single approach can reveal communication strategies unambiguously, all four approaches are adopted, to a greater or lesser extent, in the present study.

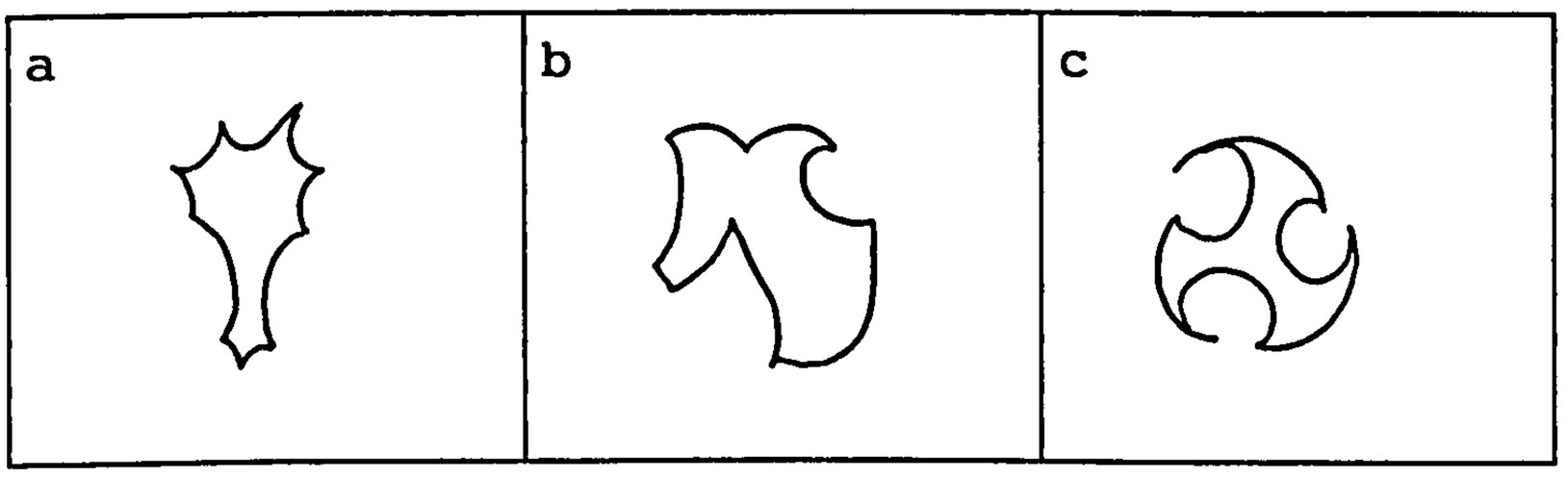
3.5 ELICITING DATA

Communication strategies can be studied in two kinds of data - data collected for that express purpose and data collected for some other purpose. Studies of the former kind are far more common, for obvious reasons. Firstly, it is possible, by means of the kind of task that learners are set, to ensure that they have frequent recourse to strategies and so provide an adequate number of them for study. Secondly, the message that learners have to communicate can be

controlled, so that researchers can usually be confident of the learners' communicative intent when they use strategies. Data collected for other purposes may well have the corresponding drawbacks. They may yield too few examples of communication strategies for anything interesting to be discovered about them, and they may be hard to interpret because of a lack of knowledge of what the learners were really trying to say. Typically, the former kind of study involves fewer learners than the latter.

What kinds of methods of eliciting data are used when the specific purpose is to provide material for the study of communication strategies? Frequently, learners are asked to describe an object or shape cued by a picture. Pictures as task stimuli have the advantage of establishing content without recourse to language. To force the learners to describe rather than name what is depicted, the objects are often uncommon or unfamiliar or likely to be outside the vocabulary of the learners, e.g. bellows (Bialystok, 1983), hammock (Paribakht, 1985), potato peeler (Bialystok, 1990), riding-crop (Yule & Tarone, 1990), abacus (Poulisse et al., 1990). The pictures may be of abstract shapes for which there is no name, as in Figure 3.6.

Figure 3.6: Abstract shapes used to elicit communication strategies



(from Bongaerts & Poulisse, 1989)

Typically, the learners' task is to describe a series of such pictures so that a listener can pick out matching pictures. Restrictions may be imposed on the listener, e.g. "... the reconstructor [= listener] refrained from speaking as much as possible" (Bialystok, 1983, p.105), "The listener was not allowed to ask the speaker for any clarifications ..." (Yule & Tarone, 1990, p.186), "... a native speaker ... who would later listen to a recording of the task ..." (Bongaerts & Poulisse, 1989, p.258). Restrictions may even be imposed on the speaker, such as not being allowed to use the exact target words

even if they knew them (Paribakht, 1985). Bialystok (1990) describes her picture task as having "a 'game-like' quality" (p.59), a comment which would seem to apply to many of the other tasks.

A series of pictures is used by some researchers to elicit more narrative-like speech (e.g. Váradi, 1973), or a narrative is triggered by events seen on a videotape (Yule & Tarone, 1990). Narratives are also elicited by learners retelling in L2 a story they have heard in L1 (e.g. Poulisse et al., 1990).

Another common elicitation task is one in which learners give a series of instructions for making something, e.g. constructing a house from Lego blocks (Wagner, 1979) or assembling a Christmas tree stand (Yule & Tarone, 1990).

Blum-Kulka and Levenston (1978), who were interested purely in lexical simplification, used isolated sentences with single blanks for single missing words. They had native speakers complete the same test.

Other techniques are role-plays with native speakers, e.g. getting a plumber to recover a contact lens dropped down a sink (Corrales, 1985), and interviews with native speakers (e.g. Poulisse et al., 1990).

Though the tasks cited above are successful in eliciting strategic behaviour from learners whilst giving the researcher good knowledge of their intentions, many of them may seem remote from real communication. For that reason, no doubt, a smaller number of researchers have chosen to study communication strategies occurring in more naturalistic learner language. Færch and Kasper (1983a,b) used data from the Copenhagen University PIF corpus of learner language, as did Haastrup and Phillipson (1983). PIF (Project in Foreign Language Pedagogy) is concerned with the spoken and written English of 120 Danish learners at all levels of the education system and includes a 20-minute videotaped conversation between the learner and a native speaker of English. It was the latter section of the corpus that was used as data for the study of communication strategies (8 learners) by Haastrup and Phillipson. Færch and Kasper also drew on a corpus of the Ruhr-Universität, Bochum, called "Kommunikative Kompetenz als realisierbares Lernziel" (Communicative competence as an attainable goal), which con-

sisted of 48 audiotaped role-plays between German first-year students and English native speakers. Færch and Kasper do not state how much of these large corpuses they actually investigated, but their interest was theoretical and qualitative rather than quantitative. Raupach (1983) used data from the KAPPA-Project at the Gesamthochschule Kassel, a corpus of learner language in French as a foreign language consisting of language productions of 30 German undergraduate students of French and 15 French students. Tasks involved interviews with the native speakers and the retelling of a French story presented in writing. The present study uses data from the Munich-York corpus of learner language, described in detail in Chapter Five.

The advantages and disadvantages of the two basic approaches to eliciting data relate to the tension that exists in educational research between reliability and validity. Greater control over the data generally means increased reliability but often at the expense of validity - the relation between what researchers have actually investigated and the "real-life" phenomena that they hope their research will illuminate. But can unreliable data ever be valid? Bialystok (1990) discusses the problem and comes down on the side of the controlled study.

> There is always a trade-off in research between control and naturalness ... Research that is carried out in completely natural settings is difficult to control and the results are often problematic to interpret. If a particular phenomenon is the object of study, such as the use of strategies for referential communication, one may have to wait days for any spontaneous emission of relevant data. Further, natural data are the product of a myriad of factors, over most of which the researcher has no control, and many of which the researcher is unaware [of]. Hence, for the investigation of highly specified phenomena, naturalistic study is generally an inefficient procedure.
>
> (p.61)

This study is based on the belief that it is possible to achieve a reasonable balance between the claims of naturalness and control.

3.6 FACTORS AFFECTING STRATEGIC BEHAVIOUR

Tarone (1981) describes a study by Aono and Hillis which reported that their subject's use of strategies was affected by whether he perceived his interlocutor as sympathetic, interested, relaxed etc.

This was a personal experience, which has not been formally investigated, but there have been attempts to relate strategy use to other factors. Clearly, the learner's choice of this or that strategy must be determined by something, but that "something" is likely to be a complex of factors that is difficult to unravel.

Váradi (1973) touched on the problem in his pilot study but could go no further than stating that the distribution of different kinds of strategies was "influenced by various factors such as (obviously) the stage of development of the learner's AS" [= approximative system (interlanguage)] and "should be a promising subject for further investigations" (p.93).

Bialystok and Fröhlich (1980) set out to evaluate the effect of elicitation procedures on strategic use. Using a picture description task, they asked one group of learners to write the description and stressed thoroughness and accuracy in their instructions. A second group had to describe the picture orally and a third to describe the picture to a passive listener who recreated it in view of the describer. The results of the study revealed no interaction between the procedure and the pattern of strategic choice.

Bialystok (1983), in two sections of her study headed "Who uses which strategy?" and "Which strategy when?", conducted a statistical analysis of types of strategy and learner proficiency or task type. She found that target language proficiency biased learners to select differentially between L1-based and L2-based strategies: not surprisingly, the more proficient learners used fewer L1-based strategies, but it was a complex relationship. The target lexical item had a slight effect on the kind of descriptive strategy used in that the descriptions - again unsurprisingly - reflected critical features of the item (size, material etc.). She also found that the best strategy users (in terms of the effectiveness of their strategies) were the most proficient learners and those with the greatest linguistic experience (knowledge of several languages, travel).

Haastrup and Phillipson (1983) compiled profiles of the strategy use of their eight learners and found that there were as many styles as there were individuals and that it was not, therefore, possible to link strategic behaviour with learner factors in any simple way.

Corrales (1985) set out to find links between types of communication strategy and learner proficiency or task type, but could come to no clear-cut conclusions. There was a tendency for learners to depend less on strategies as proficiency increased. There is, however, a danger of circularity in her interpretation, for proficiency at one point (p.90) appears to be equated with less dependence on the use of communication strategies.

For Paribakht (1985), the main purpose of the research was "the nature of the relationship between speakers' proficiency level in the target language and their CS use" (p.133). She hypothesised that both type and frequency of communication strategies would vary according to proficiency level. She found that advanced learners occupied a mid-position between native speakers and low-proficiency learners in both type and relative frequency of strategy use.

The Nijmegen project (Poulisse et al., 1990) had as one of its research questions the relationship between L2 proficiency and the use of communication strategies. The findings were that less proficient learners used more strategies overall and also more L1-based strategies. They also concluded that L1 and L2 strategic behaviour were largely similar in showing a preference for holistic over analytic strategies. Their most clear-cut result, however, concerned "the enormous differences in the subjects' use of CpS in tasks I, III and IV. In the picture description task (task I) virtually all CpS were analytic, while in the story retell task (task III) and particularly in the oral interview (task IV) holistic strategies and transfer strategies were also used relatively frequently." (p.194) This task difference is perhaps not so surprising in view of the marked difference between task I and the other two tasks. Task I was a picture description task in which the subjects had to describe "20 concrete objects for which they were unlikely to know the conventional English names" (p.11). Examples of the objects are a rolling pin and a humming-top. Obviously, the subjects would be forced into "listing (some of) the properties" of the objects (an analytic strategy) since they would find "substituting the word for a related concept which shares some of the criterial properties" (a holistic strategy) virtually impossible for such specialised objects.

Not too much has come out of this survey of attempts to establish links between strategic behaviour and other factors. The only relationship that emerges with any consistency is with the L2

proficiency of the learner. This study hopes to shed further light on possible factors affecting the use of communication strategies.

3.7 COMMUNICATION STRATEGIES AND LANGUAGE TEACHING

All language users, L1 or L2, use communication strategies to help them over the hiatus between communicative needs and linguistic resources. The hiatus, however, is generally much greater in L2 than in L1. Will a study of communication strategies give insights into their use that can be used to help foreign language learners maximise their linguistic resources? Opinions expressed by other writers are clearly divided on this point.

Corder (1978) was in no doubt:

> If one wishes at this stage of the art to consider the pedagogical implications of studying communicative strategies, then clearly it is part of good language teaching to encourage resource expansion strategies and, as we have seen, successful strategies of communication may eventually lead to language learning.
>
> (p.17)

Færch and Kasper (1983a) take the view that there is no need to teach strategies to foreign language learners because they already have implicit knowledge about them (no doubt from their native language), but they do need to be made conscious of strategies and how to make the best use of them. They point out that foreign language teaching methods that put a premium on correctness may encourage learners to opt for avoidance rather than achievement strategies. They suggest that if learners are put into communicative situations that go beyond their current linguistic knowledge (due care being taken not to frustrate them), the gains could be considerable. Communication strategies could be devices to help learners bridge the gap between classroom interaction and the less controlled communicative situations they will encounter outside the classroom. They also believe that more advanced learners could benefit from being taught "floor-holding gambits" to increase their overall fluency by filling their planning pauses in the way that native speakers do.

Haastrup and Phillipson (1983) also believe that learners could benefit from consciousness-raising about the elements of strategic competence and about their own and other learners' use of communi-

cation strategies. They claim that many teachers who have seen their videotaped learner-native speaker interviews have wanted to use them as a way of making learners aware of the possibilities that strategies open up.

Tarone (1984), Willems (1987) and Dörnyei and Thurrell (1991) all take the view that L2 learners need, on the one hand, to be sensitised to communication strategies and, on the other hand, to spend time practising their use in the classroom. Both Willems and Dörnyei and Thurrell give detailed suggestions for exercises to practise such achievement strategies as approximation and paraphrase.

Writers connected with the Nijmegen project (Poulisse et al., 1990) are divided in their view of the implications of their research for the classroom. Poulisse cautiously advocates a role for CpS in the classroom (Poulisse et al., 1990, pp.196-9), whereas Kellerman (1991) specifically rejects the arguments of Færch and Kasper and Willems, claiming that the Nijmegen experimentation shows no evidence of learners failing to make adequate use of the strategic competence they bring to L2 from L1. The project found no substantial differences between native speakers and foreign language learners in the use of CpS [in the description of abstract shapes, it must be remembered] and, equally, no crucial differences between learner groups of differing proficiency. He maintains that the only factors inhibiting learners from making efficient use of their strategic competence are classroom settings in which there is an over-emphasis on grammatical correctness (in that, he is in a sort of agreement with Færch and Kasper) and lack of the linguistic means to use strategies properly. "The answer" he says "is simple enough: Teach the learners more language and let the strategies look after themselves." (Kellerman, 1991, p.158)

As Bialystok (1990) denies special status to communication strategies (see above, Section 3.2), seeing them simply as an enhancement of one or the other of her language processing mechanisms - analysis of linguistic knowledge and control of linguistic processing - she, too, takes the view that communication strategies cannot be taught directly. Instead, one can endeavour to reinforce the processing skills.

> What is necessary for analysis of the linguistic system is knowledge. Structural information about the language, including rules of grammar, rules of use, vocabulary and the like, contributes to

> the learner's analysis of the system. The greater the analysis, the more likely the learner is to develop reasonable hypotheses about how concepts may be expressed in the target language using the analysis-based communication strategies. What is necessary for control of processing is practice. Experience in speaking, listening, reading and writing, all contribute to the learner's development of fluent procedures for identifying and accessing relevant knowledge, both linguistic and nonlinguistic, that become especially critical to communication when proficiency in the target language is limited. With the cultivation of these skill components, it is argued, will come the effective use of communication strategies.
>
> (p.146)

It is nevertheless difficult to escape the observation that some foreign language speakers make much better use of limited resources than others and to conclude that the less effective users might be helped by having their attention drawn to and practising the use of communication strategies. In the only empirical evidence that I have come across, on either side of the argument, Brodersen, Gibson and Svendsen (cited by Poulisse et al., 1990, p.197) found that "subjects' communicative abilities were greatly improved after they had received instruction in CpS use".

CHAPTER FOUR

RESEARCH AIMS, METHODS AND QUESTIONS

> Peering into the 'black box' to identify the different strategies at work in second language acquisition is rather like stumbling blindfold around a room to find a hidden object.
>
> (Ellis, 1985, p.188)

4.1 AIMS

There are two broad reasons for an interest in communication strategies.

Firstly, they can play a part in <u>learning</u> a foreign language. As we saw in the last chapter, it is not possible to draw a clear boundary between learning strategies and communication strategies. Many strategies that in this thesis would be called communication strategies, because they address a specific short-term problem in communication, may result in learning. The strategy of *appealing for help* (What do you call that? etc.) may well do so when successful, as may the strategy of *coinage*. Language learning has been seen as a creative rather than an imitative process (cf. Section 2.2.1) and inventing a word is a part of such a process. When the word is then used, it may elicit feedback that gives rise to learning. The German pupil who wrote about a "pocket thief" in a letter was using a strategy of coinage based on translation from German (*Taschendieb* = [literally] pocket thief). As a communication strategy it was successful, for few readers would have difficulty in identifying that what the writer wanted to convey was "pickpocket". As it was employed in a letter, it did not result in any learning, but had it come out in conversation, the speaker might well have provoked a reaction such as "Oh, pickpocket", and learning could have been a by-product of a successful strategy. So an interest in communication strategies belongs to a general interest in how foreign languages are acquired.

Secondly, communication strategies are a fundamental part of <u>using</u> a foreign language. Linguistic resources are seldom entirely adequate for all communicative needs and some way of coping with the deficit

has to be found if communication is not to break down. The problem exists in native languages but becomes acute in foreign languages, particularly at the lower levels of proficiency. It is the role of communication strategies in using a foreign language that is the concern of this thesis.

Its aim is **to increase our knowledge of how school learners use strategies to overcome the problems they encounter in normal communication in a foreign language.** The purpose of acquiring such knowledge is the hope that it may point to ways in which other school learners can be helped to improve their efficiency in using the limited resources they have at their disposal in a foreign language.

Let us look at this aim in greater detail before considering how it relates to previous studies of communication strategies, and how it is proposed to achieve it.

By "school learners" is meant secondary school pupils of a full range of ability, learning their first foreign language at the three school levels that are loosely called beginners, intermediate and advanced. "Normal communication" refers to occasions when learners are being asked to convey messages in the classroom of a kind that they might have to convey outside the classroom. "To increase our knowledge of how ... learners use strategies" is a very broad aim with several component aims:

1. to identify when learners are encountering problems and using communication strategies to overcome them;

2. to establish whether their strategies are successful;

3. to discover what kinds of strategies they employ;

4. to relate their use of strategies to other factors such as their level of proficiency and the type of message they are endeavouring to convey;

5. to compare their strategy use with that of peer native speakers conveying the same message.

In what way will this add to what we know from previous research into communication strategies? As we have already seen, there have been many other studies of communication strategies, but they have been concerned more with theoretical issues of defining and classifying strategies than with investigating them empirically. The same observation is made by Ellis: "Theoretical discussion of communication strategies has predominated over empirical research into their use." (1985, p.183) The studies of actual communication strategies that <u>have</u> been conducted have often involved rather small numbers of learners. Whilst Færch and Kasper (1983a,b), it is true, based their study on a corpus of 168 video and audio-taped conversations, it is not clear whether the whole of this material was examined. The Nijmegen project (Poulisse et al., 1990) had 45 subjects, but many other studies were much smaller in scope. Váradi called his 1973 study, involving 19 learners, a "pilot study" and "small-scale experiment". Bialystok (1990) studied 18, Chesterfield and Barrows-Chesterfield (1985) 14, Glahn (1980) and Kumaradivelu (1988) 10, Wagner (1979) 9, and Haastrup and Phillipson (1983) 8 learners. Trosborg (1982) had two subjects, whilst Dechert (1983) and Meyer (1990) both examined the strategic behaviour of just one learner. The present research examines data produced by 286 subjects.

Whether or not they might be considered to have investigated an adequate number of subjects, many of the studies give only meagre information about what kind of learners they are investigating. Yule and Tarone (1990) characterise their subjects, for instance, as follows:

> One group of subjects consisted of nine native speakers of English, all undergraduates at the University of Minnesota. The other group consisted of nonnative speakers of English from countries on both sides of the Pacific. The SLL [second language learner] group was divided into 12 South Americans (native Spanish speakers) and 15 Asians (six native speakers of Japanese, four of Chinese, and five of Korean)
> (p.184)

At first glance, this may seem rather precise, but then we realise that all we are told about the important group of foreign language learners is how many there were of them and what their native language was. We are not told, for example, their age, their level of proficiency, or in what circumstances they were learning the foreign language. It is clear, however, that the subjects in the majority of studies are adults, often university students and not infrequently

learning English in an English-speaking environment. This means that an important group of learners is very much under-represented, namely school learners of foreign languages, who outside the classroom are largely surrounded by their native language. The foreign language learners in this study are German school pupils learning English in classrooms in Germany. They are described in detail in Chapter Five.

A further reservation that one might have about some of the existing empirical studies is that they deliberately set out to elicit strategic behaviour. This is no doubt because the number of subjects they are dealing with is low and their recourse to communication strategies has therefore to be maximised if they are to yield sufficient data for study. The disadvantage of this approach is that it becomes difficult to relate the findings to the use of communication strategies in ordinary communication. Elicitation procedures seem likely to produce artificially high frequencies of strategies as well as a bias towards certain types. Since the problems that learners face are brought into the foreground, they probably spend a much longer time overcoming them than normal communication would allow. Furthermore, the communicative activities used in elicitation procedures often seem remote from normal language use. For example, a "director" describes abstract shapes or objects listed on a sheet to a "matcher" behind a screen, who sorts cards with the same shapes or objects, in so-called "dyadic" trials (Bongaerts, Kellerman & Bentlage, 1987; Bialystok, 1990). The focus that elicitation procedures put on communication strategies tends also to mean that other aspects of the learner's performance that may have a bearing on strategic behaviour are overlooked and indeed they are rarely reported on in the findings.

The present study of communication strategies is based on the analysis of 286 oral texts, which were produced in response to tasks designed not to elicit communication strategies but to discover the ability of school pupils to engage in communication in their native or a foreign language. The tasks were designed, in other words, to discover, through their performance, the extent and the limitations of their *communicative competence*, of which *strategic competence* is one component (cf. Section 2.4). The tasks themselves, how they were administered and how the data were processed, are described in the next chapter.

4.2 METHODS

4.2.1 The source of the data

The main data used in this study are taken from the corpus of the Munich-York project "Learner Language" that was outlined briefly in Chapter One. The corpus has a number of advantages as a source of data for the study of communication strategies:

1. The communication strategies that are found in them are not deliberately provoked but occur naturally as part of the learners' endeavour to communicate a normal message.

2. The strategic behaviour of a large number of different subjects can be investigated.

3. The subjects represent an important constituency of language learners, which has tended to be somewhat neglected in second language acquisition research, namely school learners of foreign languages.

4. The corpus contains data about other aspects of the learners' communicative competence, such as their competence in grammar, vocabulary and style.

5. There is a control group of native English pupils, who perform all the same communicative tasks and tests of competence as the German pupils.

6. Much of the data is oral and therefore appropriate for an investigation of communication strategies: firstly, the real-time language processing of spoken language puts a greater strain on limited linguistic resources than written language; secondly, the problems learners encounter leave their trace in false starts, hesitations, etc.

7. The spoken data in the corpus have been recorded and the hesitation phenomena mentioned above can therefore be systematically studied.

There are, however, also disadvantages. The conversational part of the data is not fully interactional, which somewhat restricts the

range of communication strategies open to the learners. More importantly, the learners themselves are not available to comment on their performance, to confirm whether or not what appears to be the use of communication strategies really is that. As was noted in the last chapter, the identification of strategies is a fundamental problem of communication strategy research, since the researcher must rely to a large extent on indirect evidence such as the hesitation phenomena mentioned above. In the attempt to "peer into the black box", the learners themselves may be able to provide some illumination if they can be invited to comment on their performance and the problems they encountered whilst they are still fresh in their minds. For this reason I supplemented the main data with data from a small number of learners who performed one of the tasks and immediately afterwards discussed their performance with me.

The basic approach to investigating what role communication strategies played for all these learners in carrying out the communicative tasks they had been given was first to analyse their productions from the standpoint of the three components of their *communicative competence*, as defined by Canale and Swain (1980), i.e. *strategic competence*, *grammatical competence* and *sociolinguistic competence*, and then to attempt to relate the first component to the other two. Analysis of strategic competence - or, more accurately, *performance* in Chomsky's use of the terms (cf. Section 2.3) - reveals <u>what</u> communication strategies the foreign language learners and the native speakers are using. Relating that information to the other aspects of their communicative performance may enable us to say something about <u>when</u> and <u>how</u> they are using communication strategies.

4.2.2 <u>Analysis of strategic performance</u>

The oral "texts" (i.e. the transcriptions of the recorded performances) were scanned individually to identify communication strategies of two basic kinds: *message abandonment* and *achievement*. The former category consists of those cases where a pupil began a message, realised there was a problem of linguistic resources and gave up. Such cases are, of course, part of the overall picture of strategic performance, but they are less interesting than the attempts to overcome problems, which are grouped together as *achievement strategies*. These were identified by the evidence of a problem in the form of false starts or hesitation phenomena, such as

pauses, drawls (lengthening of sounds) and fillers (er, um). The achievement strategies were assigned to one of a number of categories, such as *coinage*, *approximation* or *circumlocution*, and recorded together with a note of the success or failure of the strategy.

Færch and Kasper defined communication strategies as "potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal" (1983a, p.36). That has been adopted as a working definition for this study (cf. Section 3.2). In order to check that what was held to be a problem on the basis of hesitation phenomena really was seen as a problem by the learner, in other words whether the hesitation phenomena were *strategy markers* (Færch & Kasper, 1983b, p.224) and not indicators of something else, such as a lapse of concentration, six additional pupils were interviewed immediately after performing one of the communicative tasks to see if they were conscious of their problems and, if not, whether they were able retrospectively to raise them to the level of consciousness. Their comments on their strategic behaviour were then related to the apparent use of communication strategies by the 286 learners who could not be interviewed.

4.2.3 Analysis of grammatical and sociolinguistic performance

Grammatical competence, in Canale and Swain's definition includes not only knowledge of morphological and syntactical rules but also knowledge of rules of semantics and phonology and knowledge of lexical items. It enables learners to understand and produce sentences with intelligible propositional content. Sociolinguistic competence, on the other hand, enables them to link sentences together cohesively and coherently and to relate them appropriately to their sociocultural contexts. Five measures were used to establish both the achievements and the deficits of the individual performances in the areas of grammatical and sociocultural competence.

4.2.3.1 Content

The tasks were analysed into the units of information which the speakers were called upon to transmit or the speech acts which they had to perform. Each performance was then judged on how many of them were attempted and how many successfully completed.

4.2.3.2 Keywords

Many of the information units or speech acts ideally required knowledge of specific lexical items for their completion (or, of course, in their absence, appropriate communication strategies). A list of such keywords was drawn up and the texts were analysed to establish what proportion of them each learner knew.

4.2.3.3 Length of text

The above content analyses were concerned only with the minimal message required by the task. How minimally or how elaborately it was achieved might be connected with the length of the text. This was measured by the number of words in each production.

4.2.3.4 Speech rate

How to measure a learner's proficiency in a foreign or second language is a much discussed problem, for, as Stern concludes, "second language proficiency as a concept has not yet found a satisfactory expression" (1983, p.356). To the layman, a speaker is more or less "fluent" in a language, but whilst fluency may be easy to recognise, it is hard to define. What is recognised as fluency is probably an amalgam of several components, and one of them is likely to be what the word "fluency" itself implies - the flow of speech, the extent to which coherent speech flows smoothly without over-long pauses or false starts. One indication of this flow is the speech rate, measured as the total number of syllables the speaker produces, not counting false starts or slips, divided by the number of seconds the whole text, including, of course, false starts, pauses, etc., takes to produce.

4.2.3.5 Error

The deficits in each learner's performance were assessed by means of an error analysis. First the errors were identified by three native speakers working independently. Then they were classified into errors of grammar, vocabulary, appropriacy, discourse organisation and pronunciation. Finally, an overall error rate was calculated for each text by relating the number of errors to the number of words produced.

All these analyses were carried out on the texts produced by both native and non-native speakers. They are described in detail in Chapters Six and Eight.

4.3 RESEARCH QUESTIONS

The results of the above analyses make it possible to relate the use of strategies to a number of other measures. Bialystok concluded a survey of other attempts to do so with the remark "few meaningful relations have emerged" (1990, p.55). There was, however, "some evidence for differences in strategy selection attributable to the learner's proficiency and the processing demands that specific tasks place on a learner's linguistic competence" (p.146). The data on which Bialystok based her conclusion are, as we have seen, rather meagre in some cases. It seems, therefore, worthwhile to enquire whether the more extensive data analysed in this study confirm her conclusions and, indeed, whether any other "meaningful relations emerge". That is one reason for asking a number of questions of the data. An equally important reason is the ultimate purpose of this research, stated earlier in the chapter - the hope, through increased knowledge of how foreign language learners and native speakers use communication strategies, of being able to point to ways in which learners can be helped to employ their limited foreign language resources to maximal effect. Nine questions follow, which seem relevant to these concerns and appropriate to the kind of data available to this study.

4.3.1 The learners were nearly always able to complete the communicative tasks they had been given more or less successfully. Few could do so, however, without some problems. How often, when problems arose, did they give up and how often did they make some attempt to overcome or circumvent them?

Question 1: What is the overall frequency of communication strategies in the data?

4.3.2 An attempt has been made to assign the communication strategies found to different categories in a taxonomy (cf. Section 3.3). What is the overall distribution between those categories? Is it a fairly even distribution or are there favoured categories? Are some categories in fact purely theoretical and not found in the data investigated here? How does the distribution found in these data compare with that found in other studies?

Question 2: What is the distribution of communication strategies between the categories of the taxonomy?

4.3.3 Communication strategies are plans for solving problems encountered in reaching a communicative goal. Do they on the whole enable learners to get the message across?

Question 3: What proportion of communication strategies have a successful outcome?

4.3.4 One might reasonably expect that increasing proficiency in a foreign language means that learners encounter fewer problems in encoding what they want to say and therefore need less often to have recourse to communication strategies.

Question 4: Do more advanced learners use fewer communication strategies?

4.3.5 By the same argument, native speakers of a language should encounter even fewer problems and make the least use of all of communication strategies.

Question 5: Does the group of native speakers of English use fewer communication strategies than the groups of non-native speakers?

4.3.6 Increasing proficiency may affect not only the overall frequency with which communication strategies are used but also the selection of particular types of communication strategies. It might be, for instance, that the strategy of circumlocution itself puts demands on learners' proficiency and is therefore more available to advanced learners.

Question 6: Is the distribution of communication strategies related to the proficiency of the learner?

4.3.7 It may be not only the proficiency of learners that affects the number and choice of communication strategies they use but also their personality. Some learners may be "risk-takers", willing to take the risk of failure that the use of communication strategies involves. Others may be "risk-avoiders", who may choose to avoid a topic rather than run the risk of failure and possibly ridicule. This might be reflected in some learners using considerably more communication strategies than average, other things being equal, whilst other learners use considerably less or none at all. There may even be a male-female difference in the willingness to use communication strategies.

Question 7: Are there under- and over-users of communication strategies? Is there any sex difference in the adoption of communication strategies?

4.3.8 The choice and frequency of communication strategies may be related to learner factors but they may also be a function of the kind of problem that learners encounter. Breakdowns in communication are much more frequently caused by problems of vocabulary than by problems of grammar (cf. Green & Hecht, 1985, p.88). It might be reasonable to expect then that there are more communication strategies in the area of vocabulary than in that of grammar. Also, there may be a relationship between a particular kind of problem and the type of strategy chosen to cope with it.

Question 8: Is there a relationship between problem types and the frequency and choice of communication strategies?

4.3.9 In its turn, the kind of problem learners encounter may be a function of the kind of task they are asked to perform, so that the task, too, may affect the frequency and choice of communication strategies employed. The task of describing abstract shapes, for example, (cf. Bongaerts, Kellerman & Bentlage, 1987) seems apt to put a strain on the vocabulary resources for describing and locating shapes.

Question 9: Are there different frequencies and distributions of communication strategies in the data elicited by different tasks?

It must not be forgotten, of course, when drawing conclusions from whatever answers emerge to these questions, that we are still only inferring what goes on in the black box: not even the learners themselves can actually know that, and much less the researcher working entirely from outside.

CHAPTER FIVE

COLLECTING AND PROCESSING THE DATA

5.1 MAIN DATA COLLECTION

The main data on which this study of communication strategies is based form part of a large corpus of productions in English as a foreign language made by German, French, Hungarian, Italian and Swedish school pupils, supplemented as a control by a number of productions made by English pupils in their native language. These productions have been collected by my colleague in Munich and by me in the course of our long-term joint research project concerned with many aspects of what pupils achieve, and fail to achieve, in learning a foreign language in school.

Some aspects of the research have been reported on at length: *error analysis* (Hecht & Green, 1983; Hecht, 1984; Green & Hecht, 1985), *marking and assessment* (Green, 1984, 1985; Green & Hecht, 1984; Hecht, 1986, 1991; Hecht & Green, 1987, 1989a), *communicative effectiveness* (Green & Hecht, 1987, 1988; Hecht & Green, 1988a, 1988b, 1989b), *grammatical competence and performance* (Hecht, 1987a; Kieweg, 1988; Hecht & Green, 1989c, 1992; Green & Hecht, 1992; Hecht & Hadden, 1992), *problems of investigating learner language* (Green & Hecht, 1990). Other aspects have been dealt with more briefly: *communication strategies* (Hecht, 1987b; Hecht & Green, 1991a), *monitoring and self-correction* (Hecht & Green, 1991b; Green & Hecht, 1993a), *language awareness* (Green & Hecht, 1993b), *interlanguage development* (Hecht & Green, 1993a), *L1 interference* (Hecht & Green, 1993b). The corpus has also been available to other researchers and there have been in-depth studies of *pronunciation* (Pascoe, 1987), *lexical competence* (Wiebalck-Zahn 1990), *grammar* (East, 1992), *error cause* (Schloter, 1992), *self-correction* (Scheuerer-Willmar, 1993) and *discourse proficiency* (Archibald, 1994).

The corpus consists of 7416 pupil productions. 5636 of them are the product of tasks mainly concerned with the foreign language itself (*medium-centred* tasks). 1780 are the result of tasks concerned primarily with imparting information (*message-centred* tasks). The

productions which lend themselves directly to an investigation of communication strategies are those based on the message-centred tasks, in which the pupils' attention is focused on the information they have to get across. The message-centred tasks in the corpus are both oral and written, but it is particularly in the oral tasks that communication strategies can be readily observed, since any language problems the pupils encounter leave their trace in interruptions of the flow of speech in the shape of pauses, sound-lengthening, false starts, repetitions, self-corrections, etc. The time pressure that keeping up the flow of speech inevitably imposes, even if the task as a whole is not under any time constraint, also gives rise to a greater number of problems than in the more relaxed language production of a written task. The oral tasks in the corpus were performed only by the German and English pupils. The primary data for this investigation are therefore the 286 productions by German and English pupils performing the two message-centred oral tasks: they are called, for convenience, the *picture story* and the *telephone conversation*.

5.1.1 The picture story

This task was an oral narrative in which pupils were asked to assume the role of the owner of an electrical goods shop making a statement to the police about an incident which had just occurred in the shop, when a shoplifter had attempted to steal a radio and been apprehended. The pupils' knowledge about the incident was provided by a strip cartoon of six pictures (taken from Heaton, 1966 - see Appendix A). The purpose of using pictures was to control the information the pupils were asked to give without influencing the language they might choose to give it in.

The picture story task was given to 126 pupils in state secondary schools in Bavaria to perform in their first foreign language, English. Like most states in the Federal Republic of Germany, Bavaria operates a tripartite secondary system after a two-year orientation phase, which begins at the age of ten (classes five and six). The *Gymnasium* is the most academic school type, where pupils are expected to remain until the age of 18 or 19, when they take the *Abitur* qualification for university entrance. The *Realschule* is for the more practically oriented pupils, whose further studies, after compulsory schooling, will generally be pursued in technical or

commercial colleges. The *Hauptschule* is for the non-academic pupils, who will probably become skilled or unskilled manual workers. There is a certain amount of movement between the three school types. Comprehensive schools are found in some states (though not in Bavaria), but they are in a minority.

71 of the pupils were in the *Mittelstufe*, the intermediate stage of secondary education, comprising classes 8-10. At this level, all three school types were represented and thus the full range of ability. There were also 26 pupils from the *Unterstufe* (beginners' stage, classes 5-7) and 29 pupils from the *Oberstufe* (advanced stage, classes 11-13) of the Gymnasium (the other two school types do not have an advanced stage). Thus, the full range of learning English in school, from beginners' to advanced level, is represented. The 126 pupils were distributed across 12 schools in different parts of Bavaria, two of them in Munich, the capital, the remainder in different small towns. (See summary information in Table 5.1.)

The picture story task was given to the pupils by their English teachers, who were asked to observe the following instructions:

Instructions for the picture story

In order to achieve comparable test conditions for all the pupils, we ask you to observe the following guidelines.

1. Allow the pupil 2-3 minutes to study the pictures and grasp their content. Do not give any linguistic help.

2. Tell the pupil to play the role of the shop-keeper making a statement about the incident to the police, who would want, on the one hand, an account of exactly what had taken place and, on the other, a description of the thief. The state-ment might begin: "About half an hour ago ..."

3. The pupil should not be permitted to make any written notes but should speak "freely" on the cassette.

4. Switch on the cassette recorder and leave it running until the end of the pupil's performance. We should like to have all the pauses for thought, slips, corrections, etc. included in the recording.

5. Please record the following information before each pupil speaks:

e.g.
Pupil: 1 (no names!)
Class: X
School: Gymnasium

After studying the pictures for a few minutes, each pupil was recorded individually on a cassette recorder by the teacher. The cassette was then returned to the project. In almost every case, teachers appear to have adhered to the instructions. There were very few instances of the cassette recorder being stopped and restarted once recording had begun. In one or two isolated cases, the teacher could be heard to whisper to the pupil after an appeal for help or a very long pause, possibly because the teacher felt that the recording for that pupil could not otherwise be completed. We have, of course, no way of knowing whether teachers gave any help to pupils before recording started, but we have no reason to think that they did. Certainly, the pupils' performances showed the sort of variation within a class and overall similarity between schools that one might expect.

The schools, teachers and pupils were assured of their anonymity, and the pupils also understood that they would not be assessed on their performance. We knew the names of the schools and the teachers, though not of the pupils, but once we had begun to process the recordings, each performance was identified purely by a code, consisting of an abbreviation for the task, the school type (not name) and a running number, e.g. PS GM1 (picture story, Gymnasium Mittelstufe, pupil no 1), PS RS10 (Realschule pupil no 10), PS HS15 (Hauptschule pupil no 15).

5.1.2 The telephone conversation

For this task, the pupils were asked to assume the role of a young German on holiday in England with three friends. The task was to make a telephone call to the warden of the youth hostel in York, book the group in for three nights and obtain certain information about meals, prices, the situation of the hostel, closing times, etc. The part of the warden was recorded on tape, together with genuine coin box dialling noises to enhance the sense of reality. The information the pupil was to obtain was given in a flow chart (in German for the German pupils) and a form was provided on which the pupil was to record five specific bits of information given by the warden. The flow chart and the form, in their English versions, together with the tapescript of the warden's part, are given in Appendices B1-3.

This task was given to 106 Bavarian state secondary school pupils, again to be performed in their first foreign language, English. The distribution across school types and ages was similar to that for the picture story. 61 were in the intermediate *Mittelstufe*, with all three school types represented. There were also 24 pupils from the beginners' stage, *Unterstufe*, and 21 from the advanced stage, *Oberstufe*, of the *Gymnasium*. (See Table 5.1.) The pupils were in ten different schools: four schools were in the state capital, Munich; the remaining six were in smaller Bavarian towns.

The procedure for administering the task was similar to that for the picture story. After studying the instructions and flow chart for a few minutes, pupils were recorded individually by their English teachers. Cassettes, and in this case the forms filled in by the pupils, were then returned to the project for processing. Again, teachers were asked not to intervene once the recording had started, and again, on the whole, they respected the request. Teacher intervention was perhaps less likely for this task, for a technical reason: the teachers had to operate two cassette recorders. One of them was to be switched on to record at the beginning of each pupil's performance and left running until the performance was complete. The other, which was switched on to playback, contained the warden's voice and had to be started and stopped by operating the pause button at appropriate moments during the pupil's performance. In order to make the conversation as realistic as possible, only short pauses had been recorded on the warden's tape so that he could "react" promptly to what the pupil said. It meant, as I discovered myself when administering the task to English pupils, that teachers had to be alert, keeping an eye on the flow chart, listening to what the pupil was saying, and being ready to operate the pause button at the right moments.

Schools, teachers and pupils were again assured of their anonymity. For the pupils, this meant telling them that, when asked for their name in the recorded conversation, they could give an invented name if they preferred. Several did, giving names ranging from comic invented German names, such as "Fridolin Wurstknecht", to straightforward English names, such as "Tom Taylor" and "Angie Smith", to more fantastic ones, such as "Rocky Balboa" and "Pebbles Firestone", to celebrities, such as "Mick Jagger", "Al Capone", "Ronald Reagan" and "Giuseppe Verdi". The owners of the more

lengthy or complicated pseudonyms may well have been somewhat taken aback when they were promptly asked by the warden: "Could you spell that, please?" Most pupils, however, gave plausible German names that were probably their own. As with the picture story, each performance was subsequently identified by a code number, e.g. TC RS17 (telephone conversation, Realschule pupil no 17).

5.1.3 The control group

As with every task or test used in the project, the picture story and the telephone conversation were given to peer groups of English pupils to perform in their native language. The picture story was performed by 34, and the telephone conversation by 20, English pupils, who ranged across the ability range and from years 8 to 10 (i.e. 12-14 years old) in two comprehensive schools and one secondary modern school. (See Table 5.1.)

When the performance of a non-native speaker of a language is evaluated (and most performances are, informally if not formally), what is heard or read is set against some notional model performance. That model is not generally specified but is tacitly assumed to be a *native speaker.*

> Native speakers, however, come in various ages, with differing abilities and from different backgrounds, both linguistic and otherwise. So what is a model native speaker like? Probably something akin to Chomsky's 'idealized speaker-hearer' (Chomsky, 1972, p.116), i.e. an adult, educated, intelligent, experienced speaker of the standard dialect who is rarely guilty of slips of the tongue or brain. Clearly, most real native speakers fall short of the ideal in a number of respects.
>
> (Green & Hecht, 1990, p.95)

The notion of the native speaker is a fuzzy one. Thomas Paikeday, after asking two dozen distinguished linguists (among them Carroll, Chomsky, Crystal, Gleason and Quirk) what a native speaker was, received such widely differing answers that he wrote an article entitled 'May I kill the native speaker?" (Paikeday, 1985). Nevertheless, though the native speaker may not exist, native speakers do and they provide a useful frame of reference for the investigation of foreign-language learner language. The correct frame of reference for our secondary school learners is, we believe, a peer

group (age and ability range) of native speakers. The principal value of such a reference group is that it makes it possible to distinguish those features of the German pupils' performance that are attributable to their being non-native speakers of English from those that could be attributed to their being young speakers of English.

The two tasks performed by the English pupils were identical in every respect to those performed by the German pupils except for the instructions being in English. This made no apparent difference to the picture story task, but for the telephone conversation there was a risk that the flow chart would influence the language used. For example, given the instruction "Ask how long it takes to walk.", pupils might be expected to say "How long does it take to walk?". 11 of the 20 pupils did in fact say just that, but others put in small variations such as "How long would it take [us] to walk [please]?" or "How long is it if you walk?", so the flow chart was not a straitjacket.

Unlike the German pupils, who performed for their regular English teacher, the English pupils made the recording for an outsider they did not know. I attempted to relax them by some preliminary informal chat and by explaining to them what the purpose of their participation was. It is possible that some of them may still have felt a little nervous.

The English pupils were coded "TC EP1" (telephone conversation, English pupil no 1) etc. and were treated as a homogeneous group.

5.1.4 The representativeness of the pupil sample

In selecting pupils for the recordings, we were anxious to obtain as representative a sample as possible. The pupils cover the ability range in secondary schools in Germany, and they also span the age range for learning English. All three types of Bavarian school are represented, each by more than one individual school. Some of the schools are situated in the capital city and some in smaller towns. With the numbers involved, it seems likely that the spectrum of German school learners of English is adequately represented.

The English pupils also cover the ability range, but as their number is smaller, they do not span the whole secondary age range and they are not drawn from such a variety of schools as the German pupils.

For both German and English pupils, there was the inevitable constraint of having to find teachers willing to participate, either by conducting the recordings themselves (in Germany) or by allowing access to their pupils (in England). We were helped in this by both my German colleague and me having numerous school and teacher contacts through our teacher-training activities.

Table 5.1: Distribution of pupils across levels, groups and tasks

Pupils	Level	Group	Task	
			Picture story (PS)	Telephone conversation (TC)
German (GP)	Advanced	Gymnasium Oberstufe (GO)	29	21
	Intermediate	Gymnasium Mittelstufe (GM)	32	20
		Realschule (RS)	20	21
		Hauptschule (HS)	19	20
	Beginners	Gymnasium Unterstufe (GU)	26	24
Total numbers of German pupils			126	106
English (EP)	Intermediate	Comprehensive/ secondary modern	34	20
Total of German and English pupils			160	126

5.1.5 The picture story and the telephone conversation as communication

In the introduction to this chapter I described the picture story and the telephone conversation as message-centred tasks. Focus on message is certainly a feature of real communication, but to what extent can these tasks be described as "communicative"? One definition of communication has already been given in Section 2.4 -

that of Canale and Swain (1980). Littlewood (1987) elaborates a model of communication, which is in fundamental agreement with Canale and Swain and from which he derives eight "essential features":

> 1. Communication is embedded in interaction (this is true of written as well as oral communication).
>
> 2. It is linked to non-linguistic reality, from which it derives its purpose.
>
> 3. It is focused primarily on meaning.
>
> 4. It is subject to social constraints (e.g. on what is appropriate).
>
> 5. It must take account of changing shared knowledge, perceptions and expectations.
>
> 6. It is unpredictable to varying degrees.
>
> 7. It is carried out in 'real time' (especially true of oral communication, where reactions must be immediate).
>
> 8. Success is measured primarily in terms of whether the messages are effectively transmitted and received.
>
> (Littlewood, 1987, p.20)

Littlewood adds that not <u>all</u> communication has to have <u>all</u> of these features and goes on to suggest that they might be used "as a sort of checklist in order to decide on how 'communicative' a test or other activity is" (p.20).

If we apply Littlewood's checklist to the two tasks, how communicative do they seem to be? Table 5.2 shows "+" for a feature that appears to apply to the task in question, "(+)" for a feature that applies with some reservation, and "-" for a feature that appears not to apply to the task.

<u>Table 5.2</u>: The communicative features of the tasks

Littlewood feature	1	2	3	4	5	6	7	8
Picture story	-	+	(+)	(+)	(+)	+	(+)	+
Telephone conversation	+	(+)	+	+	+	(+)	+	+

Most of Littlewood's features (F1-8) appear to be represented in the picture story, but not unequivocally so.

(F1:) Though a statement to the police would normally be largely a monologue, there could be occasional interruptions for clarification, but that was ruled out here.

(F2:) There is a real link with non-linguistic reality, even if in the shape of pictures, but

(F3:) the focus on meaning is probably tempered, rather more than in real life, by the presence of the teacher and the pupil's likely concern with accuracy.

(F4:) The degree of formality of the situation is given by the roles of the speaker and hearer, but the speaker is not really a shopkeeper nor the hearer a policeman.

(F5:) See below.

(F6:) Though the pictures ultimately control the content of the statement, what pupils select as essential and what language they choose to express it is largely unpredictable.

(F7:) The performance takes place in real time and the teacher listening to it, not to mention the presence of the cassette recorder, no doubt imposes a certain pressure. However, there was time for some preparation, and the absence of an interlocutor, who might feel the urge to move into any overlong pauses, does allow the speaker rather more time than the real-life situation would.

(F8:) Performance success was judged primarily in terms of information communicated. Linguistic errors were rated according to their effect on meaning.

Littlewood's feature concerning shared knowledge (F5) pinpoints what is probably the biggest departure from real life in the picture story task. Shared knowledge is an essential ingredient of all real communication and part of it is the "here and now" of who we are, where we are, what we can see and what we are doing. We do not normally need to make such shared information explicit. A picture in

front of us also belongs to the here and now. Pupils performing the picture story task were being asked to transfer part of the "here and now" to the "there and then" by imagining that the incident depicted had happened earlier. They were also asked to play the role of someone in the pictures who could not see everything that they could see. That leap of the imagination was sometimes too great for some of them. These factors may explain why pupils occasionally drifted from the past to the present tense in their account, or why they referred to "the radio [on the counter]" rather than "a radio [which was on the counter]", or why they stated baldly "The man put the radio in his bag" (which the shopkeeper could not have seen since his back was turned) rather than "The man must have put the radio in his bag".

The telephone conversation task seems to display more of the characteristics of real communication than the picture story. The essential difference is the element of interaction which the task has. The illusion that the warden of the hostel is actually responding to what the pupils say is strong, as the fillers and polite phrases produced by many pupils indicate, e.g. "Oh", "Well", "Yes, of course", and "Please". (One English pupil, who has just given her full name, instantly responds to the warden's "Can you spell that, please?" with "Which, my surname?".) However, some of the features are still not unequivocally those of real communication.

(F2:) Much of the conversation is linked less to non-linguistic reality than to the instructions on the flow chart.

(F6:) Again because of the flow chart, the predictability of what is said is fairly high, and certainly higher than for the picture story.

Communication in a foreign language classroom, especially one situated in the learners' own country and where the teacher is a compatriot, can only rarely be said to be real communication. The true purpose of what is said is nearly always to practise the foreign language. Why else should teacher and pupils communicate with each other in a language that perhaps neither of them masters entirely when they could do it so much better in their shared native language? The communication is thus at best pseudo-communication and rehearsal for real communication. Nevertheless, the closer the classroom communication is to real-life communication, the better is the rehearsal. The picture story and telephone conversation tasks do

come close to real communication, sufficiently close, as will be seen, for pupils to have frequent recourse to strategies of communication. However, the strategy of appealing for help or confirmation is ruled out by the lack of real interaction in the tasks as well as the instruction to the teacher to withhold any linguistic help. Pupils do, nevertheless, make the attempt.

5.2 MAIN DATA PROCESSING

As has been explained, the pupil productions were recorded on cassette tapes. Whilst recordings bear very faithful witness to what was actually said, they are inadequate for a detailed analysis of the language they contain. In the first place, the listener can process only what can be held in short-term memory, which may be too brief a stretch of discourse for many phenomena of interest, e.g. the organisation of discourse itself. Secondly, retrieval of particular passages of text by winding and rewinding of the tape is much too slow. Finally, the techniques of skimming and scanning, which can be used in reading, are excluded as listening can only take place in real time. Of course, recordings are an essential tool for the reliable assessment of such factors as pronunciation, fluency and comprehensibility, but they need to be backed up by a written record of what was said.

Transcribing what has been recorded on a tape sounds straightforward but time-consuming. Time-consuming it certainly is: straightforward it is not. The problem is that the conventional written language is not a simple representation of the spoken language. Most written language is created directly through the medium of writing. Written records of people speaking spontaneously are comparatively rare and usually highly conventionalised. Generally, no attempt is made to indicate the speaker's accent or tone of voice, whilst intonation and stress are only shown very sketchily by conventions such as commas, full stops, question marks and italics. False starts and repairs are sometimes shown; hm's, drawls and pauses rarely. Non-speech sounds, such as laughs and coughs, and extraneous noises (that may actually drown out what is said) are usually ignored. Thus, a great deal of information in the sound continuum is consciously or unconsciously overlooked (whilst missing information may be supplied). If what we are interested in is purely the speaker's message, then such a parsimonious record is not only

entirely adequate but actually the most efficient, and we are not usually conscious of the redundant information that has been omitted. It is nevertheless an essential part of real speech in order to protect the vulnerable oral channel of communication against loss of information through interference. That becomes apparent when the spoken medium is based on the written instead of the reverse. One need only listen for a few moments after turning on a radio at random in order to determine whether the language one hears is spontaneous or scripted. Abercrombie (1965) called the latter *spoken prose*.

> Although we are well accustomed to hearing *spoken* prose, we are certainly not accustomed to seeing *written* conversation.
>
> If conversation is to be studied properly, it must be available in a form which is not only, as a recording is, permanent, but which is susceptible of being handled for analysis - in some visual form, in fact. We must have written texts of conversation.
>
> (Abercrombie, 1965, p.6)

The question remains: how much information should the texts show? The four transcriptions that follow are all of the same spoken text produced by a pupil performing the picture story task.

<u>Transcription 1</u>

Half an hour ago, a man came into my shop and wanted to buy a radio. He showed me a radio behind me, and so I had to climb up a ladder. When I was standing at the ladder, he took a radio which was standing at the table and put it in his bag. While he put it in the bag, he was clicking the radio on. Then, he wanted to go out, but I heard the melody which came in the radio. Then I run behind him, and I wanted to stop him. At the street, a policeman help me to stop him.

This idealised transcription has removed all the pupil's false starts and repairs as well as hm's, pauses and drawls. Full stops and commas organise the text into sense groups in accordance with the intonation and conventional punctuation. It is easy to read and enables us to gauge the pupil's ability to get the message across

and assess linguistic deficits. It gives, however, no clues to the *process* which enabled the pupil to arrive at this end *product*.

Transcription 2 includes information that is largely redundant as regards the speaker's intended message but that might indicate where a problem or difficulty of some sort is being encountered and where, therefore, a communication strategy may be employed to surmount it. It shows false starts and repairs and gives some indication of pauses and hesitation phenomena.

Transcription 2

Half an hour ago, a man came into my shop and wanted to buy - a radio. Um, he show/ - he showed me a radio behind me, and so - I had to climb - up a ladder. When I cl'/ - I'm / I was standing at the - ladder, he took the/ a radio which was standing at the table and put it in his bag. Uh, while he put it/ while he put it in the bag, he - wasss - / he was clicking the radio on. Th- / Then, he wanted to go out, but I heard the m- / melody which is/ which came in the radio. Th- / Then I run out behind him, and I wanted to stop him. At the street, a policeman - help - me to stop him.

Transcription 3 adds further information, showing hesitation phenomena, particularly sound lengthening (shown by a following colon), more fully. It identifies much more clearly than Transcription 2 which words have been rejected by the speaker (shown in [ ]). It also adds an indication of badly mispronounced phonemes and shows where a word's phonetic realisation is ambiguous and has to be determined by the context (words bracketed together vertically). Above all, Transcription 3 is systematic and follows a set of stated conventions, which are shown in Table 5.3.

Transcription 3

(main
Half an hour ago, a (man came into my shop and vanted to: buy a: radio. [ʔem He show..] He showed.. me a radio behind me, and so.. I had to climb.. up a ladder. When [I cl] [I'm] I was standing.. at ze: ladder, he took [ze r] a radio which was was standing at the table and put it in
(beck.
his (back. [ʔə While he put it] While he
(beck
put it in that (back [he:] [he was] he was clicking [ʔə] the radio on. [S] Sen he: wanted to go out, but.. I heard.. ze: [mʔ] melody [which is] which came in the radio. [Ze] Zen I run behind him, and.. I wanted to stop him. At ze street a policeman.. help.. me to stop him.

Table 5.3: Conventions used for Transcription 3

Symbols

̥	voiceless sound. Thus m̥ = a voiceless m, ie exhalation through the nose with closed lips.
R̥i̥g̥h̥t̥	whole word spoken in a whisper
ǀ	dental or alveolar click
ʔ	glottal stop (only indicated in hesitation sounds)
ɸ	bilabial fricative
:	preceding sound is extra-long due to hesitation (a colon is *never* used as a punctuation mark, only to indicate extra length)
ˑ	indicates that the *following* sound is made with an ingressive airstream. Thus ˑh = inhalation through the mouth. ˑm̥ through the nose with mouth closed.
(head (hat	realisation is ambiguous; the word as pronounced might be either 'head' or 'hat' – going by pronunciation alone, the top word would be the more likely.
..	slight pause
...	longer pause
....	unusually long pause
.....	extremely long pause of several seconds
(10 secs.)	length of particularly long pauses
[but]	non-accepted words, ie words 'cancelled' by the words immediately following them. Hesitation sounds between or following non-accepted words are included in brackets, hesitation sounds between accepted words are not put in brackets.
‖	syntactical break (eg when a sentence is abandoned)
⎪[but]⎪	non-accepted words having no syntactical connection with what precedes or follows them
[oder]	German words (by definition non-accepted)
((Yes))	words not spoken by the pupil but by teacher etc.
immediátely	stress put incorrectly on indicated syllable
ve(ry)	sounds in brackets not pronounced at all, but inferred
transistor-radio	word pronounced as a compound, with only one main stress. on first element
"Help!"	exclamation mark *only* used if appropriate 'shouting' intonation is used (very rare!)
o⌐kay └yes	teacher and pupil speak simultaneously

In Transcription 4 a narrow phonetic transcription of the pupil's interlanguage (marked IL) is added to the information given in Transcription 3 and, for comparison, a received pronunciation version of the same text (marked RP). This form of transcription is appropriate to a detailed analysis of pupils' pronunciation.

Transcription 4

Half an hour ago, a {main man} came into my shop and wanted to: buy
RP: ˈhaːf ən ˈaʊər əˌgəʊ | ə {ˈmeɪn ˌmæn} ˌkeɪm ˌɪntə maɪ ˌʃɒp | ən ˌwɒntɪd tə ˌbaɪ
IL: ˌhaf ən ˌaʊə əˌgou | ə ˌmeːn keːm ɪntu maɪ ˌʃɔp | ʔend ˌwɒntatʰ tuː ˌbaɪ

a: radio. [ʔem He shov..] He shoved.. me a radio behind me, and
RP: ə ˌɹeɪdɪəʊ || hi ˈʃʌvd mi ə ˈɹeɪdɪəʊ bɪˌhaɪnd mi | ən
IL: ʔəː ˌɹeɪdio || [ʔem hi ˌʃov..] hi ˌʃovt.. mi ə ˌɹɛɪdio biˌhaɪnt ˌmi | ʔent

so.. I had to climb.. up a ladder. When [I cl] [I'm] I was
RP: ˈsəʊ aɪ ˈhæd tə ˈklaɪm ˌʌp ə ˈlædə || ˈwen aɪ wəz
IL: ˌsouː ˌʃaɪ ˌhetʰ tu ˌklaɪm.. ʔʌp ə ˌledəː || wen [aɪ kl] [ʔaɪm] ʔaɪ wɔːs

standing.. at ze: ladder, he took [ze ɪ] a radio which was standing
RP: ˈstændɪŋ ət ðə ˌlædə | hi ˈtʊk ə ˈɹeɪdɪəʊ wɪtʃ wəz ˈstændɪŋ
IL: ˌstɛndɪŋ.ʔet zəː ˌledə | hi ˌtʊk [zə ɪ] ʔə ˌɹeɪdio | wɪtʃ wɔs ˌstendɪŋ

at the table and put it in his {back. back.} [ʔə while he put it] while
RP: ət ðə ˈteɪbɪl | ən ˈpʊt ɪt ɪn ɪz ˌbæːg || ˈwaɪl
IL: ɛt ðə ˌteɪbi | ʔentʰ ˈpʊtɪtʰ ʔɪn hɪs ˌbɛkʰ || [ʔə ˌwaɪl hi ˌpʊtʰ ɪtʰ] ˌwaɪl

he put it in that {back back} [heː] [he was] he was clicking [ʔə] the
RP: iˈpʊt ɪt ɪn ðæt ˌbæːg | hi wəz ˈklɪkɪŋ ðə
IL: hi ˌpʊtˌʔɪtʔɪn ðɛtˌ bek | [hiː] [hi wɔsː] hi wɔs ˌklɪkɪŋ [ʔə] ðə

radio on. [S] Sen he: wanted to go out, but.. I heard.. ze: [mʔ]
RP: ˈɹeɪdɪəʊ ˈɒn || [s] ˌðen hi ˈwɒntɪd tə ˈgəʊ ˈaʊt | bət ˈaɪ ˈhɜːd ðə
IL: ˌɹeɪdio ʔɔn || [s] ˌsen hiː ˌwɒntɪtʰ tu ˌgouˌaʊt | ˌbɪtʰ.. ʔaɪ ˌhɜːtʰ.. zə.. [mʔ]

melody [which is] which came in the radio. [ʔe] Zen I run behind
RP: ˈmelədi wɪtʃ ˌkeɪm ɪn ðəˌɹeɪdɪəʊ || ðen aɪ ˈɹʌn bɪˈhaɪnd
IL: ˌmɛlədiː [wɪtʃ ɪs] wɪtʃ ˌkeɪm ɪn ðə ˌɹeɪdioː || [ʒɛʔ] ˌʒɛnʔaɪ ˌɹʌn biˌhaɪnd

him, and.. I wanted to stop him. At ze street a policeman.. help..
RP: ɪm | ən aɪ ˈwɒntɪd tə ˈstɒp ɪm || ət ðə ˌstɹiːt | ə pəˈliːsmən ˈhelp
IL: hɪm | ʔentʰ.. ʔaɪ ˈwɒndɪd tuˈstɒp ˌhɪm || ʔet zə ˌstɹiːt | ʔə poˌliːsmen.. ˌhelp

me to stop him.
RP: mi tə ˌstɒp ɪm ||
IL: mi tu ˌstɒp ˌhɪm ||

All four types of transcription were made of the pupils' performances on the picture story and telephone conversation tasks. They serve different purposes.

The first type was used as input to a computerised analysis of such factors as text length, average sentence length, range and frequency of lexical items, using the Oxford Concordance Program (Hockey & Marriott, 1980). Including false starts and repetitions would distort such statistical data. However, transcriptions of this kind, which deliberately discard those stretches of text that the speakers themselves abandon, are difficult to arrive at directly from the recordings. They can be made much more easily from fuller transcriptions and, in fact, the transcriptions of type 1 were derived from transcriptions of type 3.

The second kind of transcription was prepared for identifying pupils' errors but was superseded by the third kind, which, though superficially less easy to read, is not only much more useful for a study of self-correction or communication strategies but ultimately also for error identification, since it clearly demarcates speaker-rejected text. It will not have escaped attention that Transcriptions 2 and 3 differ not only in the representation of hesitation phenomena but also on some of the actual words. This is even more marked in some of the transcriptions than in the examples shown but will not surprise anyone who has had the experience of making a transcription and comparing it with someone else's. The reason for the discrepancies is that what we understand of a spoken text is a blend of what we actually hear and what our *expectancy grammar* (Oller, 1979) leads us to anticipate; we hear to a greater or lesser extent what we expect to hear - greater if the channel of communication is not perfect. There were different transcribers for 2 and 3, but the definitive versions of the third kind were the outcome of a discussion between them of points of difference. Listening to all the recordings with the third kind of transcriptions in front of me, I found very few points at which my understanding of what was said was different from the two transcribers.

The transcriptions of the third and fourth kind were made by Dr Graham Pascoe, a phonetician who undertook an exhaustive analysis of the German pupils' pronunciation of English (Pascoe, 1987). His meticulous work and strict adherence to the set of transcription conventions given above made his transcriptions of the third kind a most valuable basis for other analyses, not least the investigation of communication strategies.

Thus, the main data for this study of communication strategies are the cassette recordings of German and English pupils' performances on the picture story and telephone conversation tasks together with the type 3 transcriptions that were made of them. Sample transcriptions of each task are given in Appendices C1-13 - one for each group of pupils, coded as follows:

PS = Picture story
TC = Telephone conversation
GO = Gymnasium Oberstufe (advanced)
GM = " Mittelstufe (intermediate)
RS = Realschule (intermediate)
HS = Hauptschule (intermediate)
GU = Gymnasium Unterstufe (beginners)
SP = Supplementary pupil
EP = English pupil

5.3 SUPPLEMENTARY DATA COLLECTION

As has been outlined in Chapter Four, the supplementary data were collected with the aim of having a small number of new pupils perform the same picture story task as the pupils supplying the main data, but with the opportunity to comment on their performance immediately afterwards, with particular reference to any problems they had encountered and the solutions they had found for them. Finally, they were to be asked to perform the picture story task again, but this time in their native language, German.

5.3.1 The pupils and schools

Six pupils from three schools supplied the supplementary data. All were *Gymnasium* pupils, four from the *Mittelstufe* and two from the *Oberstufe* (see Section 5.1.1). One school was a Munich inner city school; one was in a new suburb of Munich; and the third was in a small town just outside Munich.

The schools had been recruited by my research colleague at the English Teacher Training Department of the University of Munich during an in-service course he was running for teachers of English in Munich and the surrounding area. Three teachers from the course volunteered to find pupils willing to perform a task in English and be interviewed about it. The nature of the task and the purpose of

the interview were deliberately kept vague. They also volunteered to make available a room in the school where a recording could be made.

The pupils were all volunteers. Four were released from their English lesson for the session; two stayed on after the end of school. Logistically, no major problems were encountered (though there were time constraints), and the pupils all professed to have found the session interesting.

The schools and pupils were self-selecting and therefore not a random sample. Nor could six pupils be claimed to be a representative or cross-sectional sample. I had in fact requested that if the teachers had any choice in the matter, they should not select very good pupils who might have very few problems with the task, as that would defeat the point of the interviews. In the event, to judge from their performances, the pupils were typical of the majority of the Gymnasium pupils of their age group who had supplied the main data.

5.3.2 The procedure

Two cassette recorders were used. One was switched on at the beginning of the session and left running until the end, to give me a complete record of all that was said. The other was switched on at the beginning of the pupil's performance and off at the end of it. This gave a recording just of the performance, for reference as necessary during the interview and for transcription of the performance later.

The exact procedure followed in all the sessions, which usually lasted about thirty minutes, was as follows:

1. Cassette recorder no. 1 switched on.

2. Brief chat to warm up, relax and establish a relationship with the volunteer - mainly in German but with some simple questions in English.

3. Explanation of the task - in German - and preparation by the volunteer.

4. Cassette recorder no. 2 started, with rev. counter zeroed. The volunteer performed the task. I monitored the performance, noting down apparent problems (and their rev. counter numbers). I was guided in this by my knowledge of common strategy points for other learners and by the volunteer's own hesitation phenomena and self-monitoring. At the end of the performance, I stopped and rewound recorder no. 2.

5. At this point, I explained to the volunteers for the first time that I was interested in how they coped with any problems and we then had a discussion of them (in German), playing back, as necessary, relevant portions of the recording.

6. Finally, the volunteer was asked to perform the task again, this time in German. At the end of the whole session, recorder no. 1 was switched off.

The teachers had not been told beforehand that the session was to be mainly devoted to a discussion of communication strategies, and so the volunteers did not know what to expect when they entered the room, other than that they would be asked to perform a task in English. They did not then, when performing the task, pay any more attention to their problem areas than they would otherwise have done. Some were much more able than others to reflect on their difficulties, but all cooperated as helpfully as possible.

5.4 SUPPLEMENTARY DATA PROCESSING

The recordings of the picture story made by the supplementary pupils were transcribed, in exactly the same detail and using the same conventions, by the phonetician who had transcribed the main data.

The recordings of the pupils' German versions of the picture story were also transcribed for reference, together with those portions of the recordings of the interviews which were relevant to the use of communication strategies. These transcriptions were made by me, using the idealised type of transcription exemplified above in Transcription 1.

CHAPTER SIX

ANALYSIS OF STRATEGIC PERFORMANCE

6.1 INTRODUCTION

Strategic competence, according to Canale and Swain (1980, p.30), is "made up of verbal and non-verbal communication strategies that may be called into action to compensate for breakdowns in communication due to performance variables or to insufficient competence".

Non-verbal communication strategies, such as mime, gesture, facial expressions, may well have been part of the performances that produced the data used in this study. Indeed, one of the pupils who produced the supplementary data was at a loss for the word "shelf", and she employed the non-verbal strategy of pointing to a shelf in the room where we were making the recording before resorting to a verbal strategy and saying "board". However, of the pupil performances which form the main data, I was present only at those given by native speakers, which I recorded in this country, and they had little or no need of non-verbal communication strategies. The recordings of the German pupils' performances were made in every case by their own teachers, and as they were sound recordings, any non-verbal communication strategies they might have used were lost. Analysis of non-verbal communication strategies is therefore excluded from this study.

All of the 286 oral texts of the main data and the 6 oral texts of the supplementary data were scanned to identify the verbal communication strategies that occurred in them. Each strategy that was found was assigned to one of the categories in a taxonomy of communication strategies, and its success or failure was noted. Each of these steps requires elucidation.

6.2 THE IDENTIFICATION OF COMMUNICATION STRATEGIES

Many of the writers on communication strategies give examples of strategies and discuss their classification, frequency and use, without however revealing how it was decided that the learners were attempting to overcome a problem and not just producing what they believed, albeit mistakenly, to be the appropriate way of encoding the meaning they wanted to convey.

For instance, in the case cited above, the learner said the following:

> "? m on the top.. of.. the board"
>
> (See Table 5.3 for an explanation of the transcription conventions.)

How can we be sure that she was saying "board" because she did not know the word "shelf" and not because she thought "board" was the appropriate English word? The answer is that we cannot be sure without being able to "peer into the black box" of the learners' mind. Even when the learners themselves try to do that, they find it very difficult, and introspection may only produce a very hazy notion of why or how a particular bit of language was produced. In the absence of introspection, we have to rely on external evidence and look for "strategy markers", such as hesitation phenomena, which indicate that something, perhaps a problem, has interrupted the flow of speech. In the example above, there were three such hesitations: "? m" and the pauses after "top" and "of", which occur just before "the board". In deciding that the learner was using the communication strategy of employing a word with a similar meaning to "shelf", we are making an assumption that may not be justified, for the problem might have been not what to say instead of the unknown "shelf" but one of retrieval of the word "board", believed to be appropriate. In fact, in this case, the learner's non-verbal strategy of pointing and the discussion that followed her performance confirmed that she was indeed employing a communication strategy.

In Section 3.4, four approaches to the problem of identifying communication strategies were discussed:

(1) a comparison of learner performance in L2 with the performance of native speakers or the same learners' performance in L1, all with reference to the same task;

(2) control of what the speaker is trying to express;

(3) the use of performance features as indications of problem points;

(4) the use of speaker introspection.

Let us now look at how the first three of these approaches were used in identifying strategies in the main data. The use of speaker introspection was possible only with the supplementary data and will be considered later.

6.2.1 The comparison of performance in L2 and L1

In addition to the 126 German pupils who performed the picture story and the 106 pupils who performed the telephone conversation in their target language, English, there were 20 German pupils who performed the picture story in their native language, German. These pupils were drawn from two of the schools which supplied the main data (see Section 5.1), 14 from the beginners' level and 6 from the intermediate level. Thus, although they are not the same pupils as those performing in the target language, they are comparable to them.

The performance of the German pupils in their native language provides an indication of what Váradi (1973) called their "optimal meaning" - what they really want to say - whereas some of their target language production may represent an "adjusted meaning" - what they are actually able to say, given the limitations of their L2 resources.

Another indicator of optimal meaning is the native language performance of the 34 English pupils who performed the picture story and the 20 who performed the telephone conversation.

How these two native language samples are compared with the target language samples in deciding whether a particular target language usage found in this study represents optimal or adjusted meaning is illustrated here by two examples.

The first concerns the use of "board" for "shelf" cited above. It was not only the pupil in the supplementary sample who produced

this word: nine German pupils in the main sample used "board" in the same context. But whereas the supplementary pupil was able to confirm in subsequent discussion that she was resorting to a communication strategy, it was not possible to discuss their usage with the main data pupils. So was "board" an optimal or an adjusted meaning for them?

In none of the three sets of productions - target language English, native language English, native language German - did all, or in two of the groups even a majority, of the pupils feel it necessary to mention the shelf in their account of what happened. Of the 16 English pupils that did, 15 used the word "shelf", thereby confirming that they perceived what they saw as a shelf and that that was their preferred word for it. (The remaining English pupil used the word "ledge".) 12 of the native language German pupils mentioned the shelf. For nine of them, the preferred German word was *Regal* (= set of shelves). One said *Stellage* (= stand, set of shelves), one *Reihe* (= row) and one *Decke* (= [near the] ceiling). How, then, did the nine target language pupils arrive at the word "board", and was their use of it strategic?

The mental processes involved (not necessarily conscious processes) might have been something like the following:

(1) the pupil cannot immediately retrieve an English word for the concept "shelf" from the interlanguage lexicon, and that causes a hiatus in the speech flow;

(2) the German word *Regal* springs to mind, and the learner realises that he or she does not have available an English equivalent;

(3) the pupil casts round for another word and retrieves the German word *Bord* (= shelf);

(4) the pupil has learnt or encountered the English word "board" and assumes that it corresponds to the German word *Bord* or the pupil anglicises the German word by giving it an English pronunciation. (It is important to remember in this connection that the spelling "board" in the transcriptions is an interpretation: it represents what a native English listener is likely to hear.)

Another scenario is that the pupil at stage three retrieves the German word *Brett* (= "board", but in appropriate contexts also "shelf").

The plausibility of stage two is supported by the pupil who said

> [on a] [*was heißtn "Regal"?*] on [a:] a board (PS GU27)
>
> (See Sections 5.1.1-3 for an explanation of the pupil numbers.)

Was heißtn 'Regal'? means "How do you say *Regal*?". As the teachers recording the pupils had been asked not to offer help, the pupil's appeal went unheeded and he was forced either to abandon the message or have recourse to the achievement strategy that produced "board". Further support for stage two is lent by the overwhelming popularity of *Regal* with the German pupils who performed in their native language. The fact that not one of them used either *Bord* or *Brett* suggests that those words arose in the posited stage three. This cumulative evidence suggests that "board" represents adjusted rather than optimal meaning.

In the fourth of the picture story drawings (see Appendix A), the shoplifter is shown switching on the radio he has stolen as he puts it into his bag. Clearly, he does this unintentionally, since the next drawing shows music coming from his bag and giving him away. However, that is an inference and not every pupil drew it. A minority had him switching on the radio without any reference to intention; many stated simply that the radio started to play. This was true also of the pupils performing in their native language: 26 of the 34 English pupils and 12 of the 20 German pupils did not express the lack of intentionality. However, of the eight English pupils that did, seven used the word "accidentally" and one "by mistake". Of the eight German pupils that did, five said either *aus Versehen* or *versehentlich* (both = by mistake, inadvertently) and three used the verb *auf [den Knopf] hinkommen* (= happen to touch [the switch]). None of the pupils in their native language used any expression like the eight German pupils who attempted to express the lack of intentionality by phrases like

> and then happened what he [do] didn't want. [He put .. ʔə] He switch off the.. radio (PS GU25)
>
> He:.. ʔə turn it on.. ʔmm [but he:.. doesn't want ʔə] but he didn't want it (PS GU72)

It seems reasonable, then, to treat such usages as expressing adjusted rather than optimal meaning.

6.2.2 Control of the speaker's intention

What the speakers are really trying to say in the two oral tasks used in this study - their optimal meaning - is given to a greater or lesser extent by the tasks themselves. For the picture story, the pupils were guided in their account by the series of drawings (Appendix A). For the telephone conversation, they had the native language instructions of the flow chart (Appendix B1). The control exercised by the flow chart is much tighter and more specific, being verbal and in the native language, than that exercised by the pictures, which were much more open to individual interpretation.

Nevertheless, the pictures, too, sometimes clearly reveal that what a pupil says is an adjusted rather than an optimal meaning. For example, an important step in the account of the shoplifting incident is to record the fact that the shopkeeper has to get a radio down from a high shelf. Three pupils had him using a chair to do so, when the pictures unequivocally show him using a ladder. "Chair" is too elementary a vocabulary item for them to have thought it meant "ladder", and as, additionally, none of the native language versions had the shopkeeper using anything other than a ladder or steps, the assumption of adjusted rather than optimal meaning can be made with some confidence.

6.2.3 Performance features as indicators of problem points

In the definition of communication strategies adopted for this study (see Section 3.2), they are seen as ways in which an individual copes with a problem that arises in expressing a specific meaning. Indication of a problem is therefore part of the evidence for regarding a particular usage as strategic.

In Section 3.4, temporal variables and self-repairs were seen as performance features that may indicate points at which a speaker is experiencing some kind of problem. A number of features that slow down the speech flow may be ways of gaining time whenever a problem of encoding a desired meaning arises. The overall rate of

articulation tends to drop when a speaker is trying to express something for which tailor-made language is required rather than ready-made, off-the-peg phrases. At more specific problem points, where learners may have to resort to communication strategies, the speech flow may be slowed down unevenly by pauses, drawls and repeats, very often in combination. These time-gaining devices all occur frequently in the main data productions and, taken with indications that the speaker is expressing an adjusted rather than an optimal meaning, they are used to identify strategies in this study.

6.2.3.1 Pauses

Pauses range all the way from a brief hesitation, shown as ".." in the transcriptions, through progressively longer breaks in articulation, shown accordingly as "...", "...." and ".....", to significant hiatuses of several seconds' duration, where the actual length of pause is indicated, e.g. "...(10 secs.)...". The pauses may be completely silent or they may contain non-lexical hesitation sounds such as "er" or "um". These are shown in phonetic transcription in the transcripts. (See Table 5.3 for a list of the conventions used.).

Examples:

> How we came from the.. train stop to the youth hotel? (TC HS36)
>
> And we are arriving in New York.. ʔem.. next morning. (TC GM16)
>
> ...(20 secs.)... ʔəm...(13 secs.)... ʔəm Must we cook the... dinner.. self? (TC HS36)

6.2.3.2 Drawls

In this time-gaining device, the speaker holds a syllable for longer than usual, lengthening either a vowel or a consonant. This lengthening is shown in the transcripts by the phonetic symbol of a colon placed after the sound lengthened. Examples:

> We: travel by: train... (TC HS35)
>
> He was: ʔəm big.. (PS GU56)

6.2.3.3 Repeats

Repeats can affect anything from single sounds to several words. In the transcription, the original utterance is placed between square brackets, indicating that it is not the speaker's final intention. Examples:

> .. Are dere: de rooms [for..] for my group [f..] ʔə m.. for sree naights free? (TC RS40)
>
> We arrive [with the trai] with the train. (TC GM16)

6.2.3.4 Self-repairs

Self-repairs are spontaneous modifications which speakers make to their utterances, either after completing them or in mid-utterance. They amend the content or the form of what they have said, either because they have changed the plan of what they want to say or because they are not satisfied with its execution. In a foreign language, self-repairs may also indicate that the speaker is having difficulty in expressing a particular meaning. In Section 3.4.2, three classes of self-repairs were identified - *false starts unretraced*, where the repair occurs immediately, *false starts retraced*, where a section of text is repeated before the amendment, and *new starts*, where there is a recasting of the text. Once again, in the transcription, the abandoned text is shown in square brackets. All three kinds of self-repair are found in the pupil productions analysed here, e.g.

> How long ʔəm.... need we [to: ʔəm] [by] by: foot? (TC GM4)
>
> [he were..] [he wore] [he were (h:hh)] [he wore] [he dressed ə..əm: a smoʔ] he dressed a dinner jacket (PS GO10)
>
> [The only mistake he made was that he ʔə put the: "on" bh:həʔ] The only mistake he made was that he put it on while he was taking it in his school bag. (PS GO8)

6.2.4 Strategy identification procedure

As the foregoing discussion has attempted to show, identifying communication strategies means trying to reveal mental processes to which there is no direct access, not even for the person in whose brain they occur. So we have to infer them by combining the

evidence we have of what speakers are trying to say with an examination of the way in which they say it. If we are able to ask speakers about their own intuitions of how they arrived at a particular utterance, that may tend to support or refute the inference, but even then there may still be an element of speculation. The degree of certainty with which communication strategies can be identified depends on the amount of available evidence, but it also depends on the kind of strategy a speaker resorts to.

On the one hand, there are communication strategies that are self-identifying. Abandonment of a message that has been begun but that cannot be completed with available resources is one such strategy, e.g.

> [ʔə The ʔə:] The man tooks one radio [on my:] on my table into his bag and comes [on the:] on.. m.. and put it into his ʔə:.. bag. (PS HS14)

The pupil is attempting to say something like "and happens to touch (German *kommt auf* [= literally "comes on"]) the on-switch", but he realises, having launched into the expression, that he does not have a word meaning "on-switch" and abandons that part of the message.

Appeals for help or tolerance, which may be in the native or the target language, depending partly on the speakers' knowledge of their interlocutor, are also strategies which identify themselves, e.g.

> [ʔe: Then he fetched the:... ʔə.. [*Dieb.. was heißt des?*] Then he fetched the man with the radio..
> (PS HS16)
> (*Dieb* [= thief] - what's that called?)
>
> His nose is.. very strange (h:ːh) but.. I don't know the words (hhhʔ) (PS GO10)
> (The sounds in brackets indicate polysyllabic laughs.)

Whilst these appeals are strategies in their own right, they may also serve to identify what follows them as strategies, especially when the appeals are unsuccessful, as was the case for the learners in this study, since the teachers had been asked not to give help (cf. the first example above).

Another strategy that usually identifies itself without the need for further evidence is that of switching from the target language to the native language, incorporating the native language word(s) into the target language sentence, e.g.

The radio go on, and I:... [I] [I] [I] pΦ.. ||
[*merke*...] ʔə:.. ʔə:.. [this is] this is man ʔə:.. a
dief is. (PS HS6)
(notice)

[Note that there is no shortage of other evidence in the example just given that the learner is having difficulty in expressing his meaning.]

Whilst some strategies may be self-identifying, there are others that are very difficult, or even impossible, to identify solely from the external evidence of the learners' utterances and the context in which they are produced (e.g. task, setting, kind of speaker). That is particularly true of the strategy of avoiding talking about a topic for which learners know that they do not possess the relevant language. For the telephone conversation task, with its fairly rigid control of learner output through the native language instructions of the flow chart, topic avoidance was virtually ruled out. That was not true of the picture story, where the content of the learners' production was specified by their understanding of the pictures. It might at first glance seem as if those learners who did not mention that the shopkeeper took a ladder to get a radio down from a top shelf were avoiding the topic because they did not know, or could not recall, the word "ladder". But 20 of the 34 English pupils and 13 of the 20 German pupils who did the picture story in their native language did not mention the ladder either, although that word (or its German equivalent) was undoubtedly available to them. So the assumption of topic avoidance in the case of the target language learners, whilst not implausible, would be at least a hazardous one.

The difficulty of identifying topic avoidance can be seen in the one case in the data where the evidence seems clearly to point to something like it. This occurred in the telephone conversation, where the pupil in question (GO125) did not have available the term "youth hostel". This was a deficit she shared with twenty other pupils. Although the conversation opened with the hostel warden saying "York Youth Hostel", those pupils who did not already know the term had difficulty in picking it up. Pupil GU110, for example, had it right in his opening remarks but later in the conversation it became "youth haspel" and then "youth hustel". (Several pupils produced the form "hospel", which may well have been a blend of two better known words "hotel" and "hospital".) The flow chart (which, it will be remembered, was in German for the German pupils) put considerable pressure on pupils to attempt "youth hostel": it refers three

times to *Jugendherberge* (= youth hostel), first for pupils to ask if they can stay there, then for them to find out when the hostel closes, and finally for them to ask how to get from the station to the hostel (see Appendix B1). Eighteen of the twenty pupils yielded to this pressure and coined some term such as "youth club" or "youth house" to convey the concept. One pupil complained bitterly in German that he had not had the word for *Jugendherberge* and abandoned that part of the message at that point. Only pupil GO125 managed to steer round the term altogether. She negotiated the three relevant points in the conversation as follows:

1. *Ask if you can stay at the hostel ...*

> I ring from Bristol and want to know if: my friends and I can come to you.

2. *Ask what time the hostel closes at night.*

> ʔem.. When must we return at night?

3. *Ask how to get from the station to the hostel.*

> ʔə [how can we] can we go by car ʔə [to the] to you.... (mutters)

The abandoned "to the" in the third utterance, taken together with the fact that every other pupil produced some attempt at "youth hostel" in at least one of these contexts, strongly suggests that this pupil was adopting an avoidance strategy. However, this is not true topic avoidance but rather <u>word</u> avoidance: the pupil is forced by the flow chart to attempt to convey the message but manages to circumvent the problem of the missing term "youth hostel".

6.2.4.1 Step-by-step procedure

The actual procedure adopted for identifying the communication strategies in the main data of the picture story and telephone conversation involved the following steps:

(1) My Munich colleague (see Introduction and Section 5.1) and I scanned each separate pupil production in search of communication strategies.

(2) Communication strategies which were self-identifying in the sense noted above, i.e. strategies of *message abandonment*, *appeals for help or tolerance*, and *language-switching*, were noted on a separate strategy sheet for each pupil production (see Appendix D).

(3) All other potential communication strategies were then discussed from two points of view:

(a) the supporting evidence for regarding each one as a communication strategy, i.e. comparison with L1 performance, knowledge about the speaker's intention, and performance features (see the discussion above), and

(b) the kind of strategy that appeared to be at play, if the evidence in (a) supported the assumption of strategic behaviour.

Steps 3a and 3b were not consecutive but simultaneous steps in the discussion. As will be seen below when the taxonomy of communication strategies is considered in detail, there is an interplay between the kind of strategy and the kind of evidence that supports its assumption. The communication strategies resulting from this discussion were then also noted on the individual strategy sheets.

(4) At a later date, we reviewed all the communication strategies that had already been identified and, in an effort to reduce the subjectivity of the identification procedure, made it a requirement for most categories of strategy (see below) that the supposed strategy should display at least one of the performance features discussed in Section 6.2.3 as indicators of problem points. This step considerably reduced the number of supposed communication strategies found in (3).

(5) The final stage in this procedure was another review of the data, which I conducted for the purpose of this thesis. This resulted in a small number of additions, deletions and revisions but largely confirmed the results of the work previously carried out.

All the previous discussion has hopefully demonstrated the impossibility of determining with certainty whether certain kinds of language use are strategic or not. Instead, a decision has to be based on a subjective judgment of the evidence. The procedure adopted to identify the communication strategies in this study was aimed at maximising the reliability of the decisions reached by taking account of as much evidence as possible, by involving more than one person in the decision-making, and by repeating the procedure. The evidence has included (1) knowledge about the speaker's intended meaning, (2) knowledge about the speaker's native language, (3) knowledge about the L1 and L2 performance in the same area of other non-native speakers, (4) knowledge about the performance in

the same area of native speakers, and (5) performance indicators of problems.

Later, I shall consider whether the introspections of the six pupils who contributed the supplementary data serve to strengthen or to weaken the plausibility of what have been identified as communication strategies by the above procedure. Whatever the outcome, the procedure seems likely to have yielded a reasonably reliable, if conservative, estimate of the actual strategies employed by the German pupils.

6.3 SUCCESS OR FAILURE OF COMMUNICATION STRATEGIES

A communication strategy may succeed or fail in its purpose of solving an individual's problem in reaching a particular communicative goal. The pupil who attempted to express something like "he accidentally turned the radio on" by the following circumlocution

> Unfortunately for him, he ʔə made the radio play
> (PS G065)

would no doubt have been understood by a majority of native speaker listeners. On the other hand, the pupil who tried to extend the meaning of "fetch" in the following utterance

> the man catched a: little radio which [st ʔəm]
> stood on the: ʔəm: table, ʔəm he: didn't notice
> that he: fetched it on (PS GU30)

may well have not been understood, for not only is the meaning of "fetch" overstretched but the mention of the radio is so far back in the utterance that "it" might not be interpreted by a listener as referring to the radio.

One of the questions that was posed in Chapter Four and which it was hoped that the data used for this research might shed some light on was "What proportion of communication strategies have a successful outcome?" (Section 4.3.3). How can one decide whether a communication strategy succeeds in overcoming the particular problem that a speaker faces? Many researchers have answered this question by setting up a task for the learner in which the successful transmission of a message is criterial, e.g. describing a series of pictures so that a listener can pick out matching pictures. However, as we saw when this research was discussed in Section 3.5, the technique severely limits the kind of message that can be

transmitted. It often takes the form of description of an object, e.g. a potato peeler (Bialystok, 1990), or abstract shapes (Bongaerts & Poulisse, 1989). Artificial restrictions may be imposed on the "transmitter" of the message, e.g. not being allowed to use the exact target language words even if they are known (Paribakht, 1985), or on the "receiver" ("The listener was not allowed to ask the speaker for any clarifications," Yule & Tarone, 1990, p.186). Whilst the success of strategies may be objectively and therefore reliably assessed in these ways, the relationship of the strategic behaviour to real-life communication must be questioned. The problem of balancing naturalness and control was also discussed in Section 3.5, where the claim was made for this study that a balance could be achieved.

The communication strategies that are studied here were produced spontaneously by learners performing tasks that emulated real-life communication in controlled conditions. The learners were not deliberately put into problem-solving situations but into communicative situations they could recognise, situations moreover for which it was expected (from knowledge of their syllabuses and textbooks) that they would have been taught appropriate language. How then, when they were nevertheless sometimes forced into resorting to strategic behaviour, could the success or failure of the strategies they adopted be assessed? The answer depends partly on the kind of strategy they employed and partly on the situation in which they employed it. For example, the strategy of switching to the native language when target language words cannot be found may well be a successful strategy if the listener knows something of both languages. It might in fact elicit the appropriate target language expression from the listener and thus be a learning strategy as well as a successful communication strategy. However, most English listeners to Germans speaking English must be assumed not to have the knowledge of German that would enable them to interpret an utterance such as

De man is || [*bekleidet mit*] black head black..
[ye?] jacket (PS HS7) (dressed in)
["head" is a mispronunciation of "hat"]

The corresponding assumption might not have to be made where a native German speaker was listening to an English speaker of German, but the few cases of *language-switching* that were actually found in the data were treated as unsuccessful strategies.

Cases of *appeal for help* were also unsuccessful strategies since they largely went unanswered, the instructions to the teachers (see Section 5.1.1) having specifically asked them not to offer linguistic help to the pupils. The few cases where teachers did not adhere to these instructions occurred with very weak pupils, where the teachers may have feared that communication would break down altogether if the plea for help was ignored.

For the other strategies, a judgment of their success or failure was made jointly by my Munich colleague and me at the time when each strategy was identified (cf. the procedure described in the preceding section). We were guided in this decision by a number of factors.

One of these was a judgement test which I carried out with native speakers of English in which they were asked to assess the comprehensibility of 44 erroneous utterances chosen from some of the German pupils' productions used as the data for this thesis (Green & Hecht, 1988). The utterances were in two sets, one set taken from the picture story task and one from the telephone conversation. They represented a cross-section of the categories of error that pupils typically made and included grammatical and pronunciation as well as lexical errors. However, the lexical errors accounted for 32 of the 44 items, since an earlier study had revealed that lexical errors caused a breakdown in meaning three times more frequently than grammatical errors (Green & Hecht, 1985, p.84). The lexical errors included many items that appear as communication strategies in this thesis, e.g. "cupboard" for "shelf", "desk" for "counter", "cravat" for "tie", "stop" for "station", "wanted to" for "tried to", "live" for "stay", "Have you understood it?" for "Did you get that?". The judges were given the situational context of the picture story and the telephone conversation (though not the picture cues or the flow chart), and each erroneous utterance was embedded in its immediate linguistic context, e.g. "He took another little radio standing on my desk".

The test was conducted on two occasions. For the first, 109 native speakers of English (all teachers or trainee teachers of languages) were asked to judge whether the meaning of each item was "clear", "vague" or "distorted". In evaluating their judgments, the three categories were reduced to a dichotomy of "meaning clear" and "meaning unclear", with both "vague" and "distorted" being counted

as "unclear". For an item to be deemed either "clear" or "unclear", 60% of the judges had to have made that decision; otherwise, the item was classified "undecided". On this basis, 31 of 44 items (70%) were judged "clear" and only five (11%) "unclear". Of the eight items which were "undecided", four had a simple majority of "clear" decisions. These results show a remarkable readiness by native speakers to understand what non-native speakers are trying to say.

However, a doubt remained: "When the native judges in this test thought that an item was 'clear', did their interpretation <u>really</u> match the learner's intent or was 'clear' concealing a multitude of different interpretations?" (Green & Hecht, 1988, p.6). In a second presentation of the test items to a new group of native speakers (40 graduate trainee teachers of foreign languages), the judges were asked to write out what they thought the German learners were trying to say. This time, the criterion for deciding whether an item was "clear" was whether the judges' interpretation of the learners' intended meaning agreed with ours. Once again, a criterion of 60% of the judgments was set. The results showed "unequivocally that native speakers are not only very good at understanding what learners are trying to say, they are in fact better at it than they think they are. The ability, for example, of 39 of the 40 judges to interpret 'cupboard' correctly as 'shelf', and 37 'desk' as 'counter', is very impressive. In fact, all but two of the 44 items (95%) were clear to the native speakers and agreement over them was very high - 100% in 10 cases, 90% or more in 32 cases, 80% or more in 40 cases." (op. cit., p.7)

This research demonstrates that communication strategies have a high probability of successfully bridging gaps in learners' linguistic resources, provided, of course, that the gaps are not too large or frequent. The listener depends, in understanding the speaker's intent, on information provided by the situational context and the linguistic context of the strategy. As with a cloze test, the linguistic hiatuses cannot occur too close together without overstraining the ability of the listener's *pragmatic expectancy grammar* (Oller, 1979) to bridge the gap.

In deciding, then, whether a particular communication strategy was successful or not, we looked closely at each individual context. That led sometimes to the same strategy being judged successful in one context and unsuccessful in another, e.g.

[Can we: ʔəm] Can we have ʔər for three nights.. beds [r] reservated, yes? (TC GO129) (successful)

ʔə: can you ʔə[reser] reserwate me, ʔə for me and my group, ʔə three nights please? (TC GM42) (unsuccessful)

We were influenced by the research cited above towards regarding a communication strategy as successful rather than unsuccessful in the absence of contrary evidence. Contrary evidence could be sought in two of the analyses of linguistic performance that had been carried out on the data and which were described briefly in Section 4.2.3. The first of these was a *content analysis* (described briefly in Section 4.2.3.1 and fully in Section 8.2). Both the picture story and the telephone conversation task were analysed into the basic units of information that the speakers were called upon to transmit. There were nine such units for the picture story (e.g. "Shop-keeper pursues man onto the street." See Appendix E1) and twenty for the telephone conversation (e.g. "Enquiring about closing time." See Appendix E2). Each performance was judged on how many of the units were attempted and how many of those attempted were successfully completed. The decision on success or failure was taken by two judges (myself and my Munich colleague). Cases of disagreement were arbitrated by a third judge, who was a native speaker of English. If a communication strategy played a central part in the unsuccessful transmission of a particular unit of information, then the strategy itself was rated unsuccessful.

There was also an *error analysis* (described briefly in Section 4.2.3.5 and fully in Section 8.6). Each pupil production was "marked" by three native speakers of English working independently . Their task was to identify what they thought were the errors in the production, classify them into categories of syntax, lexis etc. and judge whether they affected meaning. The error category chart which each marker completed for each pupil production invited the marker to indicate if the meaning conveyed by each error was either "vague" or "distorted" (see Appendix F1). Two of the three markers were speakers of British English (I was one of them) and one was a speaker of American English. The latter was a deliberate choice, as we believed - and the belief proved well founded - that what British and American speakers deemed acceptable English would vary in some cases. If a majority of these three markers had judged a particular bit of language that we regarded as a communication

strategy to have distorted the meaning, then the strategy was classified as unsuccessful.

As with the strategy identification procedure, subjective judgment was involved in deciding on the success or failure of communication strategies, but here, too, it is hoped that the use of more than one approach, more than one judge and repeating the procedure (I have reviewed all the original decisions) will have improved the reliability of the judgments made.

6.4 TAXONOMY OF COMMUNICATION STRATEGIES

As we saw in Chapter Three (cf. Figures 3.2-4), many writers on communication strategies have a dichotomous initial division of strategies, according to whether they result in no message at all or in a message of some kind, albeit it adjusted rather than optimal. In the zero message category, the learner either avoids tackling a problematic message altogether (*topic avoidance*) or else launches into it and then abandons the message unfinished when the linguistic resources run out (*message abandonment*). There were no doubt strategies of topic avoidance at play in this study, particularly in the picture story. They proved to be unidentifiable with any degree of confidence, for the reasons given in Section 6.2.4, and an original attempt to record them was abandoned. Strategies of message abandonment were, however, noted.

6.4.1 Message abandonment

Cases of message abandonment were identified according to the definition given by Tarone (1981, cf. Table 3.1): "The learner begins to talk about a concept but is unable to continue and stops in mid-utterance."

One pupil (GU100) abandoned his message on four occasions during the telephone conversation. The first occurred right at the beginning of his production:

> I call from Bristol, ant I wanted to know.. [*ob*] my friends and I.. ʔə [in] [in the] [*Was heißtn "Jugen(dherberge)"?*]... in the [*Des hamma noch nich gmacht!*] ((*Laß es weg!*)) || in York.. ʔəm.. can.. stay

His three switches to German (in square brackets in italics) mean "whether", "How d'you say *Jugendherberge* (youth hostel)?" and "We haven't done that!". His appeal for help, followed by an appeal for tolerance, having provoked, contrary to the task administration instructions, a teacher response (in double brackets) "Leave it out!", he does just that and abandons that part of his message.

He abandoned again when enquiring about cooking facilities:

> .... ʔə m Can we.. cook [the..] a [din] dinner... too.. on ʔə.. ours [*oh na, des weiß i net*]||

The pupil is attempting to convey "on our own" or "ourselves" and gives up, with another appeal ("oh well, I don't know that"), just at the moment when he seems about to get there.

His third abandonment comes when he needs the word "youth hostel" again in order to find out when it shuts:

> When close ze.. [*Des weiß ich nich.. Des hamma nich ghabt.*]||

This time, after a further protest ("I don't know that. We haven't had that."), he abandons his message without further ado.

His final abandonment is again triggered by the missing "youth hostel" when he is trying to ask how to get there:

> [We are arri..] We arrive with a.. train, and [we are] wee coming we to the... ||

Here, there is no protest and no appeal for help. The pupil no doubt feels he has already made it abundantly clear that he doesn't know the word for *Jugendherberge*.

At the end of his production, though once again protesting bitterly, he does actually persevere and manages to achieve his message by means of a strategy of circumlocution. This occurs at the point where he is to ask the hostel warden if he can book the group in for three nights:

> [Can we..] [*Weiß ich nich - das hamma alles noch nich ghabt: "Reservierung"...* (whispers)] [Can we for: three nights..] eh.. [*Das hamma noch nich ghabt - "Reservierung" und "Jugendherb(erge)"* ...] [Can ve ...(11 secs.)...] [Can ve write us in...] Can you write us in a book for.. three nights?
>
> (I don't know - we haven't had any of that: "booking". We haven't had "booking" and "youth hostel".)

It might seem from the examples of message abandonment given so far that they are characterised by the speakers stating in L1 what they are trying to convey and appealing for help in doing so. That is perhaps likely in a situation where pupils have a teacher in front of them who shares their native language. In fact, in only 22 of the 58 cases of message abandonment which were found in the data was the native language used. In the great majority of cases, the message is simply abandoned after considerable hesitation phenomena:

> and Φ... well.. the people... m... yeh ˙hn? ||
> (PS GO9)

That instance is from the picture story and concerns the people in the street outside the shop, but what the pupil is trying to say cannot be determined. Often, however, there are contextual and linguistic clues that establish fairly clearly what the learner's problem is, as in this example from the telephone conversation:

> Can my friends in the youth hostel.. in York....
> || (TC HS34)

Here, the flow chart instructions and the structure of the incomplete sentence reveal that the problem is "stay" (which in German word order would occur after "York").

6.4.1.1 Sample list of abandonment strategies

As has already been mentioned, 58 cases of message abandonment were identified in the data. Several of them have already been quoted to exemplify different aspects of abandonment. A list of twelve further examples follows, drawn from the different pupil levels (see Table 5.1). Translations of any German occurring in them (printed in italics) are given in round brackets immediately after the quotation. The number in front of the strategy is its running number in the complete list of abandonment strategies.

PICTURE STORY

2. and wore a black hat [and a black.. ʔəm] [ʔə *Was heißt "Anzug"* (həhəʔ)] [and.. a black.. hoʔ ʔəm..] [*na, ich wei nich*] and.. [he..] he had ʔə eyes like Chínese (GM3)
(What's "suit"? ... Oh, I don't know.)

4. and.. [while I was climbing up.. the:.. ʔəm] while I was climbing up [to:] to take the radio (GM5)

12. and the: shop assistant.. ʔə... ʔm.... m....||(RS24)

14. The man ʔə has a: hat and a: handbag. He has ʔə:....|| (HS6)

23. [Zen I: m.. [*Was heißt.. naufsteing?*]..(7 secs.).. t̤o̤..] (HS13)
(What's "climb up"?)

27. [ʔəm Then he thought ʔəm that he: could.. əm..] [Then he thought.. tha] [Then] Then he ran out [of] of the shop (GU27)

37. and his nose was.. p'.. very... m..|| [don't know] don't know the word.. (GO14)

TELEPHONE CONVERSATION

38. how can I get from the.. ʔəm.... [*oh, Scheiße..* (click) *aber.. Bahnhof*] h:h || (GM18)
(oh, shit.. but station)

41. and what.. does.. ze..(5 secs.).. ə...(19 secs.)... m..(9 secs.)..|| (HS32)

45. ...(17 secs.)... Can you: ʔəm.. three [nays ʔə] [day ʔə] nights for us.... ʔəm... || [*Was heißt "reservieren"?*] (HS36)
(What's "book"?)

57. .. [Ants..] And ʔə [do you re ʔə:m:] do you: take the... [*Oh. Jetz weiß ich aber da(s).. m.. ah, weiß nich*] || (GU109)
(Oh. Now I know tha(t).. m.. ah, don't know)

58. ʔem [Can I have ʔem] Can I.. [yeah] have ʔəm.. ʔəm in the: youth hostel (GU118)

6.4.1.2 Discussion of findings

Altogether, there were 58 cases of abandonment of message in the data. How they were distributed between tasks and levels is shown in Table 6.1. One of the research questions that were posed in Chapter Four (see Section 4.3.9) asked whether there were different frequencies of communication strategies in the data elicited by the different tasks. Table 6.1 shows that, of the 58 cases of message abandonment, 37 occurred in the picture story (a task performed by 126 pupils) and 21 in the telephone conversation (a task performed by 106 pupils). Is the difference in the number of abandonments in the two tasks simply a reflection of the difference in the sizes of the groups performing them?

In relating the frequency of abandonment fairly to the number of learners, account must be taken of the fact that some learners may make unusually frequent use of this strategy. We have already seen, for example, that pupil GU100 abandoned his message no less than four times whilst performing the telephone conversation task. By

considering each learner as someone who does or does not use abandonment as a strategy, we can establish the number of "abandoners" in each group and relate it to the total number of learners in the group. Table 6.1, therefore, also shows, alongside the number of abandonments, the number of abandoners. There are altogether 47 of them among the 232 learners performing the two tasks, a minority of 20%. 31 of the 47 abandoners were in the picture story group and 16 in the telephone conversation group. Is this finding task-related or simply a result of the different group sizes?

Table 6.1: Distribution of cases of message abandonment according to task and level

Level	Task						Totals		
	Picture			Telephone					
	N	Abts	Abrs	N	Abts	Abrs	N	Abts	Abrs
Advanced (GO)	29	5	5	21	0	0	50	5	5
Intermed. (GM)	32	9	9	20	1	1	52	10	10
Intermed. (RS)	20	3	2	21	0	0	41	3	2
Intermed. (HS)	19	14	9	20	11	9	39	25	18
Beginners (GU)	26	6	6	24	9	6	50	15	12
Totals	126	37	31	106	21	16	232	58	47

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe N = Number in group
Abts = Abandonments Abrs = Abandoners

The chi-square test is a way of investigating whether the observed number of abandoners among the learners performing each task differs significantly from the number one would expect from the overall proportion of abandoners to learners (20%) if the task did not affect whether learners abandoned or not. The chi-square value obtained from the above results is 2.60 and fails to reach significance at the 5% level, for which a value of 3.84 would be needed.

It could be argued that the decision whether or not to abandon the message is relevant only for those who encounter problems of insufficient linguistic resources. The learners who do not run up against such problems in performing either of the tasks have no

need either to abandon or to use any other more constructive achievement strategy. Of the 232 learners performing one or other of the tasks, 211, or 91%, needed to use a strategy at some stage in performing their task. It is perhaps with this total of strategy-users rather than with the total of learners that the abandoners should be compared. The 47 abandoners represent 22% of the strategy-users. If the chi-square test is applied to the distribution of abandoners across tasks comparing them with strategy-users rather than learners as a whole, a value of 2.68 is obtained, which is marginally larger but still does not reach significance.

The nature of the two tasks used to elicit data in this study does not, then, appear to be a factor in determining whether learners abandon their message when a problem arises.

Another research question (see Section 4.3.4) asked whether more advanced learners use fewer communication strategies. If that question is applied to the strategy of message abandonment, the answer would appear to be that they do. The totals for the two tasks in the column on the right of Table 6.1 (since task seems not to affect the numbers) have both fewer abandonments and fewer abandoners at the advanced level (5, 5) than at the beginners' level (15, 12). There is no difference in the group sizes (50 in each), so is the difference in the frequency of abandonment significant?

Table 6.2: Chi-square test of distribution of abandoners according to level

Level	Strat.-users	Abandoners		Chi square $(O-E)^2/E$	Residual $(O-E)/\sqrt{E}$
		Obs.	Exp.		
Advanced (GO)	43	5	10	2.20	-1.48
Intermed.(GM)	51	10	11	0.17	-0.41
Intermed.(RS)	33	2	7	3.94	-1.99
Intermed.(HS)	36	18	8	12.50	+3.54***
Beginners(GU)	48	12	11	0.16	+0.40
Totals	211	47	47	18.97***	

*** $p<0.001$

Table 6.2 shows the chi-square test applied to the distribution of abandoners across levels and comparing it with the distribution of

strategy-users. This time, the chi-square value obtained is significant at the 0.1% level (i.e. less than one chance in a thousand that that this is a random finding). It indicates that the level of the learners is a factor in how many of them are abandoners. Inspection of the individual contributions of the different learner groups to the chi-square value reveals that of the intermediate pupils of the *Hauptschule* to be disproportionately high. To shed light on how important that particular contribution is to the overall picture, the residuals were calculated (Everitt, 1977, pp.46-8). The residual has an approximately normal distribution, i.e. there is a 95% probability of its falling within +/- 2 and a 99.9% probability of its falling within +/- 3 in an even distribution. The value of +3.54 for the *Hauptschule* means that significantly more pupils in that group used abandonment than in the other groups. None of the other values indicates a significantly different contribution, though the distribution of + and - signs (more or fewer abandoners) indicates that, as one might expect, the more advanced learners tend to be abandoners less frequently than beginners. What singles the pupils of the *Hauptschule* out from the pupils of the other groups is that they are at the bottom end of the ability range in the German selective school system (see Section 5.1.1). It would seem from this evidence that a lower level of general ability is a more important factor in determining whether a learner is likely to give up, rather than try to find a solution to a problem of communication, than the number of years of experience of the target language. This finding should, however, be kept in perspective. Although the proportion of abandoners is higher among the pupils of the *Hauptschule* than for any other group of learners, they still represent only half of the strategy-users in the group (18/36). Furthermore, all the abandoners, no matter which group they belong to, also use some other communication strategy in the course of their performance. There are no learners who always give up when there is a problem.

6.4.2 Taxonomy of achievement strategies

More interesting than abandonment are the strategies which Corder called "resource expansion" and Færch and Kasper "achievement" (Figures 3.3 and 3.4), where learners do not give up when their linguistic resources are inadequate to express their optimal message but seek instead to achieve at least an adjusted message by expanding their resources through coinages, circumlocutions, ap-

proximations, appeals for help, etc. These are the main focus of analysis in the pupil productions used for this study. The taxonomy of *achievement strategies* is as follows:

a) foreignising
(L1 or L3-based strategy)
b) coinage/loan-translation
(L2 or L1-based strategy)
c) language-switching
(L1-based strategy)
d) appeal for help or tolerance
(L1 or L2-based strategy)
e) lexical approximation
(L2 or L1-based strategy)
1. too specific (L2-based)
2. too general (L2-based)
3. co-hyponym (L2-based)
4. over-extension (L1-based)
f) circumlocution
(L2-based strategy)
g) grammatical approximation or bypassing
(L2-based strategy)

What is meant by these categories is explained as each is dealt with individually.

6.4.3. Foreignising

Words in cognate languages like German and English are often very similar or even identical, e.g. German *Suppe*, English "soup"; German *Haus*, English "house"; German *Butter*, English "butter". This may lead learners to assume, or to gamble, that an unknown word in the target language (L2) will be the same as that in the native language (L1) after appropriate "foreignising", i.e. after any necessary adjustments to the L1 word to bring it into line with the morphology and phonology of L2. This appears to be the process that led to the words "nimm" and "hole" in the following examples

and the man.. ʔəː.. nimm [theː..] the radio
(PS HS6)

I ʔə go on a ladder and.. ʔə wanted [toː.....] to
hole the radio (PS RS19)

The German *nimmt* means "takes". The pupil has appropriately removed the German third-person-singular, present-tense verb ending *-t* but then made the common error of omitting the English third-person-singular, present-tense verb ending -s. With or without the -s, the resultant form is meaningless to the English-speaking listener with no knowledge of German. In the case of "hole", the infinitive ending has been successfully removed from the German verb *holen* (= to fetch, get), but this time the resultant form is either misleading or, more likely given the context, mystifying.

Foreignising may be particularly seductive to the learner if it results in an actual word in the foreign language that the learner has encountered but not fully conceptualised. This may have accounted for the popularity in the picture story of "map" for "bag", which was produced by 11 learners, and "board" for "shelf", which was also produced by 11 learners. German *Mappe* means "bag" or "briefcase". German *Bord* means "shelf".

Where the word produced by foreignising is not only a real word in the target language but one that is appropriate to the context in which it is used, its strategic origin is effectively concealed. Even if there is considerable hesitation in producing it, it cannot be assumed that the problem giving rise to the hesitation was one of lack of resources: it may have been a problem of retrieval of a known vocabulary item or there may have been some other problem. For example, in the following extract, the learner may have successfully foreignised the German word *Kassettenrecorder*:

> want buy a: cassette recorder ·m I show him a:
> cassette recorder (PS HS11)

On both of the occasions quoted above, "cassette recorder" is preceded by hesitation - a drawl affecting the indefinite article. The same pupil uses "cassette recorder" twice more in his production, on both occasions without any sign of hesitation. The original slight hesitation might have been due to uncertainty over whether what the man in the shop was actually pointing to was a radio, cassette recorder, tape recorder, radio recorder or transistor radio. The pictures are unclear at that point (see Appendix A), and both the German and the English pupils used all those words to describe the article in question. This use of "cassette recorder" was not therefore recorded as a strategy of foreignising, and neither was any other correct and appropriately used word, even though it might conceivably have been the outcome of foreignising. (It is clear, of

course, that the German *Kassettenrecorder* came into the language originally by a process of foreignising an English word, which would facilitate its being foreignised back to English.)

The use of both "nimm" and "hole" in the pupil productions quoted above is preceded by hesitation phenomena - by silent and filled pauses, drawls and repeats, or combinations of them. These indications that the speaker may have been encountering a problem were made a prerequisite for treating an apparent instance of foreignising as a communication strategy.

It should perhaps be stressed that hesitation phenomena are not taken as evidence that learners are conscious of having employed a communication strategy, or even of having encountered a problem. They may be totally unaware of the mechanics of how their utterance was arrived at, or they may become aware if asked about it, or they may be aware all along of having come up against a problem and possibly also of the means by which it was solved. Færch and Kasper's definition of communication strategies as "*potentially conscious* plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal" [my italics] is an apt one. (See Section 3.2.)

What the hesitation phenomena do indicate is some kind of temporary breakdown in the speech production process, localised to a point which may be a problem area. A repair is effected and production is resumed, but what is then produced is not necessarily an optimal meaning: it may be an adjusted meaning, and may or may not be interpretable by a listener.

On the other hand, the absence of hesitation phenomena does not indicate that no strategic processes were involved in the production of an utterance. They may have been present at an earlier planning stage, where again they may or may not have been consciously deployed. (Pupils were able to study the pictures before doing the picture story task and the flow chart before doing the telephone conversation task. [See Sections 5.1.1-2.]) Ultimately, too, at some deep level, processes must have been at work which account for learners producing forms which they may never have heard.

The decision to look for some overt indication of a problem when treating an instance of foreignising as a communication strategy was

taken in order to ensure that what are recorded as communication strategies are indeed individual solutions to problems in reaching specific communicative goals rather than exemplars of more general learning processes. It means that the attempt to peer into the "black box" is undertaken from an objectively defined external viewpoint. It may exclude instances that really are instances of communication strategies but which lack any evidence that they are. It means that the communication strategies that are recorded in this study represent a conservative estimate of those that were probably at play.

Thus, not all the 11 instances of "map" for "bag" mentioned above were treated as communication strategies. For example, in

> he:.. took it [in his... 2m...] in his map he had by him (PS GM1)

"map" was treated as a communication strategy of foreignising, whereas in

> I thought he had əm stolen a radio and put it in his map (PS GM6)

it was not. 4 of the 11 occurrences of "map" were not recorded as communication strategies because they occurred without any indication that the speakers had encountered a problem. 5 of the 11 instances of "board" were discarded for the same reason.

Most foreign language teachers will have seen evidence of the interference of another foreign language (L3) in their pupils' productions. Learners of German who have also learned French often say, for example, *Ich habe 14 Jahre*, which, like the French *J'ai 14 ans*, literally means "I have 14 years". The correct German is *Ich bin 14 [Jahre alt]*, which corresponds exactly to the English "I am 14 [years old]". The only plausible explanation for the non-existent word "enregistrator" in the following quotation

> he wanted to buy... ʔə.. a.. enregistrator (PS GO77)

seems to be that the pupil has anglicised the French word *enregistreur* (= recorder), since the equivalent German word would be *Tonbandgerät* or even *Recorder*. Similarly, in

> how long does it take [to go by: ʔə] to march (TC GM1)

where the flow chart makes it clear that the optimal meaning is "How long does it take to walk?", the pupil is more likely to be anglicising the French word *marcher* (= to walk) than the German word *marschieren* (= to march). She may, of course, have come

across the English word "march", though that would be a much less common vocabulary item for intermediate English than *marcher* for elementary French. At any rate, knowledge of French seems likely to have been at play in lending the meaning of "walk" to "march". Both these pupils were learning French as a second foreign language (their L3) begun after English, their first foreign language (L2). Both these instances, given the hesitation with which they were associated, were recorded as L3-based strategies of foreignising.

6.4.3.1 List of foreignising strategies

Unlike message abandonment strategies, where each occurrence was unique to an individual pupil, several of the forms that resulted from anglicising a German word were produced, as we have seen, by more than one pupil.

Altogether, sixteen different forms were produced, with a total of 35 occurrences. They are listed below with an example to show the context. The figures following the strategy, e.g. 7 (0+7) following "map" and 6 (6+0) following "board", indicate that there were seven strategic uses of "map", of which none was successful and seven were unsuccessful, and six strategic uses of "board", of which six were successful and none was unsuccessful.

PICTURE STORY

1. **map:** 7 (0+7)
   Optimal meaning briefcase, bag (German *Mappe* = briefcase, bag)
   Context he:.. took it [in his... ʔm...] in his map (GM1)

2. **board:** 6 (6+0)
   Optimal meaning shelf (German *Bord* = shelf)
   Context a m taperecorder which stood ʔəm [on a board] on a high board (GM3)

3. **mantle:** 1 (0+1)
   Optimal meaning coat, jacket (German *Mantel* = coat)
   Context wearing.. [ʔem a: hat] a: black hat and mɻʔə: ʔɐ: ʔə.. a.. [black mantle] [*oder*] black mantle (GM7)
   (*oder* = or)

4. **catch(ed):** 3 (1+2)
   Optimal meaning take, took (German *catchen* = to grab)
   Context when I was at the ladder to ʔem catch the: radio (GM16)

5. **fang:** 1 (0+1)
   Optimal meaning catch (German *fangen* = to catch)
   Context he helped me to [f] [fang] ʔəʔhʌ fang the robber (GM18)

6. **cravat:** 1 (1+0)
   Optimal meaning tie (German *Krawatte* = tie)
   Context he wear a [gm:..] [cravat..] cravat (GO11)

7. **smoking:** 4 (0+4)
   Optimal meaning black suit (German *Smoking* = dinner jacket)
   Context he had an black hat and a black.. smoking (GM43)

8. **hole(d):** 2 (0+2)
   Optimal meaning fetch, get (German *holen* = fetch, get)
   Context I ʔə go on a ladder and.. ʔə wanted [to:.....] to hole the radio (RS19)

9. **nimm:** 1 (0+1)
   Optimal meaning take, steal (German *nimmt* = takes)
   Context the man.. ʔə:.. nimm [the:..] the radio (HS6)

10. **circa:** 1 (1+0)
    Optimal meaning about (German *zirka*, unlike "circa", is an everyday word meaning "about")
    Context [*etwa*..] circa... forty years old (HS7)
    (*etwa* = about)

11. **apparates:** 1 (0+1)
    Optimal meaning appliance (German *Apparat* = appliance, apparatus)
    Context a shop where electronic ʔəm.. apparates were.. selled (GO11)

12. **enregistrator:** 1 (0+1)
    Optimal meaning recorder (French *enregistreur* = recorder)
    Context he wanted to buy... ʔə.. a.. enregistrator (GO77)

TELEPHONE CONVERSATION

13. **march:** 1 (0+1)
    Optimal meaning walk (French *marcher* = to walk)
    Context how long does it take [to go by: ʔə] to march (GM1)

14. **gate:** 1 (0+1)
    Optimal meaning station (? French *gare* = station)
    Context how can ve come.. ʔə: to de yowth hostel.. ʔəm from de gate (GM6)

15. **pro:** 2 (2+0)
    Optimal meaning per (German *pro* = per)
    Context how much.. cost it.. pro person (HS40)

16. **wee:** 2 (0+2)
    Optimal meaning how (German *wie* = how)
    Context an:t.. wee can we come to your youth hostel from ze station (GU105)

6.4.3.2 Discussion of findings

How the thirty-five instances of foreignising were distributed across tasks and pupil levels is shown in Table 6.3, where the group sizes

quoted are the numbers of strategy users not the total number of pupils in the group. The reason for this was given in Section 6.4.1.2.

Table 6.3: Distribution of cases of foreignising according to task and level

Level	Task				Totals	
	Picture		Telephone			
	N	Foreign.	N	Foreign.	N	Foreign.
Advanced (GO)	24	6	19	0	43	6
Intermed. (GM)	32	10	19	2	51	12
Intermed. (RS)	18	4	15	0	33	4
Intermed. (HS)	16	5	20	2	36	7
Beginners (GU)	24	4	24	2	48	6
Totals	114	29	97	6	211	35

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe N = No of strategy users
Foreign. = Instances of foreignising

The most striking thing about the distribution is that foreignising occurs much more frequently in the picture story task than in the telephone conversation task - the chi-square value is highly significant ($p<0.001$). It is not obvious why this should be so. One possible reason might be that a wider range of vocabulary is called for by the picture story task, and indeed an analysis of the content words (nouns, verbs, adjectives, adverbs) used in performing each task by three sample English pupils gave an average of 47 different content words for the picture story and 36 for the telephone conversation. However, it is not so much the number of words needed for the successful completion of the tasks as the kind of words. As inspection of the words these English pupils used for each task shows, the vocabulary needed for the telephone conversation is much more basic than that needed for the picture story (see Appendices G1-2). The most consistent vocabulary problem encountered by pupils performing the telephone conversation task was the verb "book": only fourteen of 106 pupils managed to produce it (though not necessarily use it correctly). The picture story task, on the other hand, had many more words that proved difficult, e.g. point, shelf, counter, switch, realise, arrest.

Whilst Table 6.3 shows a big difference in the frequency of foreignising for the two tasks, the distribution across the learner groups appears much more even (and indeed the chi-square value is not significant). It does not seem then to be the case that the less able or less experienced learners are more likely to foreignise when they have a vocabulary deficit than the more able or more experienced.

For two languages as closely related as German and English, it might seem a very reasonable strategy, and one with a good chance of success, to assume that a vocabulary item one did not know in the target language would be so similar to the corresponding item in the native language that it could be arrived at by fairly predictable adjustments to endings and pronunciation. So how successful were the learners in this study with the forms they produced by this process? Of the total of 35 instances of foreignising, only eleven were judged successful, i.e. barely one in three or 31% - not a high success rate. If one looks at the different forms (the types) the learners produced rather than the instances of them (the tokens), the picture is the same. Only five of sixteen foreignised forms were judged successful - again a success rate approaching one in three or 31%.

This low success rate might not matter so much in circumstances of one-to-one oral communication, where a speaker could expect to learn from the reaction of the listener whether a foreignised form had been understood or not, and if it hadn't, adopt some further strategy. But for the learners in this study, who were recording their performances and were therefore deprived of feedback, *foreignising*, though clearly an improvement on *abandonment*, was perhaps not the best communication strategy.

6.4.4 Coinage/loan translation

"Coinage" is defined in the Reader's Digest Great Illustrated Dictionary as "the invention of new words". This bald statement glosses over the fact that "most new words are not new at all, they are simply additions to existing words or recombinations of their components. Words which are invented out of nothing are extremely rare." (Aitchison, 1987, p.153) Language, as Chomsky pointed out, is

creative (see Section 2.2.1): it uses a limited number of devices to generate a potentially infinite number of new words and expressions from the existing lexical resources of a given language.

These devices are primarily *compounding* - putting words together to create new meanings, e.g. "cupboard", "daisy wheel" - *derivation* or *affixation* - adding a morpheme to the beginning (prefix) or end (suffix) of a word or root, e.g. "deschool", "translationese" - and *conversion* - using one part of speech as another, e.g. "to hand-bag". Many of the products of these processes may be instantly understood, and therefore not recognised as new words, even though they may not be listed in any dictionary. Green (1983) calls these formations *latent*. Others may be strikingly novel but are usually understandable from the context in which they occur. It is arguable that the brain, which must be presumed to have finite memory capacity, saves storage space in the mental lexicon by storing roots, morphemes and derivational rules and recreating many frequent words as they are needed. It seems unlikely, for instance, that noun plurals or the -s, -ed and -ing forms of weak verbs or the -ly adverbs are stored by the brain as entities.

These powerful creative processes are available to the foreign language learner as well as to the native speaker. For example, the process of compounding was used by pupil HS36 to form "train stop", no doubt on the analogy of "bus stop", a successful coinage to cover for the missing word "station". An even more nativelike coinage was "train station", which was produced by four pupils. This is a neologism which I have noticed several native speakers producing recently. Of course, not all non-native attempts at compounding are equally successful. "Recording engines" (pupil GO9), for example, is a somewhat puzzling attempt at "tape/cassette recorders".

The use of derivation and conversion was far less common in the data than compounding. "Youngth" (pupil GU117) may have been an attempt at deriving a noun from the adjective "young" but is perhaps more likely to have been a blend of a well-remembered "young" and dimly remembered "youth". The origin of "sixteen and seventeen olds" (pupil GU104) for "sixteen and seventeen-year-olds" is unclear, but it may have been an attempt at conversion. The native language does not appear to have influenced the incorrect

formation (*Siebzehnjährige* would correspond to something like "seventeen-yearies").

There were two further attempts at conversion. A request for information in the telephone conversation which should have been formulated as something like "How long does it take to walk?" gave pupils quite a lot of trouble. Two of them used a conversion in their attempt to overcome the problem. In

> ʔə How.. much time does it long to get by foot?
> (TC GM41)

the word "long" is unlikely to be a wrong use of the verb "long" (as in "to long for") but rather a conversion of the adverb "long" with the intended meaning "last", "take". In

> ʔə.. ʔə How long ve'd need for the by feet?
> (TC GU115)

the adverbial phrase "by feet" (on foot) has been converted to a noun phrase.

All the above coinages by foreign language learners are essentially like those employed by native speakers when faced with expressing a meaning for which they cannot recall a ready-made word or for which there is no ready-made word. But coinages by foreign language learners can obviously involve another factor - their native language. They may, for example, translate the elements of a native language compound, then put them together to form a compound in the target language. In many cases, the strategy will result in an accepted target language form. For example, analysing the German compound *Schultasche* into its components, translating them into English and recombining them will produce "schoolbag". The same process applied to *Schulweg*, however, produces "schoolway", a compound that may not instantly suggest "route to/from school" to a native speaker of English. Coinages based on the native language are often called "loan translations". Where the resultant form is entirely acceptable in the target language, it is likely to be invisible to the researcher unless there is good evidence that the speaker experienced a problem in producing it, and even then the problem may have been one of retrieval of a known expression rather than of creation of a new one. Where, however, the result of coinage or loan translation is a non-standard expression or a standard expression that is in conflict with what appears to be the optimum meaning, and where furthermore there is evidence that the speaker is having some

difficulty in encoding a desired message, then a strategy of coinage/loan translation has been recorded.

Thus, it has been assumed that the pupil who produced

My shop is a: electroshop. (PS GM41)

arrived at the indefinite article "a" and then held it for a brief instant (indicated by the colon in the transcription) whilst calling up an expression to identify the shop. The coinage "electroshop", though comprehensible, is not a standard compound in English and appears to be based on the German *Elektrogeschäft*, which <u>is</u> standard and is composed of *Elektro-* (electro-) and *Geschäft* (shop). It is therefore a loan translation. Not only the lengthening of the article but also the fact that the pupil, having coined "electroshop", then fails to notice that it begins with a vowel and therefore requires the allomorph "an", may indicate that the pupil is at a problem point in the encoding of his message.

In the following utterance

a policeman.. ʔə [holded] hold him.. up
(PS GU72)

the pupil shows considerable evidence of having had difficulty in encoding her message but appears in the end to have arrived at an acceptable English expression "held him up" (allowing for the wrong morphology of the past tense). However, the expression cannot be taken at face value, for not only do policemen not normally hold up thieves but the picture cues clearly indicate that the policeman <u>stopped</u> the thief. Again, we appear to be dealing with a strategy of loan translation, for the German *aufhalten* (stop) can be analysed into *auf* ("up" in some contexts) and *halten* (hold).

6.4.4.1 Sample list of coinage/loan translation strategies

Nine examples of coinage/loan translation strategies that were found in the data have been quoted in the preceding section. Ten further examples are listed below from a total list of 44 different strategies. They have been chosen to illustrate both L1 and L2-based strategies. Once again, evidence of the pupil experiencing difficulty was a criterion for recording a particular utterance as a strategy. The listing conventions are the same as for the the list of foreignising strategies (see Section 6.4.3.1).

PICTURE STORY

Coinage strategies (L2-based)

1. **start-point:** 1 (1+0)
   Optimal meaning on-switch
   Context he came [on ze] viz his finger [on ze:.... m....] |§| on ze start point of ze radio (GM47)

2. **radiocorder:** 1 (1+0)
   Optimal meaning radio (cassette) recorder
   Context the: radiocorder stood on a board (RS10)

Loan translation strategies (L1-based)

8. **make on:** 1 (1+0)
   Optimal meaning switch on
   Assumed German basis *anmachen* = lit. make on
   Context he.. ʔəm.. [made] [*oder*] [made] [*ja*] the.. radio on (GU79) (*oder* = or, *ja* = well)

10. **backside:** 1 (0+1)
    Optimal meaning back
    Assumed German basis *Rückseite* = lit. back side
    Context I [stoo] stood viz my backside (GM47)

15. **jump him in the hands:** 1 (1+0)
    Optimal meaning run (straight) into his arms
    Assumed German basis *ihm in die Hände fallen* = lit. fall (to) him in the hands
    Context a policeman [wait] [waits] [wa..] wait and the man... jumps him in the hands (RS25)

TELEPHONE CONVERSATION

Coinage strategies (L2-based)

17. **youth house:** 2 (0+2)
    Optimal meaning youth hostel
    Context in a youth [orfs] house from York (RS40)

Loan translation strategies (L1-based)

25. **we are four (persons/people/together):** 22 (22+0)
    Optimal meaning there are four of us
    Assumed German basis *wir sind vier* = lit. we are four
    Context (Warden: How many of you are there?) ʔəm Ve are four persons (GM6)

27. **have you understood (well/right)?:** 34 (34+0)
    Optimal meaning did you get that?
    Assumed German basis *haben Sie (gut) verstanden?* = lit. have you understood (well)?
    Context ʔəm Have you understand me? (HS33)

38. **with in:** 1 (1+0)
    Optimal meaning included
    Assumed German basis *mit drin* = lit. with in
    Context is there the: breakfast already [*mit* in] with in? (HS39)

40. **evening eat:** 2 (2+0)
    Optimal meaning evening meal
    Assumed German basis *Abendessen* = lit. evening eat
    Context Can we: make the.. evening eat? (HS34)

6.4.4.2 Discussion of findings

There were 44 different strategies (types) of coinage or loan translation. Most of them occurred uniquely, but ten were produced by more than one learner - six by two learners and one each by three, four, 22 and 34 learners. The latter two very common loan translations are strategies 25 and 27 in the sample list. These multiple occurrences of some of the strategies mean that the number of actual instances (tokens) of coinage or loan translation strategies is 109. These statistics are summarised in Table 6.4, where the different strategy *types* are shown in bold figures and the *tokens* in plain typeface.

Table 6.4: Distribution of coinage/loan translation strategies according to task and success

Strategies		Task				Overall	
		Picture		Telephone			
		Strats	Succ.	Strats	Succ.	Strats	Succ.
Coinage (L2-based)	Types	**6**	*5*	**9**	*4*	**15**	*9*
	Tokens	6	*5*	13	*7*	19	*12*
Loan tr (L1-based)	Types	**9**	*8*	**20**	*12*	**29**	*20*
	Tokens	11	*10*	79	*68*	90	*78*
Overall	Types	**15**	*13*	**29**	*16*	**44**	*29*
	Tokens	17	*15*	92	*75*	109	*90*

Strats = no of strategies Succ. = Successful
Loan tr = Loan translation

In this table, which basically compares the distribution of coinage/ loan translation strategies between the two tasks - picture story and telephone conversation - and between the two categories of strategy - L2-based coinages and L1-based loan translations - there are notable differences in both comparisons. Whether one looks at strategy types or strategy tokens, the numbers are consistently larger for the telephone conversation than for the picture story, by ratios ranging from 1½ to 1 for L2-based coinage types (9/6) to over 7 to 1 for L1-based loan translation tokens (79/11). This is in spite of the smaller number of learners performing the telephone conver-

sation task. Overall, the difference is significant at the 1% level for the types and at the 0.1% level for the tokens (chi-square).

The same consistent pattern is found for the greater frequency of L1-based loan translations compared with L2-based coinages, where the ratios range from 1½ to 1 for picture story strategy types (9/6) to 6 to 1 for telephone conversation strategy tokens (79/13).

The task difference is much more pronounced for L1-based than for L2-based strategies. This is probably to be explained by the fact that the linguistic content of the picture story was elicited by a series of pictures (Appendix A), whereas for the telephone conversation it was largely governed by a series of instructions given in L1 (Appendix B1). It has been suggested, for example by Newmark (1966), Taylor (1975), Corder (1978b) and Krashen (1981), that the influence of L1 is strongest when learners are called upon to perform at too early a stage. The two tasks used in this study were originally chosen as suitable for pupils at an intermediate stage of learning. They might therefore be expected to overtax the linguistic resources of beginners, and the repeated protest "We haven't done that" of pupil GU100 in the beginners' group (see Section 6.4.1) might seem to bear that out.

Table 6.5: Distribution of coinage/loan translation tokens according to level

Level	Task						Overall		
	Picture			Telephone					
	L2	L1	Tot.	L2	L1	Tot.	L2	L1	Tot.
Advanced (GO)	2	2	4	5	12	17	7	14	21
Intermed. (GM)	1	2	3	1	8	9	2	10	12
Intermed. (RS)	1	2	3	1	10	11	2	12	14
Intermed. (HS)	2	2	4	2	26	28	4	28	32
Beginners (GU)	0	3	3	4	23	27	4	26	30
Overall	6	11	17	13	79	92	19	90	109

GO = Gymnasium Oberstufe
GM = Gymnasium Mittelstufe
RS = Realschule
HS = Hauptschule
GU = Gymnasium Unterstufe
N = No of strategy users
L2 = L2-based coinages
L1 = L1-based loan translations
Tot. = Total

Table 6.5 shows the distribution of coinage/loan translation strategies (tokens) across strategy users at the different levels. For the picture story, the numbers are low and what instances there are are evenly distributed. For the telephone conversation, there does appear to be a tendency for the less experienced (GU) and less able (HS) learners to use more L1-based strategies and indeed a chi-square test (Table 6.6) shows the distribution to be significantly uneven ($p<0.05$). However, the residuals (see Section 6.4.1.2) show that it is the intermediate but less able pupils (HS) rather than the more able beginners (GU) who use the most L1-based strategies. At the other end of the scale, it is the intermediate (GM) rather than the advanced (GO) pupils who use disproportionately fewer L1-based strategies.

Table 6.6: Chi-square test of distribution of loan translation tokens (telephone conversation) according to level

Level	Strat.-users	Loan trans		Chi square $(O-E)^2/E$	Residual $(O-E)/\sqrt{E}$
		Obs.	Exp.		
Advanced (GO)	19	12	15	0.78	-0.88
Intermed.(GM)	19	8	15	3.61	-1.90
Intermed.(RS)	15	10	12	0.40	-0.64
Intermed.(HS)	20	26	16	5.79	+2.41*
Beginners(GU)	24	23	20	0.61	+0.78
Totals	97	79	78[1]	11.19*	

[1] The decimals in the column above have been rounded.
* $p<0.05$

Table 6.4 also shows the number of strategies, both types and tokens, that were successful (italicised numbers). For the tokens, the success rate is very high (90/109 or 83%), but that is a misleading figure since two strategy types (items 25 and 27 above) provide 56 of the successful tokens on their own. It is more realistic, therefore, to judge the success rate by the different strategy types, where the overall success rate is 66% (29/44). L1-based strategies have a success rate of 69% (20/29) and L2-based strategies one of 60% (9/15). So it seems that translation from the native language is not a

bad communication strategy and one that is certainly better than foreignising. However, *foreignising* and *loan translation* are seldom alternative strategies: on the whole, they address different problems. Foreignising is generally only applied to single words: all the instances of it found in the data (see Section 6.4.3.1) were single words. Loan translation, on the other hand, involves compounds or phrases, where the individual components are translated separately in the hope that they will produce an acceptable compound or expression with the same meaning.

6.4.5 Language switching

When the pupil productions are scanned for evidence of language switching, i.e. to find out how often and at what point pupils change from speaking English to speaking German, there appear to be five distinct reasons for the switch.

1. Pupils are talking to themselves as a sort of filler whilst searching for a word or expression or commenting on or correcting their performance, e.g.

> [When I] [*nee*].. while I took the radio
> (PS GU60)
> (no)
>
> [*Na*] He had an black hat (PS GM43)
> (well)

2. They may simply lapse unintentionally into their native language. When that happens, they sometimes notice the lapse, sometimes not, e.g.

> We are [*vier*] four pupils. (TC HS39)
>
> We are [*vier*] people. (TC GM16)
> (four)

3. They may want to clarify the task instructions. This happened quite frequently with the telephone conversation, where pupils had to write down information about prices, times, etc. which they got from the youth hostel warden, e.g.

> ʔəm.... [*Soll ich hinschreiben?*] (TC HS33)
> (Am I supposed to write it down?)

4. They may want to appeal for help with the task, e.g.

> [ʔe: Then he fetched the:... ʔə.. [*Dieb.. was heißt des?*]] (PS HS16)
> (*Dieb* [= thief].. what's that called?)

5. They may substitute a native language word or expression for a target language word or expression that is outside their resources, e.g.

> [In this price is the.. 2əm] [*Frühstück*]
> (TC GM18)
> (= breakfast)

The first three of these different kinds of switching from English to German in an English text are not communication strategies within the terms of the definition adopted for this study (see Section 3.2) because they are not concerned with solving a problem in reaching a particular communicative goal. The fourth and fifth uses are, however, and they are considered under the headings *appeal for help or tolerance* (which can, of course, be made in the target language and does not necessarily involve changing languages) and *language switching*. Appeal for help or tolerance will be dealt with in Section 6.4.6.

This section is concerned with language switching as a communication strategy, by which is meant that the learner who cannot find an English equivalent for a German word or expression simply integrates the German into the grammatical structure of an English sentence in order to complete the sentence.

It might seem that occurrences of the kind exemplified in 2) above also fit this definition. Linguistically, they do, but their use is not strategic because the learner is not attempting to overcome a linguistic deficit but has simply slipped inadvertently into the native language. It is inconceivable that the learner quoted (GM10) did not know the English word "four", and there is, of course, no evidence of any problem having been encountered. Lapses like this were rare in the data: altogether there were only three that passed unnoticed by the speaker. "Vier" for "four" occurred four times - twice noticed and twice unnoticed. Its occurrence can perhaps be explained by the phonetic similarity of the two words (the initial sound of both is [f]) and the fact that the instructions for the task are in German.

There is a grey area between language switching and abandonment of message. The following example was treated as abandonment

> Then I show him ə another cassette recorder. ·m
> I.. [*na, er is auf die Leiter gestiegen*] (HS11)
> (well, he went up the ladder)

because the German text is not integrated into the English discourse but functions as a comment to indicate what the pupil could not express in English. The example with *Frühstück* in §5 above was treated as a case of language switching because *Frühstück* does fit into the structure of the English sentence. It could be argued, however, that it is a sort of appeal and, indeed, the teacher is heard (against instructions!) to whisper "breakfast", which the pupil picks up, going on to say "Is the breakfast [in] in:cluded?".

Strategic language switching was rather infrequent. There were sixteen possible occurrences, which are listed in the next section.

6.4.5.1 List of language switching strategies

PICTURE STORY

1. He has a:.. [ha] hat on and .. a striped m.. (10.5 secs.).. [*Krawatte* (h·h)...] (RS21)
(tie)

2. The radio go on and I:... [I] [I] [I] pΦ.. || [*merke*] ʔə:.. ʔə.. [this is] this is man ʔə:.. a dief is. (HS6)
(realise)

3/4. [*In dem Moment (in dem) ich mich umdrehte..*] || have he: a radio || [*ge..klaut...*] (HS7)
(Just as I turned round.. pinched)

5. De man is.. || [*bekleidet mit*] || black head, black.. [ye?] jacket (HS7)
(dressed in)

6. The playing radio made a policeman.. [*aufmerksam*] (HS16)
(attentive, i.e. attracted the attention of)

7. But he.. ʔə.. [pushed..] [no] ʔəm m:.. ʔəm ...(10secs.)... [*oh mei, wia hoáßt jetz des?* ...(6secs.)... m *wie heißt des?* ...(11 secs.)... *mei, was hoáßtn des?* ...(6 secs.)... *sag ich's auf deitsch, oder?*] [*ein' Knopf*] (GU69)
(oh God, now what's that called?... what's it called?... God, what is it called?... I'll say it in German, right? "a switch")

TELEPHONE CONVERSATION

8. [In this price is the.. ʔəm..] [*Frühstück..*] (GM18)
(breakfast)

9. Could you explain me de way [from de:] from [de ʔəm] de [*Bahnhof*] || h·h to the youth hostel? (GM21)
(station)

10. and.. [are] are in York arrived [*und unterkommen können*] (GM22)
(and can stay)

11. I want to know [*ob* mə] I come wid my friends (RS28)
(whether)

12. *Wie* can ve come from ze: station (HS32)
(how)

13. When do the youth hostel.... ʔə in the evéning [*schließen*] h·h (HS36)
(shut)

14. When shut the: youth: ʔə:... [*Herberge*?] h:h (HS42)
(hostel)

15. Can you for our group to:morrow evéning for free nights.. ʔə:... ɬʔə:... a reserv[*ierung*... ʔə *annehmen*?] (HS42)
(-ation [word starts as English and is completed in German]... take)

16. ant I wanted.. to know.. [*ob*] ʔəm [*ob*] || my friends and I (GU100)
(whether)

6.4.5.2 Discussion of findings

How the sixteen cases of language switching were distributed between the tasks and across the pupil levels is shown in Table 6.7. It shows, in addition to the number of occurrences, the number of pupils who used language switching as a strategy.

Table 6.7: Distribution of language switching strategies and language switching pupils according to task and level

Level	Task						Overall		
	Picture			Telephone					
	N	Str.	Pup.	N	Str.	Pup.	N	Str.	Pup.
Advanced (GO)	24	0	0	19	0	0	43	0	0
Intermed. (GM)	32	0	0	19	3	3	51	3	3
Intermed. (RS)	18	1	1	15	1	1	33	2	2
Intermed. (HS)	16	5	3	20	4	3	36	9	6
Beginners (GU)	24	1	1	24	1	1	48	2	2
Overall	114	7	5	97	9	8	211	16	13

GO = Gymnasium Oberstufe
GM = Gymnasium Mittelstufe
RS = Realschule
HS = Hauptschule
GU = Gymnasium Unterstufe
N = No of strategy users
Str. = language switching strategies
Pup. = language switching pupils

The overall numbers are small - too small to apply a chi-square test (cf. Kenny, 1982, p.117). There would appear to be little difference between the tasks, but there is a clear tendency for the less able intermediate pupils of the Hauptschule to resort to language switching more often than the pupils of the other groups.

The strategy of language switching, if it is to succeed, requires that the listener first of all realises that what is heard is no longer English, then recognises that it is in fact German, and finally is capable of understanding it. These three requirements are normally unlikely to be met, and it is therefore a strategy that is largely doomed to failure and, as such, scarcely better than message abandonment.

6.4.6 Appeal for help or tolerance

It is not only in a foreign language that one is sometimes at a loss for words: in one's own language, one may not always remember the name of something or someone; at other times, one finds difficulty in expressing an argument or a concept adequately. In such cases, it is normal to indicate verbally that one is in difficulty rather than just revealing the fact by speaking slowly or making abnormally long pauses. One may appeal for help - "What is it called?", "You know the thing I mean.". More often perhaps, one appeals for tolerance by indicating that one knows that what one is saying is not entirely adequate - "I can't just find the right word.", "a 'what-do-you-call-it?'", "kind of...". Appeals for help are more often a form of appeal for tolerance than real requests for assistance, and of course, with many speakers, what began as an apology for lack of precision - "sort of..." - has become a meaningless and redundant phrase, a filler that the speaker is often totally unaware of using.

Appeals for help or tolerance are such a regular strategy in everyday native language speech that it is not surprising to find them turning up as a frequent strategy in a foreign language. Altogether, there were 57 instances of the strategy in the picture story and telephone conversation. In recording them, an attempt was made at first to distinguish between appeals for help and appeals for tolerance, and indeed several instances of appeal seemed to belong clearly to one or other category, e.g. an appeal for help

[*Was heißt "reservieren"?*] (TC HS36)
(What's "book" called?)

and an appeal for tolerance

waiting for someone to come to buy my.. radios
or something like this (PS GO86)

Overall, however, the dichotomy proved not to be viable, probably for two reasons. The first was the fact that the teachers administering the task had been asked not to offer help. The pupils knew that, and almost invariably no help was forthcoming. The fact that they nevertheless did appeal for help suggests that, in some cases at least, they did not really expect an answer to their question but rather were making a comment on their lack of knowledge. This is supported by the finding that very often a question like the one quoted above took the form

..ʔem..ʔə [*Was heißtn "reservieren"?*] (TC GM17)

where the addition of *-n* (a shortened form of *denn* used in speech) changes the meaning to something like "Now what's 'book'?". One pupil made several such comments before coming to a real appeal for help

But he.. ʔə, [pushed..] [no] ʔə m m:.. ʔə m ...(10 secs.)... [*oh mei, wia hoáßt jetz des?* ...(6 secs.)... *m wie heißt des?* ...(11 secs.)... *mei, was hoáßtn des?* ...(6 secs.)... *sag ich's auf deitsch, oder?*] [*ein' Knopf*] (PS GU69)
(oh God, now what's that called?... what's it called?... God, what is it called?... I'll say it in German, right? "a switch")

The other reason for the difficulty encountered in upholding a distinction is that what might be taken as an appeal for help often occurred alongside an appeal for tolerance in the same problem area

wore a black hat [and a black.. ʔə m] [ʔə *Was heißt "Anzug"?* (hə hə ʔ)] [and.. a black.. hoʔ ʔə m..] [*na, ich wei nich*] and.. (PS GM3)
(What's "suit"?... oh, I don't know.)

Appeals for help or tolerance are therefore treated as a single category of strategy.

Another problem of decision-making in arriving at an inventory of appeals for help or tolerance was what to do with instances such as the following

He... well... he had black hair.. (PS GO9)

[Can you take] [no..] [*Moment*] Can you accept
(TC GM19)
(hang on)

This kind of use of "well", "no" and "hang on" (in either language) occurred frequently and might be seen as a sort of appeal for tolerance. It was felt, however, that its function was rather to fill a pause whilst searching for an expression or preparing a self-correction (cf. Section 6.4.5, no 1) Such instances have not been counted as strategies of appeal for help or tolerance in the data given in Table 6.8.

The following list gives a sample of the 57 instances of appeals for help or tolerance found in the 232 German pupil productions.

6.4.6.1 Sample list of appeals for help or tolerance

PICTURE STORY

1. ..and... well, wanted to see.. some... h:Φ:.. recording.. engines or.. something like that (GO9)

2. His nose is.. very strange (h:ʰh) but.. I don't know the words (hhh2) (GO10)

8. a: record player [he] [who ə ʔə] [which was.. ʔəm.. ʔəm.. hʰh] [*wie sagt man denn da?* ʔəm:..] which I could reach only ʔə [with:] with my ladder. (GO74)
(now how do you say that?)

16. want.. to: put it [in.. ʔəm his.. m] [in his ʔəm] [*na, is es nich*] [in his: hʰh ʔəm..] in his: [ha] handback. (GU79)
(well, that's not it)

17. music.. came out [*oder so*] (GU79)
(or something like that)

19. [The police came soon after I have cried, and ʔəm....] [and ʔə m....] [and ʔə..] [*Was heißt "verhaften"?*] (GM2)
(What's "arrest"?)

27. [ʔe: Then he fetched the:... ʔə:.. [*Dieb.. was heißt des?*]] (HS16)
("thief".. what's that called?)

28. I showed.. him..... m a radio [o weh] [on..] on the board (HS17)
(oh dear)

TELEPHONE CONVERSATION

29. [Are you [able to take.. ʔə d] able to take this] [*Wie sagt man denn?*] (GO124)
(Now how do you say?)

32. [*Stimmt "supper"?*] |§| Can we cook supper ourselves? (GM19)
(Is "supper" right?)

36. [When does the h·h ʔem *Ich weiß nicht wie das heißt!....*] (GU97)
(I don't know what it's called!)

43. How long must we go to.. feet? [*od(er) na, ich weiß es nich*] (GU100)
(or well, I don't know)

57. Have you booked for our group three nights until tomorrow? [*Oh Gott oh Gott!*] (GU112)
(oh my God!)

6.4.6.2 Discussion of findings

Table 6.8 shows the number of occurrences of appeal for help or tolerance distributed according to task and to language. Such appeals can, of course, be made in either the target language or the native language. As the table shows, in these data, they were made overwhelmingly in the native language. That is perhaps not surprising given the fact that the only listener present when the pupils were speaking, i.e. the person to whom the appeals were addressed in the first instance, was the pupils' native-German teacher.

Table 6.8: Distribution of appeals for help or tolerance according to task, language and level

Level	Task						Overall		
	Picture			Telephone					
	L1	L2	Tot.	L1	L2	Tot.	L1	L2	Tot.
Advanced (GO)	4	6	10	1	0	1	5	6	11
Intermed. (GM)	4	0	4	4	0	4	8	0	8
Intermed. (RS)	0	0	0	0	0	0	0	0	0
Intermed. (HS)	6	0	6	2	0	2	8	0	8
Beginners (GU)	8	0	8	22	0	22	30	0	30
Overall	22	6	28	29	0	29	51	6	57

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe

Equally striking is the fact that all six instances of appeal in the target language were the product of advanced pupils performing the picture story task. As has already been suggested when looking at

appeals in connection with abandoning a message (Section 6.4.1), appealing in the target language, which in normal linguistic intercourse between a non-native learner and a native speaker is the only kind of appeal with any hope of success, perhaps needs the greater linguistic sophistication of the older, more advanced learner. The fact that, even at that level, target language appeals occur only in the picture story may reflect the greater freedom that particular task allowed, with its less narrowly specified content and its less great time pressure. A native language appeal is perhaps more of a panic reaction engendered by the tight conditions of the telephone task.

Whilst the picture story may be the less demanding task in terms of the greater freedom of message content it allows and its more relaxed timing, it was suggested in Section 6.4.3.2 that it required a wider range of vocabulary and more difficult vocabulary than the telephone conversation. Table 6.8 suggests on the face of it that these task differences were not in general reflected in the frequency of appeals for help or tolerance, and a chi-square test confirms the absence of any task difference. Whether the test is applied on the basis of the total number of pupils performing each task or the number of strategy users, and whether appeals or "appealers" are considered, the chi-square values obtained fall well short of significance.

The other striking features of Table 6.8 are, on the one hand, the large number of appeals made by pupils at the beginners' level in both tasks but especially in the telephone conversation and, on the other hand, the total absence of appeals by the intermediate pupils of the *Realschule*.

The large number of appeals by the beginners is considerably inflated by frequent appealing by a few pupils, especially in the telephone conversation by pupil GU100 (whom we met as a frequent abandoner in Section 6.4.1). He alone accounted for seven appeals. Another pupil (GU98) made four appeals and a third (GU103) three. Altogether, the 22 appeals in the beginners' group performing the telephone conversation task were made by only nine pupils. The figures for "appealers", i.e. those pupils who used the strategy of appealing for help or tolerance at least once, are given in Table 6.9 along with the numbers of pupils in each group who used at least one strategy of whatever kind. Table 6.9 combines the figures for

the two tasks since there was no significant difference between them.

Table 6.9: Chi-square test of distribution of appealers according to level

Level	Strategy users	Appealers		Chi square	Residual
		Obs.	Exp.	$(O-E)^2/E$	$(O-E)/\sqrt{E}$
Advanced (GO)	43	9	8	0.14	+0.37
Intermed. (GM)	51	8	9	0.22	-0.47
Intermed. (RS)	33	0	6	6.10	-2.47*
Intermed. (HS)	36	6	7	0.06	-0.25
Beginners (GU)	48	16	9	5.73	+2.39*
Totals	211	39	39[1]	12.25*	

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe

[1] figures in this column have been rounded to integers
* $p<0.05$

A chi-square test applied to Table 6.9 reveals that the distribution of appealers among strategy users at the different pupil levels is significantly uneven ($p<0.05$). The residuals show the intermediate pupils of the *Realschule* to have contributed significantly ($p<0.05$) to the uneven distribution by their complete absence of appeals, whilst the beginners have contributed a significant excess of appeals.

As has already been pointed out (Section 6.4.4.2), the picture story task and the telephone conversation task were chosen as suitable for pupils at an intermediate stage of learning English, that is to say, the vocabulary and range of grammar called for by the tasks should have been covered by the taught syllabus by that level (though not necessarily learned, of course). It was therefore to be expected that the linguistic resources of the beginners would be stretched, and perhaps overstretched, by the tasks. What in one sense are appeals for tolerance - "We haven't had that!", etc. - can also be seen as protests by able but inexperienced pupils over what seems to them perhaps the unfairness of the task. The overuse of appeal (in the

native language) by pupils at the beginners' level as compared with pupils at higher levels may be due, at least partly, to this.

What is surprising is the complete absence of appeals in the intermediate group of the *Realschule*. There seems to be no obvious explanation for this finding. A local quirk as a result, say, of a particular teacher emphasising much more strongly than teachers in other schools that appeals for help would fall on deaf ears is ruled out by the fact that these intermediate pupils were drawn from three different *Realschulen*.

It would be unwise to draw many conclusions from the findings about appeals for help or tolerance in this study. On the one hand, help was ruled out by the task conditions and, on the other hand, the difficulty in many cases of distinguishing clearly between appeals for help and appeals for tolerance precludes studying only appeals for tolerance. The fact, too, that the vast majority of the appeals were made in the native language sets them apart from normal intercourse between a foreign language learner and a native speaker of that language. In that situation, an appeal for help would not only need to be made in the target language but there would also need to be some indication of what it was that help was needed for - either by the creation of an unequivocal context or by the use of another strategy, for example, one of pointing or circumlocution. In fact, in 39 of the instances of appeal for help or tolerance, the pupil went on to find a way out of the difficulty. Only in 18 cases was the message abandoned.

6.4.7 Approximation

Language is very flexible in the precision with which it expresses concepts: different circumstances demand different degrees of specificity. For most everyday needs, "car" is not only an adequate description of the four-wheeled, motor-driven form of personal transportation: it is also the briefest, most easily recalled and most readily understood. It would not, however, help the police very much if a witness to a bank robbery merely stated that the thieves drove off in a blue "car": they would like to know what kind of a car it was and might be told it was an "estate" or that "it had a door at the back".

This flexibility not only makes language such a versatile tool: it is of great value to the foreign language learner with limited lexical and grammatical resources. In the picture story task, the thief is clearly shown to be carrying a briefcase and 17 of the 32 English pupils who mentioned the object used that word. However, 27 English pupils used the less precise word "bag", either solely or in conjunction with "briefcase" or another more precise word ("suitcase", "case", "saddlebag"[!]). Interestingly, 14 of them used the precise word only where it was of value, i.e. in describing the thief. They used the more general word "bag" in giving an account of the theft, where such precision was unnecessary. "Bag" was used entirely adequately by 79 of the 126 German pupils who performed the picture story task. Only five of the remaining 47 produced the word "briefcase": most of the others had recourse to a communication strategy.

Six of the 47 made no mention of the bag at all. They may, of course, have avoided the topic, but as we have seen in Section 6.2.4, it is virtually impossible to distinguish deliberately omitting a topic from overlooking it or not thinking it necessary to mention it. All the English pupils can be fairly assumed to have had access to some item of vocabulary to describe the concept; yet two of them made no mention of the bag in their account. (Neither did two of the twenty German pupils who performed in German.) None of the 41 remaining German pupils embarked on the topic only to abandon it when they discovered they did not have sufficient vocabulary resources. They chose instead an achievement strategy and came up with one of the following words: map, schoolbag, handbag, suitcase, basket, pocket.

"Map" can be ascribed to a strategy already discussed in Section 6.4.3 - *foreignising* (German *Mappe* = briefcase). The other words all share certain characteristics with "bag" or "briefcase": they are portable containers for carrying smallish articles about with one. "Pocket" has lost its earlier meaning of detached container (cf. the nursery rhyme "Lucy Locket lost her pocket") but has all the other features. All these words are assigned here to a strategy of *approximation*.

Tarone, in her 1981 taxonomy of communication strategies (see Table 3.1), defines approximation as

> use of a single target language vocabulary item or structure, which the learner knows is not correct, but which shares enough semantic fea-

> tures in common with the desired item to satisfy the speaker
>
> (Tarone, 1981, pp.62-3)

This definition contains a proviso which could not be applied to the data studied here, namely "which the learner knows is not correct". Cases like the following

> to: put it [in.. ʔəm his.. m][in his ʔəm][*na, is es nich*][in his: h·h ʔəm..] in his: [ha] handback (PS GU79)
> (well, that's not it)

certainly seem to indicate (though still not demonstrate) that the learner is aware that the word he is about to produce is not the right one, but such cases are rare in the data. Even when the evidence of internal struggle (false starts, hesitations, drawls, etc.) is considerable - and it frequently is, e.g.

> [De man put his] [De man put his:.. ʔə̃::] De man put [his:...] his basket (PS RS13)

- it is still not certain that the learner knows that the end result is "not correct", though it might, as here, seem very likely. Even discussion with learners about their productions would not always reveal whether they knew they were incorrect, but such discussion was in any case not feasible, given the way these data were collected. The very judgment of "correct" or "incorrect" would in many cases be bothersome: "suitcase", for instance, was considered inappropriate by all three independent markers, and yet the book from which the pictures for the picture story task were taken (Heaton, 1966) actually suggests that word in the vocabulary help it gives. (The German learners in this study received no help beyond the task instructions and the pictures themselves - see Section 5.1.1.)

Ringbom also takes up the question of correctness or appropriateness:

> Although a word a learner has produced ... is judged as inappropriate, this of course need not mean that the learner himself knew that it was inappropriate ... . Some learners may be sure that their alternative is 'correct', others, who have produced the same form, are reasonably sure that it is not. Very often the learner can be assumed to have been uncertain ...
>
> (Ringbom, 1978, p.86)

Ringbom includes under "Types of approximation" many categories that are treated here (and by Tarone) as separate communication strategies, e.g. *language switching, paraphrase, loan translation,*

coinage and *foreignisation*, but he also has four categories - *overspecification*, *underspecification*, *co-hyponym* and *extension of meaning on basis of L1-word* - that it seemed useful to adopt here as sub-categories of *lexical approximation*. They are called in this study *too specific*, *too general*, *co-hyponym* and *over-extension*.

6.4.7.1 Too specific

The approximation produced by the learner may share characteristics with the optimal meaning but include other irrelevant characteristics that narrow the meaning in a way that strikes the listener as incongruous, e.g.

ze vun.. on ze: bookshelf (PS GU57)

The pupil here was referring to the radio on the shelf. In the following description of the thief in the picture story,

and ʔem.... ʔə:... ʔm.. black jeans (PS GM4)

the pupil probably did not know the word "trousers" and resorted to the international word "jeans", although the pictures have nothing to suggest that the man was wearing jeans but many indications to the contrary (trilby hat, collar and tie, jacket).

The category *too specific* produced only six instances between the two tasks, and two of those might arguably belong to the category of *circumlocution*:

How long need we to: ʔəm walk by feet?
(TC GM21)

How long does it take to: walk by foot?
(TC GM24)

These two examples were included here because they seemed to be an incongruous overspecification of the optimal "walk", which already implies the feature "on foot". The following example, however, was treated as a true circumlocution for a probably unknown word "walk":

ʔə: How long ʔə must I go from ze station ʔəm to
ze: yous hostel [by food] by feet? (TC GM42)

6.4.7.2 Too general

It was much more common for the learner to underspecify the characteristics of an optimal meaning in an approximation, and this

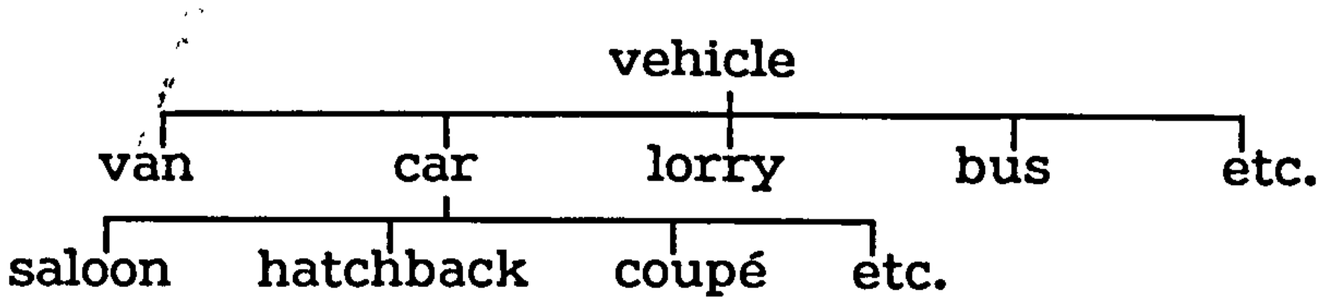
sub-category produced 48 instances. A common one, which occurred twelve times, was the use of "table" for the optimal "counter", e.g.

> he ʔəʔ took the radio standing on [the:] the table
> (PS GM24)

"Counter" could scarcely be said to belong to the core vocabulary one might expect a school learner of English to have acquired, and indeed only two pupils produced the word. "Table" shared with it the important features of being a flat square surface at about waist height for setting things out, but lacked the more specific features of having side panels and being the surface behind which a shopkeeper stands to conduct sales transactions. It was a successful native-like strategy ("table" was in fact used by one of the English pupils). The choice of "table" may have been influenced by the German *Ladentisch* (literally "shop table"), though the fact that no pupil attempted a loan translation suggests that that was not necessarily so.

6.4.7.3 Co-hyponym

Hyponymy is described as follows in the The Linguistics Encyclo-pedia:

> Hyponymous relations can be expressed by taxonomic tree diagrams, showing levels of generality and specificity and which words include which in their meaning. Thus a simple tree diagram for car showing its relations with its near neighbours might be:
>
> 
>
>
> Vehicle is the **superordinate** term and car is a hyponym of it. Van, car, lorry etc. are **co-hyponyms.**
>
> (Malmkjaer, 1991, pp.300-1)

Co-hyponym as a strategy of approximation is used then to mean that the learner produces a word that is neither more specific nor more general than the word that would be most appropriate in a given context. The hierarchical level of the two words is roughly the same but their area of appropriate use is different. Thus, "handbag", "suitcase", "schoolbag" and "basket" share carrying features with "briefcase" and together with it are hyponyms of the

more general concept "bag". As approximations of "briefcase", they are entered in the sub-category *co-hyponym*.

The use of a co-hyponym instead of the target concept was very common, accounting for a third of all the lexical approximations made by the German pupils. Certain specific examples were very frequent: in the telephone conversation, for example, there were 21 instances of "dinner" and three of "lunch" instead of the optimal "supper" (or "evening meal").

For co-hyponyms, and indeed for all the sub-categories of approximation, evidence was sought that the pupil encountered a problem before a particular instance was registered as a communication strategy. "Dinner", for example, was produced by 19 pupils in addition to those mentioned above but with complete confidence and was not therefore counted as a strategy in those instances.

An interesting co-hyponym of "briefcase" that, for the reason just mentioned, was not registered at all as a strategy was "satchel". The eight pupils who produced it had all apparently learnt the word well for they produced it with complete fluency. "Satchel" seems, however, an unnecessarily specific word to teach pupils for what must be a rather restricted need: "schoolbag" (used by one pupil) would be a more useful term and has the advantage of being easy to analyse into usable components.

6.4.7.4 Over-extension

Cases of lexical approximation recorded here as *over-extension* are those "where the meaning of the English word has been extended on the model of the L1-word" (Ringbom, 1978, p.89). For example, the pupil who said

> and ʔəm then he.. wanted to run out of my shop
> (PS GO93)

was probably extending the meaning of "wanted to" to include "tried to" or "was about to" on the model of the German word *wollte*, which basically means "wanted to" but also has the other senses in a sentence that goes on to cite something that intervened or occurred at the same time.

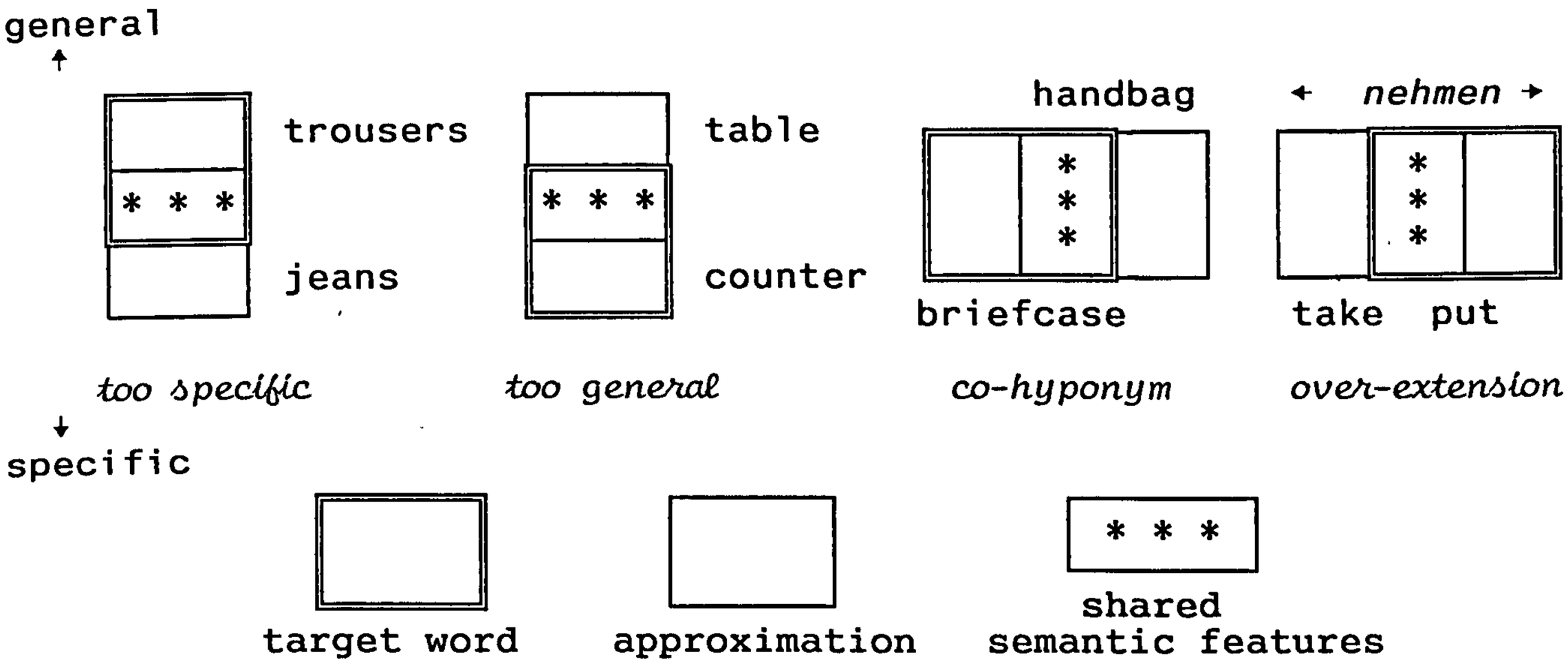
The German verb *nehmen* has the basic meaning "take" but has a very wide area of usage. This pupil's use of "take" for both "take" and "put" shows how the meaning of the English verb "take" becomes over-extended if it used in the same way as German *nehmen*:

> In zis time the man was taken a radio.. who: stands on the desk and.. take it into his bag. (PS RS12)

Both "want" (29 instances) and "take" (28 instances) were particularly frequently over-extended verbs, and indeed over-extension in general was a very large sub-category of approximation, accounting for over half of all the cases of approximation.

Figure 6.1 shows diagrammatically the relation between the approximation and the target word in the four sub-categories.

Figure 6.1: Diagram of sub-categories of approximation



In the following section, further examples are given of the four sub-categories of approximation. They are taken from both tasks and the four levels.

6.4.7.5 Sample list of approximation strategies

The examples that follow are taken from a total list of 372 approximation strategies. The listing conventions are the same as for the list of foreignising strategies given in Section 6.4.3.1.

Too specific

2. **alarmed:** 1 (1+0)
   Optimal meaning shouted to
   Context and.. ʒ.. [I alarm..] I alarmed.. the people (GO9)

Too general

55. **man:** 2 (2+0)
   Optimal meaning thief
   Context "Stop [the:] the: man" (GM5)

106. **going on:** 4 (3+1)
   Optimal meaning climbing
   Context While I: was going on ze ladder (GM47)

176. **wall:** 1 (1+0)
   Optimal meaning shelf
   Context de radio on de: wall (HS20)

Co-hyponym

16. **high:** 1 (1+0)
   Optimal meaning tall
   Context He was:.. about ʔə.. one metre.. ninety.. high (GO63)

98. **client:** 1 (1+0)
   Optimal meaning customer
   Context ʔəm a client enters (GM42)

104. **cried:** 7 (7+0)
   Optimal meaning shouted
   Context and.. cried that the people should stop the man (GM45)

151. **robber:** 1 (1+0)
   Optimal meaning thief
   Context and the: robber.. was caught (RS25)

Over-extension

19. **recognise:** 4 (4+0)
   Optimal meaning realise
   Assumed German basis *erkennen* = recognise/realise
   Context ʔəm ʔʔm.. I: recognithed that he wath [a:] a thief (GO64)

46. **pocket:** 5 (0+5)
   Optimal meaning bag
   Assumed German basis *Tasche* = pocket/bag
   Context I heard music from his ʔəm.. pocket (GM2)

103. **showed:** 12 (0+12)
   Optimal meaning pointed
   Assumed German basis *zeigen* = show/point
   Context Then he: m showed on a radio (GM45)

148. **did:** 6 (1+5)
   Optimal meaning put
   Assumed German basis *tun* = do/put
   Context [and ʔəm.. ʔə][and.. w ʔə:][done] and [did it] did it in his ʔə: bag (RS24)

Too specific

312. **travel:** 1 (1+0)
Optimal meaning come
Context ʔə We: travel by: train (HS35)

Too general

263. **stop:** 1 (1+0)
Optimal meaning station
Context And.. how.. [d] does we arrive [from the.. ʔəm..] from the: stop (GM16)

329. **come:** 1 (1+0)
Optimal meaning stay
Context whether.. my friends and I can.. come in the youth.. hustel (HS40)

334. **meal:** 2 (1+1)
Optimal meaning supper
Context m.. Can we make [ze:...] ze meal... by myself (HS41)

336. **it:** 1 (1+0)
Optimal meaning the youth hostel
Context ʔem [When does the h·h ʔem *Ich weiß nich was das heißt!*....] When does it shut in the evening? (GU97)
(I don't know what it's called)

Co-hyponym

261. **next:** 3 (1+2)
Optimal meaning tomorrow
Context And we are arriving in New York.. ʔem.. next morning (GM16)

270. **sleep:** 5 (4+1)
Optimal meaning stay
Context if me and my friends can.. sleep in your youth hostel (GM21)

306. **pay:** 2 (0+2)
Optimal meaning price
Context ʔəm.... Is de pay.. ʔə for ze breakfast? (HS32)

Over-extension

258. **how many:** 6 (4+2)
Optimal meaning how much
Assumed German basis *wieviel* = how much/many
Context ʔəm How many [does ʔəm][does] does it cost (GM6)

295. **morning:** 5 (0+5)
Optimal meaning tomorrow
Assumed German basis *Morgen/morgen* = morning/tomorrow
Context we come ʔə morning to York (HS24)

309. **come:** 9 (9+0)
Optimal meaning get
Assumed German basis *kommen* = come/get
Context how to:.. come from the ʔəm station to the youth hustle (HS33)

6.4.7.6 Discussion of findings

Table 6.10 shows how the 372 cases of lexical approximation were distributed between the picture story and telephone conversation tasks and across the four sub-categories of *too specific*, *too general*, *co-hyponym* and *over-extension*.

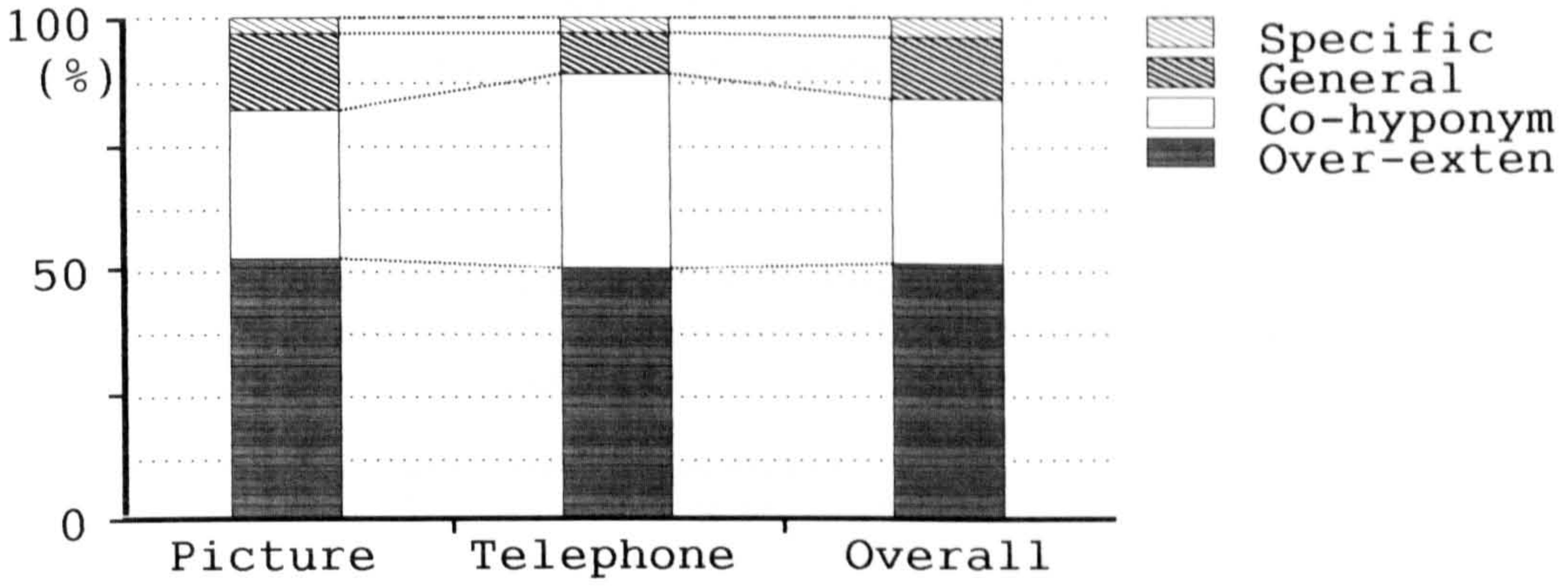
Table 6.10: Distribution of lexical approximation strategies according to tasks and sub-categories

Sub-category	Task		Overall
	Picture	Telephone	
Too specific	3	3	6
Too general	37	11	48
Co-hyponym	71	54	125
Over-extension	124	69	193
Total	235	137	372

The first striking fact in this table is the much larger number of approximation strategies produced by pupils performing the picture story task. Even allowing for the fact that the picture story group of pupils was larger and had more strategy users than the telephone conversation group (cf. Table 6.3), the difference is highly significant as measured by a chi-square test ($p<0.001$). The reason for the difference is most probably the one advanced in Section 6.4.3.2, namely that the picture story called for a wider and more difficult range of vocabulary than the telephone conversation.

Given that there is a task difference in the overall number of approximations, is there also a difference between the tasks in the distribution of strategies across the sub-categories? Figure 6.2 facilitates the comparison by presenting the data of Table 6.10 as a 100% stacked bar graph, in which each sub-category appears as a percentage of the total for each task and overall.

Figure 6.2: 100% stacked bar graph of approximation strategies



It shows clearly that *over-extension* is not only the largest sub-category but it accounts fairly consistently for just over half the approximations in each group. There does, however, appear to be a group difference in the distributions of the sub-categories of *too general* and *co-hyponym*, and this is confirmed by a chi-square test. As very low frequencies in a category distort the chi-square value (cf. Kenny, 1982, p.117), the sub-category of *too specific* was combined with that of *too general* before computing chi-square. This seems justifiable in that these two categories are at opposite ends of a continuum of specificity. The chi-square test once again confirms the apparent difference, though not to the same degree of significance ($p<0.05$). The difference is mainly attributable to the lower frequency of *too general* strategies in the telephone conversation group.

If one looks at the kind of problems that were addressed by the strategy of using a word that was too general, they were overwhelmingly nouns, target words like "counter", "thief", "noise", "shelf" in the picture story - altogether 23 out of 37 - and "station", "hostel", "evening meal", "price" in the telephone conversation - altogether 9 out of 11. The picture story called for more descriptive language, involving people, things and locations, than the telephone conversation, hence perhaps the lower frequency of the *too general* strategy in the latter.

A further question to be asked of the data is whether the pupils' level affected the distribution of the sub-categories. One might expect, for example, that over-extension - an L1 strategy - would be used more frequently by beginners than by advanced learners (cf. Section 6.4.4.2). Table 6.11 shows the distribution of the four sub-categories across the different learner groups.

Table 6.11: Distribution of lexical approximation strategies according to sub-categories and levels

Level	Sub-category				Overall
	Spec.	Gen.	Co-hyp.	Over-ex	
Advanced (GO)	1	7	24	26	58
Intermed. (GM)	3	15	32	48	98
Intermed. (RS)	0	3	17	34	54
Intermed. (HS)	1	8	26	33	68
Beginners (GU)	1	15	26	52	94
Totals	6	48	125	193	372

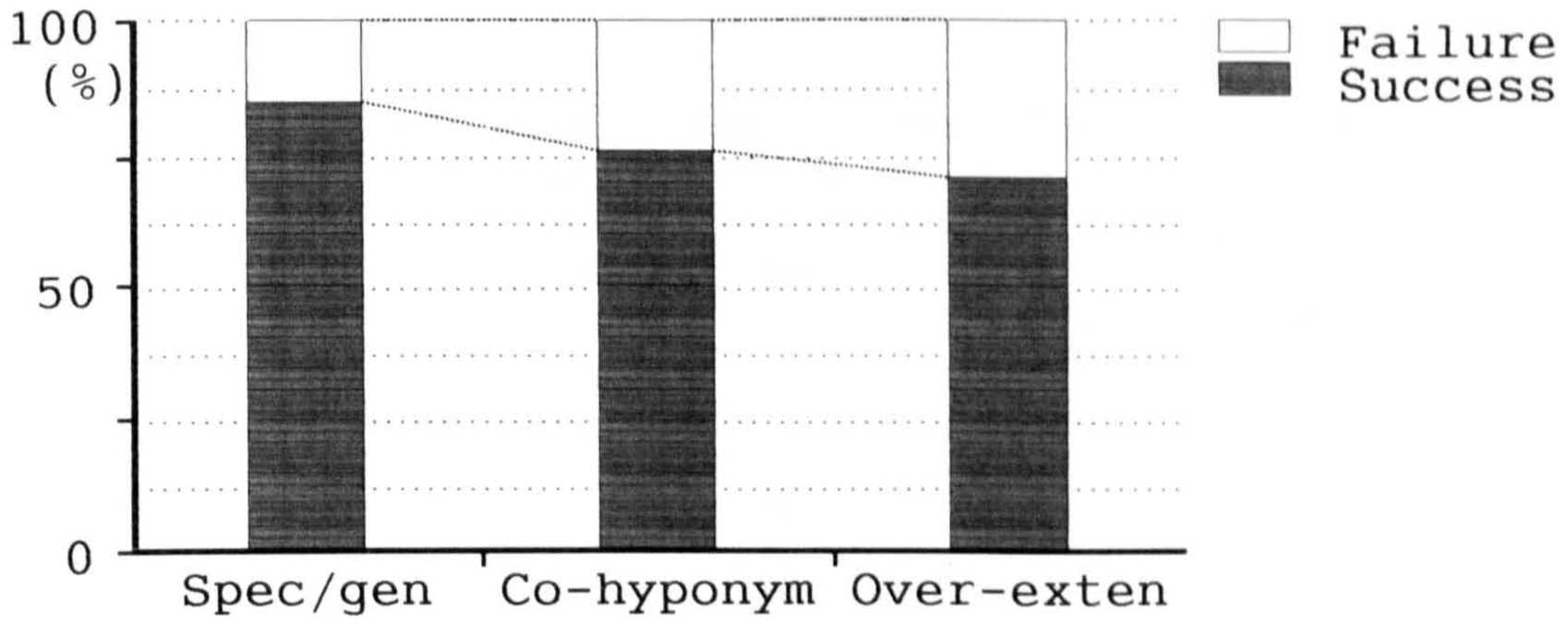
GO = Gymnasium Oberstufe
GM = Gymnasium Mittelstufe
RS = Realschule
HS = Hauptschule
GU = Gymnasium Unterstufe

Spec. = Too specific
Gen. = Too general
Co-hyp. = Co-hyponym
Over-ex = Over-extension

Inspection of the table reveals no obvious tendency, and this is confirmed by a chi-square test, which falls well short of significance.

So far, the question has not been considered of how far the strategies of lexical approximation were successful. The overall success rate of the 372 strategies was high - 75%. Figure 6.3 shows visually how the individual sub-categories fared. The combined category of *too specific or too general* shows the highest rate of success with 85% followed by *co-hyponym* with 76% and *over-extension* with 72%.

Figure 6.3: 100% stacked bar graph of success/failure of different approximation strategies



Spec/gen = Too specific or too general
Over-exten = Over-extension

Clearly, using an expression that shares semantic features with an optimal meaning is a very sound communication strategy. An expression that is in a hyponymous relationship with the optimal meaning, especially at a higher level of generality, is probably the best approximation strategy, since context usually renders much specific detail redundant. In fact, there may have been several instances like that of "bag" for "briefcase", where a more general word was entirely appropriate to the context and was not therefore recorded as a strategy. Words on the same level of specificity - co-hyponyms such as "handbag" - could, however, sometimes be confusing to the listener and were more often recorded as failures. Least successful was the use of L1-based over-extensions like "pocket", because sometimes the native speaker could be completely misled by them.

6.4.8 Circumlocution

One of the definitions of "circumlocution" given in the Concise Oxford Dictionary (COD) is "the use of many words where fewer would do". Circumlocution is a common communication strategy used by native speakers of a language when they cannot for the moment recall a word or expression or when they simply do not have a word for a particular concept (or, of course, when they are too embarrassed to express something directly). Their strategy may be to describe something - "one of those fungus growths on tree trunks"

(polypore) - or to explain its function - "a thing for taking stones out of horses' hooves" (?).

Non-native speakers of a language employ the same strategy: Tarone defines it thus:

> Circumlocution - the learner describes the characteristics or elements of the object or action instead of using the appropriate target language (TL) item or structure.
>
> (Tarone, 1981, p.62)

Tarone also uses the term "paraphrase" to label a group of strategies consisting of "approximation", "word coinage" and "circumlocution".

Nayar, on the other hand, treats "paraphrase" and "circumlocution" as different strategies belonging to a group called "Replacement Strategies":

> a. Paraphrase: Learner seeks alternate (often less direct) ways of making a point or conveying the message.
>
> e. Circumlocution: Learner says something in a very roundabout way using many words what a native speaker would say using fewer words and syntactically more directly.[sic]
>
> (Nayar, 1987, pp.63-4)

These definitions do not seem to delineate distinct strategies and the single example Nayar gives of each does not make the distinction clearer. No attempt is made here to uphold such a distinction, and since in ordinary language paraphrase suggests restating a whole text in different words ("a free rendering or rewording of a passage" - COD) rather than necessarily using more words than are ideally needed, the strategy is called *circumlocution*. The definition given to it is that of Tarone quoted above.

A problem which several of the learners in this study attempted to resolve with a circumlocution was to find suitable adjectives to describe the thief's face in the picture story. He had sharp features and narrow eyes and generally looked rather sinister (see Appendix A). The native English pupils who attempted a description of his face produced some appropriate language - "beady eyes" (EP8), "pointed nose" (EP11, EP13), "long chin" (EP14), "shifty-looking" (EP18) - but they, too, were not always sure what to say:

> he looked kind of funny on the face (PS EP27)
>
> əm He looked quite odd (PS EP34)

The problem was much more acute for the German pupils, most of whom did not have access to words like "pointed" and "narrow". Circumlocutions were quite common:

> ..ʔə like Al Capone in the criminal stories (PS GO78)
>
> He looked like a man from the Mafia (PS GM1)
>
> and.. [he..] had ʔə eyes like Chínese (PS GM3)
>
> looked like.. a mysterious man (PS GM41)

Strategies of circumlocution that more directly fit Tarone's definition describing "the characteristics or elements of the object or action" were, for example:

> I'm the shopkeeper.. of a shop where you can buy ʔəm: tape recorders or record players and radios (PS GO10)
>
> he ʔə made the radio blay (PS GO65)

Sometimes, a strategy of circumlocution was used for a problem that more commonly was addressed by a different strategy. For example, the problem word "shelf", for which the foreignisation "board" (Section 6.4.3) or the approximation (co-hyponym) "cupboard" was used by several learners, was sometimes successfully resolved by a circumlocution that picked out the essential fact that the radio the customer wished to see was out of reach and involved getting a ladder to bring it down:

> a: record player [he] [who ʔəm] [which was.. ʔəm.. ʔəm.. h·h.. [*wie sagt man denn da?* ʔəm:..]]
> which I could reach only ʔə [with:] with my ladder (PS GO74)
> (how do you say that?)
>
> [I'd put up in the..] I'd put up very high (PS GO86)

The circumlocution did not always involve the use of more words than the optimal expression. For example, the very difficult optimal meaning "my back was turned" or "I had my back to him" called forth circumlocutions such as:

> and ʔə̃ did not look at him (PS GO90)
>
> ʔəm [I don't ʔə] I don't see the man (PS GM32)

As with other communication strategies, it was not always easy to determine whether a particular expression was a circumlocution or an optimal meaning. For example,

> ʔəm.. Can we cook our meal ʔə.. in the evèning? (TC GO125)

is acceptable English and may be interpreted as the optimal meaning, i.e. what the pupil really wanted to say. However, as we saw in Section 6.4.7.3, "evening meal/supper" was a problem for many of the pupils. That combined with the hesitation shown by the pupil and the fact that the flow chart in German contained a specific noun (*Abendessen* = evening meal) was considered evidence enough to record a circumlocution.

Sometimes, there was difficulty in deciding between circumlocution and another strategy. A very common strategy, with slight variations, was the following:

> ʔəm [How long...] How long ʔəm..... ʔəm must we go.. on foot, or? (TC HS36)

This was treated as a circumlocution, but it might be argued that a loan translation was at work here based on the German *zu Fuß gehen* (= to walk, literally "to go on foot"). However, the German flow chart calling for the learner to enquire how long it would take to walk did not use the verb *zu Fuß gehen*: it said *Frage, wie lange man zu Fuß braucht* - literally, "Ask how long one needs on foot". A circumlocution to get round a missing word "take" seems the more likely strategy, but perhaps the learner was using a compound strategy involving both a loan translation and a circumlocution.

A strategy of circumlocution could even be compounded with one of abandonment:

> ʔəm.. ʔə Is ə breakfast.. in de.. price**.. ʔm [*Des weiß ich nich*] (TC GU101)
> (I don't know that)
>
> ʔə:m ʔə Is the breakfast in the price? (TC GU111)

On the face of it, these two circumlocutions for "Is breakfast included?" are virtually identical, but in fact pupil GU101 spoke the word "price" with a level intonation (indicated in the transcript by **) implying that his question was not finished but that he intended to continue, probably with "included", but was unable to produce the word and abandoned the message at that point. This interpretation is supported by the appeal in German for tolerance. Pupil GU111, on the other hand, spoke the word "price" with a fall-rise intonation indicating a completed question.

6.4.8.1 Sample list of circumlocution strategies

The examples that follow are taken from a total list of 170 circumlocutions. The number preceding the strategy is its running number in the total list. The heading in bold gives the likely optimal meaning which the pupil was attempting to convey. The figures following it indicate the number of individual circumlocutions that were found for that particular optimal meaning and their success or failure (see Section 6.4.3.1.).

PICTURE STORY

7. **arrest:** 1 (1+0)
an policeman.. takes him in prison (GO13)

10. **shop assistant:** 1 (1+0)
the man.. ʔm ʔə who sells ze radio (GO66)

11. **on-switch/switch on:** 7 (6+1)
and [sw ʔəm:] touched.. the button which switches the radio on and off (GO73)

22. **briefcase:** 2 (2+0)
and looked [like] like a p bag which children ʔə use for school (GM3)

26. **fortunately:** 1 (1+0)
In the street, there was [ʔəmh f] good luck, and there was [a: m̥ˑh] a policeman (GM22)

38. **thief:** 2 (2+0)
[ʔe: Then he fetched the:... ʔə.. [*Dieb.. was heißt des?*]] Then he fetched the man with the radio.. (HS16)
(What's "thief"?)

40. **shelf:** 7 (5+2)
and it əm stand over [m] my head (GU26)

41. **accidentally/by mistake:** 8 (6+2)
then he əm did [some] something he don't wanna make (GU27)

TELEPHONE CONVERSATION

52. **close:** 4 (3+1)
ʔem.. When must we return at night? (GO125)

60. **take a booking/book in:** 27 (16+11)
ʔəm [Could you ʔəm..] Is it okay [that ʔə ʔəm you....] that [we] we can have ʔəm the rooms ʔəm from tomorrow for three nights? (GO130)

62. **stay** 17 (9+8)
ʔə if hˑh me and my friends ʔəm.. can have a: place in your youth hostel.. (GO136)

68. **include** 39 (33+6)
ʔem Can we have.. ʔe ʔem the breakfast.. also in this price? (GM15)

72. **price:** 1 (1+0)
and ʔə I wanted to ask you.. ʔəm: [how much the:] how much it costs sleeping there (GM21)

94. **get (that):** 5 (3+2)
[Have you ʔe] Is zis okay? (HS28)

119. **breakfast:** 1 (1+0)
[Is in this price de... də də dəm] [*Was heißt "Frühstück?"*] Is in dis brice de eating in de morning in? (GU98)
(What's "breakfast"?)

162. **take:** 20 (10+10)
ʔem How long ʔem.. must I go vhen I go by foot? (GU118)

6.4.8.2 Discussion of findings

Table 6.12 shows how the 170 cases of circumlocution were distributed.

Table 6.12 : Distribution of strategies of circumlocution according to task and level

Level	Task				Overall	
	Picture		Telephone			
	N	Strats	N	Strats	N	Strats
Advanced (GO)	24	17	19	15	43	32
Intermed. (GM)	32	16	19	14	51	30
Intermed. (RS)	18	3	15	7	33	10
Intermed. (HS)	16	3	20	30	36	33
Beginners (GU)	24	10	24	55	48	65
Overall	114	49	97	121	211	170

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe N = No of strategy users

The immediately striking feature of Table 6.12 is the much larger number of circumlocution strategies recorded for the telephone conversation task (121) than for the picture story (49). Even when the difference in the sizes of the learner groups performing each task, in particular the number of strategy users in each group, is

taken into account (picture story = 114, telephone conversation = 97, see Section 6.4.1.2), the difference as measured by a chi-square test is still highly significant ($p<0.001$).

The reason for the preponderance of circumlocution strategies in the telephone conversation task is perhaps that the flow chart of German instructions (see Appendix B1) confronts pupils with a small number of verbs that they found difficult to convey directly in English. They are *unterkommen* (= find accommodation, stay), *mit einschließen* (= include), *brauchen* (= take [time]), *eine Reservierung annehmen* (= take a booking) - see examples 62, 68, 162, and 60 in the last section. Between them, these verbs provoked 103 circumlocutions. However, though the strategies of circumlocution address a much smaller number of problems for the telephone conversation than for the picture story, it is not a case, as it was with *coinage/loan translation* discussed in Section 6.4.4.2, of a large number of *tokens* and a small number of *types*. The circumlocutions offer individual solutions to the problems, even if they are often very similar to one another.

Table 6.12 also shows how the strategies of circumlocution were distributed between the different learner levels. All three distributions (picture story, telephone conversation and overall) are significantly uneven. The chi-square test for the overall distribution is shown in Table 6.13.

Table 6.13: Chi-square test of distribution of strategies of circumlocution according to level

Level	Strat.-users	Strategies		Chi square $(O-E)^2/E$	Residual $(O-E)/\sqrt{E}$
		Obs.	Exp.		
Advanced (GO)	43	32	34.6	0.2	-0.4
Intermed.(GM)	51	30	41.1	3.0	-1.7
Intermed.(RS)	33	10	26.6	10.4	-3.2***
Intermed.(HS)	36	33	29.0	0.6	+0.7
Beginners(GU)	48	65	38.7	17.9	+4.2***
Total	211	170	170.0	32.1***	

*** $p<0.001$

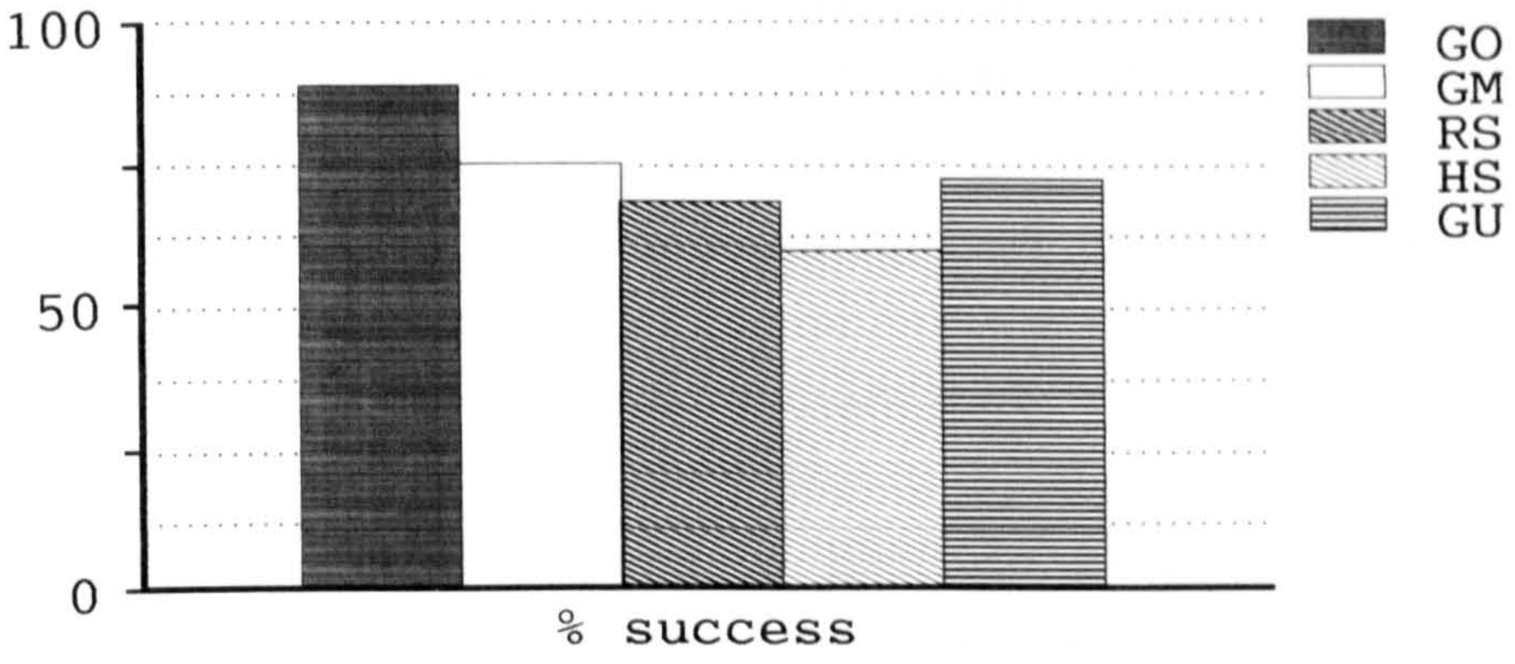
The ordering of the learner groups in the table represents a blend of years of experience of English (GO>GM>GU) and learner ability (GM>RS>HS) - see Section 5.1.1). One might expect the pupils at an advanced level (GO) would need to resort to circumlocution less frequently than those at beginners' level (GU) and, similarly, those at the top end of the ability range (GM) less frequently than those at the bottom end (HS). Both the observed figures and, more accurately, the comparison between observed and expected figures seem to confirm those expectations: there is a "shortfall" of circumlocution strategies at the top end and an "excess" at the bottom end in each case.

One might argue, however, that whilst the inability to produce the optimal meaning would be greatest amongst both the less able and the less experienced learners, the ability to come up with a suitable circumlocution would make cognitive demands that might be met more readily by the inexperienced but able learners of the GU group. That might explain why, according to the residuals (see Section 6.4.1.2) in Table 6.13, it is the GU group, with its large excess of circumlocutions, that is chiefly responsible ($p<0.001$) for the uneven distribution.

There is another significant contributor to the uneven distribution shown in Table 6.13. That is the RS group, which produced a significantly lower number of circumlocutions ($p<0.001$) than one would have expected. This repeats the finding in the uneven distribution of *appeal* strategies, where a significant shortfall for the RS group was also recorded (see Section 6.4.6.2 and Table 6.9). As in that case, no explanation can be offered.

How successful were strategies of circumlocution? The overall success rate was 75%, the same high figure as was found for strategies of *lexical approximation* overall. A chi-square test reveals no significant differences between the numbers of successful strategies at the different learner levels, but two trends can be distinguished in the percentage success rates which are shown in bar graph form in Figure 6.4.

Figure 6.4: Bar graph of % success of circumlocution strategies according to learner level



If one looks at years of learning English, then the more experienced learners at the same level of ability are, the more likely it is that their strategies of circumlocution are successful (GO>GM>GU). If one looks at ability, then the more able pupils at the same stage of learning English are, the more successful are their strategies of circumlocution (GM>RS>HS). It seems, however, that ability overrrides experience to a certain extent, since the beginners of the GU group have a success rate (74%) which is greater than that of the intermediate pupils of either the RS group (70%) or the HS (61%). It should be noted, however, that differences between percentages are deceptive when the numbers on which they are based are smaller than the percentages themselves (see again Table 6.12).

6.4.9 Grammatical approximation or bypassing

It is, of course, not only in the area of meaning that learners of a foreign language run up against the problem of inadequate resources: they also find themselves coping with an incomplete or uncertain command of grammar. Here, the problem is not one of vocabulary: the words which form the grammatical framework of sentences are, not surprisingly, those most frequently occurring in a language. The twenty most frequent words in the London-Lund Corpus of Spoken English are: the, and, I, to, of, a, you, that, in, it, is, yes, was, this, but, on, well, he, have, for (Crystal, 1987, p.86). None of those words would present any difficulty to the learners in this study: their grammatical problems lie in the ordering (syntax) and manipulation (morphology) of both the *function words*, like those

just mentioned, and the *content words*, the words that carry most of the meaning.

What do learners do when they are unable to cope with the optimal grammatical form of an utterance? They may resort to what Færch and Kasper (1983a), following Váradi, call "formal reduction strategies" (see Section 3.3 for their definition). At the morphological level, they may approximate an optimal form by using a more general one, e.g.

> and.. was.. em immediátely em catched by a policeman (PS GM7)

The learner here appears to hesitate in producing the simple past tense form of "catch" (the problem is probably not a lexical one, since he earlier had the shopkeeper shout "Catch the thief!"). He has learnt that most verbs produce the simple past tense by adding a morpheme -ed whilst a smaller number change the root. In the absence of "caught" (known to very few learners in this study), he coins the form "catched".

At a syntactic level, learners may substitute a simple structure for a more complex one, e.g.

> and he: asks me [to buy] for buying a m̥ʔ ʔəm [radio cass] radio (PS GM23)

This pupil appears to realise that "asks me to buy" is not his intended meaning but is unable to produce either "asks me to show him" or "asks me if he could buy".

In those two examples, attention was drawn to the possibility of a strategy of *grammatical approximation or bypassing* operating by the fact that the resultant grammar was erroneous, but as Færch and Kasper point out,

> Formal reduction ... can be difficult to detect as the result of a strategy is often a well-formed L2 sentence which is appropriate in the immediate context ...
>
> (Færch & Kasper, 1983a, p.42)

In the following example:

> I said [he] (click) "Wait a moment sir, you have to pay the radio" (PS GM31)

the pupil's utterance is "well-formed" but the rejected word "he" may indicate that she had planned to say "I said he had to pay [for] the radio" but resorted to direct speech to avoid the tense shifting involved in indirect speech in English. She may also have

simply changed her plan to achieve a livelier effect. Certainly, without the rejected "he", any strategic origin of the utterance would have been undetectable.

Learners taught by an oral approach are initially much more familiar with direct than indirect speech. After intensive practice of patterns like "What's the price of ...", it is perhaps not surprising that they produce this kind of utterance:

> we [wante] want to know, what's the price [for..]
> for one.. night (TC GU97)

where, strictly, an indirect question should have been used ("what the price for one night is"). This kind of strategy is often called using a "pre-fabricated pattern" (e.g. by Tarone, Cohen & Dumas, 1976). Altogether, there were 25 instances of direct rather than indirect speech - no less than seven of them produced by pupil GO122. All but one were found in the telephone conversation task. Whether or not they should be treated as strategies of *bypassing* is problematical. On the one hand, there were at least as many parallel instances where pupils correctly used an indirect question, e.g.

> and I would like to know what.. it costs per
> night (TC RS38)

On the other hand, a native speaker might easily have said what another pupil said:

> I'd like to ask you ʔəm what does it cost to
> spend the night there (TC GM23)

with a rising intonation, followed by a fractional pause and then a direct question. It is hard to say what might induce a native speaker to choose the direct in preference to the indirect question, but it would certainly not be any need to bypass a grammatical problem.

6.4.9.1 Examples of grammatical approximation or bypassing

Apart from the pre-fabricated patterns, only nine instances of grammatical approximation or bypassing were identified. Three have already been cited above: the remaining six are given below:

2. the buyer ʔem catched another radio (PS GM16)
   ("catch" had already been used by this pupil in the sense of "get")

3. and at that time [he w] he.. want go out of the [chop] shop, [the r] [the radio] everybody [c ʔɐm..] can hear [the radio] the music (PS GM16)
(avoidance of passive?)

5. and [he asked] he wanted to buy ʔəm (click) a little radio (PS GM31)
(possibly avoidance of passive "to be shown" ["show" is used later by this pupil] or "if he could buy")

7. ʔə On the street, [he:] a policeman ·h ʔəm hold him (PS GM42)
(avoidance of passive?)

8. [then the ʔə:] then he wants that the shop [assh] assistant ʔə show him a radio (PS RS24)
(approximation of "wants the shop assistant to show him", probably by direct translation from German)

9. [And when have we: ʔəm] When must we arrive? (TC GM1)
(possibly avoiding problem of whether or not to use do-periphrasis with "have to")

6.4.9.2 Discussion of findings

If one includes the problematic pre-fabricated patterns, 33 strategies of grammatical approximation or bypassing were identified in this study. If not, there were only nine, and they, too, were by no means clearcut. This is not to say that grammatical approximation or bypassing is not a frequent strategy, but many of the syntactical strategies may be latent for the reason advanced by Færch and Kasper above. The morphological strategies, on the other hand, applied as they are largely to content words, may be mistaken for or compounded with lexical strategies.

The pre-fabricated patterns were all found in the telephone conversation task, where they were usually preceded by a polite phrase such as "I would like to know". Eight of the nine other grammatical approximation or bypassing strategies occurred in the picture story task, so there is a clear task influence.

All the strategies of grammatical approximation or bypassing were successful.

6.5 THE ENGLISH PUPILS' STRATEGIES

That speakers also have recourse to communication strategies when they are using their own language was recognised at an early stage in the study of strategies (cf. Corder, 1978a), and it has been referred to at various points in the foregoing discussion of the categories of strategy in the taxonomy used here. This study included a group of 54 pupils who were native speakers of English and who performed the same two tasks as the German pupil learners of English. 34 of them did the picture story and 20 the telephone conversation. Together, they provide a unique opportunity for direct comparison of native and non-native strategic use of language.

It was to be expected that the native speakers would use fewer strategies than the non-native learners. The lexical and grammatical problems posed by the two tasks were at a level that the German learners would on the whole cope with. Had they posed any serious problems for the English pupils, they would not have been suitable tasks for the German pupils. Furthermore, certain strategies that were available to the German pupils performing in a foreign language were simply not open to the English pupils performing in their native language, namely all the strategies that involved transfer from one language to another. For that reason, one could not expect to find the English pupils using strategies of *foreignising*, *loan translation*, *language switching* or *over-extension*.

As Table 6.14 shows, these expectations were fulfilled. The total number of strategies recorded was 39. Even allowing for the fact that there were over four times as many German as English pupils (232 vs 54), the figure is still very low compared with the 850 strategies identified for the German pupils. There may, of course, have been more strategies than are recorded here. Strategies other than abandonment of message require the use of language and native speakers have more of it and are better able to employ it in their strategies than non-native speakers are. As Corder said of communication strategies, "we are only able more or less readily to perceive these when the speaker is not a native speaker" (Corder, 1978a, p.15).

Table 6.14: Distribution of the communication strategies of the English pupils

Type of comm. strategy		Task		Overall
		Picture	Telephone	
Message abandonment		4	0	4
Appeal for tolerance		17	0	17
Lexical approximation	{Too general	3	0	3
	{Co-hyponym	3	1	4
Circumlocution		7	2	9
Gram. approx./bypassing		2	0	2
Total		36	3	39

As can be seen from Table 6.14, the native speaker strategies were concentrated on the picture story. They arose in many cases not from a lack of vocabulary but from problems of identifying what some of the objects or items of clothing shown in the pictures actually were. What it was the "customer" pretended to be interested in and what he stole often gave rise to hesitation in the pupils' narrative, e.g.

> the: əm tape recorder [on the sh] on the shelf (PS EP7)

This uncertainty, in turn, frequently caused the pupils to appeal for tolerance of the possibility that they might not have made a correct identification. Such appeals took the form of "sort/kind of", "(bit) like", "or something (like that)". Quite often these phrases were combined, e.g.

> 'e was [asking] pointing to: these radios and, well, to sort of like televisions (PS EP30)

The same problem of identification was probably experienced by some of the German pupils, too (cf. Section 6.4.3), but for them it was likely to have been compounded with a vocabulary problem.

There were a couple of points in the picture story where the English pupils appeared to be uncertain what the optimum word would be. One such problem was the kind of hat the thief was wearing, which produced strategies of approximation such as the following co-hyponym

> The man wore.. 2əm like a top hat (PS EP26)

or circumlocutions such as

> a: black hat that was sort of.. bit like a trilby hat with [a] a big brim (PS EP20)

That pupil was unique in producing the word "trilby" but may well have been unsure what kind of hat it represented.

Another problem of finding the optimum word was what to call the briefcase the man was carrying. Even when pupils knew that word, they were often unsure and accompanied it with an appeal:

> like a sort of briefcase thing (PS EP35)

There were a few cases where pupils abandoned their message for whatever reason, e.g.

> [I was əm̰ʔ] He asked me to look at this radio up on the top shelf (PS EP12)

There were also two somewhat doubtful cases of grammatical approximation or bypassing:

> and [when I] when I [was ə] turned away (PS EP29)

> he asked about a radio [if he] how much it was and everything (PS EP34)

In the first of these, the pupil appears to be about to say something like "when I was standing with my back [turned] to him" but decides it is too complex a construction. In the second example, she is perhaps avoiding an indirect construction such as "if he could have a look at it". Both these explanations for the apparent change of plan are, however, highly speculative.

The problems giving rise to the three strategies recorded for the telephone conversation all seem to stem from a lack of familiarity with the difference between a [youth] hostel and a hotel (the same problem was encountered by a few German pupils) and that between "book" and "book in", e.g.

> I'm ringing' abou' ʔə: bookin' a hostel in York
> (Later, this pupil has "ə: book an hotel..")
> (TC EP72)

Apart from the larger number and greater range of strategies recorded for the non-native groups and their more even distribution between the two tasks, there is one other striking difference between the strategies of the natives and the non-natives. Of the seventeen native appeals for tolerance, fifteen occurred <u>before</u> the word that was felt to be less than optimum (sort/kind of ..., like ...).

Only in two cases did the appeal come after the word (... something like that, ... or something). The German pupils who appealed in English (a minority, who were all advanced pupils - see Section 6.4.6.2) all made their appeal after the doubtful item, possibly influenced by the very common German phrase *oder so* (or something like that). None produced a phrase such as "sort of". It might be that German learners could improve the naturalness of their tentative language by learning the appropriate use of "sort/kind of".

6.5.1 Sample list of English pupil strategies

Abandonment

4. he has a pointed nose [with a] and (he) was wearing a black hat (PS EP11)

Appeal for tolerance

11. a: sort of briefcase (PS EP20)

12. he must have touched the switch or something (PS EP21)

22. he had ə like ə ʔə: a long nose (PS EP29)

Too general

8. with [a] a: hat (PS EP18)

24. and əm.. I went up to get the radio (PS EP29)

Co-hyponym

20. and he's got [a səʔ] a: saddlebag with him (PS EP28)

35. and a: suitcase (PS EP36)

38. What time does the.. hotel close? (TC EP32)

Circumlocution

17. he looked kind of funny on the face (PS EP27)

29. he was carrying [like a:] similar to a briefcase but it was smaller (PS EP31)

32. ə:m oh, and ['e ʔən] 'e [leant] leant sort of forward (PS EP33)

37. if me and my friends could.. 'ave an 'ostel in York (TC EP32)

CHAPTER SEVEN

THE SUPPLEMENTARY PUPILS

7.1 INTRODUCTION

The purpose of obtaining data from supplementary pupils was to have the opportunity of observing a small number of pupils as they performed the picture task and, above all, of discussing with them the problems they had encountered whilst they were still fresh in their minds. The main data had all been recorded by the pupils' own teachers, and I had had no access to the pupils themselves. My hope was that the perceptions of the supplementary pupils about their difficulties and how they coped with them would give some indication of the accuracy of the communication strategies imputed to the main pupils solely on the external evidence of comparing L2 with L1 performance, control of the speaker's intention, and performance indicators such as hesitation (cf. Sections 3.4 and 6.2).

Whilst it might seem self-evident that the strategists themselves would have the fullest and most accurate information about their strategies, the validity of introspection (or, perhaps more accurately here, retrospection) is by no means universally accepted. Ericsson and Simon (1984), quoted by Poulisse et al. (1990, p.97), cite two main objections based on a survey of the literature on introspective reports:

(1) Retrospective data are not reliable; they are incomplete, inaccurate and affected by researcher bias.

(2) The knowledge that one will be required to retrospect influences the performance of the task.

The second of these objections did not apply to this study: the supplementary pupils were told only that they would be asked to perform a task in English. It was not until they had performed the picture story task that I revealed to them that I wanted them to think about the difficulties they had had. Despite the first objection, Ericsson and Simon consider that reliable retrospective data can be obtained under certain conditions:

(1) The data should be collected immediately after task performance, when memory is still fresh;

(2) The subjects should be provided with contextual information to activate their memories.

(3) All the information asked for must be directly retrievable, i.e. must have been heeded during task performance, so that the subjects are not induced to generate responses based on inferencing and generalizations;

(4) For the same reason the information asked for should relate to specific problems, or a specific situation;

(5) No leading questions should be asked to minimize the effects of "researcher bias".
(Ericsson and Simon, 1984, quoted by Poulisse et al., 1990, p.97)

These conditions were largely satisfied by the way in which I conducted the recording sessions with the supplementary pupils (see Section 5.3.2):

Condition 1 The discussion of problems began immediately after the pupils had performed the picture story.

Condition 2 I had two tape-recorders: one of them ran non-stop throughout the session, recording first the task performance in English, then the discussion of problems in German, and finally the performance of the task in German; the other recorder recorded only the performance of the task in English and could be rewound and played back, as necessary, during the discussion "to activate their memories" (Ericsson and Simon, above). Contextual information was, of course, also provided by the picture cues, which remained in front of the pupils throughout the discussion. In fact, because of the minimal time lapse between performance and discussion and, no doubt, because of the pictures, only two of the six supplementary pupils wanted to hear the recording of their performance.

Condition 3 The information volunteered or asked for arose directly out of what the pupils or I observed during the performance. The pupils were not asked to draw inferences, though I sometimes inferred from what they had not said that they might have had a problem at a specific point in the narrative and asked for a comment on that.

Condition 4 All of the discussion related directly to specific lexical problems or stages in the sequence of events that constituted the theft.

Condition 5 The supplementary pupils were all willing to talk about their difficulties and were frank and not at all defensive about their inadequacies (a finding of Poulisse et al., too, cf. p.99). Unsurprisingly, however, some pupils were more forthcoming than others. Supplementary pupil no 2 (SP2), for instance, spontaneously began to tell me about her problems immediately after her performance and before I had had a chance to tell her that that was what I was interested in. SP5, on the other hand, said initially that everything had been a problem but could not think of anything concrete. She needed prompting by having her attention drawn to specific things she had said (she was one of the pupils for whom I replayed the recording). All of the other supplementary pupils were able to recall at least some of the problems they had had without prompting. With all the pupils, however, there were points which they did not mention but which I suspected to be problem points, both from what they said, how they said it (hesitantly, recapping, pointing, grimacing, etc.), and from my knowledge of the principal problem areas encountered by the main pupils. In those cases, I drew attention to them either linguistically or by pointing to something in the pictures. Clearly, if you are asked if something was a problem, you may begin to suspect that it must have been, even if you weren't aware of it at the time. So, to that extent, researcher bias may have been introduced into parts of the discussion. I felt, however, that I could not waste the opportunity to find out the learners' perspective on recurrent problem areas. Moreover, looking at the interviews in retrospect, the discussion of difficulties initiated by the learner does not strike me as different from that prompted by me, e.g.

Specific problem initiated by pupil (SP4)

[This and all the subsequent examples quoted are given in English translation, as all the discussion was conducted in German. Italics indicate words actually said in English during the conversation]

PSG Do you recall any problems you had telling this story?
SP4 Yes, for a start-off, I didn't know whether *ladder* was right for "ladder".
PSG Yes, it is. Perfect. The right word.
SP4 French is my second main subject, and I thought of French.
PSG Aha, "échelle". Well, *ladder* is right.
SP4 And then I didn't know - I wanted to say that he had stolen the thing. Now I remember: it's *steal*, isn't it?
PSG *Steal* is right ...

The pupil hesitated before producing "ladder" when performing the task. What she said when she couldn't retrieve "steal" was

I heard the music, ʔə so [I] [I:] I thought [he: ə] [he əm.. ʔəm:] he: ʔ took [my:] my radio away

Specific problem initiated by me (PSG)

PSG Was that a problem for you? [I indicate the picture of the man pointing]
SP2 I said *he showed.. he showed a radio.* I didn't know "he pointed"
PSG Did you want to say something different?
SP2 I really wanted to say "he pointed to it" but..
PSG Yes, OK. Well, I can tell you that most of the pupils who've done this exercise don't know that either. It's *to point to.*
SP2 *point* [said with recognising "Of course!" intonation]

What the pupil said in her performance was

> He.. showed me a radio, ʔəm on the top.. of.. the board

Poulisse et al. also used retrospective data in their study and concluded (p. 107) that they "should be considered a valuable resource in the identification of CpS" [Compensatory Strategies, equivalent to *achievement strategies* in this study]. Nayar, on the other hand, rejected the use of introspection for several reasons, one of which was the inability to "speak any of the first languages of the participants and introspection should be in a language the speaker feels comfortable in and has sufficient control over" (Nayar, 1987, p.47). This further condition was observed in this study: as already noted, I conducted the postmortem in German.

7.2 THE STRATEGIES OF THE SUPPLEMENTARY PUPILS

The recordings of the picture story made by the six supplementary pupils were transcribed in exactly the same way as those made by the main pupils (cf. Section 5.4). An example of the transcription of a supplementary pupil performance is given in Appendix C7. Before transcribing the discussion of problems, I surveyed the supplementary pupil performances to identify the communication strategies that had been employed, basing the identification, as with the main data, solely on external evidence. This was done at a considerable remove in time (over a year) from the discussion, which is therefore unlikely to have influenced the identification. The results of this survey are shown in Table 7.1, and examples of the strategies are listed in Section 7.2.1.

Table 7.1: Distribution of communication strategies of supplementary pupils across categories

Category of communication strategy	Number
Message abandonment	4
Foreignising	3
Coinage/loan translation	3
Language switching	-
Appeal for help or tolerance	5
Lexical approximation	(24)
Too specific	-
Too general	7
Co-hyponym	4
Over-extension	13
Circumlocution	6
Grammatical approximation or bypassing	-
Total of achievement strategies	41
Total overall	45

As can be seen, most of the strategy types found in the main data were represented in the supplementary data, too. The missing categories - *language switching*, *too specific*, *grammatical approximation/bypassing* - were all infrequent in the picture story in the main data, where they accounted for 2%, 0.8% and 2% respectively of the total number of strategies. The most frequent category here (almost twice as frequent as any other) - *over-extension* - was also the most frequent in the main data, accounting there for 33% of all *achievement strategies*. So, although the supplementary pupils were a small, self-selected sample, they do not appear to differ essentially from the main pupils in their strategic behaviour. Moreover, their problems arose at the same points in the picture story account, e.g. point, shelf, ladder, fetch, counter, switch (on), accidentally, steal, arrest, suit, pointed (nose). The strategies they employed to get round these problems were almost all familiar ("dress" for "suit" was a new one). All in all, therefore, it would seem reasonable to extend the comments of the supplementary pupils on their problems

to the main data, either to lend support to or to cast doubt on the strategy identification procedure employed there.

7.2.1 Sample list of supplementary pupil strategies

The following list gives examples from the complete list of 45 communication strategies identified in the picture story performances of the six supplementary pupils before the retrospective data were consulted. They have been chosen to represent each of the categories in which strategies were found. Where appropriate, the assumed optimal meaning is indicated in square brackets.

Abandonment of message

3. and so I listened and || (SP1)
[realised he had stolen a radio]

15. unfortunately he.. pressed.. ʔə m... a.. [*Taste*] ((mhm)) [*Ja, was heißtn des?*] || (SP2)
[switch/key] (Now, what's that?)

Foreignising

7. he:.. ʔəm wer an smoking (SP1)
[dark suit - produced also by SP6]

11. a radio ʔəm on the top.. of.. the board (SP2)
[shelves]

Coinage/loan translation

24. when I was in my: shop, I have a little electronic shop (SP4)
[electrical (goods) shop]

27. and [he..] yes he was ʔəm really black.. dressed (SP4)
[dressed in black, wore black clothes]

Appeal for help or tolerance

32. he had a cigarette in his mouth, [or a..] I can't rememmer exactly, was a.. ((mhm)) cigar (SP4)

39. with a hat, and a smoking - don't know how to tell thi(s) in good English (SP6)

Lexical approximation

Too general

8. he had dark hair, ant.. was quite large (SP1)
[tall]

9. I.. stoot.. there behind.. the table an* my shop (SP2)
[counter]
*"in" intended

Co-hyponym

2. [he:...] ʔəm.. he put a.. button (SP1)
[pressed]

36. asked me [to put ʔə] to give him something.. something ʔəm.. from.. up in h'h the cupboard (SP5)
[shelves]

Over-extension

22. and so.. I recognised that he had stolen this radio (SP3)
[realised]

42. But when: he: take it in his back (SP6)
[put]

Circumlocution

6. I was standing on something [ant he...] with my bag* and he.. couldn't see me (SP1)
[with my back turned]
*"back" clearly intended, but it sounds unambiguously like "bag"

29. I thought [he: ə] [he əm.. ʔəm:] he: ʔ took [my:] my radio away (SP4)
[stole]

7.3 PROBLEMS DISCUSSED WITH THE SUPPLEMENTARY PUPILS

7.3.1 Considerations of method

Altogether, 42 potential problem points were discussed with the six supplementary pupils. At first glance, that might seem to have covered the 45 strategies identified in their productions rather thoroughly. In fact, the overlap between the problems discussed and the strategies recorded was only about 50%, i.e. 22 of the 45 supposed strategies came up in discussion. This is not to say, of course, that the other 23 strategies were wrongly identified: they were simply not discussed. The reason for this is one of method. The strategies were identified, as has been noted, at a considerable remove in time from their production. The discussion of difficulties followed the production immediately: some difficulties were mentioned spontaneously by the pupils; some were prompted by me. Neither of us noticed or remembered all of the problems.

More of the difficulties would have been noticed and discussed if more time had been available. My original plan envisaged seeing only one pupil in each session and for about an hour after school. Most

of the session (c. 45 minutes) was to be devoted to the actual discussion. In practice, two of the three schools (which provided two volunteers each) released the pupils from one of their English lessons, giving me only about half an hour for each session. In one case, the lesson bell went during the second session. I was able to continue because the break followed, but still felt under time pressure. One school did find two volunteers who stayed on after school, which was better but still not ideal: I could not help feeling that I must not keep the second pupil waiting too long. It was probably the shortage of time that led me to make less use of the performance recording in discussion than I had foreseen in my original plan, the section of which relevant to the discussion read:

> 7. Volunteer asked to introspect on own performance, with regard both to what he or she regards as the problem areas and to what I see as other potential communication strategies. In both cases, reference can be made to relevant portions of the recording. Finally, the whole performance can be replayed to give both me and the volunteer the opportunity for further observations. (c. 45 mins, but hopefully as long as it takes)

It would have been better to have led into the discussion by replaying the whole recording (having first explained the purpose of the discussion) and then allowing five minutes for reflection by both the volunteer and me, during which time brief notes could be made. After that, the original plan, as quoted above, could have been implemented. But adequate time would still remain the important requirement. That is borne out by the fact that the discussion with the second of the volunteers who stayed on after school yielded the richest retrospective data.

7.3.2 Problems identified as strategies

In the majority of those cases where pupils discussed with me what was later identified independently as strategic behaviour, their retrospection confirmed that they were aware - or potentially aware - of a problem and of producing something less than an optimum meaning. Some examples follow. It should be remembered that they have been translated from German and that words actually said in English during the discussion are given in italics.

SP2 Yes, and here with the ladder - I said *chair* because I didn't know how to say "ladder".

PSG Was that a problem - where the other radio that he stole was - where it was?
SP2 Yes. I said *over there*.
PSG *over there* - right?

SP2 Yes. Probably, it - this will be taking place at the police-station and not in his shop.
PSG That's right.
SP2 When he says *over there*, he can't point.
PSG But if they're at the station later, one would have to say something else.
SP2 *standing on.. on.. on another shelf* or something like that.

The radio was standing on the counter. Discussion of a different part of the pupil's performance revealed that "counter" was a word she did not know.

PSG ... any concrete problems?
SP3 Here, first of all, this picture [points to second picture] - I'd probably have said more, like how he told me that he wanted the one up there, and could he have a look at it, and could I get it down, and how he then had his back to him for a time.

The following were later identified as strategies at that point in the narrative: "give him this radio" for "get it for him", and "while he was in my back" for "whilst my back was turned".

PSG You seemed to have a bit of a problem when you wanted to say that he climbed the ladder.
SP4 Yes, I did - "climb".
PSG I've forgotten what you did say in the end.
SP4 *He went it up* or something like that. [She said: "I had to: ʔəm.. ʔəm go [ʔəm] it up".]
PSG That's right. OK. *He went* - you can say that- *he went up the ladder.*
SP4 But "climb", that must be something else.

PSG Any other problems you can think of?
SP4 Here [pointing to the man in the first picture].
PSG Describing the man, you mean?
SP4 Yes. I didn't say that he was wearing a suit.. what's..
PSG What did you say, do you remember?
SP4 *clothes*

This latter example might be taken to demonstrate the unreliability of retrospective data: what SP4 actually said was not "clothes" at all but "dress" (there is an overlap in the meaning of the German word *Kleid* between "clothes" and "dress"). Nevertheless, the pupil's comment is still useful as confirmation that she was aware that she wanted to say "suit" but did not know the exact word.

PSG You said.. and you pointed, right?
SP5 Yes.
PSG And you were trying to say, I suppose, that the radio was somewhere high up - or something, we can't tell what it is, "cassette-recorder", "radio" - up on some shelves, right?
SP5 mhm.
PSG Do you remember what you said?
SP5 I said *it was on a cupboard.*
PSG Yes, yes. Did you think that was the best word?
SP5 I couldn't think of it - *shelf* perhaps.

What the pupil says does not of itself, perhaps, confirm that "cupboard" was a strategy, but taken with her pointing (to the shelves in the room we were in), which she acknowledges, and the fact she is now able to retrieve the word "shelf", it does amount, I believe, to confirmation.

PSG I asked you to do this because I wanted to discuss with you the problems you had - you hardly had any, did you?
SP6 For example, I didn't know what this suit is called in English.
PSG Oh, yes. You said so , didn't you? [He said, "don't know how to tell this in good English".] And *smoking*, although it's an English word..
SP6 ..is only said in German. [German *Smoking* = dinner-jacket]

Not all of the discussion of what were later regarded as strategies clearly confirm that they were, as the following examples show.

PSG And how would you say that he turned the radio on by mistake?
SP4 I didn't say "by mistake".
PSG No. Would you have been able.. - Yes, you did!
SP4 *He pressed the button.*
PSG OK. *He pressed the button.* Didn't you say *he happened to*?
SP4 Yes, *it happened that he pressed the button.*

The pupil here seems to take my suggested phrase as confirmation of her strategy - if strategy it is. (In her original performance, it was produced with considerable hesitation and false starts.) She repeats what she actually said and does not pick up or react to my apparent correction. (I was not attempting to correct her: I did not remember accurately what she had said.)

PSG I've forgotten. What did you call this bag in English?
SP3 I don't think I called it anything. [She actually said "pocket"]
PSG What would you have said if you had tried to express it?
SP3 Oh, I'd probably have said *pocket.*

There is no indication here that the pupil is aware of having run up against a problem, or that "pocket" is not the right word. She did, however, hesitate before producing it.

PSG And what did you say here [indicating the last picture] - *the policeman* or *you*.. ?
SP4 *You stopped him.*

The promptness and confidence with which the pupil responds, together with the evidence from her German version of the picture story, where she used a verb meaning "stop", leads me in this case to reject my interpretation of "stop" as a strategy for an optimal "arrest". Looked at afresh, "stop" seems an entirely appropriate word, and was in fact used by six English pupils, even if the great majority of them chose "arrest" or "catch".

Altogether, 17 of the 22 supposed strategies that were discussed are confirmed by the retrospective comments of the supplementary pupils. Four remain unclear, whilst one is refuted.

7.3.3 Problems not identified as strategies

In addition to the foregoing, 20 areas of difficulty were discussed which were not subsequently identified as strategies. For example:

PSG OK. I think also you were trying to find a different word when you were describing his nose.
SP4 Yes, "pointed".

The pupil actually said:

and [he] his nose was [very..] ʔəm very large

There was strong reason here to suspect that "large" was an approximation strategy for a more precise word: there seemed clearly to be a problem, and it was unlikely to be one of retrieving as common a word as "large". However, "large" might well be regarded as an appropriate word: it was used by one English pupil, whilst four more described the nose as "big". So no strategy was recorded.

An example of a grammatical bypassing strategy, which the discussion revealed but which was not detectable from the pupil's production on its own, was the following:

PSG Something struck me when you did it in German: you said again and again "he must have done it" [Yes], and that's right because you can't see it. How would you express that in English?
SP4 Yes. I thought about that but couldn't manage it. *He might have put the radio in his bag.*

What the pupil said, using a successful strategy, was

ʔem: I think [in] in that moment [he had] [he:]
he had taken [a..] the radio who was on the table

The use of "table" in the above may well have been a strategy, too:

PSG The radio he stole - I don't know if you said where it was.
SP4 *on the table.*
PSG *on the table,* yes.
SP4 on this counter.

There was, however, no hesitation before she said "table" in her production, and therefore no strategy was recorded.

The retrospective data also gave an insight into *avoidance strategies*, which were not studied in the main data because of the difficulty or impossibility of detecting them from the learner's performance alone (cf. Section 6.2.4). There were ten cases in the

discussion which indicated that the learner avoided a topic because of difficulty in expressing it. For example:

PSG [after discussion of how "switched the radio on" was expressed] OK, but he didn't do it intentionally. Can you express that somehow? Would you have expressed it if you.. ?
SP1 Yes, I would.
PSG Can you find a way round it?
SP1 *Although he didn't wanted to.. want to.. press the button.*

PSG Would you have known how to say "he pointed to a" - I don't know whether it's a radio or a cassette-recorder?
SP3 You can't say *he showed to,* can you?

PSG Were there any other problems you recall?
SP3 Yes, perhaps - with the ladder - how he jumped off the ladder and shouted out.

In all the above cases, the concepts discussed - "accidentally", "point to", "jump off" and "shout out" - were not expressed in the pupils' productions. Consulting the learner's German version would not necessarily confirm whether there had been avoidance in the English version, since the German version followed the discussion and may have been influenced by it. Again, with hindsight, it might have proved a sounder method to have requested the German version before the discussion, but I was anxious for the problems of the English version to remain fresh in the learner's mind.

The discussions also revealed, not surprisingly, that the pupils had sometimes been uncertain of something that actually turned out to be correct:

PSG Did you have any other problems?
SP2 Yes, here, too [pointing to picture 4] when I said [the radio] *started to play music.*
PSG mhm.
SP2 I didn't know whether that was right.

SP4 had similar doubts about "ladder" in the exchange quoted in Section 7.1.

Looking back at the supplementary pupils' productions, there were hesitation phenomena in 13 out of 20 problem cases. Half of the problems seem to have led to avoidance strategies; seven resulted in achievement strategies; three of them were imagined problems, where the learner in fact produced appropriate and correct language.

7.4 SUMMARY

This sub-study involved six supplementary pupils, who were comparable to pupils in the main study, performing one of the same tasks but adding to it a performance of the task in their native language and above all being willing to retrospect on the problems they had met in their foreign language performance. What has it contributed to the study of communication strategies in the main data?

Firstly, it has shown that pupils are both willing and able to talk frankly about their difficulties. Some of them they are immediately aware of, whilst they can become aware of others when prompted. Færch and Kasper's definition of communication strategies (cf. Section 3.2) as "potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal" seems very apposite here (1983a, p.36).

Secondly, the strategies of the supplementary pupils, when identified in the same way as those of the main pupils, are entirely familiar and can therefore be taken as representative of the main data strategies.

Thirdly, the retrospective data provided by the supplementary pupils confirm their externally identified strategies in the majority of cases (17/22). Only in one case out of 22 do I feel that the cumulative evidence would lead me to reject the strategy. In the remaining four cases, the evidence is inconclusive.

Fourthly, the retrospective comments reveal seven further achievement strategies that are not identified by the procedure adopted in the main data, and furthermore they show that *avoidance*, though hidden from view in the external evidence and therefore not studied in the main data, was a strategy quite frequently adopted by the supplementary pupils.

These findings are very similar to those of Poulisse et al., who conclude that "the use of retrospection a) increased the number of identifiable CpS by 49%; b) confirmed the method 1 identification" [the presence of problem indicators in the data] "in 68% of the cases, which increased its reliability; and c) allowed the researcher to eliminate (the small number of) CpS incorrectly identified by method 1" (1990, p.107).

In the final paragraph of Section 6.2.4.1, which outlined the procedure adopted for the identification of communication strategies in the main data, I asked "whether the introspections of the six pupils who contributed the supplementary data" would "serve to strengthen or to weaken the plausibility of what have been identified as communication strategies by the above procedure". The evidence summarised in this section may fairly be taken to have strengthened that plausibility and, furthermore, to have confirmed that the procedure "yielded a reasonably reliable, if conservative, estimate of the actual strategies employed by the German pupils".

CHAPTER EIGHT

ANALYSIS OF GRAMMATICAL AND SOCIOLINGUISTIC PERFORMANCE

8.1 INTRODUCTION

The concept of *communicative competence* is a relatively recent one. The problem of devising valid and reliable measures of the communicative competence of foreign language learners is even more recent. If one considers Canale and Swain's three components of communicative competence (1980) - *grammatical, sociolinguistic* and *strategic competence* - then the measurement of grammatical competence is certainly the one of which we have most experience. There is considerably less experience of measuring sociolinguistic competence, and less still of strategic competence. This no doubt reflects the fact that the fundamental component of communicative competence, and that on which the other two components are based, is grammatical competence (which, it should be borne in mind here, includes not only grammar in the usual more restricted sense but lexis as well, cf. Section 2.4): without grammatical competence there can be no sociolinguistic or strategic competence. Hymes writes that "there are rules of use without which the rules of grammar would be useless" (1972, p.278), but even more importantly, as Buckby (1987) has reminded us, there are rules of grammar without which the rules of use would be useless. Strategic competence is rather different, since its function is to cope with deficits in the other two competences - most obviously, and no doubt most frequently, deficits in grammatical competence but also deficits in sociolinguistic competence. Whilst one would expect advanced learners to have more developed grammatical and sociolinguistic competences than beginners, what expectations would one have of their strategic competence? Would one assume with Stern (1983, p.229) that "naturally, as the second language user's communicative competence increases in the other two respects this third element becomes less and less important"? Strategic competence not only copes with deficits in the other two competences, it is also dependent on them, since most strategies themselves make use of grammatical and, sometimes, sociolinguistic competence. So perhaps more advanced learners have more power and flexibility in their strategic competence. Moreover, their strategies

may be more effective than those of beginners and therefore, possibly, more covert and inaccessible to the researcher. At any rate, the relationship of strategic competence to grammatical and sociolinguistic competence is a complex one.

The aim of this research was discussed in Section 4.1 and summarised there as "to increase our knowledge of how school learners use strategies to overcome the problems they encounter in normal communication in a foreign language". How that was to be achieved was by first analysing the learners' productions from the standpoint of the three components of communicative competence and then seeing how the learners' use of strategies related to the other two components (cf. Section 4.2). The strategic performance of the learners in this project has been analysed in detail in Chapter Six. In this chapter, the other two components will be examined through a detailed presentation of the five measures outlined in Section 4.2.3 - *content*, *keywords*, *length of text*, *speech rate*, and *error*.

8.2 CONTENT

How well did the learners in this study succeed in getting their message across, with or without the assistance of communication strategies? To assess this reliably, the two tasks were analysed into units of information that the performers of the tasks were called upon to transmit. This was much easier to achieve for the telephone conversation, where the pupils were given a flow chart (Appendix B1) instructing them to perform such speech acts as greeting someone, enquiring about costs, or spelling their name. Twenty such speech acts were fairly readily derived from the fourteen instructions of the flow chart. At the five points where the learners were instructed to obtain information, they were asked to record that information on a record sheet (also shown in Appendix B2). This evidence of their decoding ability is not considered here, since, as was noted in Section 3.2, this study is exclusively concerned with the use of strategies in speech production, not reception. The twenty speech acts are listed in Appendix E2.

It was much less easy to break down the picture story task into units of information. The picture cues shown in Appendix A contain some information that is central to an account of the sequence of events and some that merely serves to establish the background to

those events, such as what kind of shop it was, where specific things were, etc. People performing the task would be likely to differ in the information they selected for their account. Accordingly, only those bits of information were selected which were considered essential to a minimally adequate account of the theft. The list of these nine bits of information is given in Appendix E1.

8.2.1 Results

Each pupil's production was examined to see how many of the bits of information in the picture story they had successfully conveyed or how many of the speech acts in the telephone conversation they had succeeded in performing. For each bit or speech act, it was first of all determined whether the learner had attempted it at all and, if so, whether the attempt was successful. Success was taken to mean that the message content was comprehensible, irrespective of whether the language by which it was conveyed contained errors of grammar, lexis or appropriateness or, of course, communication strategies. This process involved subjective judgment, so to improve its reliability it was undertaken by two judges - myself and my Munich colleague. In those cases where we were unable to agree, a third judge - a native speaker of English - was asked to arbitrate.

The process revealed that the nine bits of information judged by us to be the minimal components of an adequate account of the theft in the picture story were not perceived as essential by all of the pupils performing that task. In fact, only 19 of 126 German pupils attempted all of the nine bits. The mean number of bits attempted was 6.9 (with a standard deviation of 1.5). It might be assumed that missing bits were the result of linguistic deficits, but Table 8.1, which shows the mean number of attempts group by group, reveals no very clear relationship between experience of learning English and the number of bits attempted. Whilst the advanced pupils of the Gymnasium Oberstufe make the greatest number of attempts (7.7), the beginners of the Unterstufe are not far behind them with 7.0, and they in turn are ahead of the intermediate pupils of the Mittelstufe, whose mean was 6.7. But the most telling figure here is that for the English pupils, whose linguistic deficits as a group were certainly fewer than those of any of the German groups. Nevertheless, they recorded a mean of only 6.7.

Table 8.1: Mean number of attempts at information bits in the picture story, by groups and overall

Group	N	Mean attempts (max. 9)	SD
Advanced (GO)	29	7.7	1.1
Intermed. (GM)	32	6.7	1.6
Intermed. (RS)	20	6.8	1.4
Intermed. (HS)	19	5.8	1.5
Beginners (GU)	26	7.0	1.5
German (GP)	126	6.9	1.5
English (EP)	34	6.7	1.6

GO = Gymnasium Oberstufe
GM = Gymnasium Mittelstufe
RS = Realschule
HS = Hauptschule
GU = Gymnasium Unterstufe
GP = German pupils
EP = English pupils
N = No of pupils
SD = Standard deviation

The variable rate of attempting the components of the picture story posed a problem in assessing how successful the pupils were in conveying the content of that task, since one could not assume that they were all attempting to transmit the same message. Could one maintain, for example, that the pupil with eight successful bits was better at getting the message across than the one with seven successes, if the first pupil had attempted all nine and failed in one and the second had only attempted seven but succeeded in all of them? The two pupils may have had different perceptions of the events conveyed by the pictures or they may have had the same perception but differed in their ability to convey them. One solution to this dilemma might be to assess the pupils by the ratio of their successes to their attempts, expressed as a percentage. That, however, would equate pupil GM33 scoring 3/3, or 100%, with, say, pupil GM5 scoring 9/9, or 100%, which does not seem reasonable. A better solution, and the one adopted, seemed to be to credit pupils with both their attempts and their successes by adding the two together in a combined score. The results of that scoring method, which are shown in Table 8.2, correspond to the expectation that, on the same ability level, the more experienced pupils should convey, or attempt to convey, more of the meaning than the less experienced

(GO>GM>GU) and, on the same level of experience, the more able pupils should convey or attempt more of the meaning than the less able (GM>RS>HS). The group of English pupils does not entirely fit in with this pattern. They might be expected, as the group most proficient in English, to surpass all the German groups in how much of the story they succeed in getting across. In fact, they are superior to all but one of the German groups - the most advanced one, which on this measure is clearly more successful. It must be remembered, however, that what is being assessed is how much of the message is transmitted not the accuracy of the language. As Table 8.1 shows, there was only one of the five German groups who attempted fewer of the information bits than the English group. On the other hand, the English pupils had the highest success rate of bits attempted with 89%, though only just (GO 88%).

Table 8.2: Mean number of successful information bits and speech acts, by groups and overall

Group	Information bits				Speech acts			
	N	Mean (max. 18)	SD	%	N	Mean (max. 19)	SD	%
Advanced (GO)	29	14.5	2.7	81	21	17.6	1.1	93
Intermed. (GM)	32	12.5	3.1	69	20	15.9	1.9	84
Intermed. (RS)	20	11.7	2.3	65	21	16.2	2.2	85
Intermed. (HS)	19	9.5	2.7	53	20	13.7	3.5	72
Beginners (GU)	26	12.2	3.1	68	24	15.9	1.5	84
German (GP)	126	12.3	3.2	68	106	15.9	2.5	84
English (EP)	34	12.7	3.3	71	20	18.0	1.2	95

GO = Gymnasium Oberstufe
GM = Gymnasium Mittelstufe
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HS = Hauptschule
GU = Gymnasium Unterstufe
GP = German pupils
EP = English pupils
N = No of pupils
SD = Standard deviation

The problem of information not attempted did not arise to any important extent in the telephone conversation. There, the information to be transmitted was not dependent on the pupils' perception of what was essential but was determined by instructions given to the pupils in the flow chart. Only one of the speech acts was

omitted at all frequently (no. 19, see Appendix E2), and that was through the teacher not giving the pupil time to perform it. That act was discarded from the assessment, so that all the pupils could be compared on the same basis. Of the remaining 19 speech acts, 99% were attempted overall. It is not necessary, therefore, as with the picture story, to consider both attempts and successes: successes alone give an accurate picture of how much of the content of the telephone conversation the pupils succeeded in getting across. Table 8.2 shows the mean number of successes of the separate German groups, the German pupils overall, and the English pupils. Here, the group differences are not quite as anticipated. This appears to be attributable to a weaker than expected performance by the intermediate pupils of the Gymnasium (GM), whose mean score is equalled by the beginners of the Gymnasium (GU) and surpassed by the intermediate pupils of the Realschule (RS). On the other hand, the English pupils, having been forced by the format of the task to attempt all the speech acts, were this time the most successful group, with a mean score of 18 out of 19 and not too much discrepancy between the individuals making up the group (SD 1.2).

Both German and English pupils were more successful in conveying the message content of the telephone conversation (84% and 95%) than that of the picture story (68% and 71%). This is attributable both to the explicitness of the different methods by which they were informed of the content and to the differing demands the two tasks made on the pupils' vocabulary. As we have already noted, in Section 6.4.3.2, the vocabulary needed for the telephone conversation was both less extensive and more basic than for the picture story. Overall, the German pupils succeeded impressively well in getting the message across, and they compared well with the English pupils.

One may wonder in what way an English pupil could fail to convey an attempted message. One speech act which six of the twenty English pupils performing the telephone conversation task had trouble with was that listed as "enquiring about possible accommodation". Some of the attempts showed that they were uncertain of both the concepts "hotel/hostel" and "booking in", e.g.

> and əm we'd like to book a hotel, in York please
> (TC EP30)

> ʔə I would like to know if me and my friends could.. 'ave an 'ostel in York.. for three nights
> (TC EP32)

> ʔə [I'm] I'm ringin' abou' ʔə: [a ho] ʔə: bookin' a hostel in York. ʔə I'd like to know if my friends, and I, could ə: book an hotel for tomorrow evening (TC EP72)

Whilst these unsuccessful attempts reveal a lack of experience of the world, others seem to be attributable more to a lack of general ability. One sub-group of the English pupils was drawn from a secondary modern school, and some of them had difficulty in making the pronoun shifts which some of the instructions in the flow chart entailed, e.g.

"[you] would like to know if you and your friends can book in at the Hostel in York" (flow chart, Appendix B1)

> I would like [to now] to know [if you are..] if you and your friends can book in .. Oh, I've said it wrong! (I think) (TC EP33)

"... ask how to get from the station to the Youth Hostel" (flow chart)

> could you ask me how [can] I can get there from the station to the hostel please? (TC EP28)

The problem of separating tests of language proficiency from tests of intelligence has cropped up frequently in literature on language testing (e.g. in Klein-Braley & Stephenson, 1981, p.90ff). Oller in particular has taken the strong view that language and intelligence are indivisible (e.g. Oller, 1981). Whilst that position has been strongly challenged (see, for example, the discussion in Ellis, 1985, pp.110-1), it is certainly difficult to construct tests of communicative language performance that do not to some extent also test general intelligence.

8.3 KEYWORDS

In order to convey the bits of information essential to an adequate account of the theft in the picture story or to perform the speech acts involved in booking in at the youth hostel in the telephone conversation, the learners needed to have a particular range of vocabulary at their disposal. If, as was likely, they did not have all of it, they would either have to avoid part of the message, or abandon it if they had already launched into it, or, of course, they could attempt to overcome the deficit with the help of an achievement strategy. One might expect to find learners' use of strategies to be linked to their command of appropriate vocabulary - one aspect of their grammatical competence.

For each of the bits of information, certain content words (nouns, verbs, adjectives, adverbs) were vital. For example, to express the idea that the thief switched the radio on by mistake, "switch" and "mistake" (or equivalents such as "turn" or "accident") are essential content words. "thief" may be conveyed by "man" or, at this stage in the account, "he", and "radio" may also be referred to by a pronoun. So those two content words are not essential. "Switch" and "mistake" or their synonyms are, therefore, *keywords* for this bit of information. The same applies to the speech acts in the telephone conversation: in order to ask if the price includes breakfast, "breakfast" and "include" are keywords, whereas "price" may, in the context of a price just having been quoted, be replaced by a pronoun such as "that".

The learners' command of the keywords needed for the two tasks was used as one measure of their grammatical performance. Two lists of keywords were drawn up, one based on the list of information bits (Appendix E1) and one on the list of speech acts (Appendix E2). They are shown in Tables 8.3 and 8.4.

Table 8.3: List of keywords for picture story, with achievement rates in %

Keyword	GP	EP	Keyword	GP	EP
wear	21	53	take	60	55
suit	20	38	counter	2	13
bag	65	80	put	67	65
point	79	78	switch	50	48
top	13	20	by mistake	10	25
shelf	19	40	leave	83	83
climb	37	38	realise	19	25
ladder	48	35	run after	26	28
get	29	58	policeman	84	60
turn	17	40	arrest	67	65
Overall success				41	55

GP = German pupils EP = English pupils

Table 8.4: List of keywords for telephone conversation, with achievement rates in %

Keyword	GP	EP	Keyword	GP	EP
ring	92	100	include	58	95
stay	54	95	supper	29	75
hostel	88	85	close	97	95
arrive	56	55	get to (place)	62	90
per	22	85	book	60	100
Overall success				58	87

GP = German pupils EP = English pupils

Two points should be borne in mind when looking at the lists of keywords. Firstly, they are not exhaustive but a selection: words that were unlikely to present any difficulties to the pupils, and therefore to have any discriminatory power, were not included. Thus, for example, "street" was excluded from the picture story list and "breakfast" from the telephone conversation list. Secondly, whilst some of the words listed have no acceptable alternative (e.g. "shelf"), others may have a single alternative (e.g. "shut" for "close") or a range of alternatives (e.g. "call", "phone", "telephone" for "ring"). The decision as to what were acceptable alternatives was largely based on the words used by the English pupils when they expressed a particular concept.

Each pupil's performance was scanned to see how many of the listed keywords (or their acceptable alternatives) it contained. Words were accepted as correct even if they were used in the wrong grammatical form, since error was assessed separately (see Section 8.6 below), e.g.

he take another radio (PS HS18)

However, words which were not used appropriately in the context in which they occurred were not counted, e.g.

he took another radio into his bag (PS HS16)

8.3.1 Results

The results of the scan for keywords are shown in Table 8.5. The table also shows for comparison the results of the same scan carried out on the performances of the English pupils. It should be borne in mind that the number of keywords found depends not only on the pupils' vocabulary knowledge but also on the extent to which they attempted all of the nine bits of information or to perform all of the twenty speech acts (see Section 8.2.1). That is the reason for the failure of the English pupils to achieve 100% of the keywords.

Table 8.5: Mean number of keywords, by groups and overall

Group	Picture story				Telephone			
	N	Mean (max. 20)	SD	%	N	Mean (max. 10)	SD	%
Advanced (GO)	29	11.1	3.5	56	21	6.7	1.7	67
Intermed. (GM)	32	7.7	2.4	39	20	6.8	1.6	68
Intermed. (RS)	20	8.2	2.2	41	21	6.8	1.9	68
Intermed. (HS)	19	5.4	2.3	27	20	4.5	1.8	45
Beginners (GU)	26	7.5	2.5	38	24	4.5	1.8	45
German (GP)	126	8.2	3.2	41	106	5.8	2.1	58
English (EP)	34	11.1	3.1	56	20	8.7	1.4	87

GO = Gymnasium Oberstufe
GM = Gymnasium Mittelstufe
RS = Realschule
HS = Hauptschule
GU = Gymnasium Unterstufe
GP = German pupils
EP = English pupils
N = No of pupils
SD = Standard deviation

As with the information bits and the speech acts, the scores correspond largely but not entirely with the expectation that, at the same level of ability, the longer pupils have learned English, the higher will be their scores, whilst, for the same length of learning, the more able the pupils, the higher their scores (i.e. expected ordering for length of learning, GO>GM>GU, and for ability, GM>RS>HS). The expectation for length of learning holds good for the picture story, where GO>GM>GU, but not for the telephone conversa-

tion, where GM>GO>GU. The ability expectation is not entirely fulfilled for either task - for the picture story, RS>GM>HS, and for the telephone conversation, GM=RS>HS. Some of the differences are, however, very small, and if one removes the middle groups from both dimensions (i.e. GM from length of learning and RS from ability), then the expectations are very clearly fulfilled for both dimensions and both tasks, i.e. GO always scores more highly than GU, and GM than HS.

The expectation that the English pupils will produce more of the keywords than the German pupils (EP>GP) is clearly fulfilled for both tasks, though the advanced German pupils (GO) perform just as well for the picture story. As with the information bits and speech acts, the scores for the telephone conversation are proportionally higher than for the picture story, no doubt for the same reasons, namely that the content is more explicitly expressed and the vocabulary more basic in the telephone conversation.

Tables 8.3 and 8.4 also show the achievement rates for the individual keywords as percentages. There is a wide range for both German and English pupils (GP 97-2%, EP 100-13%). For the English pupils, it must be assumed that this variation is almost entirely due to whether they saw fit to express the concept and hardly at all to whether they were able to find the right words, since none of the vocabulary was abstruse. This is borne out by the higher rates they recorded for the telephone conversation, where their freedom of choice was much more circumscribed. The German pupils, on the other hand, were affected by both factors - by how important they considered the concept to be and by their ability to express it. Interestingly, if the two sets of figures are correlated (by Pearson's product moment correlation), there is a high correlation of the picture story results for the German and English pupils (0.85, $p<0.01$) and a low correlation for the telephone conversation results (0.38, n.s.). The picture story correlation indicates that 72% of the variation in the German and English scores is linked, probably by similar perceptions of the importance of the concepts expressed by the keywords. Nevertheless, the marked inferiority of the German pupils in the overall percentages, particularly in the case of the telephone conversation, indicates that, for them, the keywords <u>are</u> also a measure of their command of the vocabulary associated with the two tasks.

8.4 LENGTH OF TEXT

The content analysis described above (Section 8.2) was concerned with the minimal message required by the tasks, but there was, of course, latitude, particularly in the picture story, for the pupils to perform the task more or less elaborately. What constituted, for example, an adequate description of the shoplifter was very difficult to establish objectively. The most obvious way in which the degree of elaboration would show up would be in the *length of text*, and that was indeed proposed by Carroll (1980) as one criterion in the assessment of communicative performance. However, whilst the length of a text can be reliably measured by counting the number of words it contains, its validity as a measure of communicative effectiveness is not thereby guaranteed. It is perfectly possible for a speaker to ramble on at great length, indulging in verbiage that may render a text less rather than more effective. A case in point was pupil G085 whose account of the picture story ran to 380 words, more than three times the average length of the German pupil productions, but who still failed to give a full description of the thief. On the whole, however, the longer accounts of the picture story were the more effective ones: all the pupils who achieved the full nine information bits, for example, produced a text of above average length.

Words were counted on the basis of the transcriptions of the spoken texts, where decisions had been taken as to which words speakers had accepted and which they had rejected. False starts, self-repairs, repetitions, lapses, etc. were treated as rejected words and enclosed in square brackets in the transcriptions (see Section 5.2 on the problems of transcribing spoken texts). Only accepted words (not including any hesitation sounds) were counted. German words were not counted unless they were incorporated as supposed English words in the structure of the English sentence, e.g. *nimm* (= take) below. In the following sample of text, 21 words were regarded as accepted and were therefore counted:

> A man [came [i ʔe:] in my shop..] came in my shop. m: [*Tja*...] ʔə: ʔe: He will ʔʌ... [He.. w... ə...] a radio. I [am ʔə] look for the radio.. ʔə: and the man.. ʔə:.. nimm [the:..] the radio. (PS HS6)

8.4.1 Results

Table 8.6 shows the mean number of words (and standard deviations) produced by the German pupils in each group and overall for each task. The results of the English pupils are also given.

Table 8.6: Mean number of words in texts, by groups and overall

Group	Picture story			Telephone		
	N	Mean	SD	N	Mean	SD
Advanced (GO)	29	144	67	21	154	20
Intermed. (GM)	32	117	34	20	146	13
Intermed. (RS)	20	107	23	21	150	17
Intermed. (HS)	19	83	24	20	124	23
Beginners (GU)	26	95	27	24	130	10
German (GP)	126	112	46	106	141	21
English (EP)	34	106	33	20	135	13

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe GP = German pupils
EP = English pupils N = No of pupils
SD = Standard deviation

There was, of course, much less scope for variation in text length in the telephone conversation, where the task instructions were far more precise, and this is reflected in the consistently lower standard deviations despite the greater mean text lengths. Within the German groups, text length largely follows expected proficiency. On the dimension of length of learning, the expected ordering of the groups, GO>GM>GU, pertains for both tasks. On the ability dimension, the expected ordering GM>RS>HS holds for the picture story but not for the telephone conversation, where RS>GM>HS.

Surprising perhaps is the finding that, on both tasks, the German pupils overall produce longer texts than the English pupils. This may be attributable to two factors, one linguistic, one cognitive. The undoubtedly greater proficiency in English of the English pupils

enabled them to some extent to be more economical in their use of language than the German pupils. On the one hand, the optimum word or phrase is generally shorter than a circumlocution. Compare the following two versions:

> he accidentally knocked the switch on (PS EP12)

> he ə turned the radio on, ʔəm he doesn't want this but [.. h b ʔh] it happens (PS GO11)

On the other hand, participial constructions such as

> I see him walking out of the shop with music coming out of his bag (PS EP11)

are economical uses of language but were much less frequently used by the German pupils, who were more likely to say something like

> I saw dat.. the man was going.. outside. [B ?]
> [He het] He has a little radio [in his ʔəm] in his bag, ent ʔə it was playing (PS GO74)

Furthermore, foreign language learners have often been conditioned by their teaching to answer questions with full sentences, repeating the verb of the question. Such sentences are unnatural and much less likely to be produced by native speakers. This may have affected the relative lengths of the native and non-native versions of the telephone conversation. Compare the following (typical) responses of a German pupil (GP) and an English pupil (EP) to the youth hostel warden's questions (YHW). Pauses, false starts, etc. have been removed as well as some irrelevant text.

YHW: How long would you want to stay?
GP(HS25): We want to stay three nights.
EP (33): Three nights, please.

YHW: How many of you are there?
GP: We are four people.
EP: Four of us.

YHW: How many boys and how many girls?
GP: We are two boys and two girls.
EP: Two girls and two boys.

YHW: How old are you and your friends?
GP: We are between sixteen and seventeen years.
EP: Sixteen or seventeen.

The cognitive factor was probably more important in determining the mean length of the German and English pupils' versions of the picture story. We have already seen (cf. Table 8.1) that the German pupils attempted more of the information content of the picture story than the English pupils. This may be connected with the fact that more of the German pupils were from the upper end of the ability range than the English pupils. Three of the five German groups

were from the more academic Gymnasium, whilst 26 of the English pupils were from comprehensive schools and 8 from a secondary modern school. All these reasons lead me to believe that the shorter mean length of the English pupils' productions does not invalidate the use of length of text as one measure of the grammatical competence of the German pupils.

8.5 SPEECH RATE

Since the advent of more communicative approaches to language teaching, more importance has been attached to fluency than was formerly the case, when accuracy was seen at least as a major aim of foreign language teaching. Brumfit (1979) in fact identified fluency and accuracy as "polarities" in foreign language teaching materials and methods. Whilst fluency is certainly an important factor in assessing oral proficiency in a foreign language, it is very difficult to define (cf. Section 4.2.3.4). Hieke (1985, p.139) proposed a componential approach to the evaluation of fluency, one component being *speech rate*, measured in syllables per second. That measure was used here: the number of syllables in the accepted words was counted and divided by the total time in seconds of the whole text (including hesitations, repetitions, etc. but excluding in the case of the telephone conversation the time the warden was speaking). Obviously, there are naturally fast and naturally slow speakers, irrespective of linguistic proficiency, but pupils whose speech is frequently interrupted by false starts, hesitation sounds, repetitions and self-repairs will still record slower speech rates than pupils whose speech is less disjointed, even though the latter may, seen objectively, speak more slowly. Thus, speech rate could correspond to how fluent the speech seems.

8.5.1 Results

Table 8.7 gives the mean speech rates with standard deviations of both the German pupils (by groups and overall) and the English pupils for both tasks. The results are unremarkable except at one point. That is the exceptionally fast speech rate of the Realschule pupils performing the telephone conversation. Not only are they faster than the Realschule pupils performing the picture story (it should be remembered here that, although they were from the same

type of school and at the same level of learning English, they were different pupils) when all the other groups were slower in the telephone conversation than in the picture story, but also they were faster than all the other German groups on either task and faster even than the English pupils on the telephone conversation. The reason for the general slowing down of the speech rate in the telephone conversation is to be sought in the fact that pupils were asked to note down during the conversation the information they got from the youth hostel warden about prices, times, etc. Perhaps the teacher recording the Realschule pupils (they were drawn from two different classes in the same school and may have had the same teacher), contrary to instructions, paused the tape recorder to give the pupils more time to write down the information. (They did in fact have the most correct answers of any group.) Whatever the reason for it, the mean speech rate for the Realschule pupils is unusually high. If the Realschule pupils are left out of the calculation, the overall mean speech rate of the German pupils for the telephone conversation becomes 1.4 syllables per second, with a standard deviation of 0.6, which is in line with the general trend of the other groups.

Table 8.7: Mean speech rate in syllables per second, by groups and overall

Group	Picture story			Telephone		
	N	Mean	SD	N	Mean	SD
Advanced (GO)	29	2.3	0.8	21	2.0	0.5
Intermed. (GM)	32	1.9	0.7	20	1.6	0.5
Intermed. (RS)	20	1.4	0.4	21	2.6	0.4
Intermed. (HS)	19	1.4	0.5	20	1.0	0.4
Beginners (GU)	26	1.5	0.6	22	1.1	0.4
German (GP)	126	1.8	0.7	104	1.7	0.7
English (EP)	34	3.2	0.7	20	2.1	0.6

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe GP = German pupils
EP = English pupils N = No of pupils
SD = Standard deviation

It must also be said that the timing of the telephone conversation productions was much more difficult than for the picture story, since the time occupied by the warden speaking had to be deducted from the overall time. The telephone conversation figures have to be regarded therefore as less reliable than those for the picture story.

8.6 ERROR

Accuracy has traditionally played a major role in the assessment of foreign language proficiency. That may well be because it was thought that departure from accuracy, or error, was something that could be objectively and therefore reliably identified. That assumption was severely challenged by the findings of an earlier part of the Munich-York project (see Section 5.1) in which letters written in English by German pupils were marked independently by three German teachers of English and five native speakers of English. Their lack of agreement on what the errors were in the letters was great: there was unanimous agreement in only a tiny minority of cases, and even majority agreement between the native speakers was obtained for only half of the "errors" that the individual markers identified (Green & Hecht, 1985).

To identify the errors in the productions used for this study, three native speakers of English, two of British English and one of American English (see Section 6.3), marked the productions independently using both the transcriptions and the tape recordings. They were asked to underline in the transcriptions what they considered to be errors and to indicate by the kind of underlining they used whether they regarded them as slight, medium or grave errors. They were then asked to categorise the errors as errors of grammar, vocabulary, style or pronunciation (see chart in Appendix F1). All the "errors" of the three markers together with their judgments of gravity and category were then entered on an error survey sheet (Appendix F2). The "errors" that had been identified by only one of the markers were then discarded: the remainder were treated as real errors. It was these errors that were used to calculate a percentage *error rate* for each pupil production by dividing the number of errors by the number of accepted words and multiplying by 100. An error rate of 10.0 means in effect that one in ten of the words produced was erroneous.

8.6.1 Results

Table 8.8 gives the means and standard deviations of the error rates on both tasks for the German pupils by groups and overall and for the English pupils.

Table 8.8: Mean error rate, by groups and overall

Group	Picture story			Telephone		
	N	Mean	SD	N	Mean	SD
Advanced (GO)	29	11.5	4.8	21	9.7	2.5
Intermed. (GM)	32	11.0	3.7	20	12.1	2.8
Intermed. (RS)	20	13.4	3.5	21	13.1	5.0
Intermed. (HS)	19	19.5	5.3	20	19.7	6.0
Beginners (GU)	26	16.0	5.2	24	14.6	3.3
German (GP)	126	13.8	5.5	106	13.8	5.2
English (EP)	34	2.9	2.6	20	2.9	1.9

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
RS = Realschule HS = Hauptschule
GU = Gymnasium Unterstufe GP = German pupils
EP = English pupils N = No of pupils
SD = Standard deviation

The figures are based on the total number of undifferentiated errors for each pupil. They are thus a conglomeration of errors of grammar, vocabulary, style and pronunciation. The percentages of these categories for the German pupils overall were:

	grammar	vocab.	style	pron.
picture story	42	29	18	10
telephone	45	21	23	10

For the English pupils, they were:

	grammar	vocab.	style	pron.
picture story	29	15	54	2
telephone	13	22	56	9

The errors are also undifferentiated as to gravity. This is partly because there was only poor agreement between the markers on how they rated the gravity of the same errors and partly because an attempt to establish an error gravity rate for each pupil turned out to have a very high correlation (r=0.9) with the undifferentiated

error rate and did not therefore appear to add anything to the discrimination.

The error rate was the only measure that could be said to take account of the pupils' sociolinguistic performance. The category of style had two sub-components, which corresponded approximately to Canale and Swain's two sub-components of sociolinguistic competence (see Section 2.4). The first was "inappropriate language item", which was related to the sociocultural rules enabling utterances to be related appropriately to sociocultural contexts. A common offence against appropriacy was the kind of language used by German pupils when talking to the youth hostel warden:

> I want to know how much ʔə one night costs ʔə for a person (TC GM22)

This contrasts with an English pupil's more appropriate

> and could I ask how much the price is per night, please? (TC EP28)

The other sub-component, called "discourse organisation" corresponded to Canale and Swain's "discourse rules", which have to do with sentence linking (cohesion) and how groups of utterances are combined to produce communication (coherence). Many of the discourse errors were errors of anaphora, e.g.

> At first a man came in the shop, then he wants that the shop assistant show him a radio. When the shop assistant stand on a ladder, he took the radio and did it in his bag. (PS RS24)

In the above extract (from which the false starts and hesitations have been eliminated), "he" in the second sentence is obviously intended to refer to the man though it could equally well refer to the shop assistant, whilst "the radio" refers to the radio in the first sentence but is meant by the pupil to refer the radio that was stolen. It is this kind of poor discourse organisation that accounts for the large proportion of style errors in the English pupils' productions.

The figures in Table 8.8 correspond to expectations about proficiency in all respects as regards the telephone conversation (GO<GM<GU, GM<RS<HS and EP<GP) and in almost every respect for the picture story (also GM<RS<HS and EP<GP but GM<GO<GU). The exception here is the marginally higher error rate in the picture story for the advanced pupils of the Gymnasium (GO) compared with the intermediate pupils of the same school type (GM). On the whole, the error

rates for the two tasks are very similar. The most striking feature of the results is the very large difference in the error rates of the German pupils and the English pupils.

8.7 CONCLUSION

It might be asked how independent the measures outlined in the preceding sections are. One would expect some degree of relationship between certain of them, for example, between the number of keywords achieved or errors made and the degree of success in transmitting the message content. However, if the scores on different measures are too closely linked, it might be suspected that they are merely alternative measures of the same thing and that any differences in the scores are attributable to errors of measurement rather than to real differences in what is being measured.

One way of establishing the independence of the measures is to examine the extent to which they correlate with each other. Tables 8.9 and 8.10 give the correlation matrices (Pearson r) for the German pupils on the five measures of *content*, *keywords*, *length of text*, *speech rate* and *error rate*. As the measures are not comparable across tasks, the picture story and the telephone conversation are shown separately.

Table 8.9: Correlation matrix of measures of grammatical and sociolinguistic competence for all German pupils, picture story

	Content	Keywords	Text length	Speech rate
Keywords	0.713	*		
Text length	0.593	0.525	*	
Speech rate	0.292	0.420	0.142^{ns}	*
Error rate	-0.363	-0.547	-0.422	-0.366

All values significant at 1% level, unless marked ^{ns}
(N=126. For $p<0.01$, $r>0.230$)

Table 8.10: Correlation matrix of measures of grammatical and sociolinguistic competence for all German pupils, telephone conversation

	Content	Keywords	Text length	Speech rate
Keywords	0.495	*		
Text length	0.514	0.385	*	
Speech rate	0.377	0.516	0.404	*
Error rate	-0.826	-0.596	-0.578	-0.470

All values significant at 1% level
(N=106. For $p<0.01$, $r>0.256$)

All but one of the coefficients in the two matrices are significant at the 1% level, indicating that the measures are not totally independent. The minus values for the error rates are expected: greater success with message content or a higher speech rate, for example, should be associated, if at all, with a lower error rate. It should be remembered, however, that the *coefficient of determination* (the square of the coefficient of correlation), multiplied by 100, gives the percentage of the variance in one variable that is associated with variance in the correlated variable (Guilford & Fruchter, 1978, p.358). Thus, a correlation coefficient of 0.5 means that no more than 25% of the variance in the two variables is associated. There are, however, two sizable correlations with content in the two matrices. Keywords correlates 0.713 with content for the picture story, indicating that 51% of the content variance is associated with the keywords. Error rate correlates -0.826 with content for the telephone conversation, accounting for as much as 68% of the variance. As one might expect, the extent to which pupils make errors has some bearing on how well they get their message across but only to a limited extent. Pupils who are over-concerned with accuracy may avoid parts of the message where they know they would expose themselves to making errors, whereas more adventurous pupils, the "risk-takers", will go for the message and end up getting most of it across, albeit with errors. In a detailed study of pupil errors in a letter-writing task in another part of the Munich-York project, we found that errors of vocabulary were three times more likely to cause a breakdown in communication than errors of grammar (Green & Hecht, 1985, p.88),

and as we have seen in Section 8.6.1, errors of grammar were much more frequent in the pupils' productions than errors of vocabulary.

The general pattern of these two matrices might perhaps be summarised as follows: there is, as expected, a relationship between the measures, but it is not so strong as to suggest that any of them is redundant.

The corresponding correlation matrices for the English pupils are not given here, but they follow closely the pattern of those for the German pupils, with positive correlations ranging from 0.133 to 0.559 and negative correlations from -0.226 to -0.537. The correlations with error rate are also all negative. However, because of the much lower number of pupils (34 for the picture story and 20 for the telephone conversation), much higher coefficients are required for significance at the 1% level (for N=20, r>0.561), and most of the values are not therefore significant. Nevertheless, the fact that the pattern of correlation for the English pupils matches that for the German pupils so closely enhances the validity of the measures used.

CHAPTER NINE

THE RESEARCH QUESTIONS ADDRESSED

9.1 INTRODUCTION

In Chapter Four the broad aim of this study was stated to be

> to increase our knowledge of how school learners use strategies to overcome the problems they encounter in normal communication in a foreign language.

That aim was broken down into five component aims (Section 4.1). Chapter Four further outlined the data and the methods which were to be used in order to achieve these aims and posed nine specific research questions which it was hoped that this procedure might help to answer (Section 4.3).

In Chapter Five the data were extensively described: how they were collected and how they were processed for subsequent analysis.

Chapter Six was devoted to a detailed analysis of how communication strategies were identified in the data and how they were categorised. The individual categories of the taxonomy were elaborated one by one and the communication strategies recorded for them were described both qualitatively and quantitatively.

Chapter Seven reported on the study conducted with supplementary pupils in an attempt to validate the findings from the main data.

Chapter Eight analysed the pupils' productions from the point of view of their grammatical and sociolinguistic performance.

It is the purpose of this chapter to bring together the results of the analyses of strategic performance and grammatical and sociolinguistic performance to see what answers they are able to offer to the research questions.

9.2 RESEARCH QUESTION ONE

What is the overall frequency of communication strategies in the data?

(Section 4.3.1)

Table 9.1 shows that altogether 850 instances of communication strategies were identified in the productions of the German pupils. 792 of them were achievement strategies, i.e. on 93% of those occasions when learners came up against a problem of lack of linguistic resources, they attempted to do something positive about it rather than give up and abandon that part of their intended message.

Table 9.1: Distribution of communication strategies across categories

Type of comm. strategy	Task		Overall
	Picture	Telephone	
Message abandonment	37	21	58
Foreignising	29	6	35
Coinage/loan translation	17	92	109
Language switching	7	9	16
Appeal for help/tolerance	28	29	57
Lexical approximation	235	137	372
Circumlocution	49	121	170
Gram. approx./bypassing	8	25	33
Total without abandonment	373	419	792
Total overall	410	440	850

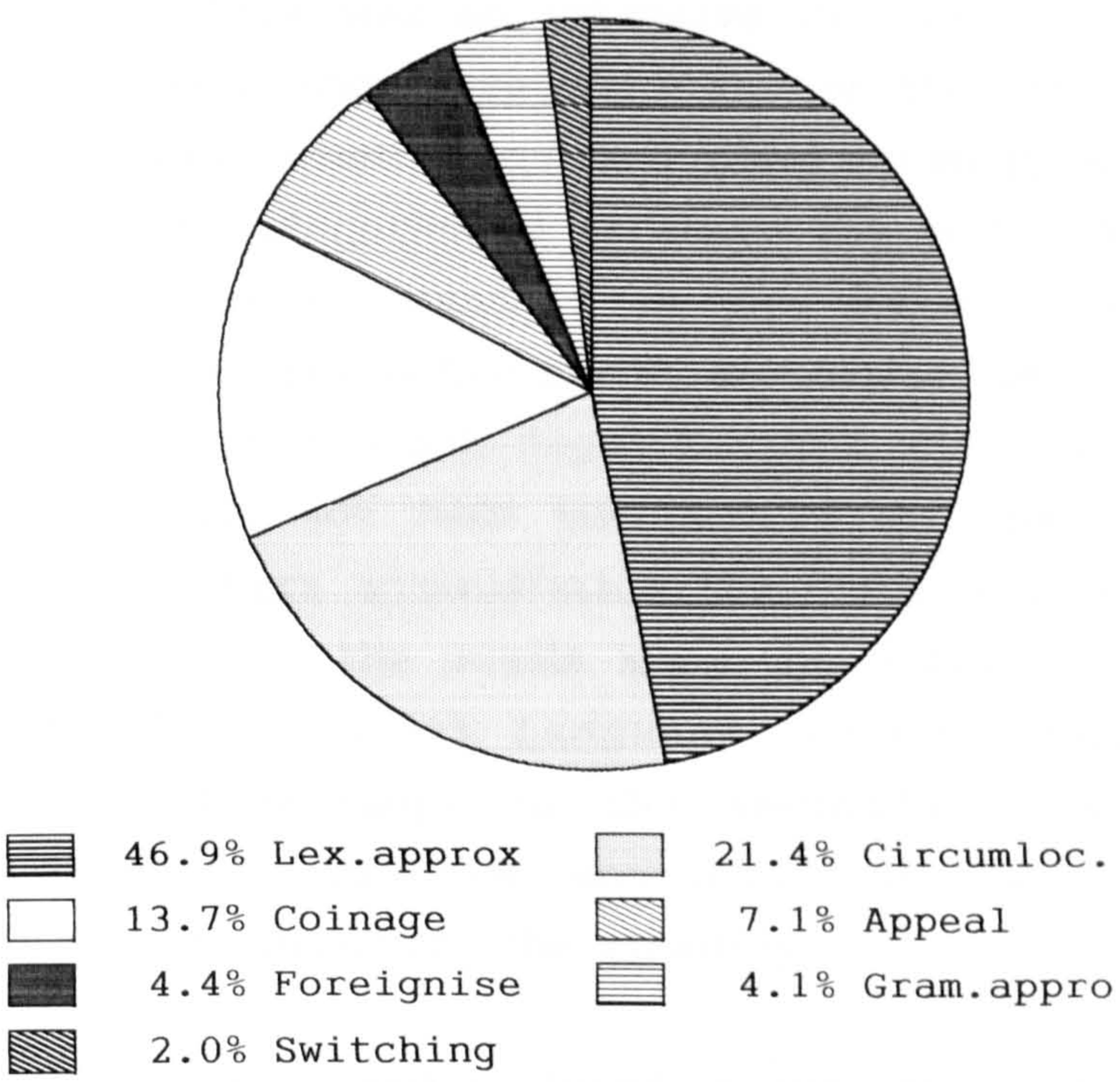
There were few pupils who did not encounter a problem at some point in their production. Of a total of 232 German pupils, 211 or 91% had recourse to at least one communication strategy.

9.3 RESEARCH QUESTION TWO

What is the distribution of communication strategies between the categories of the taxonomy?
(Section 4.3.2)

Table 9.1 also shows that when pupils had recourse to achievement strategies rather than abandoning the message, they made very uneven use of the different kinds of strategies listed in the taxonomy (Section 6.4.2). How uneven that use was is shown more strikingly in the pie graph in Figure 9.1.

Figure 9.1: Pie graph of distribution of achievement strategies between categories



Almost half of the achievement strategies (47%) were strategies of *lexical approximation*. A further 35% was accounted for by strategies of *circumlocution* or *coinage/loan translation*. The remaining four categories of *appeal for help or tolerance*, *foreignising*, *language switching* and *grammatical approximation or bypassing* together represent only 18% of achievement strategies. However, the figures for two of them may be artificially low: appeals for help were ruled out as a successful strategy by the fact that the teachers administering the two tasks had been asked not to give help; grammatical approximation or bypassing was, as has been noted in the section

devoted to it (Section 6.4.9), a difficult strategy to identify and there may be other examples latent in the data. Furthermore, language-switching, here the least frequent category with 2%, might well be a common strategy in certain circumstances, for example, in natural communication, if speakers know that their listener has some knowledge of their native language. At any rate, none of the categories anticipated by the taxonomy turned out to be purely theoretical.

9.4 RESEARCH QUESTION THREE

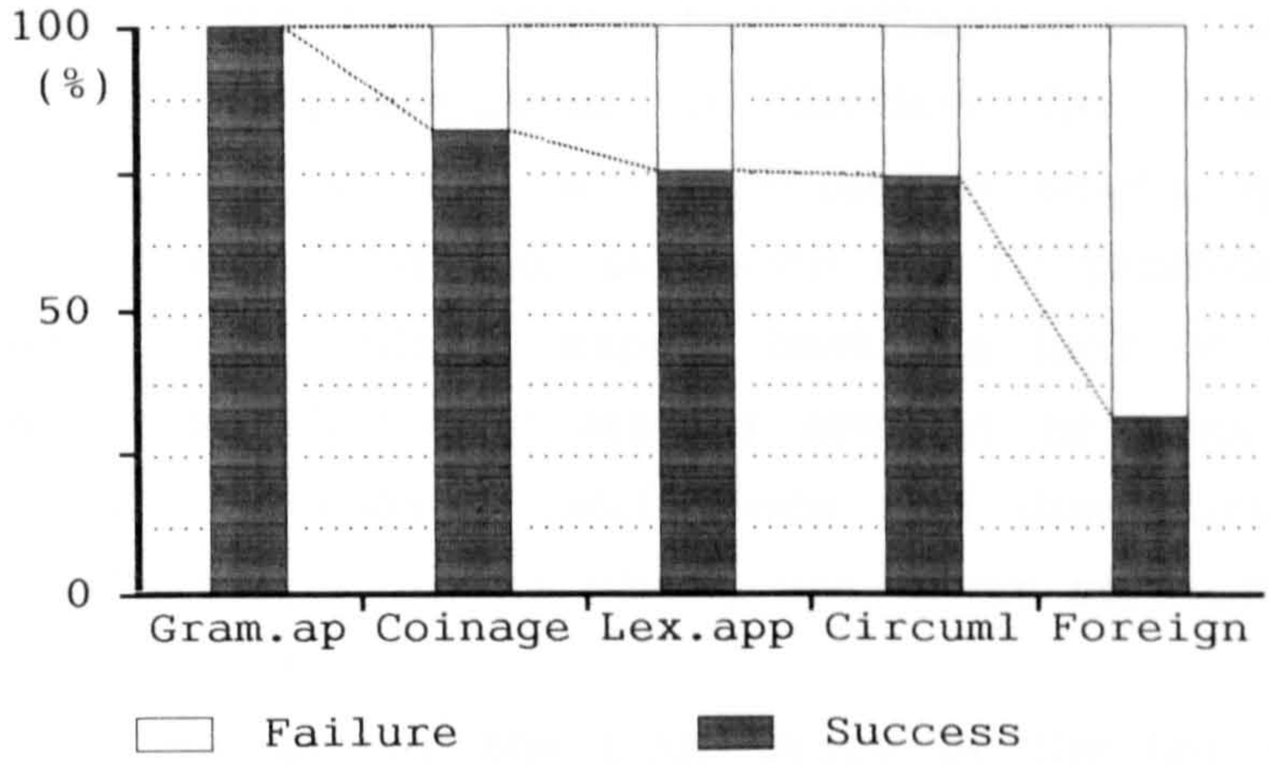
What proportion of communication strategies have a successful outcome?

(Section 4.3.3)

In Section 6.3 there was an extensive discussion of the success or failure of communication strategies and of the criteria used in this study for judging whether an individual strategy was successful or not. For certain categories of strategy the judgment was a blanket one. *Abandonment of message* is by definition an unsuccessful strategy, but certain achievement strategies were also doomed to failure in this study which might in other circumstances have been successful. *Appeal for help* was always an unsuccessful strategy because the teachers administering the tasks had been asked not to help the pupils, and the pupils knew that (though it did not always prevent them from trying). *Language switching*, too, was treated as an unsuccessful strategy on the assumption that most English-speaking listeners would not have a sufficient knowledge of German to enable them to interpret the strategy.

In answering the question posed above, then, it is important to specify the total on which the proportion is based. If that total represents all the strategies recorded whatever their category and including abandonment of message, then 64% of them were successful. However, it is perhaps more meaningful to ask what proportion of achievement strategies were successful. In that case, the answer is 68%. Perhaps fairer still would be to consider as the total only those achievement strategies that had a chance of success, i.e. exclude appeals and language switching. In that case, the proportion of communication strategies with a successful outcome rises to 75%.

Figure 9.2: 100% stacked bar graph of success/failure of different achievement strategies



Gram.ap = Grammatical approximation or bypassing
Coinage = Coinage/loan translation
Lex.app = Lexical approximation
Circuml = Circumlocution
Foreign = Foreignising

Figure 9.2 shows the percentage success rates of the different categories of achievement strategies. Two factors should be borne in mind when considering the 100% success rate achieved by strategies of grammatical approximation. Firstly, as Table 9.1 shows, the overall number of such strategies was small (33). Secondly, and more importantly, they are a somewhat different category of strategy from all the other achievement strategies in that they address grammatical problems where the other strategies are attempts to overcome lack of vocabulary resources. Strategy success is judged in terms of getting the message across and, as we saw in Section 8.7, grammatical deficiencies are far less likely to cause a breakdown in communication than those of vocabulary. Achievement strategies were, on the whole, highly successful, with the exception of foreignising, where only 31% of strategies were successful. Foreignising, however, like grammatical approximation, was a category with few strategies (35).

The task did not have any marked influence on the success rate of the achievement strategies. The overall rates for the picture story and the telephone conversation were exactly the same, and the rates for the separate categories varied little except for circumlocution (picture story 88%, telephone conversation 69%). Task differences for circumlocution were discussed in Section 6.4.8.2.

9.5 RESEARCH QUESTION FOUR

Do more advanced learners use fewer communication strategies?

(Section 4.3.4)

The search for the factors that influence the use of communication strategies was discussed in Section 3.6, where the conclusion reached was that the only relationship emerging with any consistency in research studies was with the L2 proficiency of the learner. It seems reasonable to expect that the lack of linguistic resources which communication strategies attempt to make up for would decrease with increasing proficiency and that more advanced learners should therefore, on the whole, use fewer strategies.

How can one assess the proficiency of the learners in this study? One relatively crude way is to assume that the longer they have been learning L2, the more proficient they are in it. The advanced pupils of the Gymnasium Oberstufe (GO) had learnt English for 8-9 years, the intermediate pupils of the Gymnasium Mittelstufe (GM) for 5-6 years, and the beginners of the Gymnasium Unterstufe (GU) for 2-3 years. As they all belong to the same school type - the more academic Gymnasium (see Section 5.1.1) - they can reasonably be compared with one another. If more advanced learners do indeed use fewer communication strategies, then one would expect GO pupils to use fewer strategies than GM pupils and GM pupils to use fewer strategies than GU pupils. Table 9.2 shows the mean number of strategies recorded for the pupils in each of the groups together with the standard deviation.

Table 9.2: Distribution of mean numbers of strategies according to task and level

Level	Task						Overall		
	Picture			Telephone					
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Advanced (GO)	29	2.8	2.1	21	2.4	1.6	50	2.6	1.9
Intermed. (GM)	32	3.6	2.3	20	3.3	1.8	52	3.5	2.1
Beginners (GU)	26	3.3	2.5	24	6.5	3.8	50	4.8	3.5

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe
GU = Gymnasium Unterstufe N = No of pupils
SD = Standard deviation

The predicted order of GO<GM<GU is found for the numbers of strategies used overall and, in the separate tasks, for the telephone conversation but not for the picture story, where the order is GO<GU<GM. The standard deviations are all ordered GO<GM<GU meaning that not only do pupils in the advanced groups use fewer strategies but also that they differ less from one another in the number of strategies they use. So, for example, individual pupils in the GO group used between 0 and 8 strategies overall, those in the GM group between 0 and 11, and those in the GU group between 0 and 19. The differences between the mean numbers of strategies used by the different pupil groupings are not large but all the overall mean differences are statistically significant (as tested by z-scores) - GO<GM and GM<GU at the 5% level, GO<GU at the 1% level. For the separate tasks, where the group sizes are smaller (see Table 9.2) and the differences need to be larger to be significant in statistical terms, none of the picture story differences reach significance in a t-test, but both the telephone conversation differences involving the GU group - GO<GU and GM<GU - are significant at the 1% level. So, if the length of time spent learning L2 is taken as a measure of proficiency, then, on the whole, the more advanced learners in this study use fewer communication strategies than the less advanced.

However, as has been described in Chapter Eight, it is also possible to judge the proficiency of individual pupils by how well they performed the separate tasks. Five different measures were described - those of *content* (Section 8.2), *keywords* (Section 8.3), *length of text* (Section 8.4), *speech rate* (Section 8.5), and *error* (Section 8.6). It might be expected that the more proficient pupils would know more of the keywords and in consequence have less need of communication strategies, that they would be more fluent and less slowed down in their speech rate by vocabulary problems and the search for strategies to overcome them, and that, in general, they would make fewer errors. The measure of content, of the amount of information transmitted, whilst certainly a measure of proficiency, would probably not relate to the number of strategies used in any straightforward way, since learners could get their message across with or without recourse to strategies. Similarly, whilst learners with larger linguistic resources are in a better position to deal with the linguistic task more fully, certain strategies

like circumlocution, which use more words than the optimum expression, might themselves lengthen the text.

Table 9.3 gives the correlations between the total number of strategies used by pupils and their score on each of the measures of *content*, *keywords*, *length of text*, *speech rate*, and *error*. As the measures for the different tasks are not always comparable (e.g. 10 keywords for the picture story, 20 for the telephone conversation), the data are given separately.

Table 9.3: Pearson correlation coefficients, by task, between numbers of strategies used by pupils and measures of proficiency

Task	Content	Keywords	Length	Speech rate	Error
Picture	0.02	-0.23*	0.17	-0.52**	0.21*
Telephone	-0.43**	-0.70**	-0.34**	-0.65**	0.52**

* = p<0.05 ** = p<0.01

A minus sign in front of a coefficient indicates that, if there is a relationship between the two variables, a larger value on one is associated with a smaller value on the other. Minus values are thus to be expected with keywords and speech rate, and indeed they are found. Positive values are expected for error, and again they are found. As indicated above, it is not clear whether positive or negative values should be associated with content and length of text. Interestingly, for both variables they are positive for picture story and negative for telephone conversation. The two picture story values are small and non-significant, but the telephone conversation values, while modest, are both significant at the 1% level. It could perhaps be argued that the tighter control of content for the telephone conversation means less opportunity for avoidance strategies and a greater need for achievement strategies. As strategies do not always succeed, the frequent strategy user might be somewhat less successful in conveying the message content of the task (the amount of variance accounted for by the relationship is no more than 18%). This might be a plausible explanation, though it would need much more evidence to substantiate it. It is difficult, however, to see why a more frequent use of strategies should relate to a shorter text in a task where content control and a dialogue format

impose fairly narrow limits on length. Once again, the variance involved is small - about 11½%.

The correlations with keywords, speech rate and error are all significant and in all but two cases at the 1% level. The keywords coefficient for the telephone conversation is substantial and indicates that almost half of the variance in the number of strategies used is accounted for by the number of keywords the learners had available. The much smaller value for the picture story (5% only of the variance) may be attributable in part to the greater opportunity the task gave for avoidance.

In summary, the findings of this study substantiate earlier findings that, not surprisingly, there is an inverse relationship between the number of strategies used by learners in completing a task in a foreign language and their general proficiency in the language. However, it should be borne in mind that advanced learners are more likely to be able to devise strategies that result in correct language and that may therefore go unnoticed.

9.6 RESEARCH QUESTION FIVE

Does the group of native speakers of English use fewer communication strategies than the groups of non-native speakers?

(Section 4.3.5)

If, as the preceding section seemed to indicate, increasing proficiency in a foreign language leads to a reduced need for communication strategies, then native speakers of a language, who, on the whole, can be assumed to be more proficient than foreign learners of it, should use even fewer strategies than advanced foreign learners.

Table 9.4: Distribution of mean numbers of strategies used by English and advanced German pupils (group GO) for individual tasks and overall

Group	Task						Overall		
	Picture			Telephone					
	N	Mean	SD	N	Mean	SD	N	Mean	SD
English pupils	34	1.1	1.1	20	0.2	0.5	54	0.7	1.0
German "(GO)	29	2.8	2.1	21	2.4	1.6	50	2.6	1.9

N = No of pupils SD = Standard deviation
GO = Gymnasium Oberstufe (advanced German pupils)

Table 9.4 gives the mean number of communication strategies used by the English pupils in each of the tasks and overall, together with the standard deviation. For comparison, the figures for the most advanced German group (GO) are reproduced from Table 9.2. The differences between the native and non-native groups of pupils are substantial and, not surprisingly, significant at the 1% level. As with the comparison between the different German groups, the more proficient groups not only have lower means but also lower standard deviations. Overall, individual English pupils used between 0 and 4 communication strategies compared with a range of 0-8 for the advanced German group.

9.7 RESEARCH QUESTION SIX

Is the distribution of communication strategies related to the proficiency of the learner?
(Section 4.3.6)

Although communication strategies are brought into play to overcome linguistic deficits, certain of them themselves make demands on learners' linguistic resources. So less proficient learners may not only have a greater need, they may have more limited access to certain kinds of strategies. One would expect, for instance, that they would be forced to abandon their message or appeal for help more often than more advanced learners and that they might fall back more frequently on certain achievement strategies such as those based on their native language, e.g. language switching, foreignising, loan translation. If that were the case, the taxonomy of communication strategies used in this study should reveal different distributions at different levels of proficiency.

Table 9.5: Distribution of communication strategies according to level

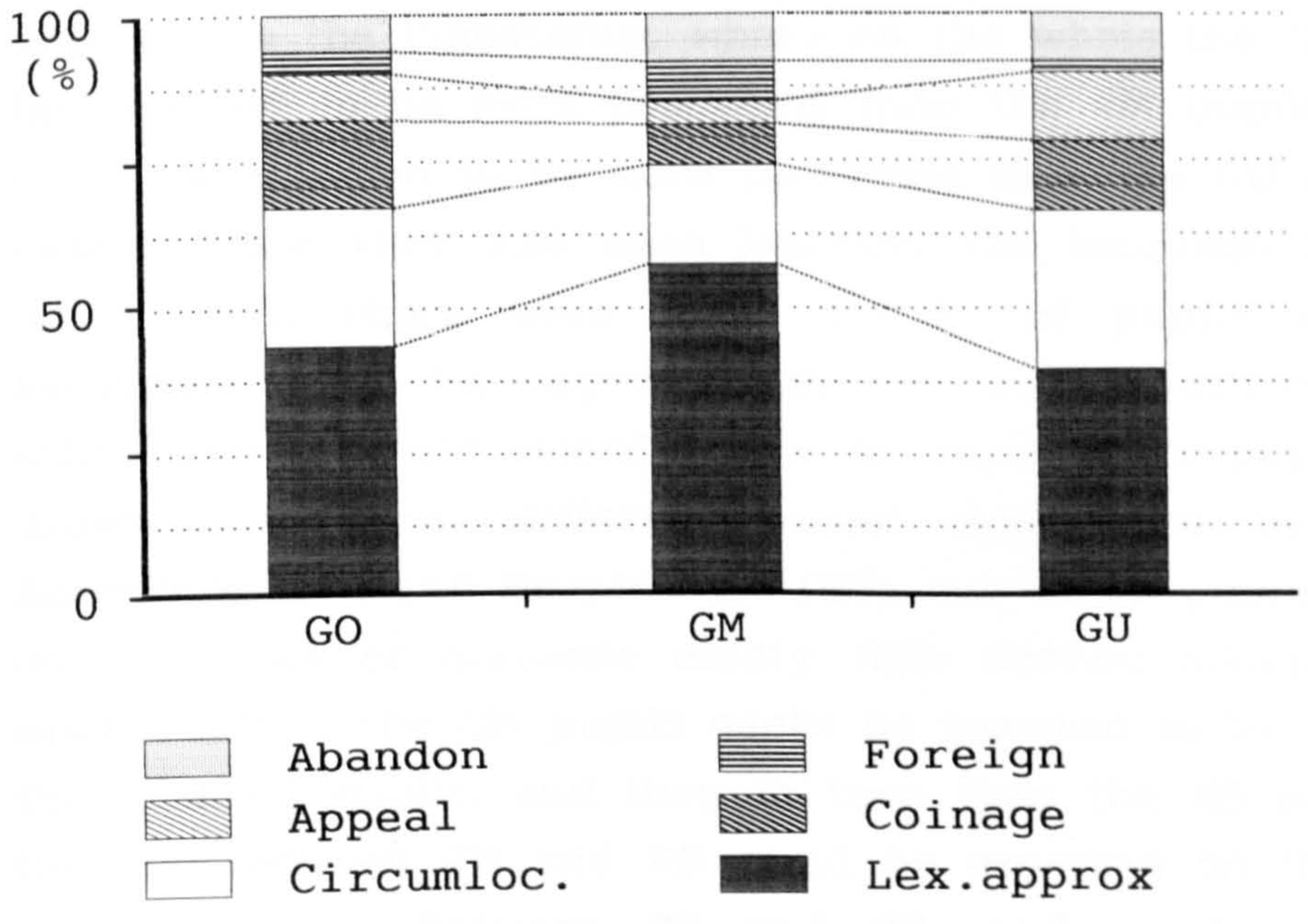
Level	Aband.	For.	Coin.	Switch	Appeal	Lex.a.	Circ.
Adv(GO)	5	6	21	0	11	58	32
Int(GM)	10	12	12	3	8	98	30
Beg(GU)	15	6	30	2	30	94	65
Total	30	24	63	5	49	250	127

GO = Gymnasium Oberstufe
GU = Gymnasium Unterstufe
For. = Foreignising
Switch = Language switching
Lex.a. = Lexical approximation
GM = Gymnasium Mittelstufe
Aband. = Abandonment of message
Coin. = Coinage/loan translation
Appeal = Appeal for help/tolerance
Circ. = Circumlocution

Table 9.5 shows the distributions for the advanced, intermediate and beginners groups of Gymnasium pupils. The strategies of *grammatical approximation* have been omitted from this table: as explained in Section 6.4.9, it is problematic whether or not pre-fabricated patterns should be included in this category, and the decision makes a big difference to the numbers recorded (33 instances with pre-fabricated patterns, 9 without).

A chi-square test performed on the data in Table 9.5 indicates that there is significant unevenness in the distributions ($p<0.01$). Strategy use is therefore affected by proficiency, and not just simply in the overall numbers of strategies, but just how the distribution between categories is affected is not clear. Figure 9.3 displays the same data visually (omitting *language switching*, as the numbers are so small).

Figure 9.3: 100% stacked bar graph of distributions of major categories of communication strategies for advanced pupils (GO), intermediate (GM), and beginners (GU)



It can be seen from Figure 9.3 that the changes in distribution from advanced pupils (GO) through intermediate (GM) to beginners (GU) cannot be interpreted as simply linear, with certain strategies increasing in frequency and others decreasing. The only category to show a linear change is *message abandonment*. All the other categories change in a curvilinear fashion. Thus, *lexical approximation* and

foreignising increase from GO to GM but then decrease from GM to GU, whilst *circumlocution*, *coinage/loan translation* and *appeals for help or tolerance* take the opposite course. Visually, the distribution for the advanced learners (GO) looks very similar to that for the beginners (GU) and, indeed, if the chi-square test is applied to just those two distributions, the result obtained is not significant. The residuals of the chi-square test (Section 6.4.1.2) performed on the data of Table 9.5 show the main contributors to the uneven distribution to have been the intermediate pupils (GM) with an "excess" (i.e. greater number than expected) of *lexical approximation* and *foreignising* strategies and a "shortfall" of strategies of *appeals for help or tolerance*, *coinage/loan translation* and *circumlocution*. However, only the excess of *lexical approximation* strategies is significant ($p<0.01$).

Certain significant differences between the groups of pupils were found when the individual categories of the taxonomy of communication strategies used in this study were discussed in detail in Chapter Six. Those differences cannot be related in any simple way to proficiency since the five groups of German pupils differed along two dimensions. On the one hand, there were the three groups of pupils from the Gymnasium, where on the whole the GO pupils could be expected to be more proficient than the GM pupils, who in turn could be expected to be more proficient than the GU pupils, in each case because they had been learning the language longer. On the other hand, there were three groups of pupils who had been learning English for approximately the same length of time that, in school terms, would classify then as intermediate pupils. They were drawn from three different school types, the Gymnasium (GM), Realschule (RS) and Hauptschule (HS), for which pupils were selected on the basis of academic ability (see Section 5.1.1). Here, though more crudely, the GM pupils might be assumed to be more proficient than the RS pupils, and they in turn than the HS pupils. However, the gap between GM and RS could be expected on the whole to be less than that between RS and HS, and we have seen in the discussion of the different measures of proficiency in Chapter Eight that the RS group in particular did not always fit into the predicted pattern of proficiency. The findings of Chapter Six concerning group differences in the individual categories of the taxonomy are summarised in Table 9.6.

Table 9.6: Group differences found in the individual categories of the taxonomy of communication strategies

Category	General group distribution	Contributing groups	Section reference
Abandonment	* * *	HS+ * * * RS- *	6.4.1.2
Foreignising	n.s.	n.s.	6.4.3.2
Coinage/loan	*	HS+ *	6.4.4.2
Lang.switching	n.s.	n.s.	6.4.5.2
Appeal for help/tolerance	*	RS- * HS+ *	6.4.6.2
Lex. approx.	n.s.	n.s.	6.4.7.6
Circum-locution	* * *	RS- * * * GU+ * * *	6.4.8.2
Gram. approx.	n.s.	n.s.	6.4.9.2

Coinage/loan = Coinage/loan translation
Lex. approx. = Lexical approximation
* = p<0.05
n.s. = not significant
RS = Realschule
+ = excess
Lang. switching = Language switching
Gram. approx. = Grammatical approximation
* * * = p<0.001
HS = Hauptschule
GU = Gymnasium Unterstufe
- = shortfall

The column marked "General group distribution" in Table 9.6 shows whether the distribution of the strategies found for each individual category of the taxonomy was significantly uneven and, if so, at what level of probability. The second column, headed "Contributing groups" indicates, for each significantly uneven distribution, which group or groups contributed significantly to it and, again, at what level of probability. The final column gives the reference to the relevant discussion in Chapter Six.

So far, whilst the proficiency of learners has been found to affect the overall distribution of communication strategies significantly, the nature of the relationship between the two is not apparent. A somewhat clearer picture emerges when the distributions of individual categories of strategies are considered: the least able pupils (HS) display a marked excess of cases of *message abandonment* and the least experienced pupils (GU) a marked excess of cases of

circumlocution. However, here too, there is an inexplicable shortfall of cases shown by the intermediate pupils of the Realschule (RS).

One further aspect of the relationship between proficiency and the distribution of communication strategies remains to be considered. There is a dichotomy in the communication strategies listed in the taxonomy in Section 6.4.2 between those strategies that draw on the resources of the learners' native language - L1-based strategies - and those that make exclusive use of the learners' target language knowledge - L2-based strategies. It was suggested in Section 6.4.4.2. that the influence of L1 is strongest when learners are called upon to perform at too early a stage. It was also the finding of a study of L1 interference, that errors attributable to transfer from L1 declined from beginners to advanced pupils. This study was based on an area of the Munich-York corpus that included altogether 373 pupils of the Gymnasium, at the three levels GO, GM and GU, performing four different tasks - the two tasks of this study and two written tasks (Hecht & Green, 1993b). This suggests that, as learners become more proficient, the frequency with which they use L1-based communication strategies might also decline. Some of the categories in the taxonomy are exclusively L1-based, e.g. *foreignising*, whilst others are exclusively L2-based, e.g. *circumlocution*. Others, however, like *coinage/loan translation*, *appeal for help/tolerance* and *lexical approximation*, can be either L1-based or L2-based.

Table 9.7: Distribution of L1-based communication strategies according to level

Level	Foreign	Loan tr	Switch.	L1 App.	Over-ex	Total
Adv(GO)	6	14	0	5	26	51
Int(GM)	12	10	3	8	48	81
Beg(GU)	6	26	2	30	52	116
Total	24	50	5	43	126	248

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe GU = Gymnasium Unterstufe
Foreign = Foreignising Loan tr = Loan translation Switch. = Language switching
L1 App. = L1-based appeal for help/tolerance Over-ex = Over-extension

Table 9.7 gives the frequency of all the L1-based strategies found in this study at the advanced, intermediate and beginners levels of the Gymnasium. When they are totalled, in the final column of the table, they reveal a clear link with the proficiency of the learners: there

are more than twice as many L1-based strategies at the beginners' than at the advanced level, and the intermediate pupils occupy a middle position in the frequency scale. The significance of this finding is confirmed, not surprisingly, by a chi-square test ($p<0.001$). This is perhaps then the only unequivocal link between learners' proficiency and the distribution of the strategies they use, that beginners make much more frequent use of L1-based strategies than advanced learners.

9.8 RESEARCH QUESTION SEVEN

Are there under- and over-users of communication strategies? Is there any sex difference in the adoption of communication strategies?
(Section 4.3.7)

Most of the learners in this study used at least one communication strategy in their production. Of 232 German learners, there were only 21, or 9%, who used no strategies at all. For the group as a whole, the mean number of strategies recorded was 3.6 with a standard deviation of 2.8 and a range of 0-19. The median was 3. These figures refer to overall strategies and include the strategy of abandoning the message. Of interest here, however, is the use of achievement strategies and whether there are "risk-takers", who are willing to take the risk of failure that the use of communication strategies involves, and on the other hand "risk-avoiders", who would rather avoid a topic than run the risk of failure that attempting to express it might incur. Those two categories of learner might display either much higher or much lower frequency of use of achievement strategies than average learners. If strategies of message abandonment are not counted, then the number of strategy users remains unchanged at 211, since there were no learners whose sole strategy was to abandon the message, but the mean number of strategies becomes 3.3 with a standard deviation of 2.5 and a range of 0-15. The median remains at 3. Those learners whose recorded number of achievement strategies lies more than one standard deviation on either side of the mean might perhaps be characterised as under- or over-users of achievement strategies. If, moreover, such under- and over-users were distributed more or less evenly across the groups of learners, then that might reflect their personality more than their proficiency and the number of problems they had with the language.

By the definition given above, under-users would be those with no strategies at all and over-users those with six or more strategies. Table 9.8 shows how they were distributed across the learner groups.

Table 9.8: Distribution of under- and over-users of achievement strategies across learner groups

Level	GO	GM	RS	HS	GU	Total
Under	7	1	8	3	2	21
Over	4	8	1	10	17	40
Total	11	9	9	13	19	61

GO = Gymnasium Oberstufe GM = Gymnasium Mittelstufe RS = Realschule
HS = Hauptschule GU = Gymnasium Unterstufe Under = Under-users Over = Over-users

A chi-square test applied to this table shows that the distribution is significantly uneven ($p<0.001$), so the idea that over- or under-use of achievement strategies might reflect a willingness or reluctance on the part of learners to take risks must be rejected on the basis of these data.

There is also the possibility that the sex of learners might have an influence on their use of achievement strategies. Girls have often been found to outperform boys in foreign learning in schools, and not only in the UK (see, for example, Carroll, 1975, and Lewis & Massad, 1975). It might be that a part of their success is due to a greater willingness to use achievement strategies to overcome their linguistic deficits. In fact, more achievement strategies were recorded for the girls in this study (mean = 3.5, standard deviation = 2.5) than for the boys (mean = 3.2, standard deviation = 2.6), but the difference is not significant. In contrast, more girls (27) abandon a message once begun than boys (20), but again the difference is not significant.

There is thus no evidence for a link between either learner type or sex of the learner and the use of achievement strategies, based on the data collected from the learners involved in this study.

9.9 RESEARCH QUESTION EIGHT

Is there a relationship between problem types and the frequency of communication strategies?
(Section 4.3.8)

There is an obvious dichotomy in the linguistic problems a foreign language learner may encounter, between grammatical and lexical problems. It was suggested in the above section that, since lexical problems were much more frequently responsible for breakdowns in communication than grammatical problems, communication strategies addressing lexical problems would be much more common than those addressing grammatical problems. We have already seen in Table 9.1 and Figure 9.1 that that was overwhelmingly the case. In the taxonomy of communication strategies, *grammatical approximation or bypassing* was the category with the next smallest number of recorded cases: they accounted for only 4% of communication strategies overall. However, the true figure may be higher: as was discussed in Sections 6.4.9 and 6.4.9.2, grammatical strategies may easily be latent and they may also become compounded with, or mistaken for, lexical strategies.

When it comes to the vast majority of communication strategies, i.e. lexical strategies, it is difficult to discern any consistent link between the type of lexical problem and the kind of strategy adopted to deal with it, especially as other factors may be at play in the choice of strategy, such as the proficiency of the learner. It is by no means uncommon to find the same problem giving rise to a wide range of strategies, e.g., for optimal "briefcase", too general (bag), co-hyponym (suitcase), over-extension (pocket), foreignising (map), and circumlocution (like a bag which children use for school).

Lexical problems may be subdivided into those caused by function words and those caused by content words. Since function words provide the grammatical framework of sentences (they are sometimes called "grammatical words"), some of them occur in every sentence. They are therefore very frequent and seldom present problems as lexis to the foreign learner. Not surprisingly, there were only a dozen such words that gave rise to strategies in this study, e.g. "how", "whether", "while", "per", and they were dealt with by

different strategies such as foreignising, language switching, and over-extension. There were, however, many more prepositions (35), which form a borderline category between function and content words. Prepositions sometimes seem relatively empty of meaning and arbitrarily used, e.g. "at noon", "on Sunday": at other times, they have a much clearer meaning content, e.g. "on the table". The majority of the preposition problems (22) gave rise to strategies of over-extension (e.g. with the train): others produced co-hyponyms (e.g. by foot) or loan translations (to foot).

Over-extension strategies address a group of problems arising out of the complex relationship between words and concepts, which means that there is no one-to-one matching of the two across different languages, even when they are as closely related as English and German. The problem seems to arise most often with verbs: of 193 strategies of over-extension, 127 were concerned with verbs (the remainder were fairly evenly distributed across word classes, with prepositions the next largest class). They were on the whole frequent and, one might assume, easy verbs like "take", "put", "do", "get", "fetch", "bring", verbs with a broad range of meaning, whose concept boundaries do not coincide with those of what might be seen as the corresponding words in German. This is particularly true of their aspect component, relating their use to where the speaker is, e.g. "Bring me that book" but "Take that book to Alice", where in German both verbs would be rendered by *bringen*.

With its 193 recorded cases, over-extension is a major category of strategy in this study. It is the L1-based component of lexical approximation. The other major categories were, firstly, the L2-based components of lexical approximation - *too specific*, *too general* and *co-hyponym* - which together produced 179 strategies. Secondly, there were 170 strategies of circumlocution and, finally, 109 strategies of coinage/loan translation.

The strategies of *coinage/loan translation* were distributed across a wide spectrum of word classes. A large number of them (44) were verbs, but that is a misleading figure, since 34 of the instances were attempts to express the single optimal meaning "Did you get that?" (see Sections 6.4.4.1-2). Aside from that imbalance, coinage/loan translation impinged mainly on nouns, with 31 cases.

The 170 cases of *circumlocution* also showed an imbalance between the word classes, with verbs dominating (123 cases), most of them (114) in the telephone conversation. As has already been pointed out in the discussion of circumlocution in Section 6.4.8.2, this task forced pupils to express four verbal concepts that they found very difficult (stay [in a hostel], include, take [time], book [someone] in). It is probably not the case that circumlocution lends itself better to getting round difficulties with verbs: in the picture story task, the cases were distributed more evenly between nouns, verbs, adverbs, adjectives and phrases like "have one's back turned"; nouns predominated.

The 179 cases of *L2-based lexical approximation* are heavily biased towards nouns (103 cases), though verbs too are well represented (54 cases). This is in striking contrast to L1-based lexical approximation, where verbs predominate. Perhaps the concrete objects called for by the picture story, where most of the noun approximations were recorded, are more easily delineated concepts than abstract verbs, so that there is less divergence between the languages in the word-concept relationship. When a learner uses a word like "jeans" for optimal "trousers", it is not because the overlap between those two concepts is different in German and English, but because the word "trousers" is not available and is therefore replaced by a word sharing most of the semantic features of "trousers". On the other hand, when the learner produces "take" for optimal "put", the problem may be that both English words are available and known to share features that are encapsulated in a single German word, and the difficulty is to select the right one. Of course, it is certainly not the case that the problem of overlapping concepts does not arise with nouns: it frequently does and sometimes with the naming of concrete objects, like "pocket" and "bag" (German *Tasche*) in the picture story.

Interestingly, one important class of content word is very underrepresented in the data: there were only 9 strategies produced to cope with unavailable optimal adjectives, six of which were L1-based strategies of lexical approximation. This may be because adjectives can easily be omitted unless they are essential: that was really only the case in describing the thief in the picture story, which is where all the instances were found.

9.10 RESEARCH QUESTION NINE

Are there different frequencies and distributions of communication strategies in the data elicited by the different tasks?

(Section 4.3.9)

As was noted in Section 3.6, "the most striking result obtained in the Nijmegen Project" was "the enormous difference in the subjects' use of CpS in tasks I, III and IV" (Poulisse at al., 1990, p.194). A number of times in the detailed discussion in Chapter Six of the individual categories of strategy used in this study, differences have been noted in the frequencies of strategies elicited by the picture story and the telephone conversation tasks. These are summarised in Table 9.9.

Table 9.9: Task differences found in the individual categories of the taxonomy of communication strategies

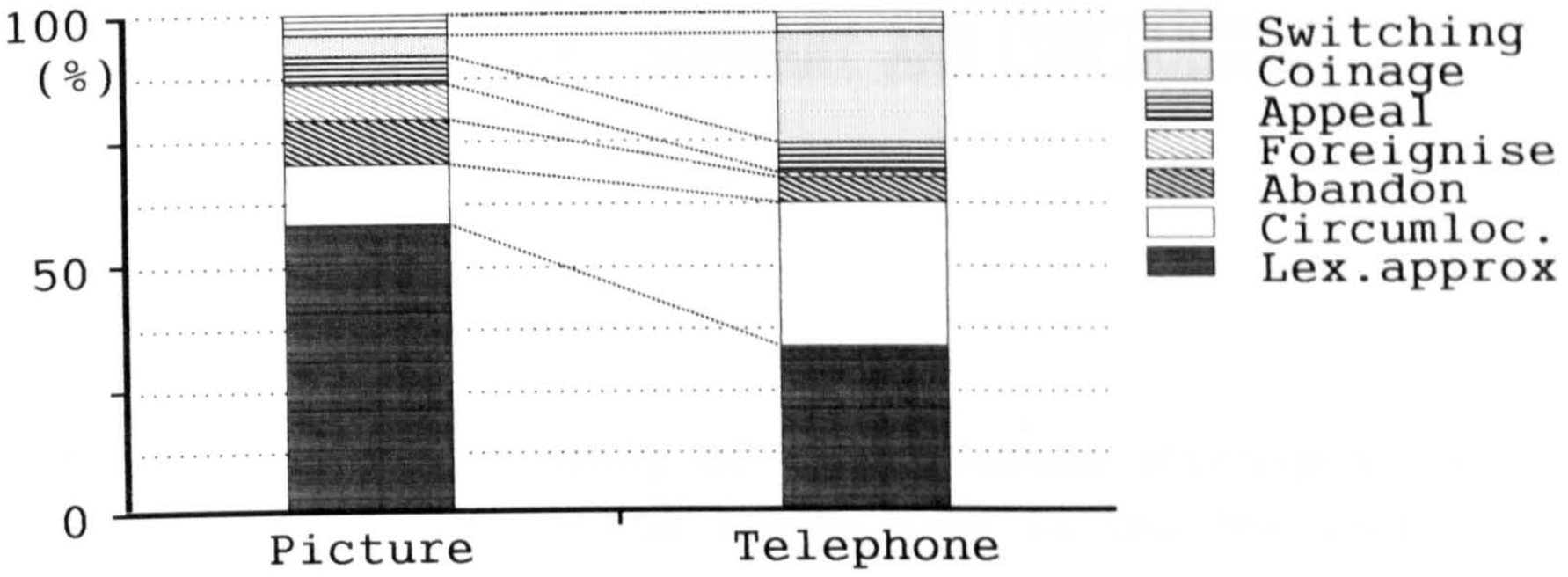
Category	Task difference	Significance p<	Section reference
Abandonment	n.s.	-	6.4.1.2
Foreignising	PS +	0.001	6.4.3.2
Coinage/loan translation	TC +	Tokens 0.001 Types 0.01	6.4.4.2
Lang.switching	n.s.	-	6.4.5.2
Appeal	n.s.	-	6.4.6.2
Lexical approx Overall L1-based L2-based	 PS + PS + PS +	 0.001 0.01 0.05	6.4.7.6
Circumlocution	TC +	0.001	6.4.8.2
Gram. approx.	?	-	6.4.9.2

Coinage/loan = Coinage/loan translation
Lang. switching = Language switching
Lexical approx = Lexical approximation
Gram. approx. = Grammatical approximation
PS = Picture story
TC = Telephone conversation
n.s. = not significant
+ = excess of strategies

There are clear-cut differences between the tasks for the three largest categories of strategy - *lexical approximation*, *circumlocution* and *coinage/loan translation*. Possible reasons for these differences have been discussed in the relevant sections of Chapter Six (noted in the table). The next two largest categories - *message abandonment* and *appeal for help or tolerance* - reveal no task differences. This is perhaps not surprising: one might expect individual learner characteristics, such as proficiency or the will to communicate, to influence the frequency of abandonment or appeal more than the nature of the task. Only a relatively small number of cases of *foreignising* were recorded, but there was nevertheless a very large difference in their distribution across the tasks. *Grammatical approximation or bypassing*, finally, is a special case. As was discussed in Section 6.4.9, it is debatable whether pre-fabricated patterns should be included in the category or not, and the decision makes a big difference to task distribution. If they are included, then, since they all occurred in the telephone conversation, that task would have a significant majority of the strategies. If they are not, then only nine cases of grammatical approximation remain and they are all but one found in the picture story. This reversal is in fact not surprising. The picture story called for grammatically more complex language, with its need for complex sentences of the kind "Whilst I was ... , he must have ...". The telephone conversation, on the other hand, had generally simple grammatical structures, but it invited several constructions of the kind "I would like to know ... ", where learners might continue with the more familiar patterns of direct speech like "what does it cost?" instead of the required indirect speech "what it costs". An additional problem in deciding whether to include the pre-fabricated patterns was the fact that, in several cases, a native speaker might well have chosen the more vivid direct speech.

The task differences found for the individual categories suggest that the overall distributions of strategies may differ between the picture story and the telephone conversation. The data of Table 9.1 are shown visually in Figure 9.4, excluding the figures for grammatical approximation.

Figure 9.4: 100% stacked bar graph of distributions of categories of communication strategies for picture story and telephone conversation



The picture is very different for the two tasks and that difference is shown by a chi-square test to be highly significant ($p<0.001$). The significant contributors to the uneven distribution are those found in Table 9.9, i.e. an excess of foreignising and lexical approximation strategies in the picture story and an excess of coinage/loan translation and circumlocution strategies in the telephone conversation. Whilst explanations for these differences have been suggested for the individual categories in Chapter Six, there is no obvious overall explanation. It is not, at any rate, a function of whether the strategies are L1- or L2-based: a chi-square test of the task distribution along those lines is far from reaching significance.

CHAPTER TEN

FINAL SUMMARY AND CONCLUSIONS

10.1 PREAMBLE

My interest in the study of communication strategies arose from my personal and professional involvement in the teaching and learning of foreign languages in school. It seemed to me that school learners formed a huge constituency that had been under-represented in language learning research since the decline in comparative method studies and the rise of so-called second language acquisition research. There were a number of good reasons for this, some practical, some more theoretical. On the practical side, those with the time, and indeed the obligation, to conduct such research were applied linguists in institutions of higher education who had much easier access to adult than to school learners. On the theoretical side, their interest in exploring the relationship between first and second language acquisition made it natural to seek out for study second language learners in a similar situation to first language learners, i.e. surrounded by speakers of the target language and using the target language to satisfy their everyday needs - a situation very different from that of school language learners.

The editors of Research in the Language Classroom (Brumfit & Mitchell, 1990) were led to declare that it was "the most neglected area of research" (p.6). Within that classroom setting, I felt that the shift that had taken place in recent years, under the banner of "communicative language teaching", from the traditional focus on medium to a greater concern for message, had still not gone very far in the direction of helping the learner to overcome imbalances between available medium and desired message. This research then set out to discover what use school learners were already making of communication strategies when called upon to use their linguistic resources in simulated natural communication.

10.2 EVALUATION OF THE RESEARCH METHOD

Previous research had largely made use of learner performances elicited specifically for the study of communication strategies. Even the most thorough empirical study to date, the Nijmegen project (Poulisse et al, 1990), in the most natural of its four tasks, the oral interview, included certain topics like gardening and cooking "because they require the use of particular domains of language with which the subjects were expected to be unfamiliar and which would consequently force them to use many CpS" (p.83). The interviewer, moreover, "rapidly developed a persistent questioning technique which forced subjects to use CpS" (p.82).

One claim to originality of this study was that no attempt whatsoever was made to elicit communication strategies from the learners. If they used them, they did so entirely spontaneously in the performance of tasks devised to study their overall communicative competence. The risk taken with this approach was that the learners would not make sufficient use of communication strategies to provide enough data for study. In practice, less than one learner in ten used no strategies, and whilst the median number of strategies per learner was only three, the use of a total of 232 German learners yielded a solid body of strategies for study. The advantage of the approach was that it provided information about learners' use of communication strategies that can more readily be extrapolated to school learners in general.

The other reason for the fact that most empirical studies have required learners to convey unfamiliar or difficult concepts is that they wished to exercise control over the meaning that the learners are asked to convey. In this study, the use of picture cues and the flow chart instructions, supplemented by information from native language performances by both German and English peer learners, meant that there was seldom doubt about a speaker's intention. The belief, expressed in Section 3.5, "that it is possible to achieve a reasonable balance between the claims of naturalness and control" has, I believe, been borne out.

The use of the two sets of native language performances proved a valuable adjunct to the target language performances not just for evaluating the speaker's optimal meaning but also for separating

aspects of learner performance attributable to linguistic deficits from those concerned with perception of the task. For example, *topic avoidance* was not included as a category in this study. It would have been all too easy, without the native speaker evidence, to assume that learners who did not mention certain topics when they were apparently clearly signalled by the picture cues, were avoiding them because they did not have the command of language needed to express them. Sometimes, they actually were avoiding topics for linguistic reasons, as the substudy with the supplementary pupils revealed, but only the learners themselves could confirm that. It was a drawback of the main study that there was no opportunity to invite learners to retrospect on their performances.

A further drawback of the way this study was conducted was the number of people it necessarily involved in addition to the subjects and the researcher. Firstly, for each group of 25-30 pupils a school teacher was needed who was willing not only to recruit the pupils but also to sacrifice teaching/learning time to obtaining the recorded performances. Secondly, a great deal of the evaluation of the performances required the judgment of two or more people.

10.3 SUMMARY OF RESEARCH FINDINGS

In Chapter Nine, the research aim was restated and the research data were related to the research questions. Briefly summarised, the findings were:

1. There were few learners who did not make spontaneous use of communication strategies to overcome problems in their performances arising from linguistic deficits and none whose sole response to them was to give up and abandon the message.

2. Although overall the learners used a wide range of communication strategies, 82% of the strategies belonged to three categories - *lexical approximation* (almost half), *circumlocution* and *coinage/loan translation*.

3. Three quarters of the strategies they used were judged successful.

4. With increasing proficiency, learners' need of communication strategies, not surprisingly, decreased, but at all school levels it remained well above that of peer native speakers.

5. Though advanced learners still needed communication strategies, they made much less frequent use of strategies that drew on the resources of their native language and more frequent use of those drawing exclusively on the target language.

6. It was not possible from the data of this study to identify different learner types as regards their willingness or reluctance to employ communication strategies: the distribution of both high and low frequency strategy users was linked to proficiency rather than to any hypothetical personality factor (or the sex of the learner).

7. Two differences emerged in the kind of problems addressed by different categories of achievement strategy, but they were not clear-cut. Within the category of *lexical approximation*, the instances of L2-based strategies (*too specific*, *too general* and *co-hyponym*) arose mainly from problems caused by nouns, whereas instances of L1-based strategies (*over-extension*) were attributable more to verb problems.

8. The distribution of communication strategies differed for the two tasks, revealing in particular proportionally more instances of *lexical approximations* occurring in the descriptive picture story task and more instances of *circumlocution* in the negotiating task of the telephone conversation.

10.4 FURTHER RESEARCH

The principal drawback of this study has undoubtedly been the absence of true interaction between the learner and another speaker, which, as we have seen, excluded a valuable area of strategy use from investigation, namely co-operative strategies in which the speaker negotiates the intended meaning with an interlocutor. This a fruitful area for further research.

It would be valuable to investigate how the strategies learners had recourse to in performing these tasks would be affected by their being given the opportunity for genuine interaction with a native

speaker of the target language, preferably one who did not know German, and furthermore whether and by how much their performance would be improved. It would be relatively simple to substitute a live speaker for the recorded voice of the youth hostel warden in the telephone conversation. In the picture story, the learner might be given the role of a German visitor to England who happened to be in the shop when the incident occurred and was asked to give a statement to the policeman, who in this case would be the interlocutor. This would be logistically more demanding than the present study, especially if an attempt to invite immediate retrospection by the learner was built in. For that reason, fewer subjects would of necessity have to be employed.

An interesting piece of classroom research would be to compare the strategic and overall performance of parallel groups of learners, one taught without any special emphasis on communication strategies, the other following a programme that included both consciousness-raising and practice of resource expansion (see below). This would hopefully at last lend some empirical support to one or other side of a debate that has thus far remained theoretical.

At a fundamental level, little is as yet known about what it is that leads to the use of one kind of strategy rather than another. We have seen that learner proficiency, problem type and task differences all have an influence, and one suspects that personality factors are involved, too. Other possible factors are the perceived relationship with an interlocutor, time constraints, and the point in the speech production process at which a problem is first encountered - whether at the planning stage or the execution stage.

10.5 IMPLICATIONS OF THE FINDINGS FOR LANGUAGE TEACHING

Opinions have been sharply divided about the place of communication strategies in language teaching, ranging from strong support for both sensitising learners to communication strategies and practising their use in the classroom to a totally non-interventionist policy based on the position that learners quite naturally use communication strategies (see discussion in Section 3.7).

This research certainly supports the view that foreign language learners spontaneously use communication strategies and use them

successfully. However, the position that the strategies can be left to take care of themselves is akin to the extreme position that the grammar of the target language can be left to unconscious acquisition, restricting the role of the classroom to providing comprehensible input and the opportunity for meaningful interaction in the target language. That is not a position shared by the majority of language teachers, who continue to believe that the acquisition of grammatical competence can be facilitated both by consciousness-raising and by practice. Many of those teachers, however, fail to apply the same belief to the strategic component of communicative competence that they apply to the grammatical component. That is perhaps more the result of a lack of awareness than of a conscious rejection of teaching about communication strategies. So there is a need initially perhaps for consciousness-raising among teachers about strategic competence, through policy statements, initial and in-service training, and published teaching materials.

In the classroom, there is scope first of all for making learners aware of communication strategies and a need perhaps for changing their attitude towards them. The kind of points that could usefully be made are:

1. Communication strategies are a natural part of language use and we draw on them continually in our own language.

2. They are an invaluable aid to the foreign language learner because they succeed more often than not in compensating for gaps in the learner's knowledge.

3. Using a communication strategy to overcome a linguistic deficit is not an admission of failure but an achievement. All foreign language learners have deficits in their knowledge: the really successful learners are those who maximise the resources they have at their disposal.

4. Communication strategies often lead to learning by eliciting an unknown target language word from an interlocutor.

5. There is an important difference between native and non-native strategic behaviour when problems arise. Native speakers fill thinking pauses with floor-holding gambits like "sort/kind of ...", "you know ...", "what do you call it?".

In addition to being made generally aware of communication strategies, learners could have their attention drawn specifically to the three kinds of strategies that were both highly frequent and highly successful in this study, namely *lexical approximation*, *circumlocution* and *coinage/loan translation*.

All of the above is concerned with consciousness-raising. It is also possible to practise using communication strategies in the classroom, and there are two ways in which that might occur. The first is by devising exercises aimed specifically at eliciting communication strategies, e.g.

> You're staying with an English family and want to use your hairdryer. You cannot find a *Steckdose* in the bathroom. Likewise you wonder if the German *Stecker* is different from an English one. Suppose you don't know what to say for the words printed in German. What would you say to your English host? Don't give up, use other English words to get the meaning across.
> (Hecht & Green, 1991a, p.144)
> (*Steckdose* = socket, *Stecker* = plug)

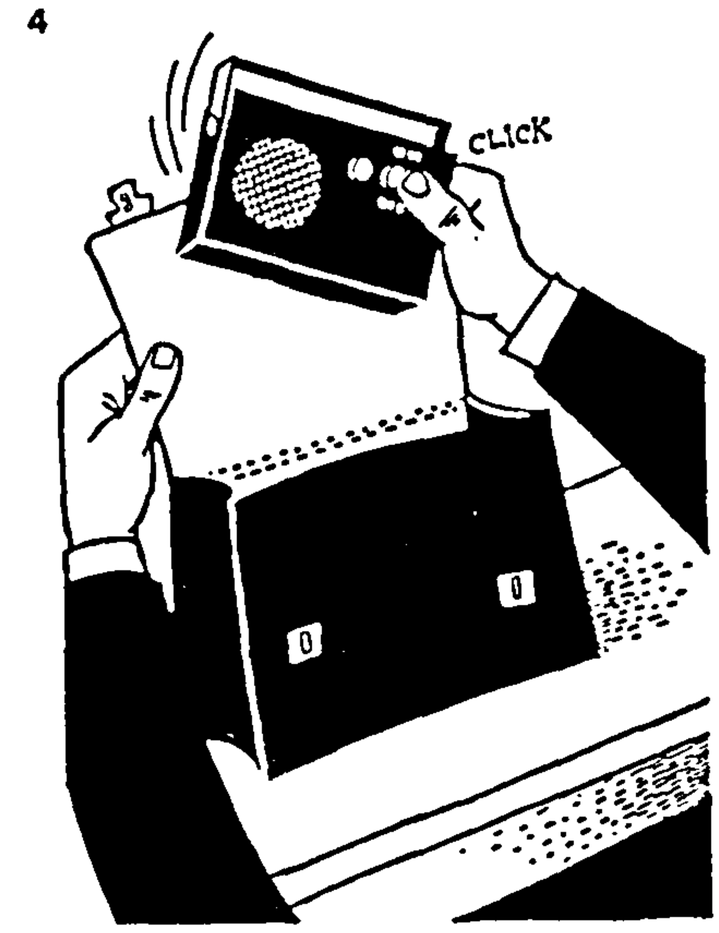
The other approach is to allow communication strategies to arise in the natural course of performing tasks like those set in this study, stressing to learners, however, the need to get the message across even if all the vocabulary is not available. This allows the use of communication strategies to be matched to individual needs and puts them into a broader linguistic context. It also has the advantage from the teacher's point of view of not requiring the special preparation and ingenuity that the first kind of exercise needs. In both cases, the effectiveness of the strategies that have arisen can be discussed with the class in a postmortem.

In the introduction to this study, I expressed the hope that it might be able to offer something of relevance to learners in school classrooms. Perhaps its main message is that they can and do use communication strategies successfully though not as extensively or efficiently as they might. The majority of learners are probably not very conscious of communication strategies but can readily accept their value when they are made aware of their potential, though the more ambitious learners may need to be persuaded. They might see

strategies as second-best and be resistant to employing them, preferring even to avoid a topic rather than run the risk of producing something inadequate.

All learners, and probably most teachers, need to be convinced that successful language learning is not solely a matter of developing grammatical (including phonological and lexical) and sociolinguistic competence. It is also learning that successful communicators make the optimal use of their linguistic resources by developing strategic competence.

APPENDIX A: Picture story cues



From Heaton, 1966, pp.47-8

Telephone call to York Youth Hostel

You are telephoning from Bristol to York Youth Hostel to make a booking for you and your friends. The part of the warden is recorded on tape. What you have to say is shown below.

2. Say "Good morning" and that you are ringing from Bristol, and would like to know if you and your friends can book in at the Hostel in York; you are planning to arrive in York tomorrow evening.

4. Say that you want to stay for three nights.

6. Say that there are four of you.

8. Say that you are two girls and two boys and ask what the price is per person for a night.

10. Say that you are all 16 or 17 years old.

12. Ask if the price includes breakfast.

14. Ask if you can cook your own evening meal.

16. Ask what time the Hostel closes.

18. Say that you are coming by rail and ask how to get from the station to the YouthHostel.

20. Ask how long it takes to walk.

22. Ask the warden if he can book your group in for three nights from tomorrow evening.

24. Say your name.

26. Do so and ask if he's got that alright.

28. Say "Goodbye".

APPENDIX B2: Record sheet for information in telephone conversation

During the call, note down the appropriate figures in the boxes below.

a) Price per night's stay if you are between 16 and 20.

b) Price for breakfast

Price for packed lunch

c) What is the latest time for checking in?

d) Which bus goes to the youth hostel?

APPENDIX B3: Text of warden's part in telephone conversation

Booking in at a Youth Hostel

Corrected & timed text of Warden's part

(Noise of pay-on-connection coinbox telephone)

Warden

---

1. York Youth Hostel.

3. Yes, that's all right. How long would you want to stay?

5. Three nights - that's from tomorrow until Friday. How many of you are there?

7. How many boys and how many girls?

9. Well, it depends on your age. How old are you and your friends?

11. Ah, in that case you're all in the junior range, and it's £2.65 a night.

13. No, meals are extra. Breakfast is £1.35, supper is £1.70, and you can have a packed lunch for 90p.

15. Yes, you can cook all your own meals if you want to.

17. We close at 11, but you have to check in by 10.30 at the latest, please.

19. Well, you can walk along the river, or you can take a number 17 bus to Clifton Green.

21. It takes quarter of an hour, twenty minutes.

23. Yes, all right. That's two boys and two girls for three nights from tomorrow. Can I have your name, please?

25. Could you spell that, please?

27. Yes, I've got that, thank you. We'll see you tomorrow, then. Goodbye.

89 secs. from "York Youth Hostel" to Warden's "Goodbye".
182 words (£1.35 = one pound thirty-five = 4 words; 90p = 2 words)
219 syllables

This morning at ten o'clock, a men entered my shop. He:.. ʔə wanted to take a look at a radio, [there was: ʔə pa ʔə] that was standing on a:.. ʔə wall rack. While I was: ʔə climbing up a ladder [to sh] to: get down the radio and to show it to him, he: took another radio, which I [w] didn't realise at this moment, and put it into his pocket. Den he left de shop, ʔəm showing no more interest in the other radio. But when he left the shop, the stolen radio began to play, [inside his pocket] inside his bag, I'm sorry, and so: ʔəm I realised.. that he has stolen it. ʔəm He: ran out of the shop with the stolen radio, playing inside his bag, and, well, you, officer, saw him and realised ə what the situation was about, and.. took him. [*Seh ich doch richtig, oder?*]

66 secs. to "him."
130 accepted words
178 accepted syllables in RP
9 hesitation sounds
9 non-accepted words
20 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ sometimes [ɛ̝] but mostly [æ] - <u>much</u> better than usual!
/ð/ twice [d]
Perhaps slight SBU tendency in diphthongs (e.g. /eɪ/ = [əi̯]).

Pronunciation near-native.
Most weak forms correct - of 21 possible (non-emphatic, non-hesitant) weak forms, 16 are right, 5 wrong (roughly the same percentage as the British pupils).
One correct strong form of "a" before hesitation: "a [eɪ].. wall rack" (the only one from a German pupil).

Well, half an hour ago, ʔarm a man was coming [into my..] into my shop and asked for a m tape recorder which stood ʔəm [on a board] on a high board [and] so that I had to climb up a {letter / ladder} [and ʔə] to: put it down.. from the board, and..[on] on a.. table ʔə.. was standing ʔəm.. a radio and while I was ʔə.. putting [the] the tape recorder down, ʔəm [I had to.. ʔə..] [I had to show to...] || ʔəm no [he:] he only saw [my] my bag and [I] I couldn't see [what he] what he did, and he ʔəm put a m radio which was standing on the table [in] in his m pocket, and.. ʔəm [as he] as he wanted [to.. ʔə] to put it into his: pocket he switched on the radio so that.. you could hear music, and he wanted to go out [of the] of the shop ʔəʔ with the radio in his pocket, [and.. ʔə] but [because the] because [of the] of the music [I ʔm... ʔə..] I ʔə.. saw him [and] and ʔəʔ I saw him getting out of my shop and ʔəʔ ran after him and.. cried ʔə for the police ʔəm and a policeman came [and.. ʔəm.. and catched] and caught him.

ʔə.. Well, ʔə the man was about thirty years old and wore a black hat [and a black.. ʔəm] [ʔə *Was heißt "Anzug"?* (həhəʔ)] [and.. a black.. hoʔ ʔəm..] [*na, ich wei nich*] and.. [he..] he had ʔə eyes like Chínese and.. ʔə he smoked a cigarette. [And he had ʔəm..] And [his] his pocket was black and looked [like] like a p bag which children ʔə use for school.

187.0 secs.

193 accepted words

236 accepted syllables in RP

33 hesitation sounds (+ 1 polysyllabic laugh)

7 German words

8 German syllables

50 non-accepted English words

85 non-accepted English syllables inc. hesitation sounds, excl. laugh

Yesterday a man came into my shop. I ask him.. ʔəm "What can I do for yòu?" [Sh mã̃ ʔə] The man faced to me that he want-ted a radio, and shows me the radio. ʔʔm The radio.. standed upstairs.. of.. me, and I put on a {ladder / letter} and want to: show the man the radio. [In the] In this time the man.. put [a radi] a other radio [in his {back / bag} ..] in his {back / bag}, [and the] and sayes to me ʔəm "Goodbye, I wantted to go." But the radio in his back began to play, and I {hurt / heard} the radio. I m cry "Please stop, mister, you have stolen my radio, you didn't {pay / buy} for it." The man [is running..] was running out of my shop, and the radio [is play] was playing. [I'm running aft] I was running after hìm, [and the] and on the street a policeman [sayes] standed and [s] [sought] {set / said} to the man "Please stop and pay the radio, which you have stolen".

99 secs.

141 accepted words

183 accepted syllables in RP

5 hesitation sounds

23 non-accepted words

31 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [e]

/ə/ = mostly [ɐ̯]

/w/ sometimes [ʋ]

no linking "r"

final voiced stops fortis

no weak forms except "the" and "a"

monotonous "listing" intonation, plus some wrongly-placed falling-tone stresses

About half an hour ago, there was a man [into my:] ʔəm into my shop, and [w ʔə:] want to see an: radio, an: portáble radio. He shows me ʔəm an radio [on my:] [on my] on a cupboard in my room, and I ʔəm take him [f:ʔə] to him [from the roo ʔə] from the cupboard. [The man ʔem] The man was ʔəm [one meʔ] one mettre and.. eighty big; he had ʔe dark {here / hair} and a cigarette, and his head was only black, and [he had ʔe] he has a {back / bag} with him.. mhm.. yes, with a {back / bag} {is / with} him. [ʔə The ʔə:] The mán tooks one radio [on my:] on my table, into his {back / bag} and comes [on the:] on.. m.. and put in into his ʔə:.. bag. Then he left ʔe: my room; the music ʔə: wants to begin to play, [and on the:] and ʔə [when the mon] when the man was on the street, the music plays only loud, [and] [and I ʔə ran to him..(7 secs.).. ɻ..(23 secs.)...] and I ran ʔə:.. behind the man, and in front of the man there was a policeman, [and stopped the:] and stopped the man.

125 secs., incl. 1 pause of 7 secs. and 1 of 23 secs.

140 accepted words

170 accepted syllables in RP

20 hesitation sounds

37 non-accepted words

58 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [e]

/ɚ:/ = variously [d], [ɖ], or [ə]

insufficient vowel reduction; no weak forms except "the" and "a"

final voiced consonants fortis; no allophonic vowel lengthening

About half an hour ago, a {main / man} came in my shop.. [He:˙ m̥ hed..] He: wa:s::.. [*is guat so?*] wearing.. a.. m̥ grey head, a [gr] grey [blea] blouser, [and a grey] and grey [trouser] trousers*. A white shirt.. and a tie. He smiled, a:nd showed me a cásset recorder**.. I: thoot.. he wants buy it.. and looked at m̥: [t] it of course. But the {main / man} m̥.. [tooked] took a: transístor radio.. and put it into his: beck..... But {then / vhen} he: m̥: took it, he: bressed on.. a botton and.. [t] it's beginned to blay... [Two boys.. [has] have] Two boys saw [i] [th] thet... I tried to ketch the men.... but he ren.. on the street.. and {vhere / there} was a policemen and tried.. to ketch him. [*Ende*] ((Thank you))

* low falling intonation

** fall-rising intonation (fall on "casset" [ˈvkɛsɛt])

120 secs. to "him."

103 accepted words

120 accepted syllables in RP

5 hesitation sounds (all [m̥] - unusual)

3 German words

3 German syllables

17 non-accepted English words

23 non-accepted English syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ sometimes [ɛ̝], mostly [e]

/w/ mostly [ʋ]

voiced allophone of /l/ in initial fortis clusters (e.g. play = "blay")

final lenis stops fortis

no weak forms except "the" and "a"

monotonous "listing" intonation

Surprisingly, a good /əʊ/ (in "ago", "showed")

I was in the shop, and a man came in. He had a: black hat on, and he was smoking a cigarette. He was wearing a coat and a stripy tie. He asked for: a tape recorder, which was high up on a shelf. I got the ladder out and climbed up the ladder to get the tape recorder. While I had my back to him he must have taken a: radio. ʔə:m.. I gave him the tape recorder and he went out of the shop.. and then suddenly his bag started playing music, and I realised he had a radio in his bag, so I ran after him and he went out into the street and I ran after him shouting.

37.5 secs.
121 accepted words
150 accepted syllables in RP
1 hesitation sound
no non-accepted syllables

Accent: slight Yorkshire. Fluent delivery, though slight quaver caused by nervousness.

[(O)kay] Half an hour ago, I.. stoot.. there, behind.. the table an* my shop, ant.. a man with a black jacket came in. ((mhm)) He had.. a little.. bag in his hand.. and was smoking. ((mhm)) He:.. seemed to me.. very friendly, because he was smiling all the time. He.. showed me a radio, ʔəm on the top.. of.. the board, ant asked me whether I could.. put it down. I said "Yes", [ant.. ʔəm.. yes] and [*ho* ʔəm] took a chair ant wanted to take the radio. Well, while I was ʔəm standing there, the man.. took.. another radio standing.. over there, ant.. put it in his little bag.. but.. unfortunately he.. pressed.. ʔə m... a.. [*Taste*] ((mhm)) [*Ja, was heißtn des?*]|| ant.. so the radio started to.. play music.. I jumped down and shouted "Yes, he wants to steal my radio," (mhm)) ..ʔh The man lost his cigarette ((aha!)) while going out... ant.. a little bit later, a policeman came, perhaps he was standing óutside, ant.. catched the man. ((Okay.)) (O)kay. ((m))

Very slow, hesitant delivery - only the more noticeable pauses indicated.

* "in" intended

162 secs. from "Half" to "the man."
151 accepted words
195 accepted syllables
7 hesitation sounds
6 German words
7 German syllables
2 non-accepted English words
9 non-accepted English syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [ɐ̯] (a little better than average?)
Final lenis stops very fortis ("and" = "ant")
No weak forms except "the" and "a"
But: dark [ɫ] good, e.g. in "steal"

2. Good morning! ʔə.. I'm calling from Bristle, and I want to know if it is possible that I and my friends.. ʔə... can stay in the youth hostel in York, we are planning to come tomorrow evèning [in] in York.
4. ə We want to stay three nights.
6. We are four people.
8. We are two boys and two girls. How many does a: night cost, for one person?
10. We are all between sixteen and seventeen years old.
12. .. mhm.. (mutters) ..... ʔəm Does this price also include the breakfast?
14. Can you also cook ə: the supper, of ourself?
16. When doth the youse hostel close in the evèning?
18. ʔə [We arriving with the] We are arriving with the train, and I want to ask you, [how we are..] [how we are coming...] what possibilities there are to come from the station to the youth hostel.
20. How long does it take to walk by feet?
22. Is it now okay ʔə: that we arrive for tomorrow evèning [and....] and that you can give us a room for three nights?
24. Yes, my name is Andrea Hofbauer -
26. h·h A - N - D - R - E - A H - O - F - B - A - U - E - R.. ʔə Did you understand it?
28. Goodbye. Goodbye.

Recorded on 2 channels; Right channel suddenly much quieter from no. 16 on.

124 secs. (total 213 secs.)
177 accepted words
223 accepted syllables
10 hesitation sounds plus one polysyllabic laugh and some muttering
13 non-accepted words
26 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [ɛ]
/r/ realised postvocalically in an accent otherwise based on RP
too little vowel reduction; no weak forms except "the" and "a"; weak form of "the" (/ðə/) used before vowels
no contractions

APPENDIX C9: Telephone conversation, pupil GM6

2. ʔəm Good morning ʔə:m I telephone from Bristol, and would like to know if I and my friends ʔə:m could come to de: [yowse] yowth hostel in York, ʔəm we want to arrive tomorrow evening.

4. ʔə:m Ve would like to stay three nights.

6. ʔəm Ve are four persons.

8. ʔəm We are two boys and two girls. ʔəm How many [does ʔəm] [does] does it cost for one night pro person?

10. ʔəm Ve are all between sixteen and seventeen years old.

12. ʔəmɳ Does dis price include also de breakfast?

14. ʔəm [Have ʔəm] [Have..] [D ʔə:] Do we have de possibility to: cook our supper.. ourself?

16. ʔə:m When does de yowth hostel ʔəm close.. the evening?

18. ʔəm.. m̩: [We:] We arrive by train, ʔə:mɳ how can ve come.. ʔə: to de yowth hostel.. ʔəm from de gate?

20. ʔəm How·long does it take by walking?

22. ʔəm.. Can you.. ʔə take a reserwation for our group, ʔə:m up to: tomorrow evening for three nights?

24. My name is Mick Jegger.

26. ʔə:m M - I - C - K J - A - double G - E - R.*

28. Goodbye, thank you.

117.5 secs. (total 206.5 secs.)

* Pupil not given time to ask if Warden has got his name.

147 accepted words

186 accepted syllables in RP

26 hesitation sounds

7 non-accepted words

33 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [e]

/ð/ = mostly [d] or [d̪]

/v/ and /w/ both mostly [ʋ]

/əʊ/ = [õ] or [õũ]

too little vowel reduction; no weak forms except "the" and "a"

(Intonation much better than average; falls on WH-questions, rises on polar questions, fairly lively)

APPENDIX C10: Telephone conversation, pupil RS30

2. Good morning. ʔəm I'm from Bristol and want to know whether my friends and I to stay in the youth hostel in York. We want to: come tomorrow in the evèning.
4. We want to stay three: nights.
6. We are four peoples.
8. We are two bores and two girls, and I want to know what coast one night [pro p ʔə:] for a person.
10. Ve are [t ʔəm] between: sixteen and seventeen years old.
12. Is breakfast include?
14. Can we cook the dinner ourzelfs?
16. When close ze: youth hostel.. latest?
18. We came vith strain, and can you zay me: how we came from train station to youth hostel?
20. How long time I need to go to food?
22. Can you do [that we:] that we can stay for three nights?
24. Yes, my name is Angie Smiss.
26. Yes: A - N - G - I - E. ʔəm S - M - I - T - H. Has you: understand this?
28. [Good my. ʔə ʔə] Goodbye h·h

69.5 secs. Warden's part and initial pauses not recorded; sound quality variable.
141 accepted words
166 accepted syllables in RP
6 hesitation sounds plus 1 polysyllabic laugh
7 non-accepted words
13 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/=[ɛ]
/s/ sometimes [z] in syllable-initial position
/θ/ once [s̪] ("Smith")
/ð/ sometimes [z]
/w/ sometimes [v]
too little vowel reduction - no weak forms except "the" and "a"
Pronunciation and text somewhat idiosyncratic.

2. Good morning. I call from Bristol and I want to know, whether my friends and I could stay [in..] in the [youth hotht] youth hostel in York, ʔəm: we wanted to.. arrive tomorrow.. evèning.
4. We want to stay three nights.
6. We are four.. people.
8. We are two boys and two girls, a:nd we want to know, [what ʔə... h·h..] what does it cost [for] for one person.
10. We all between sixteen and seventeen years old.
12. ʔəm.... [*Soll ich hinschreiben?*]..... ʔh ʔem Is there.. breakfast ʔəm in the price? h·h
14. ʔem [Can....] Can ve ʔəm cook our supper for ourself?
16. ʔəm [What t] At what time does the youth [hos] hustel ʔəm... h: shut?
18. m Well we: arrive with the: drain, and we want to know, how to:.. come from the ʔəm station to the youth hustle.
20. How long does it take [to] on food?
22. ʔm: ʔem Can we come ʔem tomorrow evèning and stay there for three nights?.. hm:
24. My name is Michaela Saller.
26. .. ʔəm M - I - C - H - A - E - L - A - {M / ʔəm} S - A - double L - E - R.. ʔəm Have you understand me?
28. Goodbye.

131 secs. (total 220 secs.) Warden recorded much louder than pupil.
151 accepted words
184 accepted syllables in RP
21 hesitation sounds plus 2 polysyllabic laughs
3 German words
5 German syllables
10 non-accepted English words
31 non-accepted English syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [ɛ]
/əʊ/ = [o] or [õ]
/w/ sometimes [ʋ]
/t/ once [d] in initial cluster
too little vowel reduction - no weak forms except "the" and "a"
intonational pause after "know"

2. Good morning, I wanted [to:] to know, if I and my friends can come to ze youth.. house ʔəmɻ [we] we plained it for tomorrow in the evè-ning.
4. I want to stay [sree knee ʔə] sree nights.
6. We are four people.
8. We are two boys and.. two girls, and I wanted to know, what *ʔə a: [pe ʔə]* penson costs.
10. We are all about sixteen and seventy years old.
12. Is.. zis price wizout breakfast?
14. ʔəm Could we: cook our: meal ʔə oúrself?
16. When does ze: youth house shut?
18. ʔə [I cou] I could come wiz ze drain, ɻʔə how can I get from ze station to ze youth house?
20. [How.. ʔə] [How must I go by foot?] How long must I go by foot?
22. .. ʔəm [Could you.. res.. ʔə] [Could you book sree nights.. ʔə] [C] Could you book sree nights?
24. My name's Axel Schuster.
26. A - ix - E - A** C - G - H - U - S - T - E - R.***
28. [Have you: ch.. ʔə] Have you.. understand me?.. Goodbye.

* status of text (accepted/non-accepted; place of article) unclear
** [ɛɭ] with clear /l/ sounds like [ɛɪ] ≈ "A"!
*** Pupil not given time here to ask if Warden has got his name.

93 secs. (total 182 secs.)
127 accepted words
148 accepted syllables
13 hesitation sounds and two clicks
26 non-accepted words
39 non-accepted syllables incl. hesitation sounds

General Pronunciation Errors:

/æ/ = [ɛ] or [ɛi̇] (e.g. planned = "plained")
/ð/ usually [z]
/θ/ sometimes [s]
/t/ once [d] ("drain")
/l/ sometimes particularly clear
too little vowel reduction - apart from "to" in line 1 and no. 4, no weak forms except "the" and "a"

APPENDIX C13: Telephone conversation, pupil EP69

2. Morning. ʔəm I'm ringing from Bristol and I would like to know.. if [my] me and my friends could ə book into.. the hostel in York.. ˑm for tomorrow evening.

4. For about three nights.

6. Four of us.

8. ə Two girls and.. two boys. What price is it [for..] [per person] [for əm] per person per night?

10. We're sixteen and seventeen.

12. ˑm [If] Does that prʔice include breakfast?

14. Can we cook our own meals?

16. ˑm What time does the: hostel close up for the night?

18. ʔəm [How ʔə] We're coming by rail and ə ˑm how far is it, and how d'you get there froʔm.. the station to the youth hostel?

20. ˑm ʔəm How long is it if you walk?

22. ˑm ʔəm Can.. you book us in for: ʔəm [t] three nights from tomorrow evening, then?

24. Christopher Brown.

26. C - haitch - R - I - S - T - O - P - aitch - E - R B - R - O - ˑm - W - N... Got it?

28. Right. 'Bye, see you.

approx. 78 secs. (total 158 secs.; playback of Warden too fast)
135 accepted words
161 accepted syllables in RP
10 hesitation sounds (plus 7 asthmatic inhalations)
8 non-accepted words
19 non-accepted syllables incl. hesitation sounds

Accent: medium Yorkshire.
Articulation fairly poor; r's weak.

Pupil asthmatic. Voice extremely creaky with occasional phonation failures (e.g. in "price") and falsetto squeaks.

Pupil no .....

COMMUNICATION STRATEGIES

1. Message abandonment	
2. Resource expansion strategies	
a) foreignising (L_1 or L_3 based)	
b) coinage (L_2 based)	
loan translation (L_1 based)	
c) language switching (L_1)	
d) appeal for help/tolerance (L_1 or L_2 based)	
e) lexical approximation (L_2 based)	
1 too specific	
2 too general	
3 co-hyponym	
4 over-extension	
f) circumlocution (L_2 based)	
g) bypassing/grammatical approx. (L_2 based)	

APPENDIX E1: List of Information bits in the picture story

1. Man enters shop
2. Man described
3. Man points to radio/cassette-recorder (behind shop-keeper)'
4. Shop-keeper climbs ladder to get radio/cassette-recorder
5. (Whilst shop-keeper's back is turned)* man steals another radio/cassette-recorder and puts it into his bag
6. Man switches on radio/cassette-recorder (by accident)
7. As man leaves shop shop-keeper hears noise/music from radio/cassette-recorder/bag
8. Shop-keeper pursues man onto the street
9. Outside shop, policeman stops/arrests man

* one of these must be mentioned for 'bit 3'

APPENDIX E2: List of speech acts in the telephone conversation

1 addressing someone
2 announcing temporary place of stay
3 enquiring about possible accommodation
4 announcing time of arrival
5 indicating length of stay
6 information about size of group
7 composition of group
8 enquiring about costs
9 information about age
10 enquiring about details of costs
11 enquiring about cooking facilities
12 enquiring about closing time
13 talking about means of transportation
14 enquiring about route
15 enquiring about walking distance
16 finalizing arrangements
17 identifying oneself
18 spelling one's name
19 checking on success of communication
20 ending a conversation on telephone

APPENDIX F1: Error category chart

Schüler: _____

ERROR CATEGORY CHART

			EFFECT ON SEMANTICS	
			MEANING VAGUE	MEANING DISTORTED
GRAMMAR	1	SYNTAX		
	2	MORPHOLOGY		
	3	TENSE		
	4	PREPOSITIONS		
VOCAB.	5	CONCEPT		
	6	COLLOCATION		
	7	NON EXISTENT WORD		
STYLE	8	INAPPROPRIATE LANGUAGE ITEM / CHOICE		
	9	DISCOURSE ORGANIZATION		
	10	PHONETICS		
	11	ENCODING		
	12	DECODING		

Pupil No: RS 15

ERROR IN CONTEXT	EM1 1	EM1 2	EM1 3	EM1 cat. no	AM 1	AM 2	AM 3	AM cat. no	EM2 1	EM2 2	EM2 3	EM2 cat. no	summary maj. error	summary maj. category	summary maj. gravity
there came a man		x		1		x		1	x			8	1	1	2
to have						x		5	x			8	2	-	-
..... the radio					x			9							
was standing						x		6							
board			x	5			x	5		x		5	3	5	3
I put on			x	5			x	5			x	5	4	5	3
the ladder/letter		x		10											
to keep			x	5			x	5			x	5	5	5	3
In this time			x	8		x		8		x		4/8	6	8	2
(the man) put			x	5			x	5			x	5	7	5	3
dable		x		10			x	5					8	-	-
suitcase			x	5			x	5					9	5	3
The man					x			8							
my (shop)									x			9			
has stolen		x		3		x		3		x		3	10	3	2
I run		x		3		x		3		x		3	11	3	2
onto						x		4							
this time			x	8		x		9		x		5	12	-	2
keep 1			x	5/2			x	5/3			x	5/2	13	5/2	3

1. No of majority errors = 13
2. No of accepted words = 91
3. Error rate (correct to one decimal place) = 14.3
   $\left[\frac{1}{2} \times 100\right]$
4. No of accepted syllables = 122
5. Time (seconds) = 48
6. Fluency rate (s.p.s./ correct to one dec. place) = 2.5
   $\left[\frac{4}{5}\right]$

CONTENT WORDS USED BY THREE ENGLISH PUPILS IN PICTURE STORY

	EP21	EP22	EP23
actually			*
again		*	
arrest			*
ask		*	
back			*
bag	*		*
behind		*	
bit		*	*
briefcase	*	*	*
busy		*	
buy		*	
carry		*	*
cassette recorder			*
catch	*	*	
chase		*	
cigar(ette)	*	*	*
climb		*	
come	*	*	*
continue		*	
counter		*	*
day		*	
decide		*	
get	*	*	
go		*	
happen	*		
hat	*	*	*
hear		*	*
high			*
know	*		
ladder		*	*
like	*		
look (up)	*	*	*
loud		*	*
make			*
man	*	*	*
mouth	*		
music	*	*	*
noise		*	
open		*	
overcoat		*	
particular		*	
patrol		*	
play	*	*	*
pleasant			*
point	*		*
policeman/officer		*	*
pop	*		
put			*
quickly		*	
quite		*	*
radio	*	*	*
reach		*	*
realise		*	*
run		*	
rush		*	

	EP21	EP22	EP23
say	*	*	*
see			*
seem	*		*
set (off)	*		
shelf	*	*	*
shop	*	*	*
shout	*	*	
side	*		
sit	*		
sly-looking	*		
small			*
smoke			*
sort		*	
sound			*
stand			*
start	*	*	
startled		*	*
steps	*		
stop			*
street			*
suit	*		*
switch	*		
take	*	*	*
tall		*	*
thief		*	
think	*	*	
tie	*		
touch	*		
try		*	*
turn		*	*
unknown			*
walk	*	*	*
want		*	
wear	*		*
wonder		*	
Total	37	56	49

Mean no of words per pupil: 47

All pupils:	14 words
Two pupils:	24 words
One pupil:	52 words

Different words: 90

APPENDIX G2: Sample content words in telephone conversation

CONTENT WORDS USED BY THREE ENGLISH PUPILS IN TELEPHONE CONVERSATION

	EP70	EP71	EP72
arrive	*	*	
book	*	*	*
boy	*	*	*
breakfast	*	*	*
certainly		*	
close	*		*
come	*	*	*
cook	*	*	*
evening	*	*	*
far			*
friend	*	*	
get	*	*	*
girl	*	*	*
good	*	*	*
group	*	*	*
hope	*		
include	*	*	*
know	*	*	*
late(st)		*	
like	*	*	*
long	*	*	*
meal	*	*	*
morning	*	*	*
name	*		*
night	*	*	*
old	*	*	*
own	*	*	*
person	*	*	
plan		*	
possible	*		
price	*	*	*
rail		*	*
right		*	*
ring	*	*	*
station	*	*	*
stay			*
take	*	*	*
tell		*	*
thank	*		
time	*	*	*
tomorrow	*	*	*
train	*		
walk	*	*	*
year	*	*	*
youth hostel	*	*	*
Total	37	37	35

Mean no of words per pupil: 36

All pupils:	28 words
Two pupils:	8 words
One pupil:	9 words
Different words:	45

ABBREVIATIONS

(Abbreviations used purely locally are explained at the point of occurrence.)

adv advanced
beg beginners
CpS compensatory strategies
DES Department of Education & Science
DfE Department for Education
EP English pupil(s)
GM *Gymnasium Mittelstufe*, the middle three classes of the *Gymnasium*, the upper tier of the German tripartite secondary school system
GO *Gymnasium Oberstufe*, the upper three classes of the *Gymnasium*
GP German pupil(s)
GU *Gymnasium Unterstufe*, the lower three classes of the *Gymnasium*
HS *Hauptschule*, the lower tier of the German tripartite secondary school system
IL interlanguage
int intermediate
L1 native language
L2 first foreign language, target language
L3 second foreign language
N number
n.s. not significant
p probability
p(p). page(s)
PS picture story
r (Pearson) correlation coefficient
RS *Realschule*, the middle tier of the German tripartite secondary school system
SD standard deviation
SP supplementary pupil(s)
TC telephone conversation
TL target language
> more/greater than
< less/smaller than

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