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A Study of

Classroom Second Language Development

by

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PhD
University of Edinburgh
1990

Für meine Eltern

Declaration

I declare that this thesis has been composed by myself
and that the work involved is entirely my own.

Acknowledgements

did not only greatly contribute to my understanding of our common field of enquiry, but whose personal friendship has sustained me throughout the last few years.

Finally, I am grateful to all my family back in Hamburg, especially to my parents, whose faith in the value of education lies at the root of my own work. They have supported me unfailingly despite the distance and "das Wasser" between us.

Abstract

The nature of the relationship between the teaching and learning of second languages in the classroom has rarely been the subject of empirical investigation. The teaching profession tends to regard this relationship as a relatively direct one. Teaching which is based on a language syllabus explicitly or implicitly assumes that, given sufficiently frequent presentation and practice, learning will take place in a linear, cumulative fashion, although actual teaching practices may intuitively respond to learning being different. Since teachers are concerned with establishing which methods bring about the desired learner outcomes, interest in the learner is generally restricted to observations of what it is he has learnt and what he still has to learn, rather than how he learns.

Second language acquisition research, on the other hand, has tended to focus on the learner, without necessarily relating his behaviour to the learning context. It has also involved mainly informal or only partially formal learners. Relatively few studies have considered learners who were exposed to the second language only in the classroom. At the same time the results of studies with informal or mixed learners have often been assumed to apply also to classroom-only learners. In particular, it has been suggested that second language development follows its own principles and therefore cannot be influenced by instruction.

The purpose of the present study is to investigate the acquisition of a second language by classroom-only learners in relation to the teaching learners were exposed to. Subjects of the study are 42 child and 6 adult learners of German, all native speakers of English. The study examines the development of negation and interrogation.

We will find that the relationship between learning and teaching is not always a direct one and will interpret this as the result of learners' organic, creative interlanguage construction. At the same time we will consider the operation of linear, imitative learning processes, which result in the use of formulaic language, as a more direct outcome of the teaching. We will conclude that the acquisition of a second language in the classroom involves both organic, creative and linear, imitative processes.

List of Abbreviations

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CA  = Contrastive Analysis
EA  = Error Analysis
IL  = Interlanguage
LAD = Language Acquisition Device
L1  = First Language
L2  = Second Language
NS  = Native Speaker
NEG = Negation
O   = Oral Task
PA  = Performance Analysis
Q   = Interrogation
S   = written Situation Task
SLA = Second Language Acquisition
SOC = Suppliance in Obligatory Context
T   = written Transformation Task
TL  = Target Language
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Chapter 1
Introduction

1.1 Rationale

The present study is concerned with the relationship between instruction and the development of a second language in the classroom. We are primarily interested in *course* of development and underlying learning processes and the extent to which these can be influenced by instruction. Our study takes as its starting point the notion of "interlanguage" and recent findings in the study of classroom second language acquisition.

One of the most influential concepts in the field of second language acquisition (SLA) research has been the notion of interlanguage (IL). The detailed analysis of errors in the speech of language learners generated its basic hypothesis: at any stage in their development towards the target language (TL) norm learners operate with a system which, though essentially variable in nature, can theoretically be described just like any language system. Since the publication of Corder (1967), Nemser (1971) and Selinker (1972), a considerable amount of research has investigated, implicitly or explicitly, the claims of the original hypothesis and has generated more specific hypotheses about the nature and development of second language learners' systems. The focus of research in the last fifteen years has shifted from the analysis of individual learner's language in order to reveal its synchronic systematicity, to the analysis of the language of groups of learners to reveal systematicity and universality in second language development, i.e. in its diachronic aspects. The universality of certain SLA phenomena in a variety of settings and despite widely differing learner backgrounds has led to speculations about humans being equipped specifically to acquire language. The postulation of a language acquisition device (LAD) emphasises learner internal processes and minimises the role of the environment in SLA.

The question of whether, to what extent and how second language development is affected by the learning environment has in recent years attracted considerable interest among SLA researchers and language teachers. This interest

is partly due to the fact that results of SLA research, in particular acquisition order studies such as the morpheme studies carried out initially by Dulay and Burt with informal or mixed subjects have led some researchers to formulate implications for language teaching, notably Krashen (1981, 1982, 1983). Thus attempts have been made to apply knowledge gained about language acquisition in one setting to practical problems of language development in another. Even if we basically agree with many of the suggestions made, they lack empirical support from SLA studies. We therefore felt that there was a need for a closer look at the language development of learners who had been exposed to the TL in the classroom only. To date there are relatively few empirical studies in this area. The main aim of recent approaches to the study of classroom SLA has been to investigate to what extent classroom SLA involves the same or different processes from those apparently involved in naturalistic SLA as reflected in the course of development. These studies generally assume that classroom, or informal, settings differ markedly from naturalistic, or informal, settings. The problems of dividing learning settings into "formal" and "informal" without further analysis of the exact nature of each environment have been demonstrated repeatedly in the literature (Krashen 1976; Allwright 1984; Ellis 1984), often with particular reference to studies attempting to measure the effect of instruction on proficiency. It has also been argued that classroom settings may share crucial characteristics with naturalistic settings. In this study we assume that the classroom does differ in certain features from naturalistic settings, but this assumptions serves merely as a starting point for a closer analysis of particular classrooms. Few studies have attempted to relate systematically the various aspects of the classroom which constitute a deliberate and principled attempt on the part of the teacher to guide language development to the actual development of learners' language. In this study we will provide such an account.

In addition, there are only a handful of studies which have investigated classroom SLA from the point of view of the interlanguage hypothesis, i.e. which have focused on learner processes rather than the target product. In other words most studies concentrate on acquisition orders. In this study we will consider not only target-like structures and functions in the learners' language, but also non-target-like structures and functions and target-like structures with

non-target-like functions.

Despite the relative paucity of classroom-only studies which investigate the course of acquisition and the limitations of some of them, they do overall provide some evidence that very similar processes are involved in naturalistic and classroom SLA and support the view that classroom learners act upon the language input available to them in whatever form to create and develop their own systems of communication. Furthermore some studies suggest that certain classroom practices may be detrimental to learners' progress by blocking their own mechanisms for dealing with language input. We will review these studies in Chapter 2. Below we will summarise the purpose of this study.

The present study is motivated both by the interlanguage hypothesis and by some of the issues raised by recent classroom SLA studies. The interlanguage hypothesis provides our theoretical starting point. The main purpose of this study is to demonstrate that classroom learners do indeed operate with their own language system and that this operation is not a direct reflection of the teaching learners are exposed to but rather the result of organic, creative learning processes. In order to investigate this hypothesis we decided to focus on the development of negation and interrogation in terms of the kinds of transitional, non-target-like structures learners use to express certain negative and interrogative functions. Most classroom studies focus on acquisitional orders and therefore the end product of acquisition. By focusing on small, relatively self-contained subsystems of language, we were hoping to obtain more direct evidence of interlanguage in the classroom.

The choice of language area also relates to our objective to provide evidence of the less than direct relationship between teaching and learning. Few studies provide any information regarding the input and interaction in the classroom in relation to learners' behaviour, which weakens any claims concerning context-independent learning processes. In this study we attempt to provide a more systematic account of the relationship between input/interaction and L2 production and development in the classroom. In particular we expect to find learner transitional structures which are not modelled in the input, hence our choice of negation and interrogation.

Our main hypothesis will be that classroom learners will show evidence of the operation of an interlanguage system in their spontaneous spoken language. In order to generalise the existence of interlanguage in the classroom we will also look at the language produced in different language tasks and by learners of different age, background and analytic ability. We expect the classroom to have some effect on L2 development which may involve encouraging imitation, the use of formulas and conscious application of rules.

In order to test our hypotheses we make use of both longitudinal observational and cross-sectional data. Our subjects are 42 child and 6 adult learners of German, all native speakers of English. All subjects were exposed to German only in the classroom or in classroom-related outside activities.

We will find that the results of our study support our main hypothesis. Evidence of organic and creative IL processes is manifest in different language tasks and surfaces regardless of learners' age, background or analytic ability. On the other hand the classroom has a more direct effect in encouraging linear, imitative processes which results in the widespread use of formulas. We will conclude that the classroom can determine to what extent certain learning processes are activated, but that it cannot suppress IL processes for long. Instruction may affect rate of acquisition both positively and negatively. We will also suggest that the respective roles of IL processes and formulaic language in SLA in general need to be reconsidered. Finally, we will suggest that the interlanguage hypothesis may need to be expanded to include not only organic and creative processes, but also linear imitative ones.

1.2 Structure of the Thesis

The thesis consists of eight chapters plus appendix and references sections.

Chapter 2 Theoretical Background provides an account of the theoretical background to this study and a review of the relevant literature. It discusses a number of approaches to SLA in general and to classroom SLA in particular which have a bearing on this study. This is followed by an outline of our own theoretical perspective and formulation of more specific hypotheses.

Chapter 3 Language Subsystem is concerned with the language areas under investigation. It provides a rationale for the choice of negation and interrogation for this study, an analysis of the German system and an account of what is known about the acquisition of negation and interrogation as L1 and L2 in German, English and other languages.

Chapter 4 Methodology outlines the procedures adopted for data collection. Details of a pilot study are provided, followed by a description of the cross-sectional and longitudinal main studies. Finally, procedures adopted for data analysis and presentation are outlined.

Chapter 5 Results I deals with the results of the longitudinal and cross-sectional study of children. It provides details about the teaching learners were exposed to. This is followed by an analysis of the longitudinal and the cross-sectional spoken learner language data.

Chapter 6 Results II presents the results of the different language tasks, the adult longitudinal study and comparison of results for learners with differing analytic ability.

Chapter 7 Discussion brings together the various strands of our investigation. It summarises the main findings and reexamines our original hypotheses in the light of the results.

Chapter 8 Conclusion relates our findings to SLA research in general, suggests possible lines of future research and ends with a comment on the notion of interlanguage.

Appendix A provides copies of materials used for data collection.

An article published by the present author, entitled *Processes in Classroom Second Language Development - the acquisition of negation in German*, which contains some of the material presented in this study, can be found at the back of the thesis.

Chapter 2
Theoretical Background

In this chapter we will discuss a number of approaches to the study of SLA in general and classroom SLA in particular which have a bearing on this study. This will be followed by an outline of our own theoretical perspective and a formulation of more specific hypotheses.

2.1 Introduction

The present study of classroom second language development is best understood within the framework of a linguist's approach to the study of the nature of language, and the "Interlanguage Hypothesis". The origins of the "Interlanguage Hypothesis" may be traced back to three influential publications: Corder (1967), *The significance of learners' errors*, Selinker (1972), *Interlanguage* and Nemser (1971), *Approximative systems of foreign language learners*.

The Interlanguage Hypothesis regards the development of a second language as a goal-oriented continuum of progressively more complex systems of communication. This perspective allows us to view the language used by learners at the various stages in their development as systems in their own right in which errors are seen as evidence of learning taking place, rather than indicating failure to learn. Language development is seen as following internal creative cognitive principles. The notion of the learner's "inbuilt syllabus" (Corder 1981) which shapes his language and its development, has in the course of second language acquisition (SLA) research surfaced in different forms and been developed in a number of ways. In the following discussion of the theoretical background to this study we will examine the main concerns and lines of argument developed within SLA theory which subscribe to such a notion and consider their relationship to the study of classroom second language development. We will concentrate on the development of L2 syntax and its associated functions.

As a starting point let us first consider the assumptions underlying the study of language and language learning prevelant at the time immediately preceding the interlanguage era. One of the first detailed and formalised theories of second language (L2) learning, Contrastive Analysis (CA), arose from observations of

learners' utterances which showed a considerable amount of "interference", i.e. errors due to the learners first language (L1) (Lado 1957). This was explained in terms of behaviourist stimulus-response (S-R) learning theory. The first language was seen as a set of habits which interfered with the learning of a new set of habits, the L2, where they differed from the L1. Comparison of the two linguistic systems involved would allow predictions about learning difficulties and thus provide teachers with a basis for selecting teaching material. Similarities between L1 and L2 were thought to make for easy learning, i.e. cause few errors, whereas differences would cause difficulties, i.e. numerous errors. The preferred method of L2 teaching was audio-lingualism with its emphasis on drilling learners into the correct use of the new set of habits. CA on its own was subsequently found to be an inadequate theory of L2 learning. Closer analysis of learners' errors revealed that not all errors predicted by CA did actually occur and that some errors occurred which were neither predicted by CA, nor could be related to the learner's L1. Rather they resembled many errors children make when acquiring their first language (Politzer + Ramirez 1973; Richards 1971a), 1971b)).

In the meantime Chomskyan theory of language had emerged (Chomsky 1957, 1964). Its emphasis on the complexity and rule-governedness, hence creativity, of language led to the rejection of the behaviourist theory of language among a number of subsequently influential researchers. Also first language acquisition research, notably by Brown (1973), had shown that language acquisition involved creative cognitive processes, including processes such as systematic overgeneralisation. The child's errors came to be recognised as part of, even as evidence for learning taking place. It therefore seemed reasonable to assume that second language acqisition, which involved similar error production, was also such a creative process in which the learner took an active part.

The idea that L2 development involves creative cognitive processes rather than behaviourist S-R mechanisms was readily accepted in SLA research, although the possibility of imitation and repetition of patterns having some role has periodically received attention. The claim that SLA is systematic and follows certain principles, regardless of the learners' L1, has been the subject of a large number of investigations. These have largely adopted the perspective that SLA is systematic, although the possibility of random variation has also been raised. L1

influence has gradually lost its behaviourist associations and has been accommodated within the cognitive, developmental framework. Subsequent claims that SLA cannot be influenced by teaching have provoked a considerable amount of debate. Whilst acknowledging the need to take into account the learner when considering L2 development, many researchers felt that this was a long way from conceding that the teacher cannot influence to any significant extent the course, rate or success of language acquisition. We will consider classroom SLA in section 2.3. For the moment we will focus on general SLA studies which have approached SLA within a creative cognitive framework and have attempted to show systematicity and commonalities in SLA.

2.2 General SLA Research

In this section we will outline those approaches to SLA research which have influenced classroom SLA studies, including the present study. We will consider the following:

1. Error Analysis and Interlanguage
2. Creative Construction
3. Monitor Theory
4. Implicational Analysis
5. The Study of Developmental Sequences
6. Simple Codes and the Creolinguistic Perspective

Finally, we will include a comment on the role of the L1.

2.2.1 Error Analysis and Interlanguage

Errors have always been part and parcel of every foreign language classroom and are as such not a discovery by error analysts. What lends importance to the contribution of, among others, Richards (1971a)) to the study of language learning is firstly his interest in errors per se and secondly his subsequent interpretation of what errors might mean. Errors were not simply ignored or seen as the result of bad teaching or learners' laziness. Their possible origins were investigated, which led to speculations about their role in the learning process. The following quotation by Richards best sums up this contribution:

> "Rather than reflecting the learner's inability to separate two languages, intralingual and developmental errors reflect the learner's competence at a particular stage, and illustrate some of

the general characteristics of language acquisition..........They cannot be described as mere failures to memorize a segment of language or as occasional lapses in performance due to memory limitations, fatigue and the like." (Richards 1971a), p.205)

Corder (1981) developed these ideas further in his notion of "interlanguage", a term borrowed from Selinker (1971), which both legitimised the learner's non-target-like production and emphasised the transitional nature of his competence. The Interlanguage Hypothesis, as it became known later, posits that at each stage in the learner's L2 development he operates with a system of rules which is constantly revised as he progresses towards the target language (TL) norms. These systems of interlanguage, though dynamic and variable in nature, can theoretically be described in terms of underlying rules just like other languages. Systematic errors are seen as evidence for the learner's underlying rule system. Although originally seen as one of the factors shaping ILs, the L1 was later considered to influence only the rate, not the course of acquisition. This view of L2 development emphasises the cognitive contributions of the learner. Corder sees as the implication of this view for language teaching that it might not matter a great deal how exactly it is done, since the learner is going to approach the task of language learning in his own particular way. The learner may have his own "built-in syllabus" which may be much more effective than any externally imposed syllabus. Furthermore, since the learner is constantly restructuring his IL we do not know until considerably more research has been carried out, what it is he is learning at any particular time. Learning is also seen as an organic process and not as proceeding in a piecemeal fashion. However, this is often what linearly organised syllabuses assume, we learn one thing and then proceed to the next. Corder suggests that teaching needs to take account of the organic nature of learning and that a language based syllabus may not be capable of doing so. Rather the best teaching method may be one which sets learners a series of successively more complex tasks to perform or problems to solve which motivate the use of language and expansion of existing resources.

Error Analysis (EA) has been criticised on various grounds. The two main objections are that by concentrating on learners' errors, other aspects of the learning process such as avoidance and correct L2 production are ignored, and that despite the emphasis on ILs as systems in their own right, the notion of error

presupposes comparison with target language forms and ignores the possibility that IL forms may serve non-target-like functions. However, the main contribution of EA to L2 research is that it questioned the hypothesis that SLA is solely the result of behaviourist principles, as suggested by theories which emphasised L1 interference. It led to the notion of "interlanguage" with its emphasis on the systematicity of learners' language and its focus on the cognitive contributions of the learner to the learning process. Within the study of interlanguage the shortcomings of EA have subsequently been dealt with by inclusion of all aspects of the learner's production.

2.2.2 Creative Construction

A slightly different approach to the issue of cognitive vs. behaviourist L2 learning was developed by the American researchers Dulay and Burt. The following description of their work is based on the study of a series of articles (Dulay + Burt 1972, 1973, 1974a), 1974b), 1974c)). Dulay and Burt believed in the cognitive nature of L2 learning and rejected behaviourist accounts of it. In order to disconfirm CA they attempted to show that L2 acquisition was like L1 acquisition. Since L1 acquisition was considered a creative cognitive process, confirmation of the L1=L2 hypothesis would in their view allow L2 acquisition to be considered in the same light. Comparison of errors produced in L1 and L2 acquisition revealed similarities. However, there was still apparently L1 influence. L1 interference, or transfer, was to Dulay and Burt unacceptably associated with behaviourist learning theory. To deal with this apparent anomaly, they made use of a major criticism levelled against CA, namely that it was entirely *product* oriented and did not consider the learner. They made a distinction between *product* and *process* , arguing that linguistic similarity between L2 errors and L1 structures was insufficient evidence for L1 transfer. They then proceeded to reinterpret such errors in terms of developmental errors found in L1 acquisition and claimed that the amount of transfer errors could be reduced to around 3% of all errors. This was followed by the study of the acquisition of certain grammatical morphemes which had previously been carried out in L1 acquisition research. Brown (1973) and de Villiers and de Villiers (1973) had found a common L1 acquisition order, measured by suppliance in obligatory contexts, in longitudinal and cross-sectional studies respectively. If it could be shown that

there was also a common order in L2 acquisition, then this could be taken as evidence for the L1=L2 hypothesis and thus further disconfirm CA and behaviourist accounts of L2 learning. Dulay and Burt did in fact find significant correlations between L2 orders, not only for different learners, but also for learners with different L1s. Therefore the role of the L1 was seen to have no significant part in L2 acquisition. CA was disconfirmed and behaviourist L2 learning theory rejected. Instead Dulay and Burt posited a "creative construction" hypothesis which saw L2 learning as a cognitive process. However, this was not the end of the road for the morpheme studies. Subsequently they have been taken as evidence for underlying processes common to all types of language acquistion and learners and have led to the hypothesis that humans are equipped with some form of language acquisition device which can be activated at any time. This in turn has led to speculations about the usefulness of teaching. In the following we will focus on one theory which has made use of the morpheme studies in this way, Krashen's "Monitor Model". [1]

2.2.3 Monitor Theory

The early morpheme studies involved children only. The fact that L2 orders were not identical to L1 orders was explained in terms of the greater cognitive maturity of L2 learners. The underlying processes were assumed to be the same. Dulay and Burt argued that one should not teach children L2 syntax since they had their own way of developing it. It was some time before this line of research was extended to adults. The position concerning adult L2 learners was that they appeared to be very much less successful in acquiring a second language than children. Lenneberg (1967) hypothesised that L1 acquisition is the result of the operation of an innate language acquisition device (LAD) and that there is a critical period for language acquisition beyond which language is acquired only with difficulty. As evidence he suggested the fact that lateralisation of language functions to the left hemisphere is completed by about the age of puberty. Adolescents and adults were assumed to be incapable of utilising the same LAD which is available to children and to have to be taught languages formally. Krashen (1975) cites a number of studies which claim to have found evidence for the superiority of formal instruction over "natural" exposure for adult L2 attainment (Krashen, Seliger + Hartnett 1974; Krashen + Seliger 1976; Krashen,

Zelinski, Jones + Usprich 1978). He singles out two essential contributions of formal instruction to account for this superiority: isolation of rules and of lexical items and feedback. Krashen later revised his theory. First he took up the critical period issue. In Krashen (1973) his research suggests that lateralisation starts at birth and is completed at around the age of 5. Thus differences in adult/child attainment cannot be explained in terms of the availability of a language acquisition device. Later neurological evidence further supports this position (Krashen 1981). Krashen also argues that the differences in attainment had perhaps been exaggerated. Adults often have to learn second languages in far from ideal conditions, conditions in which children would have little chance of progressing very far.

At this point the question arose whether adult L2 acquisition might be similar to child L2 acquisition. In order to test this hypothesis a number of researchers made use of the morpheme order methodology. Significant correlations were found between the orders of learners from different L1 and learning backgrounds. Furthermore, adult orders resembled closely child L2 orders (d'Anglejan + Tucker 1975; Bailey, Madden + Krashen 1974; Krashen, Sferlazza, Feldman + Fathman 1976; Krashen, Houck, Giunchi, Bode, Birnbaum + Strei 1977; Perkins + Larsen-Freeman 1975). This was taken by Krashen as evidence for adults being capable of utilising the same kind of processes available to children and led to hypotheses about the relative usefulness of formal and natural learning environments for the adult, which in turn would have implications for language teaching. Krashen (1976) undertook a review of studies which investigated whether adults attain greater proficiency in formal or informal environments. Some of these seem to suggest that adults can effectively utilise informal environments (Carroll 1967; Usphur 1968; Mason 1971). Others indicate that more instruction means higher proficiency (Krashen, Seliger + Hartnett 1974; Krashen + Seliger 1976; Krashen, Zelinski, Jones + Usprich 1978). To resolve these contradictory results Krashen first of all points out that in all of these studies the variables "formal" and "informal" environment are not adequately controlled for. It is quite possible that so-called "environment only" subjects provided themselves with formal instruction and that there was a considerable mismatch between potential and actual exposure (i.e. years of residence in L2

country and contact with L2 speakers). There is no detailed information about the nature of each environment, "formal" is simply equated with "going to classes" and "informal" with "living in L2 country and not going to classes".

Recognising the deficiencies of the above studies, Krashen nevertheless attempts to reconcile the contradictory results by proposing a role for both formal and informal environments. He posits the "Monitor Model" for adult second language learning. According to this model adults have two ways of developing a second language: subconscious acquisition and conscious learning. Subconscious acquisition is similar to the process of L1 acquisition. Implicit knowledge of the L2 is "picked up" through meaningful communication. The result is subconscious L2 knowledge, a "feel" for grammaticality and fluent language use. Conscious learning is what happens in most classrooms. Formal knowledge of the language is presented by means of rules and explanation. The result is conscious knowledge of L2 rules, i.e. knowledge *about* the L2. Subconscious knowledge is responsible for initiating utterances and for fluency. Conscious knowledge is available only as a monitor, that is once the acquired system has produced an utterance, the monitor can only improve accuracy (before or after physical utterance). The use of the monitor is said to be subject to limitations. Three conditions need to be fulfilled for its use: The learner has to have sufficient time, be focused on form and know the rules to be applied. The monitor itself is greatly limited by humans' capacity to learn, memorise and recall information. Only "easy" rules can be learnt. The crucial point about "learning" in this sense is that it does not turn into "acquisition", which is the main mechanism by which language is learnt. Formal instruction is therefore of limited value in L2 development. Rather it is the informal, communicative aspect of learning environments which is responsible for it. This does not mean that the classroom has no place in L2 development, but rather that it should be exploited to assist "acquisition" rather than "learning". To Krashen this resolves the contradictory results of the previously cited studies. Both formal and informal environments contribute to L2 development, but a formal setting like the classroom can provide for both "acquisition" and "learning". Acquisition, however, is crucial to L2 development.

The fact that not all informal environments seemed to promote acquisition

can according to Krashen be explained in terms of the difference between exposure and comprehensible input. From analogy with L1 acquisition Krashen concludes that L2 acquisition requires comprehensible input. The child acquires new structures when he is able to comprehend what is currently just beyond his productive capabilities by means of extralinguistic contextual features. This became known as the "Input Hypothesis" (Krashen 1985). The task of the language teacher is therefore to provide comprehensible input and acquisition will take care of itself. As evidence for this hypothesis Krashen refers to adult morpheme orders which are apparently uninfluenced by formal instruction and suggests that there is a "natural order" for L2 acquistion . Variation which does occur is assumed to be due to monitor use. Thus in tasks which allow for monitor use, higher accuracy may be observed and accuracy orders may be disturbed. The implications for language teaching are therefore that it should mirror closely the environment which makes for successful L1 acquisition. They are explored in Krashen and Terrell (1983).

To summarise briefly, discovery of common orders of acquisition in child L1 and L2 and adult L2 development has led Krashen to hypothesise that there are common underlying language learning processes, due possibly to an innate language-specific learning device. He has argued that these processes are triggered by comprehensible input and that there is a natural order of acquisition which cannot be influenced by formal instruction in language rules. Rule presentation and explanation or teaching of structures for which the learner is not ready developmentally, can at most develop conscious knowledge about the language. This can only be used as a monitor under specific conditions to improve accuracy, which may be desirable psychologically or socially. Thus languages, basically, cannot be taught and the teacher can only attempt to communicate meaningfully with learners, who will then acquire the language on their own accord.

There are certain similarities between the claims of monitor theory and the interlanguage hypothesis. Both emphasise the systematicity and rule-governedness of the learner's language and its development and minimise the role of the L1 in the course of development. As a reaction against behaviourist learning theory the role of imitation and pattern practice is minimised by Krashen (Krashen 1981)

and is no longer considered by Corder (1981). Furthermore both theories suggest that learners may proceed in their own way when learning a second language and that there is maybe not a great deal teaching can do other than provide sufficient opportunity for the learner to learn. They advocate teaching methods which focus on meaning rather than form and tasks and activities to be performed rather than transmission of knowledge about the language.

A similar perspective is also favoured by what has become known in the literature as the "Bangalore Project", headed by N.S.Prabhu. Prabhu's views of second language learning are similar to both Corder's and Krashen's views in that they assume that language form is best learnt when learners concentrate on meaning rather than form. Prabhu and his colleagues developed "Communicational Teaching" which is based not on a linguistic, but on a procedural syllabus which requires learners to tackle a series of tasks of increasing complexity. Interestingly, Prabhu's ideas developed independently from the Anglo-American theories. They also arose entirely out of insights gained from practical teaching, rather than from direct SLA research. In fact the project's primary aim is the development of improved methods of teaching. For details of the project and the ideas of second language learning which underlie its approach the reader is referred to Prabhu 1987.

2.2.4 Implicational Analysis

Krashen has had few reservations regarding the validity and generalisability of the morpheme order studies. They constitute a major basis for his monitor theory, the natural order hypothesis and the input hypothesis and his proposed applications for language teaching. There is however considerable disagreement among other researchers in the extent to which they accept the results of the morpheme studies as evidence of an internally determined universal course of L2 acquisition, or even as significant aspects of SLA. The results of the morpheme studies and their interpretation have been challenged on various grounds. There is a considerable body of literature dealing with their shortcomings.[2] We will summarise the three main difficulties which are relevant in the context of this study. Firstly, as pointed out by, among others, Long and Sato (1984), the statistical measure used makes for easily obtained significant correlations, exaggerating similarity effects and underestimating variation. This is by far the

most serious defect, since it puts into question the very existence of common orders. Secondly, by measuring accurate suppliance of morphemes in obligatory contexts the studies ignore large areas of concern in the study of SLA within the already small area which they investigate, particularly with regard to function. These include variation in use in different kinds of obligatory contexts, use of morphemes in non-obligatory contexts, functions in obligatory contexts, avoidance and developments leading up to suppliance in obligatory contexts. Therefore not only is it impossible to generalise to other language areas, this approach also covers only a subpart of the learners' language use in the areas investigated. This poses problems for the claim of a universal course of acquisition. Thirdly, the items selected for the studies are not in any way linguistically motivated. This makes the results difficult to interpret. Above all there is no evidence that the orders reflect *internal* language specific-processes. Larsen-Freeman (1976a), 1976b)) produced some evidence for a relationship between rank orders of morphemes in learners' production and frequency of occurrence of these morphemes in the input, although this evidence is weakened by the fact that the learner orders were not obtained from those actually exposed to the input studied, but from other studies. So far no definite explanation for the morpheme orders has been offered.

Despite the difficulties inherent in the morpheme order methodology and the lack of an explanation for morpheme orders, the fact that a large number of longitudinal and cross-sectional studies using a variety of elicitation instruments, have consistently produced common orders is hard to ignore. The morpheme studies have had a tremendous impact on SLA research. Not least they have inspired methodological refinements and alternatives. Most of the criticisms which have been levelled against the morpheme studies can be dealt with and there have been a number of attempts to improve the original methodology. "Suppliance in obligatory contexts" (SOC) has been modified to "target-like use" (TLU) to include not only correct suppliance of morphemes in obligatory contexts but also inappropriate suppliance in non-obligatory contexts. This allowed for a consideration of function as well as form.

A serious defect of the early morpheme studies is the use of the Spearman rank order correlation coefficient. As pointed out by Long and Sato (1984), quite

substantial differences have to exist before statistically non-significant results are obtained. Thus similarities in the results tend to be overestimated. A number of researchers therefore adopted the more powerful procedures of "implicational scaling", adopted from sociolinguistic models of language variation and change, in which the presence or absence of certain linguistic features is seen to depend on the presence or absence of certain other features (Labov 1966; Labov, Cohen, Robins + Lewis 1968; Bailey 1973). Andersen (1978) proposes an implicational model for second language research to allow and account for both group systematicity and individual variation in the morpheme orders. To meet the criticism of the original morpheme studies that selection of morphemes was unmotivated, making results difficult to interpret, he tested the hypothesis that certain "natural" groupings of morphemes can be ordered according to longitudinal order of acquisition or cross-sectional order of correct use. Groups included for example V vs. NP morphemes and bound vs. free morphemes. Despite allowing for potential variation, Andersen's study revealed a great deal of consistency across learners; orders also correlated highly with orders established by previous morpheme studies. Attempts are made to explain consistencies across learners and studies in terms of underlying dimensions such as syntactic category, morpheme type, frequency of input, similarity to the L1, syntactic and semantic complexity and perceptual saliency.

The tool of implicational analysis is a powerful and sophisticated one. It has been used extensively in SLA research. Borland (1984) used it to test the hypothesis that variability in learner's language is systematic and an indication of the developmental nature of the interlanguage continuum. Implicational analysis has been extended to cover a range of structures such as relative clauses (Hyltenstam 1981; Pavesi 1984) and spatial prepositions (Pavesi 1987a)), where form has been related to function. The notion of markedness has been introduced to explain common acquisition/accuracy orders (Hyltenstam 1981; Pavesi 1987a)). Markedness theory attempts to define what determines the marked and unmarked status of language items and postulates that linguistically simple, or "unmarked" items are acquired before complex, or "marked" items. The use of implicational analysis has therefore led to important refinements in the study of SLA, while at the same time supporting the claim of the morpheme

studies that SLA involves systematic developmental processes.

2.2.5 The Study of Developmental Sequences

Implicational analysis is still open to a major criticism, one which was also directed at the morpheme studies. Namely it ignores the nature of non-target-like forms and the development which items undergo on their way to becoming target-like. This development may involve TL forms at one stage and "backsliding" in the next, a phenomenon amply demonstrated in the literature by examples such as the use of correct irregular plural "feet" followed by the use of "foots" or "feets" in child L1 acquisition. Wode (1977, 1978) argues that this is an inherent shortcoming of the morpheme approach which far outweighs any methodological inadequacies. He accepts that the morpheme approach may still afford insights into some aspects of L2 acquisition, particularly with regard to overall acquisitional stages, but suggests that they have to be complemented by detailed analysis of "transitional structures", or "developmental sequences", i.e. by an analysis of the way learners acquire individual structures. In his study of the acquisition of plural inflections in English by four German children he found striking similarities between the forms produced by the children and the order in which they appeared (Wode 1978). Other studies, involving primarily negation and interrogation, also revealed a great deal of similarities across learners, including learners from different L1 backgrounds (Hatch 1974; Milon 1974; Ravem 1974; Wode 1976; Wode 1981; see also Chapter 3 in this study).

The advantage of the analysis of developmental sequences over the morpheme approach and implicational scaling of acquired features is that it considers all forms produced by the learner, not only TL-like forms. It also focuses on the fact that language acquisition is not an instantaneous process, but that learners develop TL structures through a series of systematic steps (implicational analysis also captures this developmental nature). In addition, since most of the developmental structures produced by learners do not appear in the input, they provide direct evidence for the creative construction hypothesis and regularities observed among learners may therefore be taken as evidence of common internal processes.

The study of developmental sequences has also been the basis of work by

Felix (1982), who proposes that humans are specifically equipped to deal with the task of acquiring a language. He does so on the basis of similarities of structures produced and in their order of occurrence across different groups of learners and in view of what has been called "the logical problem" of language acquisition. Felix, like other linguists (Lightfoot 1983; Zobl 1985), sees as a fundamental logical problem of language acquisition the fact that, given limited time and input, people ever learn languages at all. If humans had to construct a representation of the TL on the basis of input data alone, they would never master the full range of structures of the TL, so it is argued. Furthermore the possibilities for constructing hypotheses about the TL are enormous, yet learners do not seem to consider every possible analysis of the data. The kinds of structures they produce clearly show that there are limits to the types of hypotheses they make about the TL. There are also striking similarities between learners' acquisitional structures, which again points to some guiding principles underlying acquisition. If there were no common principles guiding learners' hypothesis formation, theoretically learners should show a large amount of variation in the kinds of structures they produce. Felix therefore suggests that language-specific cognitive mechanisms guide language acquisition and that these are responsible for the large degree of uniformity observed in language acquisition. Felix distinguishes between principles and strategies in language acquisition, the former determining the possible range of the latter. General principles might include decomposition of TL structures (a notion first proposed by Wode (1978)) and the developmental nature of language acquisition. More specific principles in terms of language universals will be needed to account for the acquisitional course. This might include the "structure dependency" principle. Strategies include among others overgeneralisation, simplification, avoidance and use of the L1. The use of *strategies* may vary from learner to learner and can explain for instance differences between L1 and L2 acquisition. The L2 learner can use his L1 knowledge. However, the two are guided by the same *principles*. Thus the development of language is determined to the extent that the nature of structures produced can vary only according to certain principles and their order of occurrence is not reversible, though individual learners may skip certain stages or vary in their progress from one stage to the next. Felix stresses that not every aspect of language acquisition may be explained in terms of his developmental

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model: there is room for imitation and pattern reproduction, but these are regarded as of small interest.

Felix also speculates about the availability of the putative language specific processes in adult L2 acquisition and his theory in many ways resembles Krashen's monitor theory. Felix hypothesises that language-specific processes are more efficient and successful in L2 acquisition than general cognitive processes and that with the appearance of the general cognitive ability to perform formal operations, adults lose the ability to acquire a second language by means of language-specific processes alone. He argues that we therefore find in adult L2 acquisition competing cognitive structures, where general cognitive structures may inhibit the functioning of language-specific ones. His distinction between language-specific and general cognitive processes and his theory of their role in adult L2 development are largely consistent with Krashen's acquisition/learning distinction and the claimed superiority of acquisition.

2.2.6 Simple Codes and the Creolinguistic Perspective

From the study of the beginning stages of second language acquisition in comparison with pidgins and simplified native speaker (NS) talk addressed to young children and foreigners (babytalk, foreignertalk), a hypothesis emerged which posits that there may be a simple code forming the starting point for L2 acquisition and that in the course of L2 development this code is subsequently complexified. The basis for this hypothesis derives from observations of formal similarities between the above types of simple or simplified speech. These include the use of simple sentences and reduced use of subordinate and embedded sentences, reduced morphological marking and a basic set of vocabulary with maximal use of individual items. Corder (1981) suggests that humans may have an ability to revert to simple codes as a result of having acquired a first language and that simple codes may reflect universal properties of language.

Schuhman (1976, 1978a)) originally proposed the "pidginisation hypothesis" of L2 development, relating L2 acquisition to processes of pidginisation. He later revised and extended his hypothesis and attempted, among others, to relate L2 acquisition to pidginisation, depidginisation, creolisation and decreolisation (Schuhman 1978b); Stauble 1978; Andersen 1979). It was suggested that L2

acquisition follows the same principles of simplification and complexification which guides the creation of pidgins and the development of pidgins/creoles into fully blown languages. The relevance of the study of pidgins and creoles to SLA research has been challenged (Valdman 1978). The issues involved are complex and controversial and their detailed discussion is beyond the scope of this study. However, this kind of approach to L2 research is important in that it takes into account the dynamic aspect of SLA. It concentrates on the investigation of processes and possible underlying principles guiding these processes and does not, as other approaches have tended to do, give preference to product analysis. A further advantage of this approach is its concern with function as well as form.

A substantial criticism which can be levelled against the bulk of L2 research is its almost exclusive focus on form to the neglect of function. Linguists have emphasised for some time that knowing a language involves more than knowing linguistic form and L2 learning has been shown to require more than encoding old meanings in new forms. The notion of "communicative competence" has found its way into language teaching syllabuses (Savignon 1972). This does not mean that studies which have focused on form are of no significance. There is clearly room for formal analysis of learners' production and investigation of development leading to TL forms. There is significance to the fact that large groups of learners produce the same kinds of structures in a certain order on their way towards acquiring a particular TL structure and that they acquire TL structures in a certain order. There is evidence for L1 acquisition that not all language development is semantically motivated (Levy 1983) and this may also be true of L2 acquisition.

However, there are areas where a purely formal approach may give us an incomplete picture of L2 development by not allowing consideration of function when this could actually explain certain SLA phenomena. When focusing on the acquisition of TL structure, we assume that the units of linguistic analysis of the TL correspond to units of IL use and acquisition. But this may not be the case. IL forms which appear to be related to TL forms may serve a variety of non-TL-like functions. Conversely, learners may (and evidently do) express functions by whatever means they have available in their IL. The use of IL and TL-like forms to perform certain IL functions is likely to be closely related to the

development of TL functions and forms. In other words there is likely to be a relationship between ILs as systems at any point in the learner's development and that development. This is where the pidgin/creole perspective is of value to L2 research. Long and Sato (1984) suggest that creolinguistics may provide a more adequate framework for considering the original IL hypothesis, i.e. for considering ILs as systems in their own right, because it takes account of the synchronic and diachronic aspects of language systems without reference to any TL norm, because there is none.

The notion of variability is central to the creolinguistic approach (Bickerton 1973, 1974a), 1974b)). Systematic variability is seen as the basis for linguistic change. Thus a synchronic analysis of a language system may reveal aspects of diachronic change. Systematic variability is also a characteristic of L2 development and the creolinguistic approach has been adopted in a number of ways. Meisel, Clahsen and Pienemann (1981) emphasise the need for a multidimensional approach to L2 research which considers both the use of an interim system and the development of that system, arguing that the former may influence the latter. Pidginisation approaches like Schuhman's attempt to relate linguistic change, and therefore L2 development, to functional requirements of speakers. Others have proposed models of synchronic variability which try to identify determiners of variability such as type of language task (Tarone 1979, 1982, 1983; Littlewood 1981). There is one problem with a pure pidgin/creole perspective for the study of SLA, which was originally seen as its strength: the lack of reference to TL norms. SLA is, as Corder (1981) puts it "goal-oriented" and therefore must to a certain extent depend on the TL. However, the main contribution of the pidgin/creole perspective to SLA research is that it draws attention to form in relation to function from the perspective of the learner.

2.2.7 The Role of the L1

Evidence from acquisition order studies and the development of systems such as negation and interrogation suggests that SLA cannot be explained in terms of L1 influence alone. Commonalities in acquisitional orders and structures produced by L2 learners from widely differing L1 backgrounds indicate that the use of the L1 is at least selective. Various attempts have been made to accommodate the role of the L1 in a cognitive, developmental model of L2

acquisition. These make use of notions such as "crucial similarity criterion" (Wode 1976), and attempt to determine the interaction between L1 influence and language universals in L2 production and development (Gass 1979; Zobl 1980a), 1980b)). The nature of L1 influence is not a central issue in the present study. The central issue is the relationship between classroom features and L2 development, in particular those aspects of classroom L2 development which cannot be directly related to the input or interaction in the classroom. Since the use of the L1 appears to be selective, it is also likely to be independent from instruction. Any evidence of L1 influence in classroom L2 production and development is therefore also likely to be evidence of classroom independent processes. However, since we do not want to return to a CA position which states that what is not due to input is due to the L1, we will concentrate on those aspects of classroom SLA which appear to be independent from both input and the L1 and refer to the L1 only marginally.

2.3 Classroom SLA Research

The main purpose of the above necessarily brief and general discussion of SLA research has been to give an account of some concerns and lines of argument which have had a bearing on how the issue of classroom second language development has been approached, including in the present study. What all the approaches to SLA research discussed so far have in common is an interest in systematicity, similarity and creative cognitive learner processes. They all emphasise the learner's own contribution to the learning task, which is seen as involving largely systematic and developmental processes. Given the key role of notions such as interlanguage, built-in syllabus, language acquisition device and language specific cognitive processes, these approaches pose serious questions for the relationship between teaching and learning in the development of second languages in the classroom. Their claims and perspectives suggest that this relationship may not be a very direct one and that certain, if not all, aspects of classroom L2 development may not depend to any great extent on the teaching. In particular they suggest that the *course* of SLA in the classroom may not be affected by instruction.

2.3.1 Acquisition Orders in the Classroom

The majority of empirical classroom SLA reserach has been concerned with the rate of acquisition (Long 1983a)). Much of the debate regarding the course of L2 development is based on the study of naturalistic or mixed subjects. Comparatively little work has investigated the course of classroom SLA. The majority of studies concerned with the effect of instruction on the course of L2 development have been conducted within the morpheme order methodology. These studies have attempted to establish whether morpheme rank orders obtained for informal or mixed subjects would also be found for instructed subjects. If this was the case, it might indicate the existence of similar acquisition processes in informal and formal settings. However, results of these studies are at times contradictory and difficult to interpret. Allwright (1984) points out that few, if any, of the original morpheme studies were carried out on completely uninstructed subjects. The fact that common orders were obtained for mixed subjects from differing formal backgrounds indicates a certain amount of independence from instruction. But in the majority of cases subjects were either attending an L2 medium school or living in the L2 country. The effect or lack of effect of instruction in these studies is therefore difficult to assess.

The same also applies to studies setting out to compare instructed with uninstructed learners. Perkins and Larsen-Freeman (1975) found no disturbances in the orders. However, their subjects lived in the L2 country. Fathman (1978) also found significant correlations between her two groups. But, even though her instructed group had little informal exposure, her informal group may well have received instruction, as pointed out by Pica (1983). Fathman also noted some variation. Lightbown, Spada and Wallace (1981) studied French-speaking learners of English who were exposed to the L2 principally in the classrooom. Their orders correlated with Krashen's (1977a)), but she considers her results limited due to insufficient representation of each structure in the samples. Pica (1983) studied three groups of learners, instructed learners with minimal informal exposure, mixed and naturalistic learners. She found significant correlations between the three groups and also with Krashen's order. One of the largest morpheme studies involving classroom only subjects was carried out by Makino (1979). He studied 777 Japanese learners of English, using written tasks. She

found significant correlations between her order and the orders reported by Dulay and Burt (1974b)), Bailey, Madden and Krashen (1974), Larsen-Freeman (1975) and Rosansky (1976). Krashen (1976) found disturbed orders, though the variation appears to be more related to differences in tasks (oral vs written), than to differences in learning environment. Sajavaara (1981) constitutes the strongest counter-evidence to the lack of effect of instruction. In his study of Finnish EFL learners he found a disturbed order.

Despite some of the difficulties with the above studies, the overall picture which emerges is one of consistently observed common orders in formal, informal and mixed settings. Studies which do report disturbed orders may not necessarily constitute evidence against the hypothesis that there are similarities in learning processes between naturalistic and classroom SLA. Lightbown (1983) suggests the possibility of different surface phenomena stemming from differential input rather than indicating different underlying processes. Detailed analysis of input, including teaching materials and teacher's speech in her study supports this view for her data. This raises again the issue of the difficulties involved in categorising learning environments into "informal" and "formal" without further analysis of the nature of these environments, a point referred to earlier in the context of Krashen's work. The question of input raised by Lightbown may also be put another way. The common orders which emerge in the classroom and other settings may not be independent from its environment, but rather result from it. This is in fact what Allwright (1984) suggests.

Accepting that there is some significance to the morpheme orders, Allwright examines the possibility that the kinds of environment which have been taken to differ in various aspects are actually similar in crucial areas. Thus the natural orders may not be so much impervious to instruction, but instruction may offer the same learning opportunities for the structures involved as other settings. Allwright suggests that despite the obvious differences between classroom and natural discourse, these may not influence the orders. Similarities in terms of learning opportunities may be the crucial factor. Learning opportunity may be related to frequency of occurrence in the input. As mentioned earlier, Larsen-Freeman (1976a), 1976b) found some correlation between frequency of occurrence in the input and morpheme orders. Long and Sato (1983) found no

significant relationship. In neither study were the learners whose accuracy orders were used those who had received the input studied. Lightbown (1983) found no direct relationship between frequency in the classroom input and frequency or accuracy in the learners' production in that classroom at the same time. There is then no evidence to suggest that morpheme orders obtained in the classroom are the result of frequency in the input. Common morpheme orders in the classroom therefore provide at least some limited evidence of learning context independent processes. Allwright, who shares this conclusion, suggests that other discourse features may provide an explanation, such as quality of interaction or learner attention. But even if we consider such discourse factors as possible causes of common orders, notions such as quality of interaction move us very close to Corder's and Krashen's suggestions that it is meaningful communication which is important in L2 development, where what is "meaningful" relates back to the learner.

2.3.2 Interlanguage and Input/Interaction in the Classroom

To date there are only a handful of classroom studies which have investigated not only the acquisition of TL forms and functions but also non-target-like forms and functions and target-like forms used for non-target-like functions, i.e. which have approached classroom learner language as a system. Even fewer have provided detailed accounts of the relationship between classroom learner language and the nature of the teaching the learners were actually exposed to. In fact at the time of the start of the present study only Lightbown (1983) had looked at both the short-term and long-term effect of a certain classroom feature on spontaneous speech. Other studies had considered only short-term effects (Ellis 1984; Felix 1981) or only the language produced in the classroom under controlled conditions (Felix 1981). Of these only Ellis had provided an account of input, although Felix (1981) and Pica (1983) give illuminating informal information about input in their studies. Lightbown had focused on a particular phenomenon in the use of two morphemes because it pointed to the classroom having *some* effect, albeit detrimental in her interpretation. She had also dealt only with children/adolescents. The present study was therefore set up to provide a more systematic and comprehensive account of the relationship between input, teaching and learner behaviour in and out of the classroom. This was to include

learners of different age, background and analytic ability as well as different language tasks. Details will be provided in the next section.

In the following we will review the above studies in more detail. Since the start of the present investigation there have also appeared a number of studies with aims and approaches similar to it. These we will also review. As will become apparent in the course of this study, the findings of all of these studies are largely consistent with our own.

Both Pica (1985) and van Baalen (1983) report improved accuracy on plural -s in English for instructed learners when compared with naturalistic learners, suggesting that teaching may affect the course of acquisition. These results are put into perspective by Pica (1983). In this study she investigates the effect of learning context on L2 development using adult subjects from three environments: formal, informal and a mixture of the two. Criteria for "formal" are presentation of rules in an ordered sequence and feedback. For "informal" they are: no formal articulation of rules, emphasis on communication of meaning, and focus of error correction, if present at all, on meaning. Apart from comparing morpheme accuracy orders, which correlated significantly across the three groups, Pica examined the types of errors produced in learners' forms and their use of the morphemes. She found certain differences between formal, informal and mixed learners. In particular, formal subjects produced plural -s significantly more often in obligatory contexts than mixed or informal subjects, who omitted plural -s and expressed plural with quantifiers only. However, formal subjects also oversupplied the -s inflection, whereas informal and mixed subjects did not. Pica's explanation for this is that formal subjects had been presented with plural -s as a formal feature in the classroom. Pica also notes that whereas informal subjects both oversupplied and omitted -ing, the formal and mixed groups only oversupplied. Pica concludes that

> "The effects of instruction on second language production are principally in triggering oversuppliance of grammatical morphology and in inhibiting use of ungrammatical, but communicative, constructions..." (Pica 1983, p.494)

We therefore find that instruction has had some effect on the language produced by learners.

Lightbown (1983) found similar cases of what she terms "overlearning" of the -s and -ing morphemes. Lightbown and Spada (1979) had observed the use of plural -s and -ing in inappropriate contexts. With regard to -ing it was the less advanced learners who used -ing inappropriately and more advanced learners used it less frequently overall than less advanced learners, using more uninflected verbs instead. Lightbown (1983) sought explanation for these phenomena in the classroom input. Detailed analysis of the learners' language and the language in teaching materials and teacher input involving -s and -ing suggest that there is no direct relationship between input frequency and accurate suppliance of these morphemes. On the other hand it appears that rote learning had led to oversuppliance of -s and -ing, i.e. to their use in inappropriate contexts. Lightbown suggests that this overlearning may have a detrimental effect on subsequent acquisition of the whole system by blocking certain essential learning mechanisms. Learners in more communicative environments start by using uninflected verb forms and gradually add inflections as they relate these to meanings. Overlearning of forms unassociated with meaning may eventually have to be broken down and classroom learners may have to return to the "natural" path. Lightbown's learners did in later grades use -ing less frequently and their use of uninflected forms increased, suggesting that this does indeed happen. On the other hand, with regard to -s, inappropriate use also dropped, but not appropriate use. However, this difference does not cancel out the effect on -ing.

Ellis (1984) investigated the relationship between instruction and L2 development by means of a tightly controlled experiment in which learners were taught WH-questions. His learners were 11-15 year old ESL learners. Since the experiment was controlled and involved a relatively short time span it can be counted as involving "instruction only" subjects. Ellis tested the effect of 3 hours of instruction on the production of WH-question syntax, using pre- and post-tests. With respect to course of development, he found no effect of instruction, despite the fact that teaching did not follow the "natural" order. He did not, however, look at possible long-term effects.

In a study investigating the acquisition of word order rules in German, Ellis and Rathbone (1986) report the same order for classroom as for naturalistic learners. The classroom order was also different from the instructional order

both in terms of order of introduction and frequency of treatment. These results are particularly important because the subjects of the study were all adult university students, experienced and successful learners of other languages.

Pienemann (1984, 1989) also produces evidence for the view that instruction cannot influence the course of development in an experiment which involved the teaching of subject-verb inversion in German to Italian children of immigrants. Pienemann found that those learners who had certain structural prerequisites benefited from instruction, i.e. their rate of acquisition was increased. But a learner who did not have the same structural features in his IL at the time of instruction did not add inversion to his repertoire. If it appeared at all, it was in formulas.

Felix (1981) investigated the effect of formal instruction on L2 development with German classroom only learners of English. His was a longitudinal observational study which looked only at the language produced in the classroom. Subjects were 10-11 years old. Felix examined the production and development of negation, interrogation, sentence types and pronouns. Concentrating on errors, he found striking similarities in structures produced and development between instructed and naturalistic learners. This included the use of structures not found in the input and actively discouraged by the teacher, such as non-inversion of subject and verb in questions. When learners were asked to produce utterances for which they were not ready developmentally they resorted to two strategies. They either produced structures compatible with their developmental stage (if possible, i.e. if they had been exposed to the necessary items), or they produced random utterances under pressure from the teacher to produce a response of some sort. In an extension of this study, Felix and Hahn (1985) examined the acquisition of the English pronominal system by classroom only learners aged 10-12. They found systematic errors which could not be related to the input and which closely resembled naturalistic data.

There is then quite considerable evidence to suggest that both in adult and child/adolescent classroom SLA there is not always a very direct relationship between the teaching/input and L2 production/development, and that instruction cannot influence the course of acquisition significantly. On the other hand, there

is also some evidence of teaching effects on production and development such as "overlearning" as the result of rote memorisation which may be interpreted as being detrimental to acquisition.

In the following section we will attempt to tease apart the issues which are central to the present study and which are to a certain extent raised by the preceding discussion of both the general theoretical background to SLA research and the study of classroom SLA.

2.4 The Present Study

The preceding sections have provided an outline of some of the theoretical perspectives adopted in SLA research and some of the questions addressed in the study of classroom SLA. In this section we will discuss in detail the issues which motivated the present study of classroom SLA. We will first of all outline our general theoretical perspective. This will be followed by the more specific assumptions underlying this study and finally, a formulation of specific hypotheses.

2.4.1 General Theoretical Perspective

The present study fits into the theoretical perspective outlined above to the extent that it also accepts the notion of some form of learner "built-in" syllabus and views language learning as an organic process which is not the direct outcome of teaching. Since relatively little empirical work has investigated the relationship between teaching and learning, and since the directness of this relationship is often assumed, we will concentrate on demonstrating the independence of the learner syllabus from teaching. At the same time our study will also lead to reinvestigation of linear, imitative processes and, in particular, the role of formulaic language.

The view of native language use adopted in this study is that it depends both on memorised or stored lexical items and larger unanalysed units of language, and on a generative system of syntactic and other rules. We assume that L2 use and development will reflect this general nature of language use. We are interested in the areas of negation and interrogation, and in particular in the way in which

various specified negative and interrogative functions are encoded formally. We assume that in these two areas the use of the adult language depends largely on the automatic operation of a rule system, rather than the recall of unanalysed formulas. Although we are also primarily interested in the learners' negative and interrogative rule system, we will find that we also need to take into account their formulaic language use in a full characterisation of their L2 use. We will examine the nature and development of negation and interrogation in the L2 acquisition of German by native speakers of English. We will do so in relation to the teaching, defined in terms of input and interaction variables. Since the term "interaction" may be associated with a specific SLA research area, we will at this point anticipate some of our assumptions and interests in order to clarify our own use of the term.

As will be set out in more detail in section 2.4.2, we are interested primarily in providing evidence of IL production and processes which are independent of input and interaction. We are aware that there is a branch of SLA research which has developed sophisticated tools for the analysis of interaction in the classroom (Allwright 1988; Long 1983b); Long and Sato 1983; Mitchell, Parkinson and Johnstone 1981). Our use of the term "interaction" is not intended to place the present study within such a framework. Rather it is to be understood as a cover term for any kind of behaviour involving the use of language, including behaviour between the teacher and individual learners, the teacher and groups of learners or the whole class and also between learners. In other words the term interaction is to be interpreted as applying to the whole range of interactive activities in which the L2 may be used. We will throughout this study refer to specific activities as these become relevant to the interpretation of the data. Section 2.4.1.2 provides an outline of our assumptions about some typical classroom activities. In the results we will comment on the extent to which these activities did or did not feature in the particular classrooms under investigation. As indicated earlier, by "teaching" we mean both input and interaction variables. However, since we are interested in transitional learner negative and interrogative structures, our main focus in the analysis of the teaching will rest on input.

The input/interaction is provided for the learners in the context of formal foreign language teaching and constitutes, with a few minor qualifications, their

only exposure to the L2. We will examine both short and long term teaching/learning relationships. To this end both cross-sectional and longitudinal data will be used.

This study approaches the question of the nature of classroom SLA from within the framework of the interlanguage hypothesis. We assume that the learner is equipped with certain cognitive structures which constrain the way language input is taken in, processed and used in various language tasks. For the purpose of this study it is not necessary to adopt a position with regard to whether these structures are considered language specific or general cognitive. Basically we believe two things: what is available in the input does not necessarily become intake and what becomes intake does not necessarily become output. We will expand this hypothesis below.

As discussed in the preceding sections, the interlanguage hypothesis has led to questions concerning the relationship between teaching and L2 development in the classroom. In particular it questions whether the *course* of L2 development can be influenced by instruction. This question has been put repeatedly in SLA research and attempts at answering it have involved a variety of methods and different answers. These have covered the range from the position that instruction does not affect the course of acquisition to the conclusion that it does and that it may have a negative effect. We agree with Lightbown and d'Anglejan (1985), who argue that it is no longer fruitful to ask *whether* instruction affects the course of L2 development, but rather when, how and in what aspects SLA is affected by instructional factors. We need to define more clearly what we mean when we ask questions about the relationship between instruction and L2 development. Firstly, what do we mean by instruction? We intend to define instruction in terms of input and interaction variables and specify which of these variables we will examine. Secondly, what do we mean by *course* of development? By course of development we mean more than just the order in which certain SLA phenomena appear, disappear or reappear. Surface phenomena are indicators of underlying processes and it is these which we are primarily concerned with. In relation to classroom SLA we are concerned with questions such as how instruction influences what kinds of processes are activated.

2.4.2 Specific Assumptions

2.4.2.1 The Nature of Classroom Input/Interaction

There are two reasons why we have chosen to investigate the L2 development of learners who have been exposed to the L2 in the classroom only. Firstly it offers opportunities for obtaining more reliable information about input and interaction than naturalistic or mixed settings. Secondly it offers opportunities for investigating constraints on learning precisely because of the amount of control a teacher has in shaping the classroom, and typically exerts in a principled fashion. One of the assumptions underlying this study is that the classroom will be characterised by a number of features which are the result of a principled attempt by the teacher to bring about learning. We expect to find the following features:

1. A linearly organised language syllabus.
2. Teaching techniques based on the Presentation-Practice-Activity principle (PPA).
3. The objects of PPA are a mixture of individual language items, larger unanalysed patterns and explicitly formulated rules accompanied by exemplifying language.
4. Error correction in which learners are required to reproduce corrected versions.
5. Reference to the learners' L1 as a means to understanding the nature of the L2.

It has to be stressed that these assumptions serve merely as a starting point for our investigation into the nature of a particular classroom in relation to its learners' L2 production and development. We intend to provide more detailed information about the input and interaction in the areas of negation and interrogation. With regard to interaction we will determine the extent to which learners were drilled in patterns, received explicit rule explanation and engaged in activities for which the adult TL is typically used. With regard to input we will take into account the nature of negatives and interrogatives, their order of appearance and to a lesser extent their frequency in the input. We will attempt to determine how these input and interaction features affect L2 production and development.

2.4.2.2 Learning Processes in the Classroom

Even if learners are programmed to process and acquire language in certain ways, these mechanisms still need to "feed" on input in some way and need to be triggered by some form of interaction. Therefore some relationship between

input/interaction and L2 production and development has to be assumed. The question is how direct or indirect this relationship is. Teaching which is based on a language syllabus explicitly or implicitly assumes that given sufficiently frequent presentation and practice, learning takes place in a linear, cumulative fashion, even though actual teaching practices may intuitively respond to learning being different. Much of the literature on the relationship between input and L2 development has investigated either frequency or order of presentation. The assumption is that what is presented early and more frequently is learnt earlier than what is presented later and less frequently. Earlier we discussed some evidence which suggests that neither frequency nor order of presentation are sufficient explanations for the nature of L2 production and development. We believe that the reason for this is that language learning involves not only linear and imitative processes, but also organic and creative ones.

To put it in terms of the interlanguage hypothesis, we believe that learners create their own systems of form and function relationships, which develop from the simple to the more complex. For the purposes of this study we will not define notions of simplicity, but we assume that what is easy to describe in linguistic terms is not necessarily easy to learn. For instance the morphological system of German is readily described and understood from a linguistic point of view, but it is typically late acquired. Although classroom learners may attempt to produce output which is a direct copy of the input, we expect them to show signs of falling back on processes of IL construction. That is we also expect classroom learners to act upon the input available to them in whatever form to create and develop their own systems of communication. In this study we are primarily concerned with producing evidence of IL construction in the classroom. The term "IL construction" will be used specifically to refer to the organic and creative processes mentioned above. We will see, however, that there is also a place for linear and imitative processes in L2 development and that these can be accommodated within the interlanguage model. We will return to this point later, in the discussion of results in Chapter 7 and in Chapter 8.

We now turn to the question of what might constitute evidence for IL construction in the classroom. We will take as evidence a lack of correspondence between input order and to a lesser extent input frequency and learner language.

The strongest evidence, however, will be a lack of correspondence between input and learner structures. We expect to find IL negative and interrogative structures which the learner has created systematically and for which there is no model in the input from the teacher or in the teaching materials.[3] We expect these structures to be developmental, transitional structures which appear and disappear at certain stages and which will eventually be replaced by the target structures. Comparison with naturalistic data from other studies will also serve as evidence. Similarities in classroom and naturalistic structures and their development are likely to indicate similar processes where substantial differences in input/interaction exist or where input alone cannot explain the nature of L2 production and development. On the other hand lack of similarity in surface phenomena does not necessarily indicate different processes, as they may relate to differences in input.

2.4.2.3 Additional Variables

Comparison with naturalistic learners also allows for the addition of an age variable. The naturalistic learners in question are 3-5 years old. Our own learners will include children aged 11-16 and also adults. Children and adults in our study will also differ in background and analytic ability. We expect IL construction to be independent from the learner variables of age, background and analytic ability. We also expect to find IL construction in a variety of language tasks. In other words we expect IL construction to be independent from learner and contextual factors.

Our main interest is in spontaneous, spoken language. Apart from the theoretical interest in the nature of spoken L2 language, this choice also reflects our assumption that spoken language is more widespread than written language and that it is a major focus in the foreign language classroom. Also, naturalistic data used for comparison consists largely of spontaneous and entirely of spoken language.

2.4.3 Hypotheses

Based on the general perspective and assumptions outlined above, we may formulate two sets of hypotheses. The first set is concerned with those aspects of SLA which we believe to be most independent from contextual and learner variables.

1. Classroom learner language and development will show evidence of IL construction of a negative and interrogative rule system which will not be a direct reflection of input and interaction. In particular we expect to find transitional, non-target-like structures. We also expect to find similarities across different learners.

2. Classroom IL construction and development will resemble naturalistic SLA in underlying processes, though not necessarily in all surface phenomena.

3. Classroom learners will show evidence of IL construction in a variety of language tasks.

4. Classroom learners will show evidence of IL construction regardless of their age, background or analytic ability.

The second set of hypotheses concerns the possibility of a more direct relationship between classroom factors and language production and development. Since we could not be sure about the exact nature of classroom factors at the start of the study, this set of hypotheses is necessarily more general.

5. Learners will attempt to respond to the teacher's efforts at guiding their L2 development. In particular learners will attempt to produce well-formed, target-like utterances, as modelled by the teacher.

6. In their attempt to produce TL-like utterances, learners will rely on imitation and memorisation of the teacher's speech and other input material and possibly on application of explicitly taught rules.

Notes

1. We will focus only on those issues of his theory which bear on this study. For further details the reader is referred to Krashen (1981, 1982 and 1985). For detailed criticism of Krashen's theory see McLaughlin (1978) and Gregg (1984).
2. For detailed accounts see Rosansky (1976); Wode (1977); Andersen (1977); Long and Sato (1984).
3. Although there is the possibility of learner output functioning as input, i.e. IL forms may be reinforced through learner production and interaction, these forms still have to at some stage be created by the learner if they are not provided in the teaching.

Chapter 3
LANGUAGE SUBSYSTEM

3.1 Rationale for Choice of Language Subsystem

There are a number of interrelated reasons behind the choice of negation (NEG) and interrogation (Q) for this study. The main purpose of this study is to provide some evidence of interlanguage in the classroom. In his discussion of the role of interpretation in the study of learners' errors, Corder (1981) already stresses one aspect of what was to become a more complex theory of interlanguage: the importance of relating form to meaning. In this instance he is concerned that we should establish what it is a learner is attempting to communicate before we make any judgements about the "correct " use of TL form. With the advent of morpheme order studies this relationship between form and meaning moved into the background. As already indicated in Chapter 2, the impact of these studies and insights gained from them are considerable. But, however sophisticated, performance analysis inherently focuses the researcher on target language form with little relation to function. By focusing entirely on the end product of acquisition it largely ignores the organisation of individual structures within the learners language and its development. More recently the need to study ILs as systems in their own right, the cornerstone of IL theory, has been brought back into focus by among others Huebner (1983) and Long and Sato (1984). As will become apparrent in the course of this study, the study of development within the areas of NEG and Q offers further counterbalance to the recent tendency in SLA studies, in classroom studies in particular, towards performance analysis (PA). It opens up possibilities of investigating *function* and *form* and the *independence* and *goal-orientedness* of ILs in an integrated fashion. The following will spell out some of the issues which are obscured by PA in more detail.

Since morpheme-to-morpheme correspondence between full languages is rare, it is also likely that ILs operate with units other than those commonly used for the analysis of full languages or the TL in particular (Huebner 1983; Peters 1983;

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Long and Sato 1984). To put it differently, if ILs are considered languages in their own right, their analysis will have to allow for language specific organisation of function and form. In this way systematic account can be taken of the commonly observed phenomena of learners' use of target forms for non-target functions and IL forms to express functions for which TL forms do not exist or have not yet been acquired.

The considerations outlined above lead us to basically three questions:

1. What functions are encoded in ILs?
2. How are these functions encoded formally?
3. Since ILs are also dynamic - i.e. we expect them to change as the TL is acquired - we also want to ask: How do these IL function - form relationships develop into TL function - form relationships?

Whatever other functions and distinctions may be peculiar to ILs, negation and interrogation were considered sufficiently "basic" or "common" functions to emerge early in ILs. Felix (1978) indicates that negation appears to be a universal concept and that the majority of languages distinguish between and mark YES/NO and information questions (p.189 and 139 resp.). Studies of language typology, notably Dahl (1979) and Ultan (1978), also strongly suggest that NEG and Q are universal categories. The forms and functions of NEG and Q and their relationship were assumed to be readily identifiable even within IL systems. It was considered unlikely that learners would express NEG and Q using items which were completely unrelated to NEG and Q in the TL or would use items related to NEG and Q in the TL to express completely different functions. It was therefore assumed that using NEG and Q as a framework for the investigation would not result in a distorted or unduly restricted way of looking at ILs.

Finally, NEG and Q have been widely researched, both as linguistic systems as well as in mother tongue development and in the naturalistic SLA of German and other languages, offering data for comparison.

As will become apparent in the next section, this study focuses on relatively clear-cut aspects of German. Particularly with regard to negation, complex aspects of the whole system are left aside. This is the result of a desire to have a high degree of certainty in the nature of the goal, the TL. If we want to establish

how learners acquire a second language, as a starting point it helps to know at least what the end product is supposed to be. This focus on those aspects of the TL which are easy to describe may again constrain our view of SLA. However, we are still free to examine questions 1. and 2. above, and only by clearly defining and restricting the scope of the investigation can we hope to find answers to question 3..

In the rest of the chapter we will describe negation and interrogation in German. This will be followed by a discussion of the acquisition of these areas in L1 and naturalistic L2 acquisition. Possible explanations will be discussed. In addition we will look at parallels in the acquisition of NEG and Q across languages, including some classroom data. This will provide us with a framework for looking at potential peculiarities of classroom SLA in our own study. NEG and Q will be discussed separately.

3.2 Negation

3.2.1 Analysis of Negation in German

The discussion of NEG will start with an operational definition of what it is we mean when we talk about negation and the syntactic constructions we are considering. The investigation will be restricted to the acquisition of constructions commonly labelled as "sentence negation" and exemplified by the following English sentences:

1.a) It is not raining.
 b) I don't have a cat.
 c) He doesn't work in China.

In defining the meaning of NEG we will follow Dahl (1979):

> "We thus formulate as a necessary condition for something to be called NEG that it be a means for converting a sentence S_1 into another sentence S_2 such that S_2 is true whenever S_1 is false, and vice versa." (Dahl 1979, p.80)

This means that sentence 1.a) is true whenever the sentence "It is raining" is false. There are of course a number of problems associated with defining NEG in terms of truth conditions. NEG is infinitely more complex. However, the above

definition is adequate for the data in this study. To further illustrate the type of negation with which we are concerned, consider the negative sentences in the following examples:

2.a) S1: Where is your dog?
   S2: I don't have a dog.

  b) S1: The Usher Hall is in Glasgow.
   S2: The Usher Hall isn't in Glasgow.

  c) S1: I'm going to the Hibs match in Aberdeen.
   S2: Hibs aren't playing in Aberdeen.

  d) S1: Tomorrow I'm going to Edinburgh.
   S2: You don't have to work tomorrow.

Negation in the above negative sentences works in terms of the truth conditions set out by Dahl. The fact that these sentences can function as a variety of speech acts does not affect how negation operates syntactically (leaving aside differences in the use of ellipsis, which does not apply in German in any case). We have then a relatively clear idea of the function of NEG we are looking for, which allows us to focus on the formal means by which it is encoded. Syntactically we are dealing with declarative main clauses. The investigation will be restricted to the following formal aspects of NEG in German:

1. Placement of the negator in relation to the verb.

2. Choice of negative particle.

3.2.1.1 Placement of the Negator

In German main clauses the negator is placed after the finite verb, irrespective of verb class.[1]

Examples:

I. Main Verb

ich koche nicht
I cook not, i.e. I don't cook

II. Copula

ich bin nicht groß
I am not tall

III. Modal

ich kann nicht kochen
I cannot cook

IV. Auxiliary

ich habe nicht gekocht
I have not cooked

3.2.1.2 German Negative Particles

We will consider three negative particles in this study, "nein", "nicht" and "kein". "Nein" is used in response to questions/statements/commands/ to negate part of or whole propositions at sentence or text level. It is not used sentence-internally. For sentence internal negation "nicht" and "kein" are used. As far as the use of "kein" is concerned, we will consider only those cases where it marks sentence negation and can be considered a variant of "nicht". The use of "kein" is more restricted than the use of "nicht". The difference is syntactic, there is no difference in the meaning of the negation. "Kein" is only used in constructions with indefinite NPs. These NPs stand in close relation to the verb. "Kein" typically occurs in transitive constructions with accusative objects or in constructions containing the copula. In this study we will focus on the use of "kein" in the following types of sentences:

V. Possessive "haben"

ich habe keinen Hund
I have not a dog, i.e. I don't have a dog

VI. Copula

Das ist kein Hund
that is not a dog

VII. Main Verb

ich fahre kein Auto
I drive not a car, i.e. I don't drive (a car)

Constructions containing main verbs will only be marginally referred to. "kein" is

obligatory in constructions containing possessive "haben". There is a certain amount of free variation in the use of "nicht" and "kein" in sentences of type VI and VII. Thus the following pairs of sentences can be used to convey the same meaning:

6.a) Ich fahre kein Auto.
  b) Ich fahre nicht Auto.   (definitely acceptable)

7.a) Das ist kein Hund.
  b) Das ist nicht ein Hund.   (acceptability uncertain)

However, there is a strong preference for the use of "kein" in constructions containing the copula. [2] (For further details concerning the use of "kein" see Bulach (1968), Stickel (1970) and Kürschner (1983) who also consider "kein" a variant of "nicht".)

3.2.1.3 Summary of Learning Task

Learners have to learn how German encodes negation in main declarative clauses. There are basically three formal aspects which they have to acquire:

1. Placement of NEG in German is postverbal.
2. There are two negative particles used for sentence negation, "nicht" and "kein".
3. "Kein" is used with indefinite NPs. This use is obligatory with possessive "haben", highly preferred with the copula and generally optional with main verbs (excluding "haben").

3.2.2 Acquisition of German Negation

3.2.2.1 L1 Acquisition

Different children acquiring German as their first language have been observed to go through similar, fairly clearly definable stages in their development of negation. The following analysis is based on the work of Wode and Schmitz (1974) and Wode (1976). Children in these studies typically proceed from anaphoric use of "nein" to non-anaphoric negation. Examples of anaphoric negation are *nein, Milch* or *nein, Mami* , where something in the previous utterance or in the context is denied, not the constituents with which the negative particle occurs. Thus with *nein,Milch* the child indicates that he does not want the orange juice which he has been offered, but milk. In this study we will concentrate on non-anaphoric negation, i.e. the negation of constituents within an

utterance. There appear to be two stages in the development of non-anaphoric negation.

Stage I: Sentence external negation with "nein"

"nein" is placed at the beginning of the sentence. Very common is "nein" + X :

1.a) nein hauen
  b) nein sauber

but more complex structures also appear:

  c) nein schaffe ich
  d) nein Heiko Mütze

This type of negation is commonly referred to as "sentence external" negation. By this is meant the positioning of the negative element to one side of the elements to be negated, i.e. outwith any tight syntacticization of sentence constituents (see also note 5, p. 56, where this type of negation is referred to in terms of a "pragmatic mode").There is, however, disagreement in the literature on the acquisition of negation as to whether structures of type 1.a) and b) are in fact best analysed as sentence external negation or merely represent a surface phenomenon which is the result of subject deletion or PRO-drop. In the case of 1.a) and b) we cannot determine which is the case, but in structures 1.c) and d) the subject is clearly present. These cases were also clearly identifiable from their context as non-anaphoric. We feel justified by Wode's data to label this stage in the development of German L1 negation as "sentence external".

Stage II: Sentence internal negation with "nicht"

In this stage children switch from the use of "nein" to using "nicht". "nicht" occurs in a number of positions.

X nicht Y

2.a) die nicht kaputt
  b) hier nicht Tee

nicht X (Y)

3.a) nicht rein
  b) nicht Bauch
  c) nicht auf den Tisch

X nicht

4.a) Britta nicht
  b) heute nicht
  c) geht nicht

There are also more complex structures containing verbs which are negated postverbally:

5.a) Honig gibt nicht
  b) Heiko darf nicht
  c) Meike kriegt nicht Lutschi
  d) Henning braucht nicht in die Uni

During this stage Wode also notes some preverbal negation, unfortunately no examples are given.

Development of "kein"

Data on the development of "kein" are very sparse. This is partly due to the fact that it does not appear in the early stages of acquisition. We can assume that "kein" appears after "nein" and "nicht". Lange (1979) reports the following findings:

Stage I

Before children acquire the use of "kein", they use "nicht EIN" instead:

6. Holger nicht ein Lutscher

Stage II

While children begin to use "kein" appropriately, they also produce the occasional double negative:

7.a) keiner kommt nicht mehr rein
  b) keiner nicht mein Bett

3.2.2.2 L2 Acquisition

Data for the naturalistic acquisition of German as a second language by children with English as L1 comes from studies by Felix (1978) and Lange (1979). Children in these studies were between 3 and 5 years old. As is the case with L1 learners, different L2 learners go through similar stages in their development of

negation. Anaphoric and non-anaphoric negation with 'nein' appear at the same time. Again we will focus on non-anaphoric negation.

Stage I

Non-anaphoric negation with "nein" appears both sentence-externally and internally. External and internal negation stand on the whole in complementary distribution. Children have two types of negative structures:

Sentence external negation

Sentences typically lack either a verb or a subject:

1.a) nein helfen
 b) nein spielen Katze
 c) nein gut

Sentence internal negation

Sentences have both a verb and a subject. NEG is placed between the subject and the verb, i.e. preverbally:

2.a) ich nein essen
 b) ich nein hat eins

Stage II

Non-anaphoric "nein" is gradually replaced by "nicht". Felix (1978) reports that with the appearance of "nicht" children differentiate the position of NEG. Although there are a few exceptions, "nicht" is typically placed after the copula and auxiliaries but in front of main verbs.

postverbal negation with the copula

3.a) das ist nicht Wasser
 b) das ist nicht eins

preverbal negation with main verbs

4.a) nein, du nicht kommt
 b) du nicht spielen Keller
 c) ich nicht essen mehr

For a considerable period preverbal and postverbal negation with main verbs exist side by side, until eventually preverbal negation disappears. There is only one case of preverbal negation (with a modal) in Lange's data. However, Lange (1979) notes the early appearance of negative equative sentences, long before sentences containing main verbs are negated. Examples include *das ist nicht gut* and *das ist nicht eine Hund* . The emergence of postverbally negated equative sentences before postverbally negated main clauses in Lange's data is consistent with Felix's data.

Development of "kein"

"kein" does not appear early in the development of negation. Instead children use "nicht EIN":

1.a) das ist nicht ein Bonbon
 b) ich will nicht ein
 c) das ist nicht ein Hund

When "kein" does appear it very frequently occurs in a double negative with "nicht", in almost all cases following it:

2.a) ich hab nicht keine
 b) ich seh die kein nicht
 c) wir hat nicht keine mehr

Later "kein" is used appropriately:

3.a) das sind keine Blumen
 b) du hast kein Auto

Lange (1979) also notes the use of "kein" for "nichts".

3.2.2.3 Summary and Comparison of L1 and L2 Acquisition
Even though there are a number of differences between L1 and L2 acquisition of negation, there are also clear parallels.

Similarities

1. Anaphoric negation with "nein".
2. Non-anaphoric negation with "nein".
3. External negation.
4. "Nicht" for sentence internal negation first in structures without a finite verb. Here "nicht" can be placed before, after or between constituents. "nicht" in structures with finite verbs. There is probably a preverbal stage.

5. "Kein" appears after "nein" and "nicht". "Nicht EIN" is used instead of "kein". Before "kein" is restricted to TL like use it appears in double negatives with "nicht".
6. In the early stages of negation "nein", "nicht" and "kein" are the only negative particles used and appear in that order.

Differences

Differences have to do primarily with the chronological order of appearance of certain structures and the relative complexity of structures produced. These two aspects are related. Anaphoric and non-anaphoric negation follow one another in L1 acquisition but appear at the same time in L2 acquisition. The same applies to external and internal negation. Felix (1978) suggests that these differences may be due to differences in the acquisition of sentence types. Data which might confirm or reject this hypothesis are not provided, however. A further difference is to be found in the position of "nicht" in sentences containing finite verbs. L2 learners distinguish between the copula and auxiliaries on the one hand and main verbs on the other. L1 learners do not make this distinction. Here we find though that L2 learners acquire structures with the copula and auxiliaries before structures with main verbs. L1 learners have both structures from the beginning. The acquisition of sentence type may then have an effect on the acquisition of negation. Finally, L1 learners do not use "nein" sentence internally. This may be due to individual variation rather than point to differences in L1 and L2 acquisition. L1 learners of English also use the non-anaphoric negative particle "no" sentence internally.

3.2.2.4 Explanations for the Development of German Negation

The preceding discussion of the acquisition of negation raises questions about reasons for the nature of the development and for the apparent differences and similarities between L1 and L2 acquisition. Two sources of explanation offer themselves, L1 transfer and input. Neither are necessary and sufficient explanation for what learners do.

L1 transfer

There are two structures which we might consider the result of L1 transfer:

1. preverbal main verb: die nicht macht das

2. "nicht Ein" for "kein": das ist nicht ein Schaf

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1. Since English "don't" precedes the main verb, children may use this as a model:

die nicht macht das
she doesn't do that

Felix (1978) notes that the children in his study had already progressed in their L1 acquisition of English from the stage where "don't" is a monomorphemic particle to analysed AUX + NEG and argues that it could therefore not have been transferred as a negative particle. Also preverbal negation is common in the L2 acquisition of English by learners with a postverbal L1 (to be discussed further in section 3.2.4.2). This suggests that at least part of preverbal negation in Felix's data is unrelated to the L1.

In example 2. the structural parallels are even greater than in 1.:

das ist nicht ein Schaf
that is not a sheep

However, since L1 learners produce the same structures, we could argue that the same process is involved in both cases rather than one being due to L1 transfer. Even if we allow for the possibility of partial L1 influence on the above structures, others such as external negation and double negatives cannot be explained in terms of the L1.

Input

Many of the structures produced by L1 and L2 learners are of course consistent with the input. Structures such as "nicht aufräumen" correspond to adult commands and may therefore be used as a model for preverbal negation. This does not explain though, why children do not use postverbal structures as a model. Frequency in the input is also not necessarily the cause. Bellugi (1967) in her analysis of input of negative structures in English L1 acquisition found an equal number of negative commands and other negative structures.

These examples illustrate the problem of using L1 transfer and input as the only explanations for the nature of the acquisition of negation. Mere similarities between L1 or input structures and learners structures are not enough to confirm the L1 and input as causes of acquisition. A closer look at the structures

produced by learners plus similarities across different learners and between L1 and L2 acquisition suggest that other processes are involved. Learners process the input in certain ways and create and develop their own language system, irrespective of whether they learn a first or a second language. In the next section we will examine further to what extent there are universals in the acquisition of negation across languages.

3.2.3 Common Trends across Languages

3.2.3.1 L1 Acquisition

In his review of the L1 acquisition of negation in postverbal German, English and Swedish, Wode (1976) observes the following common developmental trends:

1. Children proceed from anaphoric to non-anaphoric negation.
2. Within non-anaphoric negation they move from sentence-external to sentence-internal negation.
3. With the move to sentence-internal negation children abandon the anaphoric NEG particles in favour of the TL non-anaphoric particles.
4. There is a stage where NEG is placed preverbally. Generally this applies to both finite verbs and infinitives.

In addition Wode notes a parallel to the acquisition of "kein" in Swedish. Swedish children use "inte" instead of "ingen", which is comparable to the use of "nicht EIN" instead of "kein" by German children.

3.2.3.2 L2 Acquisition

Pavesi (1987b)) reviews a large body of studies on the naturalistic acquisition of negation in English by learners from varying linguistic backgrounds. A very clear common acquisitional pattern emerges which is consistent with the L2 acquisition of NEG in German.[3]

1. Sentence-external negation precedes sentence internal negation.
2. Sentence-internal negation is initially preverbal.
3. Postverbal negation develops first with the copula, auxiliaries and modals and only later with main verbs.

It is important to note that despite the fact that many learners have an L1 with postverbal negation (i.e. German, Norwegian, Japanese etc.), they go through a preverbal stage.

A study by Felix (1981) investigating classroom SLA also reports instances of external and preverbal negation in the speech of learners of English with German

as L1, despite constant efforts by the teacher to suppress or cut short any incorrect utterances.[4]

3.2.3.3 Summary L1 and L2 Acquisition of Negation

The distinction between the copula, auxiliaries and modals on the one hand and main verbs on the other in the placement of the negator seems to be restricted to L2 acquisition. Lange (1979) and Felix (1978) among others suggest that this may be related to the acquisition of sentence types. The copula and AUX do appear to have special status in languages. In any case, this difference does not affect the claim that L2 learners create and develop their own language system, it only shifts the analysis to a different level. There is very strong indication that sentence-external and preverbal negation are acquisitional universals.[5] We will discuss possible explanations for this in Chapter 7.

3.3 Interrogation

3.3.1 Analysis of Interrogation in German

Both YES/NO and information questions will be discussed, but the study will concentrate on the acquisition of information questions. German marks YES/NO and information questions both intonationally and syntactically. Only information questions where the question word is placed first in the sentence will be considered. Subject-Verb inversion is obligatory in information questions, optional in YES/NO questions.

Examples:

I. YES/NO intonation only

Bruno wohnt in Hamburg?
Bruno lives in Hamburg?

II. YES/NO inverted

Wohnt Bruno in Hamburg?
Lives Bruno in Hamburg?   i.e.does Bruno live in Hamburg?

III. Information

Wo wohnt Bruno?
Where lives Bruno? i.e. where does Bruno live?

The following question words will be included in the study, although their meaning will not be discussed:

wer (who), **was** (what), **wo** (where), **wann** (when), **wie** (how), **welche** (which), **warum** (why)

3.3.2 Acquisition of L1 and L2 Interrogation

Like negation, interrogation is acquired by L1 and naturalistic L2 learners in a series of stages during which learners demonstrate a preference for certain TL structures and produce forms for which there is no clear model in the TL or, in the case of L2 learners, the L1. Common patterns emerge between different learners, between L1 and L2 acquisition and across different target languages with similar interrogative structures. Most studies treat YES/NO and information

questions separately. Pavesi (1987b)) suggests that YES/NO questions appear before information questions. Since constraints on our data collection procedures make any subsequent judgement as to the chronological appearance of these question types very difficult, we will deal with them separately. The following summarises the main features of the acquisitional route for interrogation with examples from the naturalistic acquisition of German taken from Felix (1978). [6]

3.3.2.1 YES/NO Questions

Stage I

Questions are initially marked by intonation only.

1.a) du spielen?
  b) die kaputt da?

Stage II

Questions with the copula and auxiliaries and also with possessive "haben" are inverted.

2.a) kannst du die?
  b) hat du ein Mutter?
  c) soll ich das?
  d) kannst du das machen?
  e) ist das die?

Main verb structures are marked by a particle.

3.a) bist du weiss was ich gemacht?
  b) bist du bleib hier?
  c) ist du komm hier?
  d) ist du gehst zu Schule?

Structures in 3. may have been derived from English structures such as "do you know" or "are you coming". However, this analysis does not on its own explain the use of "sein" in the case of "bist du weiss was ich gemacht". Furthermore "sein + finite verb" does not occur in the learners declarative clauses. This suggests that the above structures are marked as interrogative through the use of a particle. This hypothesis receives further support from the use of particles in the acquisition of English and their widespread use in natural languages (see Pavesi 1987b)).

Stage III

Structures with main verbs are inverted.

4.a) geht das raus?
  b) mach du das?
  c) kommt du mit?

3.3.2.2 Information Questions

Stage I

Question words are generally placed sentence-initially, although some learners also occasionally place them at the end. Sentences containing the copula, auxiliaries and modals are inverted while main verb structures are not. It is not clear whether there is also a non-inverted stage for the former.

inverted questions

1.a) was ist sie?
  b) wo ist die?
  c) wo kann ich?
  d) was hat die gemacht?

non-inverted questions

2.a) wohin du geht?
  b) was du macht?
  c) warum du macht das?

Stage II

Main verb structures are inverted, although non-inverted structures still appear for some time.

3.a) was macht du?
  b) warum macht du nicht mit?

In the German data there are no examples of the use of particles in information questions.

Felix (1981) investigating the acquisition of interrogation in English by

classroom learners with German L1 notes some structural parallels to naturalistic acquisition. Even though the teacher always insists on inverted structures, learners do not always invert YES/NO questions. They also frequently produce non-inverted information questions.

3.3.2.3 Summary L1 and L2 Acqusition of Interrogation
The following represent commonly observed acquisitional phenomena:

1. Early appearance of intonation questions.
2. Marking of questions by a particle.
3. Lack of subject-verb inversion. [7]

As we observed in the case of negation, L2 learners distinguish between the copula and auxiliaries on the one hand and main verbs on the other in their question formation. Again L1 learners do not make this distinction. We have already mentioned the analysis which Felix (1978) proposes, i.e. the relationship between the acquisition of certain other structural areas. Although important for an analysis of the exact nature of acquisition processes, this aspect need not concern us in this study. It suffices to consider it as evidence of creative interlanguage construction.

Finally, it is again important to note that most of the L2 learners who do not have subject-verb inversion in their interlanguage have an L1 where it is obligatory. The preference for lack of Subject-Verb inversion will be discussed further in Chapter 7.

3.4 Summary

The preceding discussion of the nature and the acquisition of negation and interrogation in German and other languages and in L1 and L2 acquisition provides us with a framework for considering classroom SLA. L1 and L2 learners follow a fairly clearly definable route towards the TL. This common route cannot adequately be explained in terms of L1 transfer or input alone. There appear to be other processes at work within the learners which lead them to create and develop their own language system. As we saw in Chapter 2 and again in the study by Felix (1981) referred to in this chapter, there is some evidence of similar processes being at work in the classroom. In this study we want to further

investigate to what extent classroom SLA follows a similar, partially L1 and input independent route to that observed in naturalistic acquisition and to what extent certain features of the classroom can override the mechanisms responsible for it. In order to do this we need to not only collect language data from classroom language learners, but also provide an account of some of those input and interaction features of the classroom which might influence learners' development. In the next chapter we will discuss data collection procedures.

Notes

1. There are other rules governing the placement of NEG in German which will not be discussed in this study. These include:

   a. In subordinate clauses the negator precedes the verb:

      er weiss, dass ich nicht koche

      This is due to subordinate clauses in German being verb final. Learners were not exposed to such structures at beginning levels of instruction.
   b. The negator does not necessarily follow the verb immediately. Its position depends on the nature of objects, adverbs, complements etc. following the verb.

2. There are other verbs which behave like possessive "haben" with "kein", such as "bekommen", "wollen" etc. . They will not be considered in this study.
3. For more details see Ravem (1968); Hatch (1974); Milon (1974); Cancino, Rosansky and Schuhman (1978); Schuhman (1978a)); Wode (1981).
4. Felix (1981, 1982) also notes some peculiarities in the learners' utterances due to the nature of the teaching. These will be discussed together with the results of this study.
5. This preference in early acquisition for external and particularly preverbal negation finds its parallel in the distribution of types of negation in natural languages. Jespersen (1917) observes that

   > "there is a natural tendency, also for the sake of clearness, to place the negative first, or at any rate as soon as possible, very often immediately before the particular word to be negatived (generally the verb,...)"

Dahl (1979) in his study of 240 languages takes issue with the statement that there is a natural tendency for the negative to be placed first in the sentence. He finds no evidence to suggest that this is the case and reports that only V initial languages have initial NEG. Dahl's evidence suggests that it is the finite element in a sentence which is crucial in the placement of NEG. He observes that the placement of uninflected negative particles is relatively fixed in relation to the finite element and that there is a strong tendency for preverbal negation, irrespective of the basic word order of a particular language. NEG also tends to be placed as closely as possible to the finite element. These observations are consistent with Jespersen's statement that the negative is very often placed immediately before the verb. Jespersen's discussion extends to sentences of the type "not a soul was to be seen", which may partially explain his emphasis on sentence initial negation. He also mentions sentence initial negation in the early stages of some languages such as Icelandic. This may also be explained in terms of what Givón (1979) refers to as the "pragmatic mode". This basic mode of communication which places the entity to be negated on one side and the negator on the other can be distinguished from syntacticization, where NEG

is integrated into a sentence and interacts with its other linguistic elements, which Dahl is concerned with. Both may be equally central to an understanding of how languages work and develop. Interestingly, postverbal languages, including German, have at one point in their history been preverbal. There is some evidence to suggest that they have gone through what Dahl (1979) describes as "Jespersen's cycle". Jespersen (1917) observed the following phases in the development of negation in French from Latin:

1. non dico
2. jeo ni di
3. je ne dis pas
4. je dis pas

He refers to this development as cyclical strengthening and weakening of the negative, which he also observed in the history of some Germanic languages, including German. Whether this is a universal phenomenon in the development of postverbal languages remains unsettled. Double negatives, which to some extent still exist in some German dialects for instance, might provide some insight. The status of double negatives in language acquisition could also be of interest here.

6. In general the L2 acquisitional routes are documented in much more detail than the L1 routes. For accounts of the acquisition of interrogation see also Bellugi (1965); Brown (1968); Hatch (1974); Ravem (1974); Cancino, Rosansky and Schuhman (1978); Wode (1976); Chamot (1978); Huang and Hatch (1978); Shapira (1978).

7. The early appearance of intonation questions, almost universal sentence-initial placement of the question word, marking of questions with a particle and the initial lack of subject-verb inversion in the acquisition of interrogation are all reflected in the preferred question formation in natural languages. Marking questions by intonation appears to be the most common interrogative device, followed by the use of a particle. Subject-verb inversion is not so common. Wh-fronting is widely distributed. For further details see Ultan (1978) and Pavesi (1987b)).

Chapter 4
METHODOLOGY

4.1 Research Questions

We will briefly summarise our hypotheses set out in Chapter 2 to give an overview of how they relate to our methodology. The main purpose of the investigation is to study the language and language development of learners who have been exposed to the L2 in the classroom only. The central issue is the relationship between learners' language and development and the classroom in both the short and long term. The emphasis is on *course* of development, both in terms of surface phenomena and underlying processes. We predict that we will find in classroom learner language evidence of systematic IL construction which is not the direct result of the input and interaction learners were exposed to. We also expect to find evidence of IL construction regardless of the language task involved and the learners' age, background and analytic ability. In order to test our hypotheses we carried out one cross-sectional and two longitudinal studies. These centred around the areas of negation and interrogation as described in Chapter 3.

Longitudinal Study

Two longitudinal observational studies were undertaken to monitor input and interaction in the classroom and their relationship to learners' production and development during learners' first weeks of instruction. In order to limit the scope of this part of the investigation, only spoken language was considered. Two groups, one children, one adult, were monitored. For practical reasons, each group had its own particular instruction. Both groups were given a language analysis test so that the relationship between learners' analytic abilities and their linguistic development might be examined. The group of children were later included as subjects of the cross-sectional study. This allowed for information from the longitudinal study of children to be used in the analysis of the cross-sectional data. For instance inferences could be made about the instructional history of cross-sectional subjects.

Cross-Sectional Study

Since very little data on developmental sequences in the classroom exist and also for practical reasons such as limited time, the major part of this investigation consists of a quasi-cross-sectional study. Quasi-cross-sectional in that subjects were selected from a set of 5 pre-determined language levels, since we were not attempting to establish acquisitional or accuracy orders, but rather monitor development within a specific area. It was hoped that in this way sufficient data to allow for generalisations would emerge. Again for practical reasons, this cross-sectional study was possible only with children aged between 11 and 16. Subjects were given a variety of tasks. Input and interaction were studied to only a very limited extent. Evidence of IL construction will be discussed primarily in relation to Level 1 input and interaction, since this is where all the structures under investigation were introduced in the teaching. We assume that all levels had a very similar instructional history. This assumption is based on examination of both syllabus and teaching materials. Comparison with naturalistic data and also the unlikeliness of non-target-like negatives and interrogatives being present in the input at all levels will count as further evidence of IL construction above Level 1.

The rest of the chapter deals with data collection procedures adopted for the various lines of enquiry outlined above. Details of a pilot study are provided, followed by a description of the main study, including modifications to the original research design carried out on the basis of insights gained from the pilot. Procedures adopted for data analysis are outlined.

4.2 Pilot Study

A pilot study was carried out for the cross-sectional study of children, as this forms the major part of the investigation. The purpose of the pilot study was twofold:

1. To test and evaluate a variety of elicitation tasks.
2. To provide some preliminary data and therefore some initial indication of the learners' performance and development, with the emphasis on spoken language.

4.2.1 Subjects

The subjects of the pilot study were pupils at a state secondary school in Edinburgh, all native speakers of English. It was anticipated that subjects for the main study would consist of a number of learners from each of five levels of instruction in German, each level representing one year of instruction. At the time of preparation for the pilot, the longitudinal study was already in progress with 1st year learners. There was already some indication about learners' performance and the practicalities of certain elicitation techniques at this level. The pilot study was therefore restricted to Levels 2, 3 and 5, with the bulk of the study concentrating on Level 3. This was considered the "middle ground" from which adjustments for lower and higher levels could be made. For each task at each level two subjects were chosen, one female, one male.

4.2.2 Negation

4.2.2.1 Elicitation Tasks

The main purpose behind the choice of elicitation tasks was to obtain spontaneous spoken language data. In chapter 2 section 2.4.2.3 we mentioned our interest in the nature of spoken L2 language and our assumption that spoken language is more widespread than written language and a major focus of teaching. In addition, our choice of elicitation tasks also relates to studies which consider the effect of task on language production (Krashen 1976; Tarone 1979, 1982, 1983), as well as the issue of L2 variability in general (Ellis 1984c)). Whilst acknowledging the need to study variability in SLA, our concern is primarily to demonstrate systematicity. Also, variability studies are largely concerned with differences in percentages of certain L2 variants emerging in different tasks, which relate ultimately to level of TL performance and rate of acquisition. While taking performance and rate of acquisition into account (see chapter 6, section 6.1.2), our main concern is with the course of development. We expect that the developmental picture will be similar, irrespective of the use of different tasks. In order to demonstrate this we attempted to achieve in the tasks different degrees of formality, a methodology adopted at various points in SLA research, including in the above studies.

Tasks were designed to elicit structures of type I. - VI. listed in Chapter 3, i.e. negation with main verbs, the copula, modals and auxiliaries and different object

types. Details concerning the distribution of these structures in the various tasks are provided in section 4.3.1.2.

Two oral and two written tasks were designed. The four tasks can be arranged on a scale according to the extent to which they focus on form and draw attention to the type of structures to be elicited, i.e. negative structures.[1] Task 1 is the least, Task 4 the most formal task. Task 1 was designed as the closest possible approximation to spontaneous language use. It is concerned with content/meaning only. Subjects are required to provide information. Tasks 2 and 3 require subjects to provide information, but they are also instructed to do so in a certain form. Task 4 requires subjects to produce forms only, no expression of content/meaning is involved. The nature of the tasks is represented in Table 1:

TABLE 1

Nature of NEG tasks

Focus on	Task 1	Task 2	Task 3	Task 4
content	+	+	+	−
form	−	+	+	+

In addition it was thought that the oral vs. written dimension might be important in that it adds a time factor which could affect performance.

NEG Task 1

This task consisted of an oral interview between one subject and the researcher in which subjects were asked questions about their personal circumstances, e.g. family background , hobbies, school etc. The majority of questions were information questions, to avoid simple yes/no answers. Questions were designed to elicit a large number of negative constructions, using the researchers assessment of the likelihood of certain facts applying to the subjects. Examples included "Wo lernst du Karate?", with most but not all subjects not learning karate. The questions potentially yielded a good amount of negative responses without seeming absurd to the subjects. Linguistic contexts were created in the questions which allowed for the use of different verb and object

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types. A small proportion of questions was designed to elicit affirmative and descriptive answers. Thus a reasonable mixture of negative, affirmative, short and elaborate answers were allowed for in order to direct subjects' attention away from the purpose of the elicitation. In addition a small listening task was designed to elicit some further structures containing the copula, difficult to elicit with the questions mentioned above. Subjects were asked to spot false statements.

NEG Task 2

Subjects were presented with a situation such as a power-cut, public transport strike etc. Their task was to describe to another subject how this would affect their lives. More precisely they had to describe the things which they didn't do, couldn't do/have etc., i.e. use negative constructions. The other subject had to guess the situation.

NEG Task 3

This was a written version of Task 2. Subjects were asked to describe a number of situations in writing. The guessing element was omitted.

NEG Task 4

This was a transformation task. It involved transforming a series of sentences into the negative. An equal number of sentences containing main verbs, possessive "haben", modals, auxiliaries and the copula "sein" were constructed. Different object types were included.

4.2.2.2 Administration of Tasks

The pilot study for negation was carried out in March 1985. The tasks were administered in the order of least to most formal on different days with a few days between tasks. Unless otherwise stated instructions and explanations during elicitation were in English.

NEG Task 1

Each subject was interviewed individually. Interviews, which lasted between 10 and 15 minutes, were taperecorded and later transcribed.

NEG Task 2

For this task 2 subjects and the researcher were present. The researcher presented subjects with cards describing situations in English. Subjects took turns at describing these situations to each other. Each session, which lasted approx. 15 minutes, was taperecorded and later transcribed.

NEG Task 3, NEG Task 4

These tasks were administered seperately for each level, to all subjects of a level at the same sitting. Subjects were allowed 30 minutes to complete each task.

4.2.2.3 Preliminary Results

The following table (Table 2) summarises which tasks were eventually completed at the various levels for the pilot study.

TABLE 2

Pilot: NEGATION number of subjects

Level	Task 1 oral questions	listening	Task 2 oral situations	Task 3 written situations	Task 4 written transformations
2	2	1		1	1
3	2	2	2	1	2
5	2				

Evaluation of tasks

Tasks 1 and 4 posed no difficulties for administration and yielded a very reasonable amount of data. Tasks 2 and 3 proved to be more problematic. Task 2 was extremely difficult to administer on several grounds. Subjects had great difficulty in thinking of things to say. However, once they had, the other subjects guessed the situation very quickly. Thus very little data emerged. This was further aggravated by the fact that subjects slipped into using many non-negative constructions. Task 3 avoided some of these problems since it was not restricted by the guessing element and subjects had written instructions emphasising the use

of negative constructions. There was still a tendency to use some non-negative constructions, but this was only slight. This task did not yield nearly as many data as Task 1 and Task 4, though. Administration and analysis of Task 2 and Task 3 revealed that the difference in formality between them was only slight[2] and that the oral vs. written dimension did not add anything since in both cases ample time was given and taken for responses. It was therefore decided to eliminate Task 2 in the main study, but retain Task 3 despite its shortcomings in order to include a task which combined focus on content with focus on form.

Preliminary analysis of language data

This will be restricted to evidence of similarities with naturalistic data and seemingly input/classroom independent processes. Differences between classroom language and naturalistic acquisition and effects of the classroom will be discussed in the main study.

Placement of the negator

Task 2 and Task 3 yielded too little data for a meaningful analysis of the language produced by learners. Task 1 and Task 4 yielded between 30 and 40 negative constructions each per subject. These were on the whole negated postverbally. However, a number of preverbally negated main verbs emerged and also some constructions which contained a negative marker but no verb.

Choice of negative particle

Data from Task 1 and Task 4 and to a very limited degree from Task 2 and Task 3, revealed a mixture of appropriate and inappropriate use of the negators "nicht" and "kein" in terms of the target language norms, indicating that subjects did not distinguish the use of these particles to mark indefiniteness or any other functions. Overall there seemed to be a preference for using "nicht" to mark negation.

4.2.3 Interrogation

4.2.3.1 Elicitation Tasks
4 tasks, 2 oral and 2 written, were designed. In the case of interrogation it was not possible to establish such clear-cut differences in formality between tasks as

was the case with negation. Getting subjects to produce information questions without instructing them to do so seemed well-nigh impossible. The closest one can get is by using an information gap task, but even then the problem of obtaining information questions and of eliciting a variety of responses using a variety of question words can only be overcome by controlling subjects' responses more tightly. Consequently all tasks draw attention to the structures to be elicited. The main purpose of the pilot in this area was therefore to evaluate which of the two oral tasks yielded the largest amount and variety of spontaneous responses while focusing as little as possible on form. In addition 2 written tasks were evaluated, one maximally focusing on form and minimally on meaning, the other combining both equally. As was the case with negation, the oral vs. written dimension also adds a time factor which may affect performance.

Q Task 1

This was an information gap exercise. 2 subjects were given the same set of pictures, which contained both visual and verbal information about the daily lives of four different people. Some of the visual and verbal information was blanked off, different information was blanked off for each subject. Subjects were asked to obtain the missing information. In order to avoid the same question being asked (e.g."What happens?") or the same question word being used repeatedly, subjects had to pick a card from a pile of unseen question words.

Q Task 2

This took the form of a quiz. Subjects had to make up quiz questions. For this they had to pick a card from a pile of unseen question words which would also specify a subject such as history, geography etc. to which the question had to relate.

Q Task 3

In this written task subjects were asked to pretend they were journalists. They had to ask two famous personalities some questions. They were given 5 question words, each of which they had to use 5 times.

Q Task 4

This was a written transformation task. Subjects were asked to transform statements into questions. They were required to ask questions about the underlined parts of sentences using a number of specified question words.

4.2.3.2 Administration of Tasks

The pilot study for interrogation was carried out in March 1985. The tasks were administered in the order 1-4 on different days with a few days in between. Each subject had completed all tasks on negation before completing Q Task 1.

Q Task 1

2 subjects and the researcher were present. Subjects took turns at asking and answering questions. Instructions were given orally in English. All written information in the set of pictures was in German. Sessions which lasted approx. 20 minutes were taperecorded and later transcribed.

Q Task 2

2 subjects and the researcher were present. Subjects asked and answered questions in turn. Instructions were given orally in English. Question words and subjects were written in German. Sessions which lasted approx. 15 minutes were taperecorded and later transcribed.

Q Task 3 + 4

Instructions were written and in English. Question words were written in German. Subjects were allowed 30 minutes to complete each task.

4.2.3.3 Preliminary Results

The following table (Table 3) summarises which tasks were eventually completed at the various levels for the pilot study.

TABLE 3

Pilot: INTERROGATION number of subjects

Level	Task 1 oral information gap	Task 2 oral quiz	Task 3 written situation	Task 4 written transformation
2	1			2
3	2	2	1	2
5	2			

Evaluation of tasks

Task 1 yielded more varied interrogative constructions than Task 2. It did, however, take longer to yield the same amount of data. Level 2 in particular had difficulties with the information gap exercise. There was a tendency to ignore the gaps and request information already available. It was decided to retain Task 1 as the closest possible approximation to spontaneous language use, but modify it for the main study so that it would yield more data. Tasks 3 and 4 posed no major difficulties. It was decided to retain both for the main study with some minor modifications.

Preliminary analysis of language data

All interrogative structures were found to have subject-verb inversion. There is some very limited use of particles to mark information questions.

4.2.4 Pilot Study: Summary of Results

Evaluation of elicitation tasks

The pilot study allowed for the evaluation of a number of elicitation tasks. On the basis of administration and analysis of these tasks it was decided to retain with some modifications NEG Task 1, 3 and 4 and Q Task 1, 3 and 4. The three tasks will be referred to as oral (O), situation (S) and transformation (T) respectively in the main study.

Language Data

Negation

Due to the limited scope of the pilot it is not possible to offer any meaningful information about the *development* of negation between Levels 2 and 5. This will become more obvious from the main study. However, the data includes many instances of *transitional structures* and inappropriate use of negators which point to the learners creating their own interlanguage system of negation and which are also found in naturalistic L2 and L1 acquisition of German.

Interrogation

The pilot data offers only very limited evidence of transitional interrogative structures. However, the occasional use of particles to mark information questions is consistent with naturalistic acquisition. The difference between NEG and Q in the amount of transitional language data they yield also emerges in the main study. This is likely to be due to the Q features under investigation being acquired early. Nevertheless the data on interrogation is included since it still offers some insights into classroom SLA.

4.3 Main Study

The following sections describe the cross-sectional and the two longitudinal studies.

4.3.1 Cross-Sectional Study - Children

4.3.1.1 Subjects

Subjects of this study were 42 schoolchildren aged between 11 and 16 from Portobello High School, a state secondary school in Edinburgh. All were native speakers of English. These included all 12 subjects (6 female, 6 male) from the longitudinal study (described in the next section, 4.3.2), the completion of which had been designed to coincide with the start of the cross-sectional study. These 12 subjects represent Level 1 of German instruction. The remaining subjects consisted of 10 (5 female, 5 male) from each of years 2-4 of instruction in German. During elicitation it became clear that Level 4, which had not been included in the pilot, were as advanced as Level 5 with respect to NEG and Q. Level 5 data did not add any information not already covered by Level 4 and will therefore not be included.

The study is quasi-cross-sectional in that it includes a longitudinal element. While allowing for the possibility of some subjects in lower levels being more advanced than some subjects in higher levels, it seemed reasonable to assume that in general the higher the level the more advanced subjects woud be linguistically. This assumption is based partly on the fact that each level is separated by a full calendar year of instruction of between four and six 40 minute lessons per week. Partly it is based on the judgment of teachers who taught the subjects and varied instruction and testing according to the linguistic development of the learners. Furthermore, subjects for Levels 2-4 were considered by their teachers to be "average". All subjects had studied only German as a foreign language.

Subjects had been exposed to teaching based on a communicative syllabus. However, within the structure of the syllabus there was room for the isolation of grammatical points (implicitly or explicitly). Teaching was based partially on the textbook DEUTSCH HEUTE (Sidwell + Capoore), especially in the first year, which includes summaries of grammatical points, explanation of grammatical structures and grammar based exercises. In addition typical communicative activities were engaged in. More detailed information about the teaching will be provided in Chapter 5.

4.3.1.2 Elicitation Tasks

In selecting and modifying elicitation tasks which had been piloted for the main study two main criteria were applied. It was thought desirable that the same tasks be used at all levels. However, account was taken of the language level reached by subjects so as not to make the tasks too difficult or too easy, which might obscure the learners' actual competence. Therefore while keeping the basic format of the tasks constant, adjustments were made both to task and language complexity, particularly at Levels 1 and 2, but also in the course of elicitation if problems occurred. These usually required a lowering of difficulty. Details can be found in the Appendix. In this section only general comments are made.

Negation

NEG Oral Task

This oral task corresponds to NEG Task 1 of the pilot study. Part 1 consisted of approx. 50 questions, including questions designed to elicit an equal amount of negative constructions containing main verbs, possessive "haben", modals, auxiliaries and the copula "sein", as well as definite and indefinite object NPs. The same set of questions was selected for Levels 3 and 4, a sub-set of linguistically less complex questions was selected for Levels 1 and 2, with questions containing modals and auxiliaries being omitted for Level 1. Part 2, the listening component, consisted of a set of 25 statements, the same set for all 4 levels. (See Appendix A.1).

NEG Situation Task

This written task corresponds to Neg Task 3 of the pilot study. Subjects were required to describe 5 different situations. They were instructed to use a main verb, possessive "haben", a modal, an auxiliary and the copula "sein" once for each situation. This task was designed for Levels 2-4 only since Level 1 did not have enough language to complete this task. (See Appendix A.2).

NEG Transformation Task

This written transformation task was an expanded version of NEG Task 4 of the pilot study. A separate set of statements was designed for Level 1, Level 2 and Levels 3 and 4, taking into account language ability. For Levels 2-4 constructions

contained an equal mixture of main verbs, possessive "haben", modals, auxiliaries and the copula "sein", as well as definite and indefinite object NPs. For Level 1 modals and auxiliaries were omitted. The Level 1 task contained 20 items, Level 2 task 40 and Levels 3 and 4 tasks 68 items. (See Appendix A.3).

INTERROGATION

Q Oral Task

This was a modified version of Q Task 1, the picture task of the pilot study. Due to subjects' difficulties in completing the pilot information gap exercise, this task took a long time. For the main study both subjects were therefore given a copy of the same complete set of pictures. We will refer to this as Q task 1 a). Level 1 did not have enough language to complete this picture task. Instead they were given an oral task in which they questioned each other in pairs about their background. This will be referred to as Q task 1.b). (See Appendix A.4).

Q Situation Task

This task corresponds to Q task 3 of the pilot. It was essentially the same for all levels, except that Level 4 were given more question words. Level 1 did not complete this task. (See Appendix A.5).

Q Transformation Task

This was an expanded version of Q Task 3 of the pilot study. Levels 3 and 4 were assigned the same task. Levels 1 and 2 were assigned simpler versions of the task containing less complex language. Level 1 was asked to simply make up questions based on statements provided. They completed 20 items. Level 2 was asked to do the same, but were given a question word for each item. They completed 32 items. Levels 3 and 4 were asked to make up questions about the underlined parts of sentences. They were provided with a choice of question words. Level 3 had the same choice of words as Level 2. They completed 44 items. Level 4 had the same choice of words as in task S. They completed 30 items. (See Appendix A.6).

4.3.1.3 Administration of Tasks

The cross-sectional study was carried out in March/April 1985. Each subject completed all the negation tasks (in the order 1, 2, 3) before the interrogation tasks (in the order 1, 2, 3). Tasks were completed on separate occasions within a few days of each other for each subject. The whole project was completed within four weeks. All tasks were administered by the researcher. Unless otherwise stated instructions were in English.

NEGATION

NEG Oral

Subjects were interviewed individually. The listening component was administered after the interview. The whole task, which was taperecorded and later transcribed, lasted between 10 and 15 minutes.

NEG Situation and Transformation

Each task was administered to all subjects of one level in one sitting of 30 minutes. Level 1 did not complete the Situation task.

INTERROGATION

Q Oral

Subjects completed this task in pairs with the researcher present. Sessions, which were taperecoreded and later transcribed, lasted between 15 and 25 minutes.

Q Situation and Transformation

Each task was administered to all subjects of one level in one sitting of 30 minutes. Level 1 did not complete the situation task.

4.3.1.4 Overview of Language Data Collected

The following table (Table 4) provides an overview of the kinds of data collected for the cross-sectional study of children. O, S and T indicate oral, situation and transformation task respectively.

TABLE 4

Main Study: NEGATION + INTERROGATION number of subjects

	NEG			Q			
	O	S	T	O		S	T
				a	b		
Level							
1	12	–	12	–	12	–	12
2	10	10	10	10	–	10	10
3	10	10	10	10	–	10	10
4	10	10	10	10	–	10	10

4.3.1.5 Input/Interaction

Investigation in this area was very limited. Information was derived mainly from the longitudinal study of Level 1. Some additional observation of classes was carried out at Level 2. Textbooks and syllabus guidelines were also examined.

4.3.2 Longitudinal Study - Children

4.3.2.1 Subjects

As already mentioned in the cross-sectional study, the subjects for this part of the study were 12 children, 6 female, 6 male, aged 11/12, in their first year of a state secondary school in Edinburgh. They were all native speakers of English, beginners in German, their only foreign language. Their contact with German was limited to five 40 minute lessons per week plus homework. They began their German study in August 1984. The teaching was based on a communicative syllabus which included some explicit teaching about the regularities of the German language and comparison with English. More details are provided in the results in Chapter 5.

4.3.2.2 Language Analysis Test

After some initial observation of the whole class of 30 learners of German which allowed both the teacher and the learners to become used to the presence of the researcher in class, at the beginning of September 1984, a language analysis test was administered to the whole class. The purpose of this test was to discover subjects' differing abilities in analysing language data, more specifically in uncovering, formulating and applying language rules. Subjects for the longitudinal study were then to be selected according to their performance on this test.

The test was an adaptation and extension of the PIMSLEUR LANGUAGE APTIDUDE BATTERY Part 4 (Pimsleur 1966). Details can be found in the Appendix, A.7. The test consisted of four parts. Part I was designed primarily to test subjects' ability to perceive regularities in a language for themselves. Part II was designed to test subjects' ability to formulate language rules. Part III tested their ability to apply rules which had been stated explicitly. Part IV was designed to test their ability to distinguish word classes and to establish whether they tended to base their analysis on syntactic, semantic or any other information.

In Part I subjects had to analyse language data to uncover rules. For this they were given data from a language specially constructed for the original test, with English translations. They then had a multiple choice task to complete, where they had to select the correct translations of English sentences by using the rules which they had found. Thus they had to analyse both English and the new language. In Part II subjects were asked to verbalise and write down the rules which they had found in Part I. In Part III subjects were given some additional vocabulary and three rules with examples. They then had to apply these rules in translating a series of English sentences. In Part IV subjects were given a list of words and sentences in the new language and a list of English words. They were asked to group items which they thought had something in common. They were given no indication on what basis to group items.

Tests were administered in one sitting lasting approx. 35 minutes. Each part of the test was administered separately with a set time limit. Tests were analysed and subjects selected for the longitudinal study according to how they performed. 6 of the highest and 6 of the lowest scoring subjects were selected.

4.3.2.3 Learner Language

From 14th September to 18th December 1984 classes were observed for one or two lessons per week. All negative and interrogative constructions produced by the 12 subjects were noted. Due to the sparcity of these data and in order to obtain some more spontaneous data, it was decided to elicit some more data outside the classroom. Data were elicited on three occasions. The first test was administered 8 weeks after the start of the observation, followed by two further tests at four-weekly intervals.

Elicitation tasks

Due to subjects' extremely limited language knowledge it proved to be very difficult to obtain spontaneous language data. Elicitation tasks were therefore based on the types of activities subjects were familiar with from the teaching. Tasks were designed to yield a mixture of negative and interrogative constructions of various types.

TEST 1

Task 1

Subjects had to answer the interviewer's questions about themselves and in turn had to ask the interviewer questions.

Task 2

Subjects were asked to identify objects on picture cards. They were asked questions of the type "Ist das eine Handtasche?" (is that a handbag?) which they had to answer.

Task 3

This took the form of a game. A set of picture cards was used plus a large card depicting all the objects found individually on the cards. The subject and interviewer each received a selection of cards. Both would then take turns at asking for cards depicting certain objects. If the other person had a card depicting the object he would hand it over.

Example

I.: Hast du eine Handtasche?
S.: Nein, ich habe keine Handtasche.
   Hast du ein Bild?
I.: Ja, ich habe ein Bild.

All three tasks were administered in one sitting, lasting approx. 10-15 minutes. Instructions were given in English. The test was taperecorded and later transcribed.

TEST 2 and TEST 3

Subjects were working in pairs, taking turns at asking and answering questions about their families, hobbies etc., with the researcher present. In Test 2 they were also given cards containing information about imaginary pen pals and had to ask eachother questions about them. Instructions were given in English. The tests, which lasted approx. 10-15 minutes each, were taperecorded and later transcribed.

4.3.2.4 Input/Interaction

The collection of input and interaction data took the form of a diary. During the 15 weeks of classroom observation notes were taken on input and interaction in the classroom generally and specifically with regard to negation and interrogation. Out of a total of 60 classes, 12 (20%) were observed, with the observing researcher sitting in a corner of the classroom, in front of the class. We, the observer, did not in any way participate in the lessons.

The teaching was entirely teacher-fronted and it was relatively easy for the observer to keep track with pencil and paper of the input and interaction as they unfolded. There were no parallel activities, the structure of the lessons unfolded linearly and was determined by the teacher in all observed lessons.

Teaching techniques and type of learner participation were noted. Particular attention was paid to those aspects of the learning situation which were thought to be untypical of naturalistic learning settings as these might lead to differences in language development. In recording priority was given to any input relating to negation and interrogation. In addition information on the teaching was derived from the teaching syllabus, teaching materials, including the text book DEUTSCH HEUTE (Sidwell and Capoore), which was used extensively, as well as from consultation with the teacher.

4.3.3 Longitudinal Study - Adults

4.3.3.1 Subjects

Subjects of this study were 6 adults aged between 19 and 60 (three in their twenties, 2 over 50), all educated at university level. All were native speakers of English. 4 of the subjects had studied French for between 4 and 6 years and of these one had also studied Latin for 2 years. One subject had studied Italian for 3 years. One subject had no experience of other languages. 4 male learners belonged to one language class (Group 1), 2 female learners belonged to another class (Group 2). Their contact with German consisted of two consecutive hours of instruction per week at the Institute for Applied Language Studies, Edinburgh. Teaching was based on the principles of the communicative approach, the syllabus structured around notions and functions. Some explicit information about language rules was provided and comparison was made with English. Subjects

had no or very little previous contact with German. Contact with German outside the classroom was limited to some occasional reading of simple German texts of songs, films with subtitles etc.

4.3.3.2 Language Analysis Test

Subjects were given the same test as the 12 children of the longitudinal study.

4.3.3.3 Learner Language

Subjects were observed in class from October 1984 for 6/8 weeks. All 2 hour sessions were observed. All negative and interrogative constructions produced by the subjects were noted. An attempt was made to classify their responses according to "naturalness" or "spontaneity" and "formality" or "imitation". In addition data were elicited. Group 1 received two tests, the first in Week 4, the second in Week 7. Group 2 completed the first test only, in Week 4.

Elicitation Tasks

Tasks were designed to yield a variety of negative and interrogative constructions. All instructions were in English.

TEST 1

Subjects would attempt a conversation first with the interviewer, then with another subject, about their personal circumstances, similar to Test 1 Task 1 and Test 2 and 3 used for the 12 children.

TEST 2

Both Task 1 and 2 are variations of Test 1 above.

Task 1

This was a "guess the name of a famous personality" task. 2 subjects would ask and answer questions on a personality which they had chosen.

Task 2

The subject had to ask the interviewer questions about people in a photograph.

Administration of Tests

During elicitation only the researcher and tested subject(s) were present. Instructions were given in English. Interviews, which lasted between 15 and 20 minutes were taperecorded and later transcribed.

4.3.3.4 Input/Interaction

Notes were taken in all classes observed on the general pattern of teaching and interaction. Materials used were collected for all classes, with notes on additional input in the classes. Special attention was given to negative and interrogative structures in the input and the treatment they received by the teachers and the learners.

4.3.4 Data Analysis and Presentation

The purpose of this investigation is to provide some evidence of transitional interlanguage structures in classroom learners' language and assess to what extent their language use and development is related to certain features of the classroom. The presentation of data will therefore be primarily descriptive and qualitative in nature. Quantitative analysis is adopted whenever the scope of the investigation allows and when this is relevant to an understanding and discussion of the data. We will provide a linguistic description of the language used by classroom learners, comparing it to the language produced by naturalistic learners and the language provided in the input. We will also compare the language produced by adult and child learners, by learners of differing analytic ability and in different language tasks. The linguistic description will be accompanied by some quantitative analysis. As part of the cross-sectional study we will calculate the percentages of different NEG and Q structures in relation to the total of NEG and Q structures used for each of the 4 levels and for each of the 3 NEG and Q tasks. TL-like and non-TL-like performance percentages will also be calculated. This is only a rough outline of the data analysis procedures. The exact nature of the qualitative and quantitative analysis and their relationship in the interpretation of the data will become apparent in the course of the result chapters, Chapters 5 and 6.

Notes

1. There are of course other differences between the tasks such as to what extent they include a comprehension element, subjects are expressing their own ideas or respond to ideas expressed in the tasks etc. How learners react to specific aspects of the tasks will be discussed in Chapter 6.
2. If it exists at all it may be due to written forms drawing more attention to form than spoken, informal instructions. They also, of course remain available for subjects to refer to during elicitation.

Chapter 5
RESULTS I - Children

This chapter reports the results of the cross-sectional and the longitudinal study of the children in the investigation. The first section outlines the general background against which classroom SLA in our study has to be considered. This includes an account of the developments in language teaching which were taking place in the school region at the time of data collection and their effects on syllabus design and classroom practices. The second section deals more specifically with teaching practices, including general comments on what happened in the classroom, as well as an analysis of the input on negation and interrogation and their treatment by the teacher. The third and fourth sections deal with the longitudinal and the cross-sectional language data respectively. These will be discussed in relation to the teaching. We will find our main hypothesis confirmed, i.e. that IL processes operate independently from the teaching. In addition the analysis of classroom learner language also leads us to consider the role of imitation and formulaic langauge use as a more direct result of teaching practices.

5.1 Background to Language Teaching

The year in which the present study was carried out saw the publication of *"Syllabus Guidelines 1: Communication - A Graded Approach Towards School Foreign Language Learning"* edited by John Clark and Judith Hamilton (1984). These syllabus guidelines had emerged from work done in Lothian Region's Project on Graded Levels of Achievement in Foreign Language Learning (G.L.A.F.L.L.). The project was designed to allow for a high degree of teacher participation. One of the main contributors, co-ordinator for the German group, was the head of the German department at Portobello High School, Edinburgh, where the subjects of this study come from. The aim of the project was to provide a framework for teaching which would cater for learners of all levels of ability, so that all pupils would be able to benefit from language teaching. This aim has to be seen against a background of traditional language teaching which was perceived by the G.L.A.F.L.L. team to have been useful only to pupils of high academic ability who were likely to pursue language study to a high level and

whose immediate purpose was the analysis of language structure as an academic discipline rather than actual language use. The new type of language teaching focused instead on the aim of developing in all learners the ability to perform certain tasks and activities in the foreign language and a sense of responsibility for their own learning. In other words, the aim was to equip learners with basic skills and resources which they might later deploy in a context of "real" language use, regardless of whether this meant on holiday abroad or more advanced professional use of the language. Traditional language teaching had concentrated much more on the analysis and formal manipulation of grammatical structure. We therefore find in the new approach an emphasis on "communication". The meaning of the term extends beyond mere "exchange of information". It includes a variety of modes and activities. The main feature of communication is seen as language use for a purpose, and its emphasis in the G.L.A.F.L.L. approach represents a deliberate move away from the traditional use of language in the classroom which is seen merely to serve practice of language forms.

Even though the G.L.A.F.L.L. approach centres around the notion of communication, it differs from a "communicative" approach, as originally conceived by for example van Ek (1975, 1976), in a number of important ways. Early communicative approaches to language teaching represent an attempt at accommodating the notion of "communicative competence". We will not discuss in detail this notion, which arose as a reaction to linguists' preoccupation with form. Instead we will discuss briefly, how it relates to the thinking which gave rise to the communicative approach to language teaching. The notion of communicative competence provided a handle for describing a frequently observed phenomenon among classroom language learners, i.e. their inability, despite intensive and extended study of the formal properties of the foreign language, to use the language in a "real" context. Language, it was realised, consisted of more than just grammatical structure, it also had rules relating to its use in real-life situations. This rediscovered way of thinking led to the demise in some quarters of the grammar-based syllabus. Instead a graded set of language notions and functions was established. However, subsequently attempts have been made to accommodate grammatical elements into a notional/functional syllabus (Trim, Richterich, van Ek and Wilkins 1980).

There has been considerable development within broadly communicative approaches, leading to distinctions between "fluency" and "accuracy" activities in the classroom (Brumfit 1984). The G.L.A.F.L.L. approach fits in more with the recent refinements of the communicative approach. Its perspective differs from the original approach in that, whilst acknowledging the importance of language notions and functions, its basic design retains a considerable role for grammatical instruction. In addition the G.L.A.F.L.L. approach takes account not only of the "what" of language teaching, i.e. the nature of the language system, but also of the "how" of language learning. It quite specifically addresses the question of what learners actually do when they learn a foreign language. Its perspective derives largely from the notion of interlanguage. It also distinguishes between the "acquisition process" and the "formal learning process". This distinction is based on Krashen's "acquisition" and "learning" distinction (Krashen 1981). Like Krashen, the G.L.A.F.L.L. approach assumes that learners use "acquired" language for most communication and that the use of "formally learnt" language knowledge is largely restricted to a monitoring function. In contrast to Krashen, however, the G.L.A.F.L.L. appoach adopts an interface position, i.e. it assumes that through various *purposeful* language activities learnt knowledge is transferred to the acquired system. It is made clear that formal study and practice of forms in the traditional sense of drilling, substitution exercises etc. is not sufficient for internalising language rules.

Errors are seen as an inevitable part of language development, which is viewed as progressing from a limited pidgin system to a more complex system. Two types of error are expected, those that are due to overapplication of consciously learnt rules and those which arise naturally out of "acquisition". Errors produced in communicative activities should be tolerated and not given too much attention, whereas errors committed during practice have to be treated. Apart from this tentative distinction, no clear guidelines for the treatment of error are given. Rather the complex nature of errors and their treatment are stressed and teachers are encouraged to use their own informed judgement in particular contexts to take appropriate action. Finally, a large role is given to motivation, which is said to depend on learners' involvement as themselves and on their taking responsibility for their own learning.

The task of language teaching is seen by the G.L.A.F.L.L. approach as providing language learning experiences which lead to communicative ability. To this end the teaching of particular language aspects to create a language resource and involving learners in communicative activities are seen as complementary. According to context, one or the other will serve as a starting point. The G.L.A.F.L.L. syllabus consists of two parts. Part 1 (John Clark and Judith Hamilton, 1984) outlines in general "communicative" activities. Part 2 (John Clark and Judith Hamilton), which is designed for each individual language, suggests language resources in terms of communicative notions/functions and grammatical structure.

5.2 Input/Interaction

In Chapter 2 we already indicated that it was not enough to divide learning environments into "formal" and "informal" without a more detailed examination of the similarities and differences which occur in practice. Similarly, classification of language teaching methods into "direct method", "audio-lingual method", "traditional" or "communicative" hides a multitude of variables within each particular method and also commonalities between them, making it difficult to assess effects on learning. In this study we therefore attempt to avoid problems arising from a simple method label. In the previous section we outlined in some detail the thinking behind the teaching our subjects were exposed to and discussed some practical aspects of the syllabus design. In order to establish to what extent learners' language is related to the teaching/learning context, we now look more closely at what actually goes on in the classroom. We find that both with regard to general practices as well as in relation to the teaching of NEG and Q, individual teachers' interpretation of teaching guidelines and their own approach to the task of teaching have to be taken into account.

In the following we are concerned with input and interaction in the teaching of Level 1 only, information about other levels will be provided at a later stage. Language input at this level consisted mainly of routines and patterns. A small number of formulas was introduced for routine classroom activities. Learners were taught to respond to instructions such as

1. Hebt die Hand. (Lift your hand)
2. Zieh die Jacke aus. (Take off your jacket)
3. Frag..... (Ask.....)

They were also taught to produce on appropriate occasions utterances such as

4. Lisa fehlt (auch) heute. (Lisa is (also) absent today)
5. Ich habe mein Heft vergessen. (I have forgotten my exercise book)

Periodically paradigms were introduced to draw attention to regularities in a small area, i.e. gender marking on articles or person marking on one verb. In this case the whole paradigm was presented and the meaning of individual items explained. Abstract rules in isolation were not given. We may characterise the teaching at this level as designed primarily to encourage imitation and memorisation of language chunks with the help of associated English meanings and stimulus-response type practice. Learners were required to produce language from the start. Production took place within tightly controlled language practice activities with little room for varied responses. Utterances by learners were initiated by the teacher. They were either responses to the teacher's questions, responses to the teacher's instruction to produce a certain sentence or structure, repetition after the teacher or responses to other learners on teacher initiation. They occurred mostly in the context of similar utterances, i.e. similar structures which the class was practising, involving a certain amount of group repetition. The variety of structures used in class at any one time was extremely limited, as was the vocabulary. Spontaneous utterances which did not relate directly to what the teacher was trying to teach were not accepted. Rather the teacher always guided the learners back to producing those structures which she wanted them to practice. If there was any choice at all this was restricted to vocabulary or in the case of personal questions depended on the learners' personal background. At this point a limited amount of variation in responses might occur.

All structures relating to NEG and Q received similar treatment to that outlined above. It involved extensive drilling with either the teacher or learners prompting production. Practice involved both individual responses and group chanting. During practice particular attention was paid to erroneous utterances. These were corrected immediately and learners asked to repeat the corrected

version. All negative and interrogative structures were introduced and practised in relation to corresponding affirmative, interrogative and declarative structures. No explicit teaching regarding postverbal NEG placement or the word order in interrogatives was observed.

Learners were exposed to NEG and Q from the start and, interestingly, received instruction in precisely those structures which had been selected for the investigation. We may presume that this is because of their relatively clear-cut nature and obvious usefulness at an early stage of learning. The teacher assumed that learners would be familiar with the functions of NEG and Q and did not spend any time on their analysis. The functions were assumed to be transferrable from English. We will now consider in detail the input on NEG and Q which learners received, together with some more detailed observation concerning their treatment.

5.2.1 NEG and Q Input

Negation

The following negative structures were introduced in the stated order:

1. Das ist KEIN X, (That is not a X)
2. Ich habe KEIN X, (I don't have a X)
3. Ich bin NICHT *adjective*, (I am not *adjective*)
4. Ich *main verb* NICHT gern (X), (I don't like *main verb-ing* (X))
5. Ich *modal* NICHT *infinitive*, (I *modal* not *infinitive*)

"kein" appeared first in the input at around Week 3 of instruction in structures of the type "Das ist kein X". "nein" was also introduced around this time, but it was not given much prominence. Structures of type 1. were drilled extensively, "X" stands for 20-30 nouns, denoting a variety of objects such as pen, table, handbag etc.

In Week 6 structures of type 2. appeared, "Ich habe KEIN X", where "X" refers to a limited set of nouns, including at first brother and sister only, then in Week 8 a variety of pets were added. In Week 7 "Ich habe eine Schwester/einen Bruder, aber keinen Bruder/keine Schwester" also appeared. This sentence did not appear to any great extent. Only those learners who only have a sister or a

brother seemed to be required to use it. Week 7 also saw the introduction of the following paradigm:

der die das
ein eine ein
kein keine kein

This involved explanations of the gender distinctions and the definite vs. indefinite dimension already implicit in the introduction of nouns with their articles. The definite vs. indefinite distinction was related by the teacher to the difference between "a(n)" and "the" in English. Gender distinctions and the use of "kein" were described as something which is different from English. Structure 2. appeared regularly throughout Week 9-13 with extensive practice in Week 12+13. Gradually the use of nouns was extended from brother, sister and pets to include nouns appearing in structures of type 1.

The first structures with "nicht" did not appear until Week 15. The copula "sein" and its paradigm were taught and practised around Week 14, followed by a list of adjectives in Week 15/16. Structures of type 3., "Ich bin NICHT *adjective*" were then practised along with affirmative structures.

The first main verb structures with "nicht" were the two sentences *ich verstehe nicht*, (I don't understand) and *ich weiß nicht* (I don't know), which were introduced as formulas for obvious classroom management purposes. Main verb structures of type 4., "Ich *main verb* NICHT (besonders) gern (X)", were introduced a week later in Week 17. All of these main verb structures included the adverb "gern" which expresses a "liking" for an activity, for example:

ich spiele nicht gern Fußball
I don't like playing football

These structures were practised extensively over a number of weeks.

Modals were introduced much later in the year, the first, "können", appearing around Week 24.

Since the various structures received very similar introductory and follow-up

treatment, we may assume that their order of appearance also reflects the frequency with which learners were exposed to them up to Week 24.

Interrogation

Learners were introduced to a variety of information questions from the very beginning of their instruction. By Week 3 they had received input on and practised the following questions:

YES/NO

Ist das EIN X?   (is that a X?)

Information

Was ist das?   (What is that?)
Wie heißt du?   (What is your name?)
Wie alt bist du?   (How old are you?)
Wo wohnst du?   (Where do you live?)
Wo ist Edinburgh?   (Where is Edinburgh?)
Wie geht es dir/Ihnen?   (How are you?)
Was ist heute/morgen?   (What day is today/tomorrow?)

A large part of the practice of information questions consisted of the teacher prompting learner responses by means of the imperative plus indirect question:

Frag Barry, wie er heißt, (Ask Barry what his name is)

Over the weeks a small variety of information questions were added. In Week 6 another YES/NO question was introduced, "Hast du Geschwister?", (Do you have any brothers and sisters?), and in Week 8 "Hast du ein Haustier?", (Do you have any pets?). In Week 13 "Hast du ein X" was expanded to include a variety of nouns. Around this time the whole "haben" paradigm was introduced and YES/NO questions started to include subjects other than "du". The input contained only inverted YES/NO questions. By Week 18 YES/NO and information questions were added and used in roughly equal proportions. Therefore in the early input up to Week 18 information questions outnumbered YES/NO questions in the observed classes by at least 3:1.

TABLE 1 on the following pages illustrates roughly five stages in the teaching
of NEG and Q:

TABLE 1

Overview of NEG and Q Input

	NEG	Q	OTHER LANGUAGE
Stage I			
Week 3	Das ist KEIN X	<u>YES/NO</u> Ist das EIN X? <u>INFORMATION</u> Was ist das? Wie heißt du? Wie alt bist du? Wo wohnst du? Wie geht es dir/Ihnen? Was ist heute/morgen?	X= 20–30 nouns Frag Y, wo er wohnt : : :
Stage II			
Week 6	Ich habe KEIN X	Hast du Geschwister?	X= Schwester, Bruder
Week 7			der die das ein eine ein kein keine kein
Week 8	Extended use of Ich habe KEIN X	Hast du ein Haustier?	added to X= Hund, Katze, Goldfisch, Hamster etc.
Stage III			
Week 13	Extended use of Ich habe KEIN X	Hast du (EIN) X?	X includes nouns from Stages I and II paradigms: sein haben
Week 15	Ich bin nicht ADJ	Ist Z ADJ?	ADJ= faul, klein, müde etc. Z= names of learners

TABLE 1 continued

	NEG	Q	OTHER LANGUAGE
Stage IV			
Week 16	Ich verstehe nicht Ich weiß nicht		
Week 17	Ich MAIN VERB nicht (besonders) gern (X)	Was MAIN VERB du gern?	MAIN VERB= spielen, einkaufen, lesen, schwimmen, fernsehen etc.
Stage V			
Week 24	Ich MODAL nicht infinitive	MODAL du infinitive?	MODAL= können, wollen

Input/Interaction beyond Level 1

Only very limited information regarding the teaching beyond Level 1 is available. Generally, as the input increases from Level 2 onwards, more open communicative activities are introduced and the tightly controlled language practice which limits the amount and type of language used, characteristic of the first year of instruction, gradually decreases. In the second year learners received some explicit rule explanation. They were made aware of postverbal NEG placement, and Subject-Verb inversion in information questions is explained in terms of a "verb comes second in a sentence" rule. It is not clear whether these rules, or for that matter any language material relating to NEG and Q introduced in the first year, were taught repeatedly in the course of the second or any other years. However, explicit rule teaching, at least with regard to NEG and Q, did not feature prominently.[1] We also assume that the input at higher levels did not contain non-target-like negatives and interrogatives.

5.2.2 Classroom vs. Naturalistic Input/Interaction

The studies by Felix (1978) and Lange (1979) which provided our naturalistic L2 language data did not discuss in detail the input learners had received. We feel justified in making only one assumption which concerns the input on negative particles. It is highly unlikely that naturalistic learners, like our classroom learners, will have initially received input on "kein" only. It is much more likely that from the beginning they were also exposed to "nicht" since one can assume that they received at least some negative commands such as "nicht essen", (don't or not to eat) or "nicht anfassen" (don't or not to touch'). Interactional data are also not available for naturalistic subjects. Given the age of the naturalistic learners involved (3-5 years), we may assume, however, that they did not receive any explicit statements of rules and that no reference was made to their L1 as a means to understanding the L2. We also assume that naturalistic interaction was not tightly controlled in terms of permitted language use and did not involve drilling learners in certain structures or requiring them to reproduce corrected versions of non-target-like utterances.

5.2.3 The Teaching/Learning Relationship

The analysis of the relationship between classroom learner language and teaching as described in the preceding sections will want to answer to what extent the teaching does or does not affect the course of overall language development. This question falls into two parts:

1. What is the immediate effect of teaching on learner language.
2. What is the effect of learners' early classroom experiences over time.

In order to answer question 1 we will refer to the longitudinal study which looked at the language produced by Level 1 during the first 18 weeks of instruction both in the classroom and during elicitation outside the classroom. In order to answer question 2 we will refer to the cross-sectional study which elicited data from each of Levels 1-4 after eight months of instruction. Comparison will be made with naturalistic learner language in as far as it already provides some evidence of learning context independent processes.

5.3 Learner Language - Longitudinal Study

5.3.1 Classroom data

Given that we are dealing with a class of 30 learners, actual teaching time often amounting to less than 30 minutes and teaching involving aspects other than NEG and Q, we did not expect a large amount of data to emerge during classroom observation. This prediction turned out to be particularly true for negation, for which only 6 utterances were recorded. All of these were of the type "Ich habe KEIN X" and showed target-like negation. There were some errors relating to the morphology of "kein" or the choice of lexical items. The picture is somewhat different for interrogation. While YES/NO questions occurred rarely, information questions were prominent during the first 18 weeks of instruction. The following table (TABLE 2) provides a breakdown of questions produced:

TABLE 2

Type and number of information questions

Wie heißt X?	29	Wo liegt X?	4
Wie alt SEIN X?	9	Wo ist X? .	2
Was ist/war heute etc.?	9	Wie geht es dir/Ihnen?	2
Wo WOHNEN X?	8	Woher kommst du?	1

All of these questions show Subject-Verb inversion. Errors which did occur related to the part of the question to the right of the question word and the verb where learners produced more than one alternative. For example in questions such as

Wie heißt du/deine Schwester/deine Deutschlehrerin?

errors might occur relating to choice of possessive pronoun or lexical item.

Judging by the classroom data, it appears that learners are able to produce target-like structures of the following types:

NEG

Ich habe KEIN X

Information questions

Wie heißt...
Wie alt...
Was ist/war...
Wo wohn(s)t...
Wo liegt...
Wo ist...
Wie geht...
Woher kommst...

Since we are dealing with only one negative structure, we can obviously not speculate about the nature of the learners' knowledge of NEG at this stage. Interrogative structures, however, pose some interesting questions. All 64 questions produced were inverted. We also find a variety of question words and verbs, including both the copula and main verbs. The question is, what is the status of these structures in the language of our learners? Are they analysed in terms of a Subject-Verb inversion rule (or any other rule such as a "verb comes second" rule)? One could argue that teaching and the L1 have enabled learners to conform to a Subject-Verb inversion rule in German. There are, however, more plausible explanations. It is highly likely that some utterances are the result of imitation, especially where structures were introduced for the first time. It is not possible within the context of this study to determine the exact proportion of

imitated utterances, but imitation is clearly encouraged and expected by the teacher. Also, if we look more closely at the distribution of questions produced, we find that nearly half (29 of 64) are "Wie heißt...?" questions, and again nearly half (27 of 64) are in roughly equal numbers "Wie alt...?", "Was ist/war...?" and "Wo wohn(s)t...?". In other words we are dealing with a relatively small variety of questions, all of which had been practised individually and extensively when first introduced and were produced in the context of language practice. We therefore suggest that learners rely largely on memorised patterns when they produce target-like inverted information questions in the classroom rather than operate according to a Subject-Verb inversion rule. Further support for this interpretation is evident in the elicited longitudinal and cross-sectional data.

5.3.2 Elicited data

As already mentioned in Chapter 4, it was very difficult to obtain spontaneous data from 1st year learners. Elicitation outside the classroom therefore took a similar form to classroom activities. The elicitation tasks allowed for a certain amount of "real" communication, either because they related to subjects' personal background or because they took the form of a game. Nevertheless, despite assurances to the contrary, learners clearly found it difficult to perceive the tasks as anything other than tests of "correct" language performance. Therefore, while elicitation outside the classroom is less tightly controlled than classroom practice and obviously learners are not "corrected", constraints on language resources available to learners and their expectations mean that it is still far from spontaneous communication.

While utterances produced in tests 1-3 are largely target-like, around 10% (52 utterances) of structures do not conform to target norms. There is no discernible development from test 1-3, which is mainly due to the short intervals between them. A variety of phenomena appear, but with relatively few instances of each and no pattern of occurrence from one test to the next emerges. The only apparent difference is a quantitative one, with non-TL like utterances rising from roughly 12% to 17% and then falling to roughly 0.5%. It is not possible to assess the significance of these differences. Firstly the pattern is different for NEG and Q when analysed separately. Secondly absolute numbers of utterances vary considerably, both between tests and between NEG, YES/NO and information

questions. In any case, it is the qualitative aspect of these utterances which is of primary interest. We will therefore deal with the results of all three tests together.

The non-target like data supports the hypothesis that the target-like data is largely formulaic in nature. It can be divided into two subsets. On the one hand we have data which appears to relate to the learning environment, on the other hand we find structures which resemble early naturalistic data or which can be seen as evidence of IL construction. Learners appear to rely on routines and patterns in their production to an extent and with results apparently unknown in naturalistic acquisition. Evidence of the largely formulaic status of utterances is manifest in a number of ways. Learners use complete structures for the meaning of other structures. For negation we find:

1. *Das ist* KEIN X   in response to
   Hast du EIN X

and for interrogation:

2. Wie heißt deine Katze?

meaning: Wie alt ist deine Katze?

It is possible that additional data would show that the use of the above formulas is not all that different from naturalistic uses. We may merely be dealing with a case of one formula being used for more than one function. Felix (1978) reports on the case of David who uses "Sprechen Sie Deutsch?" whenever he meets someone or takes his leave of someone. However, there is some indication that our classroom learners use formulas at times randomly in other non-TL like utterances. Leaners combine different parts of different structures randomly. This may involve substitution of larger parts, as in 3.b), 4.b), c) and e), or individual lexical items, as in 3.a), 4.d) and f):

3.a) Das hast kein Pullover.
  b) Nein hast du eine Katze.

A similar phenomenon occurs with questions:

4.a) Hast du Geburtstag?
  b) Wie heißt dein Bruder Geburtstag?

c) Wie alt dein Geburtstag?
d) Wo heißt deine Freundin?
e) Wo heißt einen Bruder?
f) Sie wohnt Freundin?

Some of these utterances are clearly based on learners' attempts to retrieve memorised language chunks, such as 1. and 2. for instance. Others may be the result of modelling an utterance on the interviewer's previous utterance, such as 3.b), which was produced as a response to "Hast du eine Katze?". (This sentence, incidentally, can also be interpreted in terms of IL construction. The learner is simply negating externally the whole of the interviewer's sentence, which she understood.) Utterances of type 4. may be the result of a combination of both, an attempt to retrieve language from a memorised store of formulas and imitation of language produced by the interviewer.

Imitation and formulaic speech are of course well-documented phenomena in naturalistic SLA (Hakuta, 1974; Huang and Hatch 1978). The difference between routines and patterns observed in naturalistic SLA and those of our classroom learners seems to be primarily a quantitative one. Because of extensive drilling of a limited set of structures and a limited number of variations over a long period of time with little additional input, and possibly due to the advantage of age of our learners compared with many naturalistic learners, our learners were able to memorise larger chunks of language. However, our learners use formulas at times randomly, at times combining parts of different formulas in ways which have not been reported for naturalstic SLA. Learners' random use of formulas and imitation may be related directly to the emphasis in the teaching on memorisation of language chunks and on immediate learner production. In contrast to naturalistic learners, our classroom learners are not allowed a silent period, nor can they select from the input those items which will serve them as formulas. The constant pressure to respond to the teacher's instruction to produce language and the close interrelatedness of the forms and functions of the structures involved may lead to excessive demands on memorisation and retrieval, which in turn may lead to learners not always maintaining clearly defined contexts for the use of formulas, i.e. their use becomes random. At times the retrieval system for language chunks seems to collapse even further, leading to imitation. What is

striking is that learners, as already indicated earlier, have difficulties in treating language as a means for communication. Instead they tend to perceive the purpose of elicitation as "getting the right answer". Felix (1981) reports similar cases of random responses to our own. His learners who are of a similar age and received similar teaching are also under constant pressure to respond. In the context of explicit rule teaching they produce the following responses:

T.: Is it a dog?
L.: Yes, it isn't.

T.: Can you see a sofa in Pete's room?
L.: No, I can.

Felix interprets these as random responses in a situation where learners are forced to produce and learn structures for which they are not ready developmentally.

There are several indications that some other processes are also operating. Learners produce structures similar to those encountered in naturalistic SLA and others, which are not familiar from naturalistic SLA, may be taken as independent evidence of IL construction. There are a number of cases of external negation, mainly in complex sentences, but there is also a typical example of early naturalistic single constituent negation:

5.a) nein häßlich
   b) nein hast du eine Katze
   c) nein das ist EIN X
   d) nein mein Vater ist schön

In addition there is some indication that learners do not distinguish between the use of "nicht" and "kein" (the use of "kein" for "nicht" is not documented in naturalistic SLA):

6.a) mein Bruder ist kein schön
   b) mein Bruder ist keine häßlich

We find a number of uninverted YES/NO questions:

7.a) sie hast ein Geschwister?
   b) sie hat Freundin?

There are also a number of information questions which may be interpreted as being signalled by a particle:

8. wie heißt ist dein Bruder?

Other similarities with early naturalistic acquisition include the lack of verbs as in "Wie alt dein Schwester". None of the above structures are directly modelled on the input.

It appears then that once learners move way from the controlled classroom setting to slightly more spontaneous communication, they produce non-target like language in two ways. On the one hand, strategies which help them to produce target-like utterances in the classroom, such as imitation and memorisation of routines and patterns, result in a certain amount of randomly produced language. On the other hand, processes more characteristic of naturalistic settings begin to show themselves in systematic IL construction.

5.4 Learner Language - Cross-Sectional Study

In the previous section we indicated that 1st year learners' expectations, shaped by the experience of classroom language practice, made any attempt at spontaneous communication very difficult. The tendency not to treat language as a means for communication also surfaces in the cross-sectional part of this study. This happens despite the interviewer's explanation of the purpose of elicitation: learners are told that the interviewer is interested in finding out about learners' background, school, hobbies etc. Apart from learners' expectations, the nature of the elicitation tasks and the relatively formal conditions of their administration also contribute to this purpose often being undermined. Subjects would frequently fail to treat the interviewer's questions at face value, i.e. as real questions. This was particularly true of the lower two years. Subjects would "invent" cats, hobbies etc., as though it seemed inappropriate to them to negate the assumptions of the questions. Furthermore, they appeared to be guessing the purpose of the interview, frequently asking for confirmation as to the appropriateness of their answers, not only in terms of TL norms, but also in terms of content. In other words they treated the interview as a game or exercise to

which they had not been given the rules or detailed instructions. More advanced learners tended to respond more directly to questions, but also in much more detail than was required, which suggests an emphasis in the teaching on complete sentences and practice for oral examination questions, requiring learners to display as much of their TL knowledge as possible. Subjects in lower years also, not infrequently, refused to respond to certain questions or instructions on the grounds that they "hadn't done it yet" in class, rather than indicate that they could not understand it. In other words they would not attempt to negotiate meaning. In this sense teaching has a palpable effect on learners' early perceptions and expectations of language use. However, as will become apparent in the following discussion of the cross-sectional language data, the quite direct relationship between teaching and learning at the beginning stages develops into a more complex system as learners receive increased input and opportunities for more varied communicative interaction.

The random use of formulas observed during the longitudinal study to a smaller extent also surfaces in the cross-sectional language data of Level 1:

Q: Wo wohnt dein Bruder?
A: Mein Bruder heißt Richard.

Q: Wie heißt deine Schwester?
A: Sie ist vier Jahre alt.

Q: Wie alt ist deine Schwester?
A: Meine Schwester heißt Gemma.

Confusions of "Wie alt ist X" and "Wie heißt X" are the most common. At Level 2 this phenomenon occurs only occasionally and it disappears altogether at Levels 3 and 4. What is interesting is the role of formulaic language in learners' negative and interrogative utterances and a parallel development to that observed in the use of formulas in general. The use of routines and patterns accounts for a large proportion of Level 1 utterances. This proportion gradually decreases and an independent IL system emerges. In the following analysis we will deal with negation and interrogation separately.

5.4.1 Negation

As indicated in Chapter 4, tasks were designed to elicit a variety of responses in order to divert subjects' attention away from the purpose of eliciting negative structures. The following table (TABLE 3) provides a breakdown of responses elicited.

TABLE 3
Number of responses

	Overall number of responses	NEG responses
Level 1	315	213
Level 2	358	196
Level 3	517	249
Level 4	569	269

Elicitation tasks were designed to elicit at least 5 responses for each verb type. In practice it was not always possible to obtain this number for each subject. Since the tasks elicited spontaneous language use, there was room for learners to respond with structures other than those under investigation. Comprehension difficulties also at times led to certain items having to be abandoned and to others being added. The following table (TABLE 4) provides an overview of potential and actual number of responses elicited for the various verb types at each level:

TABLE 4
Proportion of different verb types

Level 1	actual	potential	Level 2	actual	potential
main V	70	60	main V	54	50
sein	98	60	sein	72	50
haben	28	60	haben	46	50
modal	5	—	modal	8	50
Level 3	**actual**	**potential**	**Level 4**	**actual**	**potential**
main V	76	50	main V	72	50
sein	82	50	sein	90	50
haben	59	50	haben	60	50
modal	16	50	modal	19	50
aux	7	50	aux	26	50

The distribution of actual verb types produced by learners may be a reflection of the input they received. The copula was the first to be introduced, followed by possessive "haben" and then other main verbs. Modals were introduced after main verbs and only considerably later auxiliary use of "haben" for the perfect tense. The same order applies to the introduction of negative structures. As will become apparent in the following discussion, the acquisition of postverbal NEG placement does not reflect this order in the input of different verb types.

5.4.1.1 NEG Placement

Level 1

Considering the beginner's status of our learners, there is a surprisingly high proportion of sentences containing finite main verbs [2] which are negated postverbally: 90%. Naturalistic L2 learners on the other hand distinguish finite main verbs from other verbs, placing the negator preverbally in main verb structures at the beginning of the sentence internal negation stage. Postverbal finite main verb negation is evidence of a later acquisitional stage. However, there is evidence that these structures when produced by our learners are partially formulaic, rather than indicating the presence of a postverbal NEG placement rule. In 66% of main verb structures "spielen" is used, of the remaining main verbs "lernen" represents approx. 75% and "einkaufen gehen" 25% of cases. Even more significantly, in nearly 75% of cases of postverbally negated finite main verbs, the adverb "gern" is used. In 50% of cases the use of "gern" is inappropriate.

Examples:

Q.: Wann spielst du Fußball?
A.: Ich spiele nicht gern Fußball.

Q.: Wo lernst du Spanisch?
A.: Ich lerne nicht gern Spanisch.

I.: Zola Budd spielt Fußball.
S.: Zola Budd spielt nicht gern Fußball,
    Zola Budd spielt gern running.

Further evidence comes from the occasional structure with the copula:

Q.: Bist du faul?
A.: Nein ich spiele nicht gern faul.

If we go back to the teaching, we find that structures of the kind "Ich main verb nicht gern X" (I don't like _____ ing X), were the first negative main verb structures to be introduced and were drilled extensively over a long period with a limited set of verbs, "spielen" being the most common. Learners appear to be using these previously taught structures wholesale, triggered possibly by certain aspects of the elicitation questions or statements which are similar to what they know from the classroom. Additional evidence for the formulaic status of postverbally negated main verb structures which contain "gern" can be found in learners' affirmative structures. Here "gern" is also frequently used inappropriately.

Example

Q.: Wo spielst du Fußball?
A.: Ja, ich spiele gern Fußball.

(The fact that learners respond to an information question with an answer appropriate only to a YES/NO question will be discussed under Interrogation. At this point it is the presence of "gern" which is of interest.)

As far as main verb negation is concerned, learners appear to be operating with the following "chunk" of language, where the figures indicate the proportion of use of the particular items to the total of main verb responses:

75% 66%   75%
Ich spiele nicht gern

The amount of "genuine", i.e. rule generated postverbal negation may be no more than 25%, and even then we still only find 3 different verbs, "spielen" accounting for more than 50% of cases.

Evidence for an emerging IL system is to be found in the data which was elicited by means of true/false statements. It is here that we find the 10% of preverbally negated finite main verbs. All are cases of "spielen", however, none

of the structures involved contain "gern", which further supports the interpretation of the postverbal data above. All preverbally negated sentences have subjects other than "ich". It may be that in this task learners begin to break down unanalysed language, rather than respond with language chunks associated with certain aspects of the questions asked in the first part of the elicitation. In other words, the second part of the task departs more from patterns familiar through the teaching than does the first part. At the same time the language is simple enough for learners to understand, therefore they respond meaningfully, with signs of their own system. Examples of preverbal negation are:

Zola Budd nicht spielt Fußball
Gordon Strachan nicht spiel Eishockey

One subject also produces two cases of external negation:

nein das ist ein Tür
nein du bist groß

Level 2

Level 2 negation resembles early naturalistic acquisition more closely than does Level 1 negation. The proportion of postverbally negated finite main verbs drops from 90% at Level 1 to 60% at Level 2. For possessive "haben" there is a 5% drop at Level 2 from 100% at Level 1. Preverbal negation is used by 70% of subjects. 3 subjects do not have any postverbal finite main verb negation, 4 have both preverbal and postverbal and only 2 have categorical postverbal negation. In a number of cases "gern" is used inappropriately, supporting our interpretation of the formulaic status of Level 1 postverbal negation, while at the same time indicating that the effect of extensive practice of negative structures containing "gern" is fading. "spielen" and "lernen" still make up 2/3 of all main verbs used, however, they are used with a variety of objects (Gitarre, Klavier, Fußball; Karate, Französisch, Russisch). Also, the remaining 1/3 now include 7 more main verbs. In other words the vocabulary used at Level 2 is much more varied than Level 1 vocabulary. In addition to the increase in preverbal negation at Level 2, there is also an increase in external negation. 4 cases were recorded (as opposed to 2)

and 3 subjects used it (as opposed to 1). At the same time all structures containing the copula "sein" and modals are negated postverbally.

Examples

external negation

nein ich lerne Karate
nein ich spiele Fußball
nein gestern getanzt
nein ich habe essen

preverbal negation

ich keine habe Haustiere
ich nicht gehen zum Schule am Sonntag
ich nicht spiele Fußball
ich nicht lerne Karate

postverbal negation

copula

Nordirland ist nicht sehr groß
Schottland ist nicht sehr warm

modal

ich kann nicht spiele Gitarre
ich kann nicht Russisch sprechen

main verb

ich lerne nicht Französisch
ich lese nicht

The tendency for an IL system to emerge once learners move away from tightly controlled classroom practices and receive more input, already observed to a limited extent at Level 1, is therefore much stronger at Level 2.

Level 3

There is no sentence external negation at this level. The number of subjects producing preverbal negation and the proportion of postverbally negated finite main verbs remain (fairly) constant (70% and 58% respectively). The data now

includes a greater number of modals and a few auxiliaries, all of which, together with all cases of the copula, are negated postverbally.

Level 4

Level 4 subjects categorically negate structures containing finite main verbs, modals, auxiliaries and the copula postverbally.

Development of NEG placement

The high proportion of postverbally negated finite main verbs at Level 1 has been interpreted in terms of the memorisation of a pattern which was encouraged by classroom practice. This effect of the classroom lessens considerably at Level 2. Once learners move away from tightly controlled classroom practice and receive more input, their development towards postverbal negation is essentially the same as that of naturalistic learners. There is some evidence to suggest that they move from sentence external to sentence internal negation and considerable evidence that within finite main verb structures they move from preverbal to postverbal negation, while the copula, modals and auxiliaries are negated postverbally. This development cannot readily be explained in terms of input and interaction. Rather it may be seen as evidence of independent IL construction for two reasons. Firstly, acquisition of postverbal negation with modals and auxiliaries before main verb postverbal negation does not reflect the order of the input: main verb structures were introduced and practised for seven weeks before modals and auxiliaries appear even later (both after the longitudinal study). The copula was introduced before main verbs, ruling out a case of first in, first forgotten. Secondly there is nothing in the input which could serve as a model for preverbal negation. Whereas we might assume that naturalistic learners receive negative imperatives such as "nicht anfassen", (which in itself does not explain why learners prefer preverbal to postverbal input, viz. Chapter 3). our classroom learners did not receive preverbal input. Nor were they exposed to sentence external negation. Our classroom data therefore provides strong evidence for acquisition processes independent of either input or interaction.

Other non-TL negative structures

In addition to external and preverbal negation, learners also produce other non-target like negative structures which are consistent with naturalistic data. These include constituent negation and structures without a finite verb, usually of the type Subject NEG NP. Constituent negation is rare. There are no cases at Level 1, 3 at Level 2 (used by 2 subjects), 1 at Level 3 and none at Level 4. Verb-deletion is a more common phenomenon. It is rare at Level 1 (only 3 cases, 1.5%, used by 20% of subjects), but at Level 2 approximately 7% of all responses lack a verb and 60% of subjects delete verbs. There is a roughly equal distribution of structures where the TL would have either the copula, possessive "haben" or a main verb. At Level 3 verb deletion is at around 3%, used by 30% of subjects. There are no cases at Level 4.

Examples

constituent negation

nein Zigaretten
ich keine
nicht rauchen

verb deletion

ich keine groß
Zola Budd nicht ein Schwimmer
ich keine Geschwister
ich keine eine Freundin in Deutschland
ich keine Klaviere
ich keine Französisch

Although these structures do not represent a high proportion of learners' utterances, their existence needs to be taken into account. They do not reflect input structures and therefore constitute additional evidence for at least some context-independent acquisition processes.

5.4.1.2 Choice of Negative Particle

Level 1

As was the case with the acquisition of postverbal NEG placement, the development of learners' negative particle system shows both classroom effects and independent IL construction. Only 2 Level 1 subjects use "nein" to mark negation, in two cases sentence-externally, in one case sentence-internally. Another subject uses the double negative.

Examples

nein

nein ich lerne Karate
nein gestern getanzt
ich habe nein Katze

double negative

ich habe nicht keinen Bruder
ich habe keine nicht Haustiere

These types of negation are typical of naturalistic learners, although they are too sporadic to be considered evidence of similar acquisition processes on their own. More compelling evidence for learners' independent negative particle system can be obtained by a close analysis of their use of "nicht" and "kein". Learners use both from the beginning, whereas naturalistic learners go through a phase of using "nicht" only. It is not surprising, though, that our learners use "kein" since it was introduced in Week 3 of the teaching, 12 weeks before "nicht". This also explains the large proportion of "kein" supplied in obligatory contexts. Earlier we postponed the analysis of possessive "haben" because of its special status in the data, i.e. its difference from other main verbs in that it was used to create obligatory context for the use of "kein". Approximately 85% of all structures containing possessive "haben", all of which have indefinite objects, are negated appropriately with "kein". We would argue that learners do not distinguish "nicht" from "kein", but that they relied on a formula which had been practised extensively in the classroom, i.e. "Ich habe KEIN X", where "X" stands for brothers, sisters or pets as indefinite objects. This also explains that all

structures containing possessive "haben" are negated postverbally. When learners do not supply "kein" they use both "nicht EIN" and "nicht".[3]

Examples

possessive "haben"

ich habe keine Hund
ich habe keine Schwester
ich habe nicht Katze
ich habe nicht einen Bruder
ich habe nicht ein Flöte

Learners also supply "nicht" 100% correctly with main verbs. There may be two explanations for this. On the one hand it may be that the classroom did not bias learners towards "kein" as it did with possessive "haben" and therefore learners select "nicht" in the same way naturalistic learners prefer "nicht". Probably more likely is again the explanation that structures containing "nicht" have formulaic status, as argued earlier in section 5.3 on NEG placement. This interpretation is further supported by Level 2 data, which includes the inappropriate use of "kein" with main verbs. It is also in part supported by Level 1 data on the copula, which shows that despite some target-like performance, learners do not distinguish the functions of "nicht" and "kein", but rather use both to mark negation only. In other words the early intensive classroom practice of "kein" has the effect of learners having two negative particles outside their formulaic language. The following analysis of choice of negative particles in structures containing the copula illustrates this point further. Here a larger variety was elicited:

Examples (excluding NEG)

a) Das ist EIN N
   (with a large variety of nouns used)

b) Subject copula adjective
   (with a large variety of adjectives used)

c) Subject copula NP/PP
   (with a small selection of subjects and nouns used)

Subjects supplied "kein" in 50% of all obligatory contexts, using "nicht (EIN)" inappropriately in the other 50%. The proportion of "kein" supplied in obligatory contexts rises to 60% in structures of type a) above. This was the first negative structure to be practised in class and again formulaic language is likely to be responsible for the increase in correct suppliance. In contrast to the "Ich habe KEIN X" structure, "Das ist KEIN X" is used in a larger variety of contexts and learners are also familiar with other copula structures, such as b) and c) above. This may explain the lower performance of the copula structure compared with possessive "haben" structures. In addition to the 50/50 suppliance of "kein", learners use "nicht" appropriately in approximately 75% of contexts, in 25% of cases "kein" is used inappropriately. Thus despite the early use of "kein" by classroom learners in comparison with naturalistic learners, learners do not appear to distinguish the respective functions of "nicht" and "kein", but rather select one or the other or both to mark negation only, with a strong tendency to favour "nicht" as a negative particle (80% over 20%). The lack of TL indefiniteness in learners' language is further indicated by one subject's use of "das ist keine ein Sessel". The nature of Level 2 language also supports this interpretation (discussion to follow). The following are examples of the use of NEG particles with the copula at Level 1:

a)   <u>appropriate "kein"</u>   <u>inappropriate "nicht"</u>

      das ist keine Sessel   das ist nicht ein Sessel
      das ist keine Tafel   das ist nicht eine Tafel
      das ist keine Tür   das ist nicht Tafel

b)   <u>inappropriate "kein"</u>   <u>appropriate "nicht"</u>

      ich bist keine müde   ich bin nicht müde
      meine Mutter ist keine groß   meine Mutter ist nicht groß

c)   <u>appropriate "kein"</u>   <u>inappropriate "kein"</u>

      K.D. ist keine Rugbyplayer   Glasgow ist kein die Hauptstadt
      die Usher Hall ist keine Museum Hamburg ist kein in England

      <u>appropriate "nicht"</u>   <u>inappropriate "nicht"</u>

      Hamburg ist nicht in England   die Usher Hall ist nicht ein
      Glasgow ist nicht die   Museum
      Hauptstadt

Summary: Level 1 data

The early appearance of "kein"and the high proportion of suppliance of "kein" in obligatory contexts at Level 1 can be seen as an effect of classroom practice, resulting in the formulaic use of structures such as "Ich habe KEIN X" and "Das ist KEIN X". Once learners find themselves in a setting where they have to make use of a variety of language to which they have been exposed previously and which involves novel combinations of previously learnt language, they produce language which is similar to naturalistic data. The parallels between the two types of language data can be summarised as follows:

1. The use of "nein" for sentence-external and sentence-internal negation.
2. The use of "nicht EIN" instead of "kein", indicating together with other language data a lack of marking for indefiniteness
3. The tendency to favour "nicht" over "kein" as a negative particle.
4. The use of the double negative.

The overgeneralisation of "kein" with the copula is peculiar to our classroom learners and may again be seen as the result of its early introduction in the classroom.

Level 2

Although there are still only 5 instances of "nein" being used for sentence negation, 40% of subjects use it. There is one case of sentence internal negation with "nein", otherwise the use of "nein" is restricted to sentence external negation. Like Level 1 learners, Level 2 learners use both "nicht" and "kein" appropriately and inappropriately, but their distribution is different. Suppliance of "kein" in obligatory contexts with possessive "haben" is approximately 65%. Again learners use "nicht (EIN)" instead. The drop from Level 1 (20%), may be explained in terms of the increased variety of indefinite objects which, apart from brothers, sisters and pets, now also include friend, teacher, school etc. In other words learners may be relying less on a memorised pattern at this stage where they are dealing with more varied input. The inappropriate use of "kein" instead of "nicht" is restricted almost entirely to sentences containing main verbs (80%, there is in fact only 1 case of inappropriate "kein" with the copula). 60% of main verb structures negated with "kein" do in fact contain indefinite objects.

However, since all of them are negated preverbally, it is highly unlikely that subjects were operating according to the target rule. The overall proportion of the use of "kein" with main verbs is 20% and 2 subjects account for 90% of these. In other words the use of "kein" with main verbs is relatively small. "Kein" is not used in all possible contexts, nor is it always used appropriately. 70% of subjects only use "nicht" with main verbs. What is significant about these data is that the classroom, by extensive drilling of "kein", produced an effect on some subjects of overgeneralisation of the use of "kein", whereas naturalistic learners appear to only overgeneralise the use of "nicht". This also supports the hypothesis that Level 1 learners do not distinguish the use of "nicht" and "kein", but use both to mark negation only.

Examples

"kein" with main verb

ich keine Spanisch spreche
ich keine Klavier spiele
ich keine arbeitet
ich keine oft essen

At the same time the use of "nicht" and "kein" with the copula is distributed as follows: "kein" is supplied in only 4% of obligatory contexts, in 96% of cases "nicht (EIN)" is used instead. "nicht" is supplied in 98% of obligatory contexts, "kein" is used inapppropriately in 2% of cases. Thus the tendency to favour "nicht" as a negative particle with the copula rises significantly between Level 1 and Level 2 (80%/20% at Level 1, 93%/7% at Level 2). Even if we include main verbs in the analysis, the figures still indicate a significant rise in the preference for "nicht" (86.5%/13.5%). What we find then at Level 2 is that despite the new phenomenon of "kein" appearing with main verbs, the effects of the teaching with its early emphasis on "kein" has diminished substantially. This is indicated by both, the increased tendency to favour "nicht" as a negative particle and the drop in performance on "kein" with possessive "haben". Together with the increased use of "nein", this suggests that Level 2 data resemble early naturalistic language more closely than do Level 1 data.

There is yet another phenomenon which only occurs at Level 2. This is the

use of "nichts" by 30% of subjects.

Examples

K.D. ist nichts Rugbyplayer
das Usher Hall ist nichts Museum
ich bin nichts in ein Jazzband

There is no obvious explanation for this sentence-internal use of "nichts". Comparable naturalistic data do not exist.

Level 3

Level 3 subjects do not use "nein" for sentence negation. Performance on "kein" in obligatory contexts with possessive "haben" rises again, to 78%. Again 2 subjects use "kein" with main verbs, on two occasions postverbally, on one occasion preverbally. We therefore assume that these structures have the same status as those main verb structures negated with "kein" at Level 2. "kein" is no longer used inappropriately. In structures containing the copula learners never use "kein" when required, using "nicht (EIN)" instead. The preference for "nicht" with the copula therefore becomes absolute at Level 3. It may be that the formulaic status of "Das ist KEIN X" is responsible for some suppliance of "kein" at Level 2, at Level 3 this structure is not used.

Level 4

Like Level 3 subjects, Level 4 subjects do not use "nein" for sentence negation. Performance on "kein" with possessive "haben" is 98%. This consistently high proportion of appropriately negated sentences containing possessive "haben" may indicate that the structure "Ich habe KEIN X" has permanent formulaic status, i.e. it is incorporated as a complete language routine which does not become analysed. Learners supply "kein" in only 5% of obligatory contexts with the copula, using "nicht (EIN)" in all other cases. However, 60% of subjects now use "kein" appropriately in main verb constructions in 20% of all possible contexts. They never use "kein" inappropriately and have categorical postverbal negation. This may indicate that subjects are beginning to distinguish the functions of "nicht" and "kein", using the latter to mark indefiniteness. If this is indeed the case, then learners mark

indefiniteness in main verb structures before they do so in copula structures (or alternatively, in optional contexts before obligatory contexts). Unfortunately, there is insufficient data to investigate this point further.

Examples

"kein" with main verbs

ich fahre kein Auto
ich koche kein Mittagessen
ich lerne kein Französisch

Development of the negative particle system

Learners' choice of negative particles is to some extent influenced by the order of input and classroom practice. This includes the early appearance of "kein" compared with naturalistic data and its high suppliance in obligatory contexts, and the overgeneralisation of "kein" in main verb structures. However, as was the case with the high initial incidence of postverbal negation, many structures appropriately negated with "kein" have formulaic status. Learners do not distinguish the functions of "nicht" and "kein". There is some negation with "nein" at Level 1. Learners use both "nicht" and "kein" to mark negation only, but they tend to prefer "nicht". Level 2 learners' language resembles early naturalistic data more closely than does Level 1 data. There is a higher incidence of negation with "nein" and a stronger preference for "nicht" over "kein". Level 3 learners do not use "nein". Their preference for "nicht" is even stronger and in this respect they resemble naturalistic learners more than do Level 2 learners. Level 4 learners' preference for "nicht" drops only slightly, but there is some indication that they are beginning to mark indefiniteness in structures containing main verbs.

Comparable naturalistic data are not always available for the acquisition of the negative particle system. However, the use of "nein", the occasional double negative, the lack of marking for indefiniteness and the preference for "nicht" over "kein" which establishes itself between Level 1 and Level 3 is consistent with naturalistic data. Together with the fact that there are no models for non-target

like language in the input, this indicates that learners use and develop their own particle system once they move away from tightly controlled classroom practice and formulaic language use. The classroom appears to have the lasting effect of "Ich habe KEIN X" and to a lesser extent "Das ist KEIN X" largely retaining their formulaic status from Level 1 through to Level 4.

5.4.1.3 Summary: Development of Negation

The behaviour of learners with regard to their development of negation can generally be described as U-shaped behaviour. This moves from high target-like performance which can be explained in terms of formulaic language, to a drop in performance as learners begin to construct their own IL, to an increase in performance as the TL is acquired. The effect of the classroom is mainly an initial one. IL processes assert themselves once learners receive more input and move away from tightly controlled classroom practice. At the same time some classroom effects are long-lasting i.e. some formulas "survive" and some IL processes become apparent very early.

There is a consistent drop in TL performance and increase in IL structures at Level 2. This is also where the lowest performance and highest IL production is observed regularly. The exception are the performance on postverbal main verb negation and "kein" with the copula, which have their lowest point at Level 3, indicating a slower rate or later acquisition in these areas. The U-shape of the latter is also not complete, at Level 4 TL performance is only beginning to rise again. In addition performance on "nicht" with the copula rises steadily, indicating a smaller initial proportion of formulas with the copula. Overgeneralisation of "kein" with main verbs does not occur until Level 2. With the copula it starts at Level 1 and decreases steadily. It is also much more common with the copula (50%) than with main verbs (12%). This may be due to learners extensive exposure to "Das ist KEIN X", whereas they did not encounter main verb structures negated with "kein" in the early input. Figures 1-9 on the following pages illustrate the development of negation.

In Figure 1, notice the U-shaped curve of postverbal NEG placement with main verbs and possessive "haben" and the comparatively high incidence of

postverbal NEG placement with possessive "haben", due to formulaic language use.

In Figure 2, notice the increase in IL structures at Level 2. Figure 3 illustrates that despite relatively low overall incidence of Verb-deletion, the number of subjects using it increases considerably at Level 2, indicating that we are not dealing with idiosyncratic behaviour.

Figures 4 and 5 illustrate the preference of "nicht" over "kein", with the exception of possessive "haben", where formulaic language use accounts for the high proportion of the use of "kein".

Figures 6 and 7 illustrate U-shaped behaviour in the TL-like use of NEG particles. In Figure 6, notice the overall higher percentages with "haben" compared with the copula. Again this is due to formulaic language use. In Figure 7, notice the difference in the development of TL-like performance on "nicht", which is not U-shaped, due to less use of formulaic language.

Similarly to Figures 2 and 3, Figures 8 and 9 illustrate the increase in IL structures at Level 2 both in overall incidence and in number of subjects using them, in this case with regard to the use of the anaphoric NEG particle "nein".
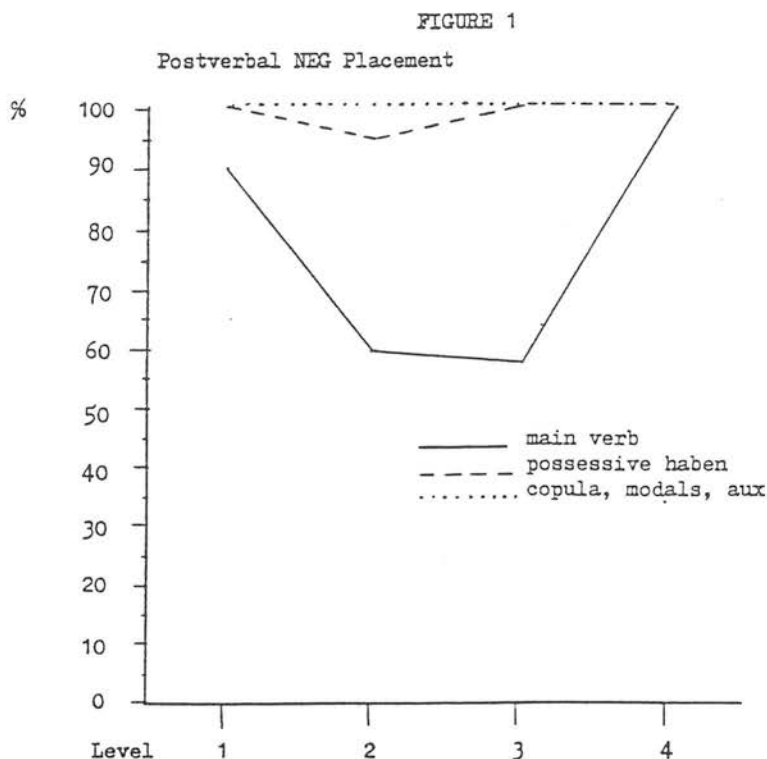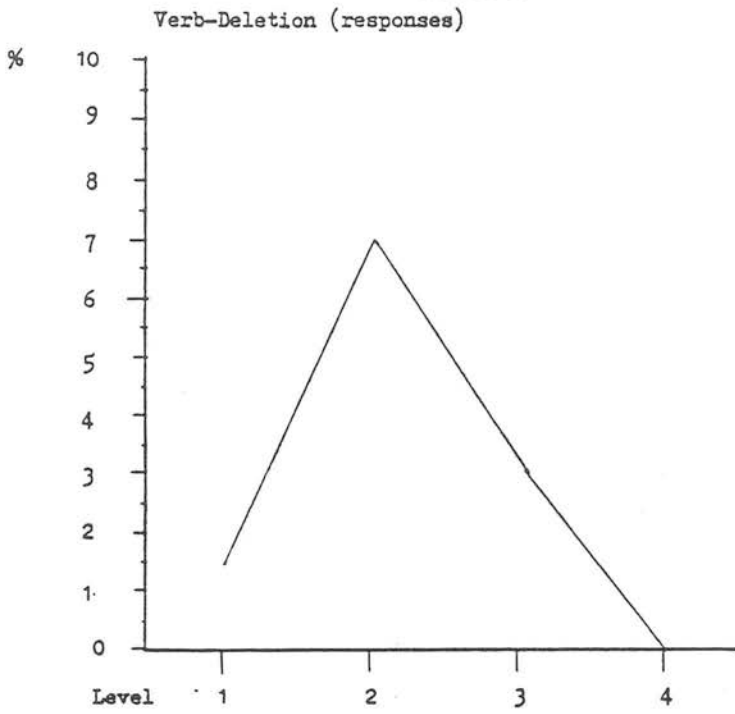
FIGURE 1

Postverbal NEG Placement

117

FIGURE 2

Verb—Deletion (responses)

FIGURE 3

Verb—Deletion (subjects)

118

FIGURE 4

Choice of NEG particle "nicht"

FIGURE 5

Choice of NEG particle "kein"

FIGURE 6

SOC "kein"

FIGURE 7

SOC "nicht"

120

FIGURE 8

Use of "nein" (responses)

FIGURE 9

Use of "nein" (subjects)
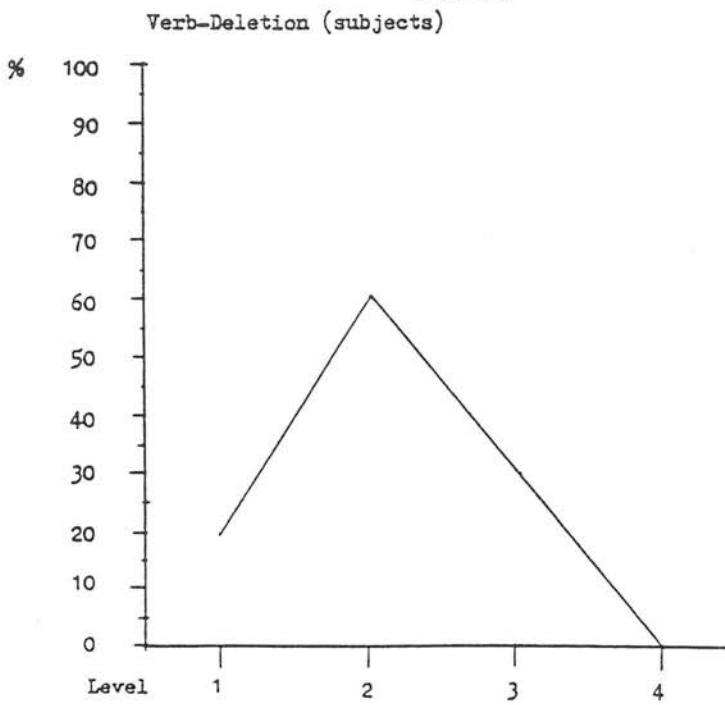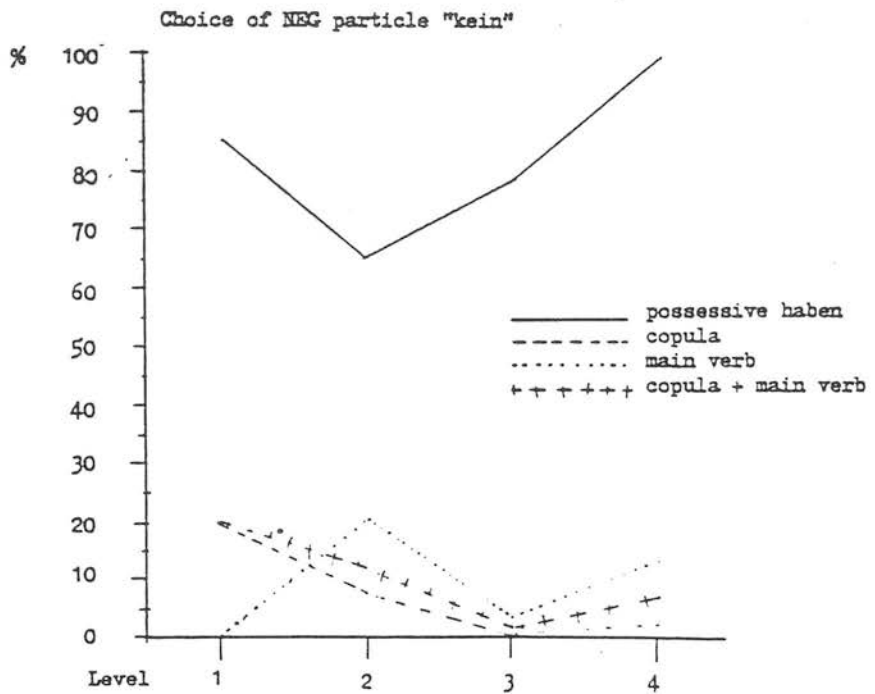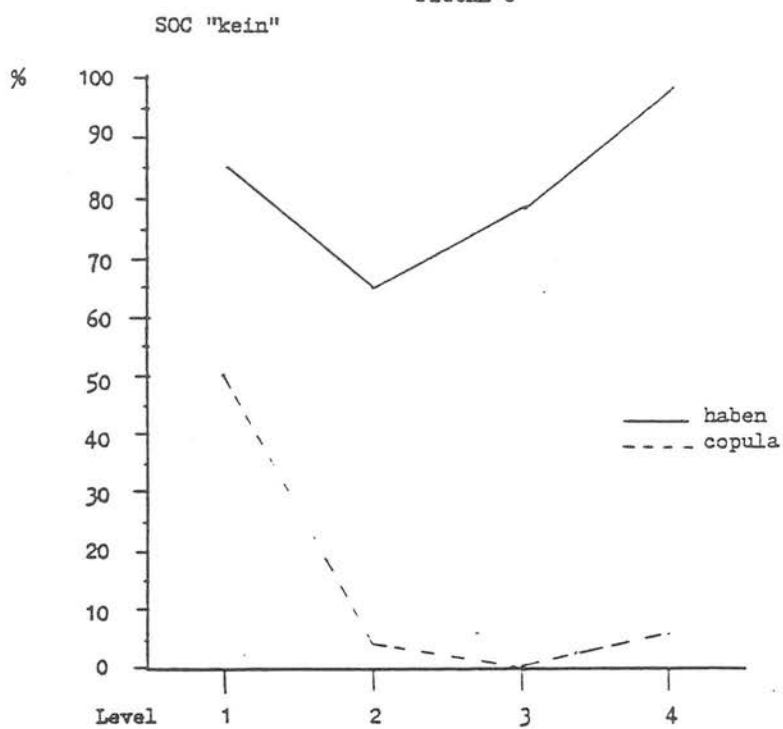
5.4.2 Interrogation

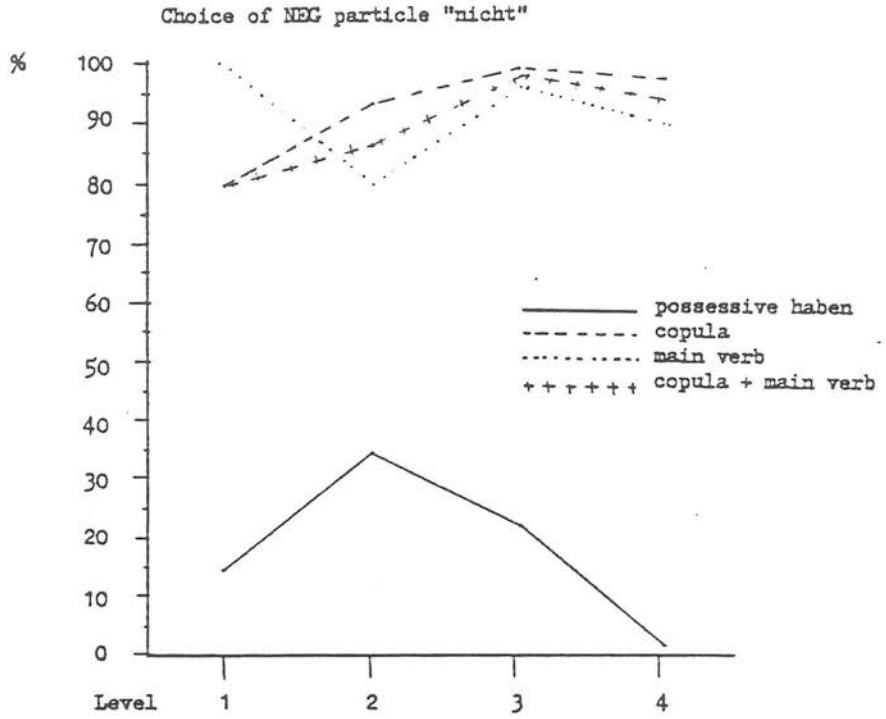The analysis of interrogation will focus on the production of information questions and their syntax. Some reference will be made to the comprehension of information and YES/NO questions. The following table (TABLE 5) lists the overall numbers of interrogative responses at each level.

TABLE 5

Number of Q responses

Level 1	100
Level 2	100
Level 3	138
Level 4	194

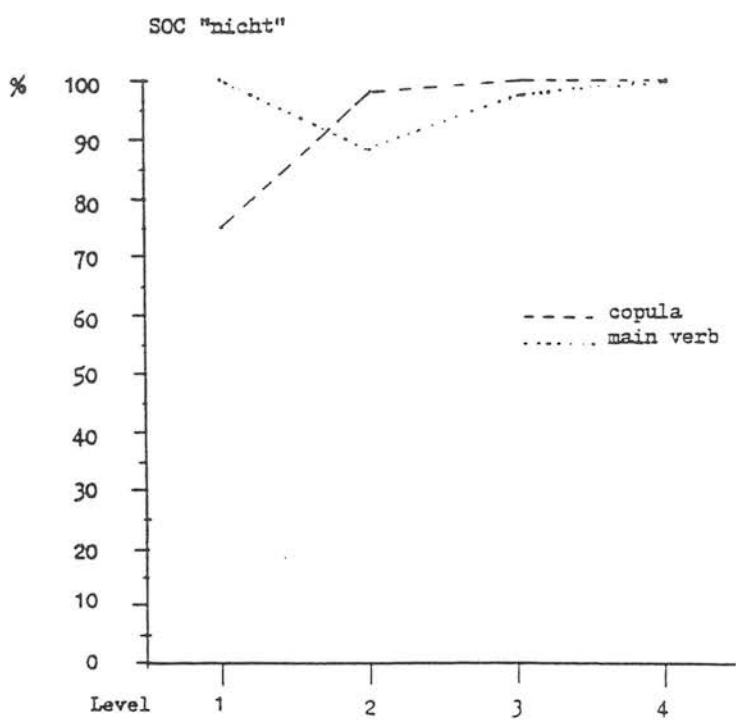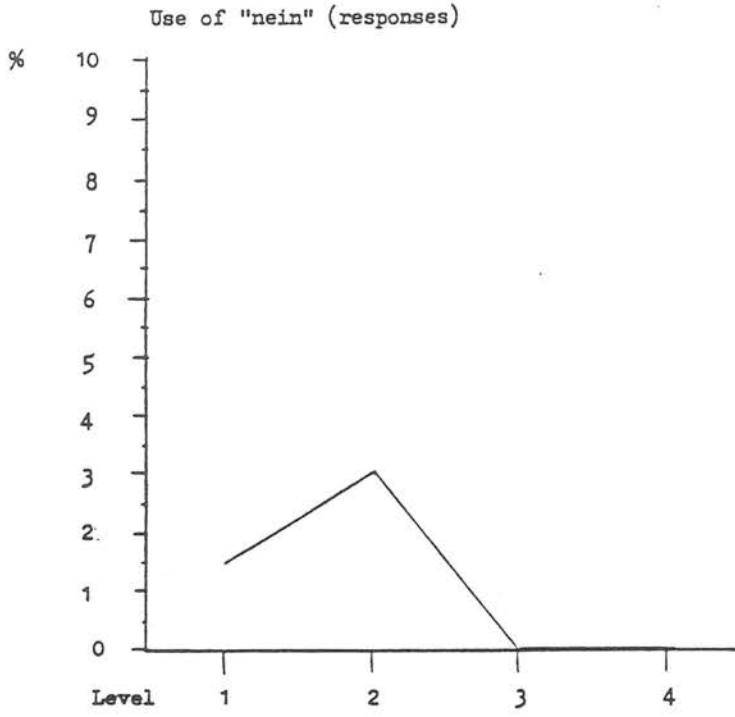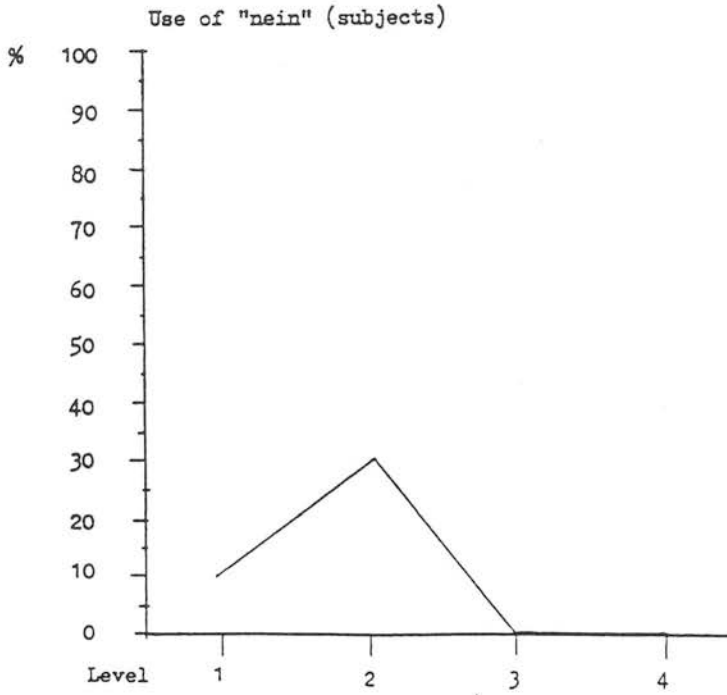## Comprehension of information questions

Learners at Level 1 and 2 respond to approximately 1/3 of information questions with answers appropriate to YES/NO questions.

Examples

Q.: Wo lernst du Karate?
A.: Ja ich lerne Karate.

Q.: Wann spielst du Fußball?
A.: Nein ich spiele nicht Fußball.

Q.: Wie heißt deine Katze?
A.: Nein ich habe keine Katze.

There are two possible explanations for this type of response. It is possible that the "nein" has the holophrastic function of signalling denial of part or all of an assumption made by a question. In some cases this is indicated by "nein" being strongly stressed and by a pause between it and the rest of the sentence. However, the presence of examples with "ja" indicates that learners are in many cases interpreting information questions as YES/NO questions. Comparable naturalistic data do not exist. But there is a parallel in naturalistic production. Pavesi (1987b)) claims that YES/NO questions are produced before information

questions.

Production of information questions

Level 1

Apart from two structures which have a particle derived from "sein", Level 1 information questions are target-like. Again we would argue that these questions are largely formulaic. As indicated in Chapter 4, Level 1 subjects did not have sufficient vocabulary to complete the picture task given to all other levels, and elicitation tasks had to be similar to those used for the longitudinal study. Consequently it lacked the desired spontaneity and variety of language use. Altogether 100 responses were elicited. Question types were distributed as follows (TABLE 6):

TABLE 6

Type and number of questions

Wie heißt X?	44%
Wie alt SEIN X?	30%
Wann HABEN X Geburtstag?	9%
Wo wohnst du?	7%
Was machst du gern?	4%
Others (5)	6%
	100% (98% target-like)

All of these questions had been practised in the classroom, although learners do use different verb forms and subjects. With 74% of question falling into only 2 question types and 94% into 5, we would suggest that learners' target-like production is the result of formulaic language use.

Level 2

The picture tasks comes closest to eliciting "real" communication. The fact that learners were working in pairs, i.e. not directly with the researcher, meant that they were less concerned with pleasing a figure of authority and had to

respond to and interact with a peer. The picture task also allowed very little room for the use of formulas, i.e language which learners were familiar with from the classroom, compared with the Level 1 task. Consequently Level 2 language is very different from Level 1 language. 59% of responses are target-like with respect to interrogative syntax, (i.e. ignoring lexical and morphological errors). 41% are non-target like. 5% of responses are uninverted (30% of subjects have uninverted questions).

Examples
inverted

Was machte A.H. von halb eins bis eins?
Wo ist F.M. um neun Uhr?
Wann arbeitet F.S.?

uninverted

Wann F.S. schläft?
Wann A.H. bringt Essen?
Wann F.M. räumt auf?

Learners were not exposed to uninverted structures in the input. Lack of inversion is also typical of naturalistic SLA.

36% of responses include the use of a particle. There are three different types of structures. 26% of questions are formed with "sein", 7% with "machen" and 3% involve borrowing from English.

Examples
sein

Wann ist Frieda lese ein Buch?
Was ist K.B. machen at 5 Uhr?
Wann ist F.S. schwimmen?

machen

Wann mache F.S. schwimmt?
Wo macht F.M. arbeite?
Wann macht F.S. liest ein Buch?

borrowing

Wann does K.B. trinkt ein Bier?
Wann does Frank arbeit?
Was ist happening um elf Uhr?
Was ist Klaus doing at elf Uhr?

The analysis of the use of particles in questions, of declarative sentences which include "sein" and "machen" as well as a main verb and of the transcripted interaction between subjects and the researcher reveals a complex pattern of IL construction, L1 influence and communication strategies. The use of "sein" as a particle to mark YES/NO questions has been observed for naturalistic learners (viz. Chapter 3). "sein" and "machen" in information questions are not documented. There is some clear indication that learners are attempting to transfer DO-support and progressive "is _____ing" from their L1 to German questions. Apart from borrowing directly from English, learners frequently ask questions such as "what is 'does' in German?", often after having started an utterance with the interrogative pronoun. Similarly they produce utterances such as "was ist Frieda at 7 Uhr", and when asked to clarify reply that they want to say what Frieda "is doing". While the researcher avoids answers to requests for translations of "does" or "doing", learners themselves offer solutions, as the following interchange between two subjects during elicitation illustrates:

S1: Wann....What's does?
S2: machen
S1: Wann machen K.B. steht auf.......aufstehen?

It is not clear whether all cases of "machen" are attempts to translate "does". In some cases it may be used for the progressive. Although learners were told that the people in the task did the pictured activities habitually, they regularly treated them as happening in the here and now. In addition learners also use "machen" and "sein" in declarative sentences. The use of "sein" may again be seen as an attempt to translate the progressive:

S1: Wo ist Anne at 9 Uhr?
S2: Anne ist arbeiten.

More difficult to explain is the use of "machen":

S1: Was macht K.B. um 11 Uhr?
S2: K.B. macht kochte Suppe um 11 Uhr.

It is possible that we are dealing with a combination of L1 influence and imitation as a communication strategy in some or all of these cases. The L1 does appear to have a strong influence. At the same time "machen" is not always inflected and in questions apparently a translation of the progressive, in nearly 50% of cases the main verb is finite. In other words learners do not appear to be using "sein" and "machen" as auxiliaries. It is possible that we are dealing with a combination of IL construction, i.e. marking questions with a particle, and L1 influence. Learners did not attempt to translate "don't" and "doesn't" in their negative structures. The use of this dummy auxiliary with negation is in fact very uncommon in natural languages and does not feature in naturalistic SLA (see also Pavesi 1987b)). The fact that learners transfer Do-support and the progressive with questions may be a sign of IL processes interacting with an L1 which has similarities with typical IL structures. This does not explain the use of "sein" and "machen" in declarative sentences. What is clear, however, is that Level 2 learners again resemble early naturalistic learners more than do Level 1 learners. TL-like performance drops from 98% to 59% and there is evidence of uninverted structures and the use of a particle to mark interrogation, neither of which are modelled in the input.

Level 3

Level 3 learners produce similar structures. They have target-like inverted and uninverted questions and questions formed with "sein" and "machen". Borrowing from English does not occur. The proportion of non-target like questions is considerably lower than at Level 2, 12.5% compared with 41%. There is only one case of "machen" and 3 uninverted questions. Approximately 9% of non-target like responses involved the use of "sein" as a translation of the progressive.

Level 4

Level 4 learners produce only target-like questions.

5.4.2.1 Summary: Development of Interrogation

The development of interrogation follows a similar pattern to that observed for negation. Initial high TL-like performance can be explained in terms of the use of formulas. Once learners operate in a more spontaneous setting and with a larger variety of language, as at Level 2, their performance drops and IL structures emerge. In the case of interrogation a reliance on the L1 can be observed which did not surface with negation. Performance rises again at Level 3 and at Level 4 interrrogation is 100% TL-like. Many structures produced by learners resemble naturalistic data. Although learners are exposed to some uninverted indirect questions at Level 1, the use of uninverted questions does not start until Level 2. Uninverted structures are also typical of naturalistic settings. Inverted questions are the norm in the input. Input alone can therefore not be responsible for their use by our classroom learners. Classroom learners also make use of particles to mark interrogation, although their use of particles differs somewhat from that of naturalistic learners. Classroom learners use both "sein" and "machen" in information questions, whereas naturalistic learners appear only to use "sein" in YES/NO questions. There are also very explicit attempts at translating directly from the L1 and borrowing is not uncommon. Although the L1 is used in the teaching to facilitate understanding of the L2, it was not apparently used to explain the nature of German questions. Level 2 learners were given a "verb comes second" rule to teach them SV-inversion. Learners also interpret information questions as YES/NO questions, a phenomenon which may be linked to naturalistic learners' acquisition of the latter before the former. It appears that in non-formulaic language IL processes and L1 transfer interact independently from the learning context to shape learners' interrogation. Figures 10-12 on the following page illustrate the development of interrogation.

In Figure 10 notice the U-shaped curve in the overall proportion of TL-like information questions and in Figures 11 and 12 the converse pattern, indicating a consistent increase in IL structures at Level 2.
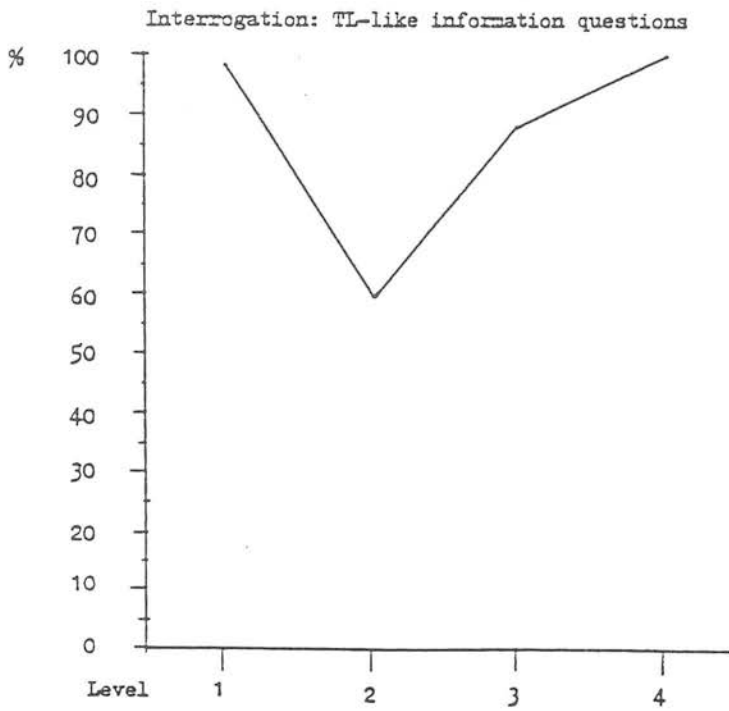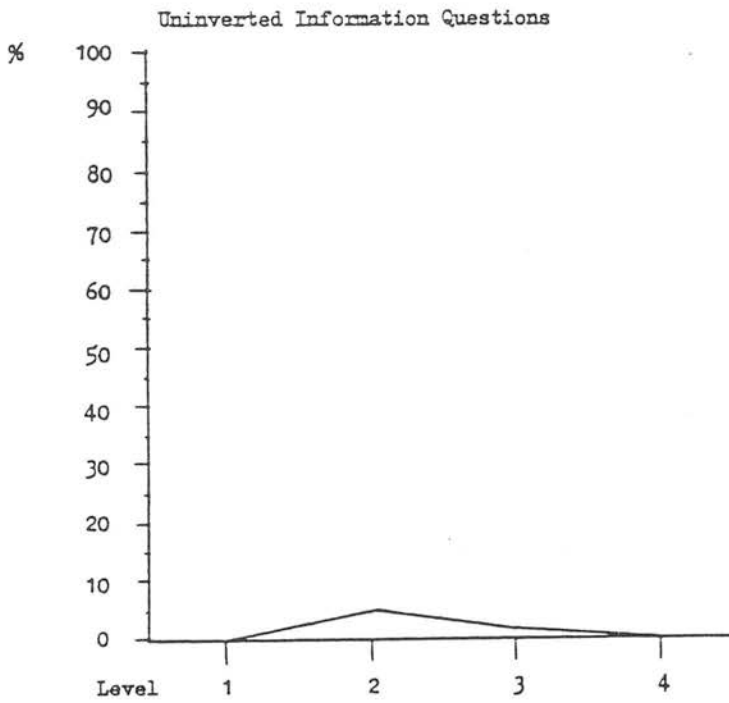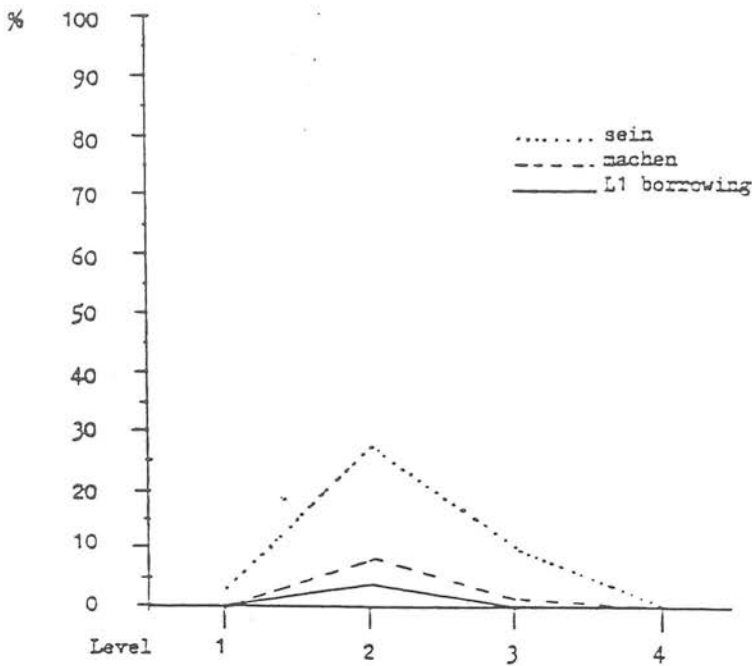
FIGURE 10

Interrogation: TL-like information questions

FIGURE 11

Uninverted Information Questions

FIGURE 12
Particle Use in Information Questions

.... sein
_ _ _ _. machen
_____ L1 borrowing

5.4.3 Summary: Negation and Interrogation

The significance of the percentages presented in this chapter has to be regarded with caution. Because of the variation in the number of responses for each subject, differences in number of responses for the various structures, and amount of individual variation within levels, it was decided not to apply statistical significance tests. In addition, whereas Q, NEG placement and the "nicht" and "kein" figures are based on large numbers of responses, verb-deletion, the use of "nein" and the use of "kein" with main verbs appear in relatively low numbers. However, the importance of the findings is to be found in the qualitative analysis of learners' language and its relationship to or independence from the learning context. Despite differences in input and interaction between the naturalistic and classroom settings, classroom SLA has clear parallels with naturalistic SLA. These parallels exist in areas where input and interaction alone cannot explain the nature of learner language, i.e. they are not due to any similarities in the two settings. Also, despite the teacher's attempt to control learners' performance, IL processes assert themselves as learners move away from tightly controlled language use and receive more input over time and through different language activities. The result is consistently U-shaped behaviour in learners' TL-like performance over time, where initial high performance can be explained in terms of formulaic language use. The relative importance of the findings presented in this chapter and their implications will be discussed further in Chapter 7.

Notes

1. It had in fact proved impossible to find a teaching approach with a strong emphasis on grammar teaching at the time of data collection because of the "communicative revolution" in Scottish foreign language classrooms.
2. Because of its special status in the data, possessive "haben" is treated separately from other main verbs. It was used to create obligatory contexts for the use of "kein", whereas other main verb structures require "nicht".
3. The proportion of "nicht EIN" and "nicht" for "kein" varies considerably from level to level and across different linguistic contexts. No pattern was observed, i.e. they seem to be in free variation. One possible explanation for the use of both may be that learners vary between the meaning of *I don't have a X* and *I have no X* . All subjects were Scottish and therefore likely users of both structures in their L1. The fact that learners use "nicht" only instead of "kein" also lends further support to the hypothesis that they do not mark indefiniteness.

Chapter 6
RESULTS II - Tasks, Adults and Analytic Ability

In this chapter we consider classroom learners' language in relation to language task, age and analytic ability of learners. The question of the effect of input/interaction will also be further investigated. We will find that while part of learners' behaviour can be related to the context of language use and the teaching, processes of IL construction assert themselves regardless of language activity, learner variables and teaching context.

6.1 Language Tasks

The subjects in the cross-sectional study completed three tasks. The nature of these tasks has already been described in Chapter 4. We will refer to the three tasks as O (oral), S (situation) and T (transformation) respectively. Comparison of the results of O, S and T reveals a complex picture of the nature of learners' language. Although there are regular patterns and similarities in language produced, there is also variation in different language areas and differences in variation across tasks according to level of instruction.

6.1.1 Comparison of Intra-Task Development

Because of differences in number and type of responses across subjects and tasks and variation among subjects within tasks, significance tests were not carried out. We will therefore again concentrate on a qualitative analysis of the data. The fact that tasks had to be varied according to level and that learners respond differently within and across tasks, is in itself an indication of both differences between levels and of the need to examine more closely what learners do in particular contexts. Task S in particular was difficult to analyse and compare to O and T because of low numbers of responses, an inflated number of modals at Level 3 (63%), and idiosyncratic behaviour by individual subjects.[1]

Despite these difficulties some strikingly similar patterns emerge and similarities in structures produced across all tasks can be observed. The similarities in language used are set out and discussed below.

1. Formulaic use of *Ich habe kein X* and to a lesser extent *Das ist kein X*.

2. Inappropriate or unnecessary insertion of "gern". At Level 1 in T there is 12.5% of unnecessary insertion of "gern", i.e. although its use is not inappropriate, it was not present in the sentences provided in the task. The lower use of main verb formulas in T compared with O (50%), is consistent with the increase in preverbal negation. We also find 6% of inappropriate use of "gern" with the copula.

3. Preverbal negation with main verbs while the copula, modals and auxiliaries are negated postverbally.

4. Lack of marking for indefiniteness, preference for "nicht" over "kein" as a negative particle followed by some marking for indefiniteness in optional contexts. The S and T data further support the analysis of the development of the use of "kein" in O. We showed in Chapter 5 that at Level 2, where the use of "kein" with main verbs first emerges, learners are overgeneralising its use and argued that even in possible contexts its use did not indicate marking for indefiniteness, given that it is placed preverbally. Although in T Level 2 learners use "kein" appropriately and postverbally in 20% of cases, 80% of cases are inappropriate. Similarly to O, at Level 3 the use of "kein" with main verbs drops (O: 20% to 3.5%; T:10% to 5%), however, in T "kein" is always used postverbally and appropriately. At Level 4 there is a slight rise to 7% and learners also use "kein" with modals and aux in S, with all cases being appropriate. Level 3 data further supports the hypothesis that before learners supply "kein" categorically in obligatory contexts, they first supply it inappropriately and then only appropriately in optional contexts (i.e. "kein" is not supplied in all obligatory contexts at Level 3 in T.).[2]

5. Formulaic use of information questions. At Level 1 in T the same limited number of questions as that found in O is used. We also find some random combination of question parts.

6. Uninverted information questions.

7. The use of a particle to mark information questions.

The patterns of use of these structures between Levels 1-4 are also similar

across tasks. They are illustrated by Figures 1-7 on the following pages and include:

1. U-shaped development of overall TL-like performance on Q (FIGURE 1).
2. U-shaped development of "kein" in obligatory contexts with "haben" and "sein" (FIGURE 2 and FIGURE 3).
3. Converse U-shaped patterns of IL interrogative structures, i.e. uninverted questions (FIGURE 4) and particle use (FIGURE 5).
4. A rise in performance on "nicht" in obligatory contexts with the copula between Levels 1 and 2 (FIGURE 6).
5. The use of "kein" with main verbs starts at Level 2, drops at Level 3 and then rises again at Level 4 (FIGURE 7).

Even though task S was not completed at Level 1, Level 2 performance is consistently the lowest and performance in S across Levels 2, 3 and 4 fits into the general developmental pattern. The development of NEG and Q therefore appears to be very similar in all tasks.

FIGURE 1

Total TL-like performance: Q

FIGURE 2

SOC "kein" with possessive haben

FIGURE 3

SOC "kein" with the copula

FIGURE 4

Uninverted Information Questions

FIGURE 5

Particle Use in Information Questions
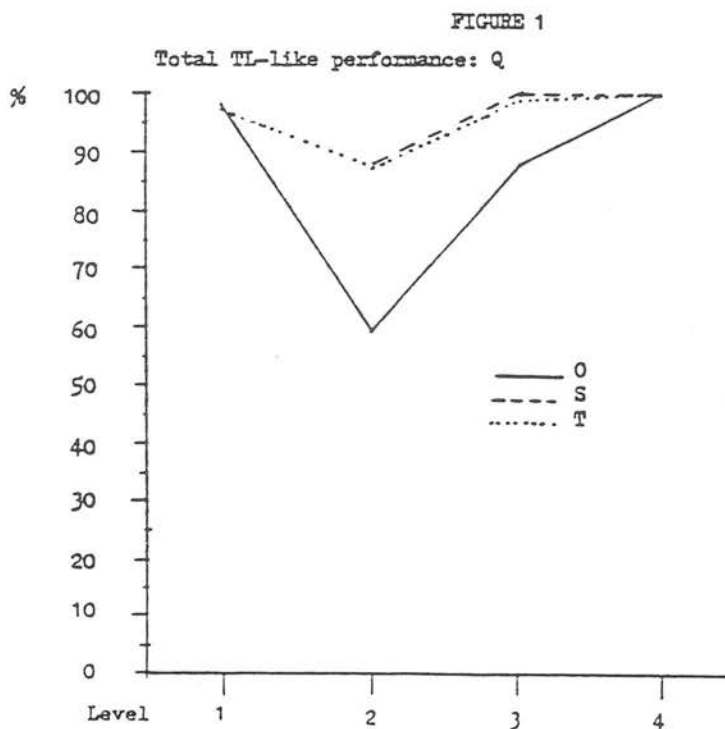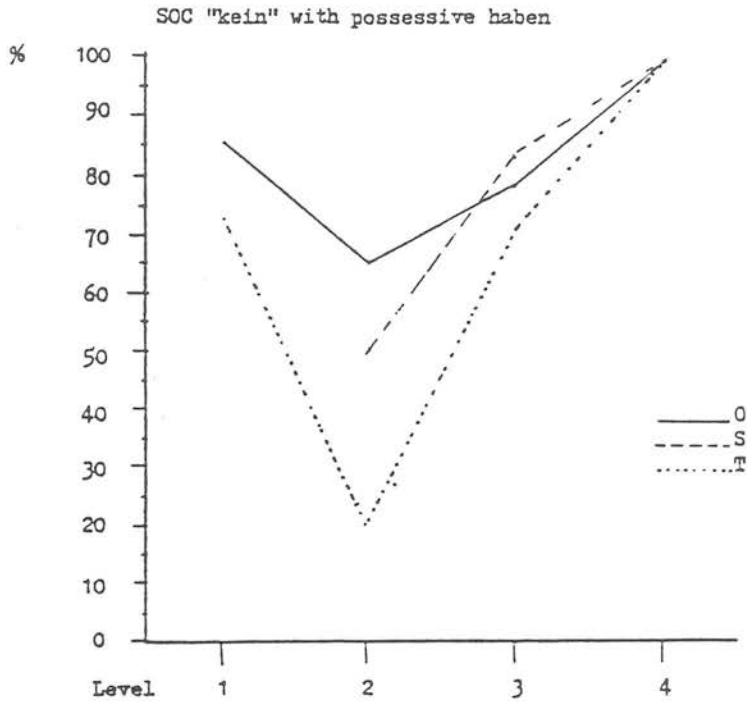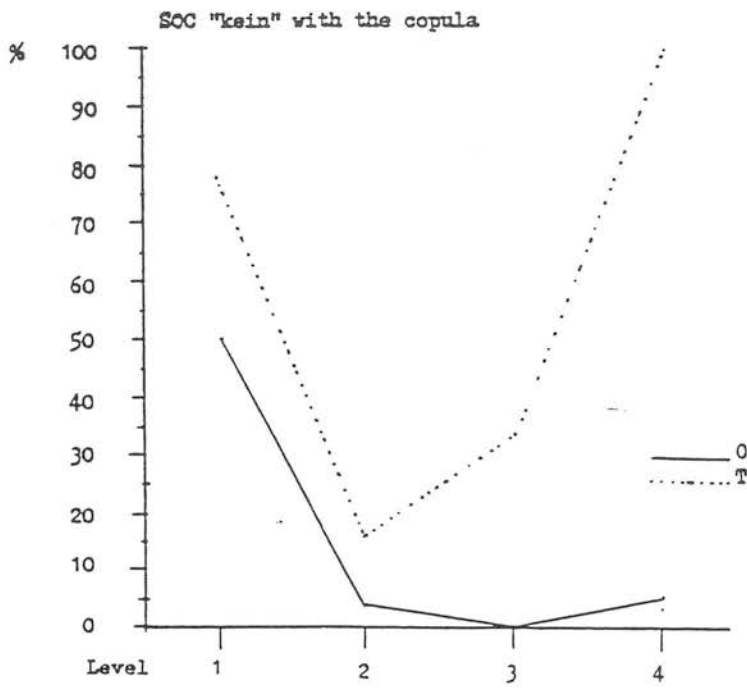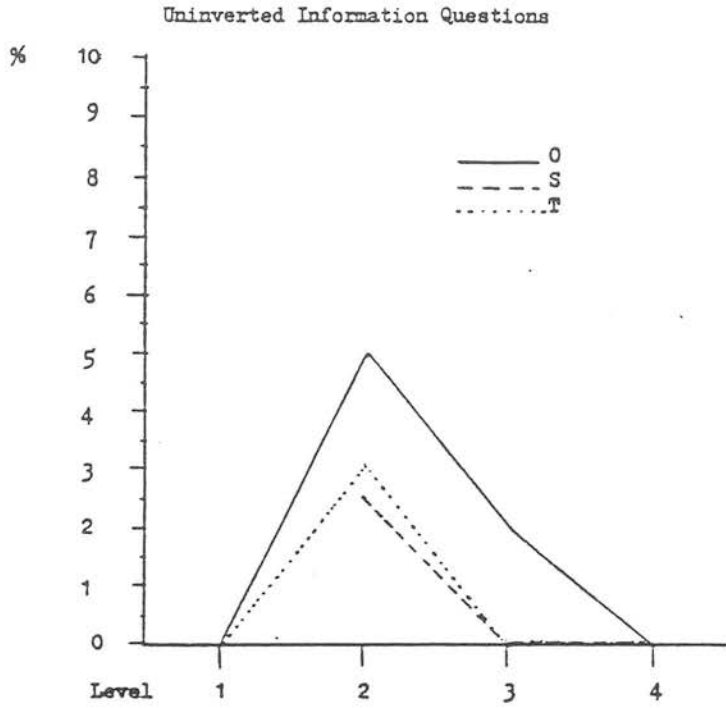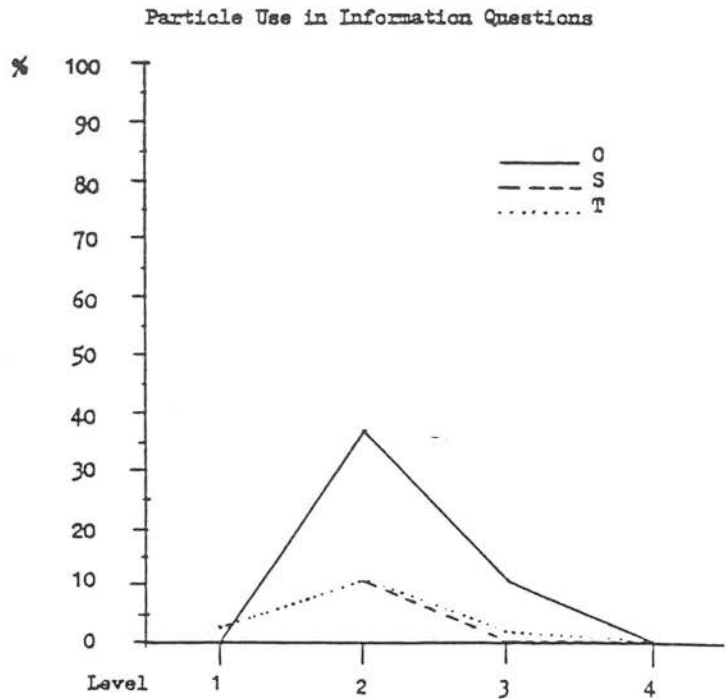
FIGURE 6

SOC "nicht" with the copula

FIGURE 7

Use of "kain" with main verbs

136
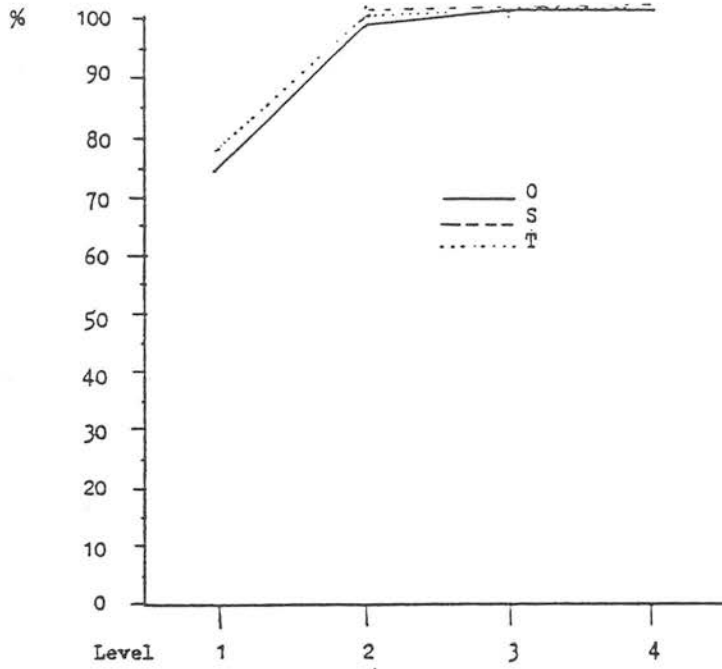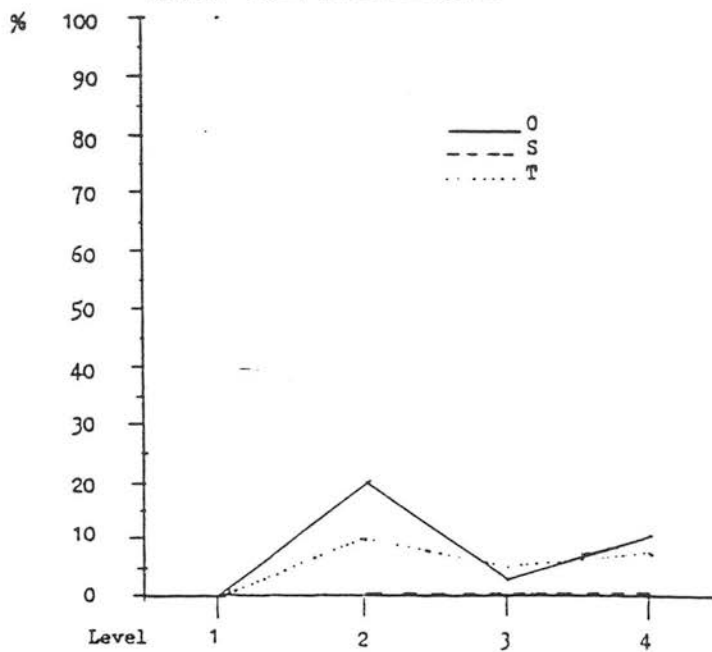
There is one striking difference in the developmental picture between O and T. Whereas in O postverbal NEG placement with main verbs follows the familiar U-shaped pattern, in T there is a steady rise from Level 1 to 4. In O Level 1 learners produced 90% postverbal NEG placement with main verbs, in T this drops to 54.5%, as illustrated by the following figure (FIGURE 8):

FIGURE 8

Postverbal NEG Placement with main verbs
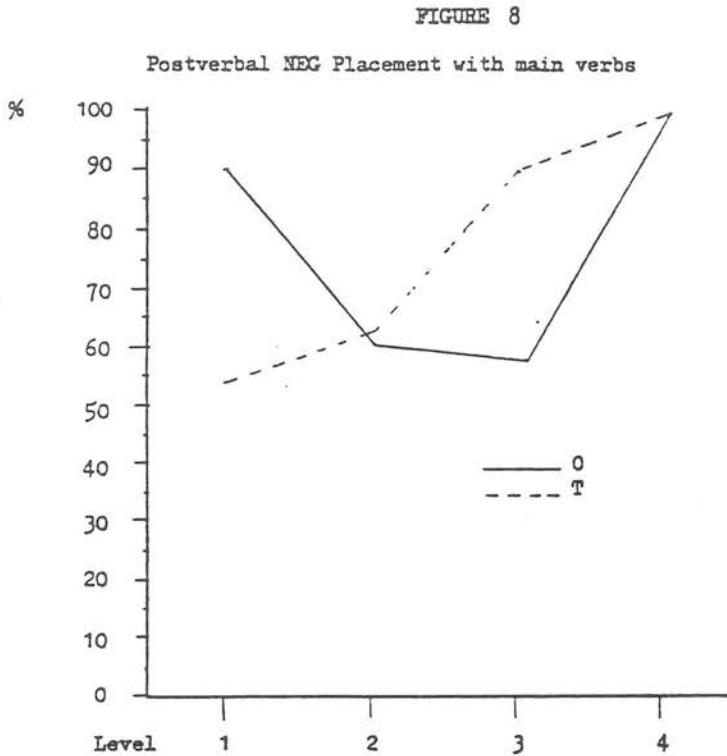
A possible explanation for this drop in performance may be the reduced opportunity for the use of formulas. In T learners are given a set of written sentences which they have to transform. The main verb structures were more varied than in O. In Chapter 5 we provided the following analysis of main verb structures used in O:

75%   66%   75%
Ich spiele nicht gern

In T the pattern is somewhat different:

20%   40%   60%
Ich spiele nicht gern

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Apart from "ich", subjects included three different proper nouns and one 3rd person pronoun, three different verbs were used and "gern" features less prominently. It may therefore be the case that the combination of provided sentences and their variety leads learners to rely less on formulas and more on processes of IL construction.

There are also some differences in the structures produced in the various tasks. Negative structures without a verb appear in S at Level 2 (10% of all responses), but not in T. An explanation for this may be that learners could always refer back to the written sentences, which all contained finite verbs.

In T at Level 2 and 3 we also find preverbal negation with modals. All are cases of "mögen", which did not occur in O. There is no obvious explanation why "mögen", but no other modals should attract preverbal negation. Linguistic contexts were similar for all modals.

There are no cases of external negation in S or T. This is difficult to interpret since even in O external negation was a rare phenomenon. It may be that in O the negative is more in focus, since learners are denying assumptions made in previous questions. In S the focus is less on denial and more on the subjects' experience of a certain situation. In other words O may bias learners more towards pragmatic than syntactic negation. Similarly in T subjects have to transform complete written sentences which are provided for them, possibly drawing their attention more to syntactic than pragmatic negation. (This raises interesting questions about the nature of external and internal negation in L1 and naturalistic L2 acquisition. There may be similar distinctions in learners utterances between denial and neutral statement of negative facts. It is beyond the scope of this investigation to attempt an analysis of the context of L1 and naturalistic L2 negative structures.)

Another phenomenon peculiar to T (Level 2 only), is the interruption of a constituent by NEG.

Examples

Mary möchte Sonntag in die nicht Stadt fahren.
Ich lese die nicht Zeitung.

Sie hat ein keine Kind.
John ist sehr nicht freundlich.

Most common are interruptions of determiner and noun. This type of negation amounts to only 2% of all responses, yet 40% of subjects use it. It may be due to lapses in concentration. The task contained 40 written items and was completed in one sitting.

6.1.2 Inter-Task Variation

Although the main purpose behind the use of different tasks was to demonstrate that evidence of *IL construction* is not restricted to spoken language, inter-task comparison of *TL-like performance* leads to some interesting questions. Comparison of subjects' performance across tasks reveals a complex picture of variation. The variables of formality/time and focus on form are not sufficient to account for subjects' variable performance. An increase in the amount of these variables does not necessarily lead to increased TL-like performance. Variation in TL-like performance appears to also depend on level of instruction, as illustrated by the Figures 9-11 on the following pages. (For reasons outlined earlier, statistical significance tests were not applied). Notice the apparent random variation at Levels 1 and 2 and the pattern at Levels 3 and 4, where performance in O is consistently lower than in S and T.
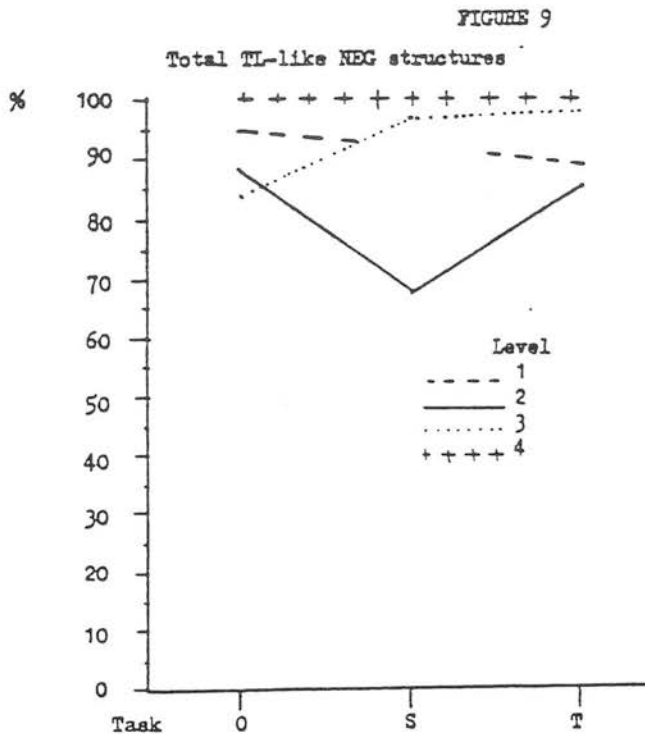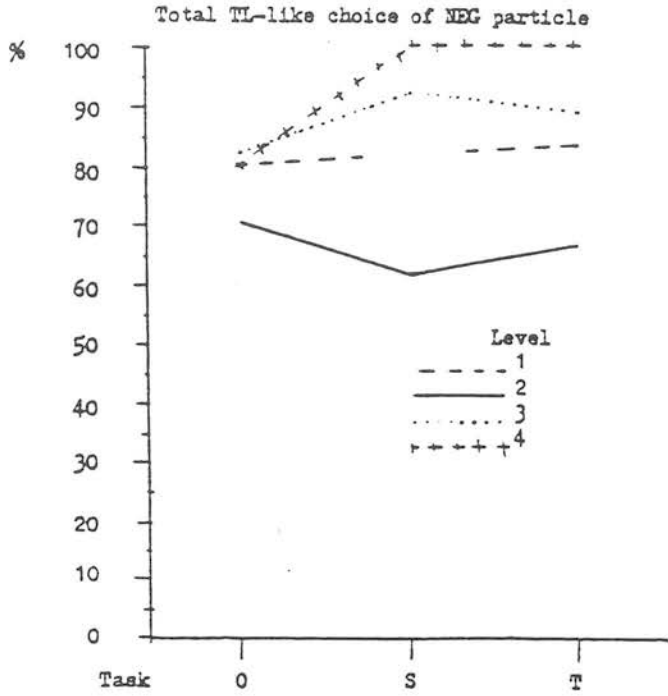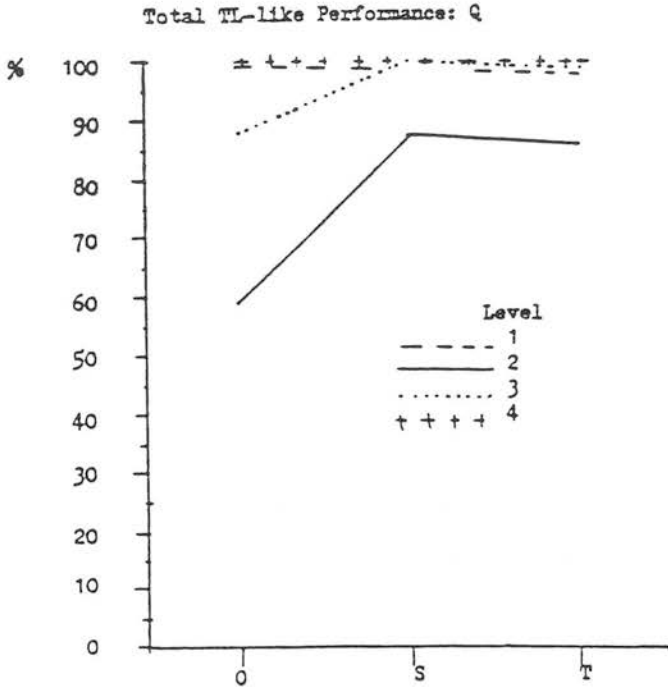

FIGURE 9

Total TL-like NEG structures

FIGURE 10

Total TL-like choice of NEG particle

FIGURE 11

Total TL-like Performance: Q

At Level 1 TL-like performance for Q is similar in O and T. Performance on NEG particles rises slightly, while the total proportion of TL-like structures drops. At Level 2 performance on Q rises in both S and T. But the picture is different for NEG. With regard to both NEG structures and NEG particles there is a drop in performance in S and T. This variable picture suggests that task does not affect performance at Levels 1 and 2. At Levels 3 and 4 performance increases in S and T (except for Q at Level 4, where performance is 100% TL-like in all tasks).

The clearest pattern therefore emerges at Level 3 and 4, suggesting that at more advanced levels TL-like performance in S and T rises in comparison with O. Given the picture at Level 1 and 2, these results are difficult to interpret. They seem to suggest that more advanced learners benefit from either increased time, having written language to refer to or a focus on form (or a combination of these), whereas less advanced learners do not. Why this should be so is not obvious from our data. It may be that Level 3 and 4 learners received more explicit rule instruction, that age or metalinguistic awareness influenced their language. These issues cannot be addressed within the scope of this investigation.

There is one exception. At Level 3 performance on "kein" with possessive "haben" drops from 78% in O to 70% in T. There is also at Level 3 a very steep rise in postverbal negation with main verbs, from 58% in O to 90% in T. There is no obvious explanation for these phenomena. We may have to leave open the possibility of some random variation. Alternatively, there may be other, very local reasons for some apparently random variation.

A further factor which may influence learners' performance is their strategies for dealing with the tasks. We saw in the previous section that performance on NEG placement drops sharply in T. We explained this result in terms of differential opportunities for the use of formulas. Task S also turned out to offer differential opportunities for the use of formulas and also other strategies. Despite written instructions which stressed the need for subjects to use a variety of negative structures, learners clearly did not always focus on this requirement. They at times focus exclusively on the nature of the situation, indicated by the use of affirmative sentences. Some learners, especially at Level 3 as indicated earlier, resort to a strategy of using "ich kann nicht..." almost exclusively. Two subjects at

Level 2 employ a strategy of starting every sentence with "ich NEG" (one uses "nicht", the other "kein" exclusively). In other words once some learners have selected a negative structure, they then imitate their own patten throughout the task. With regard to Q Level 2 subjects rely heavily on practised routine questions, whereas Level 3 and 4 learners are more adventurous and vary their questions. This opportunity for the use of formulas in S for Q was not available to the same extent for NEG. This may explain the low perfomance at Level 2.

The above discussion illustrates that inter-task comparison in terms of TL-like performance alone is not sufficient and that there is a need to consider what learners actually do in particular contexts. The fact that our learners did not receive much explicit rule instruction may partly be responsible for the lack of task effect at all levels. However, even with a monitor, other strategies would also still be open to them.

6.1.3 Summary: Tasks

Comparison across tasks indicates that TL-like performance may improve with increased amount of time, in the written mode and with increased focus on form at more advanced levels of language instruction. Such an effect cannot be observed consistently at lower levels. Other factors intervene, resulting in different variation, not only in TL-like performance, but also in language use, including formulaic language and imitation. It is not clear to what extent the classroom could have contributed to such inter-task variation. The results of S and T do on the other hand serve to strengthen the analysis of learners' language in O. The developmental pictures derived from all three tasks are strikingly similar, indicating both classroom related and classroom independent factors in the language development of our learners. Whereas formulaic language use can be related more directly to the classroom, there is also clear evidence of classroom independent IL construction. There also appears to be a relationship between more specific aspects of context and interaction and learner language, which is indicated by some differences in structures produced across tasks. Chapter 7 will discuss these findings and their implications in more detail.

6.2 Adults - Longitudinal Study

The longitudinal study of adults includes two groups of learners who were instructed by different teachers. The teaching approach adopted was similar. Teaching materials were similar, although there was some variation and also differences in order of presentation.

6.2.1 General Teaching Approach

Teaching was based on the principles of the communicative approach, the syllabus structured around notions and functions. At various points during the teaching some explicit information about language rules was provided. Comparison with English was made frequently. Dialogue practice, role-playing and pair work were the main techniques used for practising language, all with the purpose of simulating real-life situations. These included meeting and introducing people, exchanging personal information, ordering food in a restaurant, shopping, asking for directions and using public transport. Learners were expected to produce language from the beginning. Imitation and memorisation of formulas was encouraged by this teaching approach. In this the teaching methodology adopted for the adult learners is similar to the approach the children of the longitudinal study were exposed to. However, the adult learners were encouraged to move away from controlled practice and to expand their existing language resources in more or less open-ended activities. There was also less emphasis on error correction, particularly on repetition of corrected versions. Teaching material was based on the text books *Kontakte* and *Deutsch Aktiv* plus some additional material provided by the teacher.

6.2.2 Input/Interaction

Because of the nature of the classroom, there was not always such a clear distinction between teacher controlled input and learner input. Interaction in the adult classroom was much more fluid than was the case with the children. There was always more than one thing going on at the time and a negative structure or a question might appear once and quickly be passed over. It is therefore difficult to establish a clear order of input.

6.2.2.1 Negation

Group 1 (4 males)

Learners were introduced to "nein", "nicht" and "kein" in the same week. Structures with the copula and "nicht", with possessive "haben" and "kein" and some main verb structures with "nicht" were used. When negative structures had been used for 3 weeks, some explanation regarding the use of negative particles was provided. The use of negative structures was required or allowed for for a further 2 weeks including the week of explanation, after that they were used only occasionally. The following discussion provides some more detailed information regarding input.

In Week 2 learners were introduced to a variety of negative structures. "Nein" was introduced in answers to YES/NO questions such as "Kommen Sie aus England?" or "Möchten Sie Kaffee?". "Nicht" appeared in "nein, das bin ich nicht", was used with adjectives, mainly in answers to the question "ist er/sie verheiratet?" and in structures with prepositional phrases. "kein" was used with possessive "haben". Learners were corrected when they used "nicht" instead of "kein" with possessive "haben". The two main verb formulas "ich verstehe nicht" and "ich weiß nicht" were introduced when needed by the learners.

In Week 4 learners were given some explanation regarding the use of negative particles together with examples as follows:

- "nein" is used in answers to YES/NO Questions, i.e. "sind Sie verheiratet? - "nein".
- English "not" in structures with the copula and adjectives becomes "nicht", i.e. "ich bin nicht verheiratet".
- "nicht" is used with main verbs, i.e. "Er wohnt nicht in Edinburgh".
- no or not any in front of a noun becomes "kein", i.e. "Er hat keine Kinder".

There was no practice of these negative structures immediately following explanation, but in the second half of the class some activities required or allowed for the use of NEG, involving mainly the exchange of personal information. NEG structures used were largely restricted to structures containing possessive "haben", with children and pets as indefinite objects, and copula structures with adjectives

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or prepositional phrases. Main verb structures included the two above formulas and structures with "kommen aus" and "wohnen".

In Week 5 there were similar activities requiring or allowing for the use of the various negative structures. In Weeks 6-8 there were few opportunities for the use of NEG.

Group 2 (2 females)

Group 2 was also introduced to the three negative particles and a variety of negative structures within the same week (Week 3). The activities and language contexts in which negatives were introduced and used were similar to those of Group 1, involving the exchange of personal information. Group 2 learners were not given such explicit rule explanation, although on one occasion in Week 4 their attention was drawn to the use of "kein" with possessive "haben".

The following table (TABLE 1) provides an overview of the input on NEG for Group 1 and 2.

TABLE 1

Input on Negation

	Group 1	Group 2
Week 2	**particles** nein, nicht, kein **structures** copula with "nicht" "haben" with "kein" main V formulas with "nicht"	
Week 3	use of above structures	**particles** nein, nicht, kein **structures** copula with "nicht" "haben" with "kein" main V with "nicht"
Week 4	explanation of particle use: anaphoric "nein" "nicht" with main V + copula "kein" with "haben" **structures** main V	explanation of "kein" with "haben"

6.2.2.2 Interrogation

Group 1

Learners were introduced to information questions and inverted YES/NO questions from Week 1. In Week 2 they received some explanation of Subject-Verb inversion in YES/NO questions. By Week 3 they had practised a number of information questions such as:

Woher kommen Sie?   (Where do you come from)
Wer ist das?   (Who is that)
Wie ist Ihr Name?   (What is your name)
Wie heißt X?
Wo wohnt X?
Wie alt...?
Was ist X von Beruf?   (What is X's occupation)

Throughout the course there was at times an emphasis on particular question types. In Week 3 "Wer ist/hat..?" was singled out, including practice with substitution tables. In Week 4 there was renewed emphasis on the information questions listed above. In Week 5 "Wo ist/sind...?" was introduced and practised with substitution tables. In Week 7 "WELCH X...?" received similar treatment, whereas in Week 8 "Wann" was introduced in complete sentences. In other words learners were introduced to questions either by first practising a whole formula before breaking it down and substituting various elements, or they were introduced to shorter patterns of the question word plus verb and a variety of complements to make up complete questions.

Group 2

Group 2 learners also received a mixture of information questions and inverted YES/NO questions and a mixture of whole questions and substitution tables with the question word and the verb separated from possible complements. There were some differences in the questions and in their order of appearance, but there was considerable overlap with Group 1 questions. Group 2 received some explanation of Subject-Verb Inversion with information questions in Week 4.

6.2.3 Learner Language

Our adult learners approach the TL and language learning quite differently from the children. Apart from being more aware of what goes on in a foreign language classroom in general, they take a much more active part in their learning and treat the foreign language as a means of communication from the start. Encouraged by the teaching, they constantly attempt to go beyond the input and language activity provided. They make use of the whole language resource available to them and also seek to expand it. This means that they help to increase the input for others as well. In other words, in contrast to the children, who treat the foreign language more like a game and expect to be given instructions as to what to do, the adult learners use it as a means for communication in simulated or more or less "real" situations. We find apart from imitation and the use of formulas, IL construction is very much in evidence in early adult language. The relationship between teacher input and learner language is therefore not as direct as was the case with Level 1 learners in the longitudinal study of children. On the other hand the more open-ended nature of interaction in the adult classroom can be said to contribute to this less direct relationship.

Because of the relatively low number of responses per subject, per week and per task and no discernible development between weeks and tasks, we will consider all responses as belonging to the same stage. All subjects made use of a variety of TL-like and non-TL-like structures.

6.2.3.1 Negation

Altogether 68 negative responses were recorded. Of these 61.5% were TL-like, 38.5% non-TL like. Compared with the children of this study, who produced only 10% non-target structures during the longitudinal study, our adult learners' IL construction is much more prominent. The non-TL like language includes a variety of structures also found in naturalistic acquisition:

1. Constituent negation.
2. External negation.
3. Preverbal and postverbal negation with main verbs.
4. Postverbal negation with the copula.
5. Appropriate and inappropriate use of "nein", "nicht" and "kein". Lack of marking for indefiniteness and a preference for "nicht".

In addition, like our children, adults overgeneralise the use of "kein".

Constituent negation

There are of course many contexts in which the TL makes use of constituent negation. For instance, an answer to "ist sie groß?" is likely to be "nicht sehr groß" rather than "sie ist nicht sehr groß". Therefore some of our adults' constituent negation is indeed target-like:

Q.: ist er groß?
A.: nicht sehr groß

Q.: ist er ein Manager?
A.: nicht in einer Firma

In other cases constituent negation is possible, but the inappropriate negator is selected:

Q.: ist er häßlich?
A.: nein häßlich, aber er ist nicht sehr attraktiv.

Q.: essen Sie Porridge?
A.: heute nein.

nein Wein Italien (TL: nicht italienischen Wein?)

In all cases "nein" has been chosen instead of "nicht", typical of naturalistic external negation. In many cases constituent negation is not target-like:

Q.: sind sie verheiratet?
A.: ich nicht

Q.: haben Sie Kinder?
A.: nein, keine Kinder

Q.: haben Sie Käse?
A.: nein, kein Käse

Q.: mögen Sie Haggis?
A.: manchmal gut, manchmal nicht gut

nicht verstehen

All of these are typical examples of IL construction.

External negation

There are some cases of external negation with "nein":

nein er ist verheiratet
nein wohnen in Essen

Preverbal negation

25% of possessive "haben" are negated preverbally. There is only one other main verb case.

ich nein arbeite
ich nicht haben ein Haustier

Postverbal negation

Apart from the example above, all other main verbs are negated postverbally. Nearly 50% of these are either *ich weiß nicht* or *ich verstehe nicht* structures, given by the teacher to learners in difficulties, and are therefore either imitations or formulaic in nature. We also find an imitation of *das geht nicht*. The remaining main verb structures are all produced by one subject with help from the teacher. In other words, these main verb structures are not spontaneously produced, as opposed to the "haben" structures, only some of which were modelled in the preceding context.

All structures containing the copula are negated postverbally:

sie ist nicht verheiratet
er ist nicht zu Hause

These have a similar history in the input and language practice to the "haben" structures. The differences in the use of preverbal and postverbal negation with the main verb "haben" and the copula are therefore likely to be "real" differences in IL construction.

Choice of negative particle

Learners use "nein", "nicht" and "kein" both appropriately and inappropriately. The following are examples of adult learners' choice of negative particles:

<table>
<tr><td>

<u>appropriate "nicht"</u>

ich bin nicht verheiratet
er ist nicht zu Hause

</td><td>

<u>inappropriate "nicht"</u>

ich habe nicht Haustiere
ich habe nicht Durst

</td></tr>
<tr><td>

<u>appropriate "kein"</u>

ich habe keinen Hund
er hat keine Kinder
er ist kein politician

</td><td>

<u>inappropriate "kein"</u>

er ist kein billig
ein Auto ist kein billig

</td></tr>
<tr><td>

<u>inappropriate "nein"</u>

sie ist nein verheiratet
ich nein.arbeite
sie haben nein Haustiere

</td><td></td></tr>
</table>

Apart from one case in which "kein" is supplied in an obligatory context with the copula, the other obligatory contexts for the use of "kein" occur with possessive "haben". "nein" is used once, otherwise "kein" and "nicht" are used equally in these contexts. Suppliance of "nicht" in obligatory contexts is 73.5%. 75% of incorrect suppliance in these contexts are with "nein", 25% with "kein". We therefore find a preference for "nicht" over "kein" and "nein" in both correct and incorrect suppliance, and of "nein" over "kein" in incorrect suppliance. This preference for "nein" and "nicht" is consistent with the naturalistic use of the anaphoric and non-anaphoric NEG particles in the early stages of NEG development and with the late appearance of "kein". Although we find some overgeneralisation of "kein", unlike the children in this study, our adult learners were not biased by the input towards the use of "kein" at an early stage.

6.2.3.2 Interrogation

As was the case with negation, adults use a variety of target-like and non-target like interrogative structures, illustrated by the following examples of information and YES/NO questions.

Information questions

target-like

wie heißt sie?
wo arbeitet sie?
woher kommen sie?
was ist Ihr Freunde von Beruf?
was trinken sie gern?

uninverted

wo sie arbeitet?
was es kostet?
wo er wohnen?

particle use

wie heiße ist sie?
wo ist er arbeite?

incomplete

was kostet? (how much does that cost)
wo kommt? (where do you come from)
was studiere? (what are you studying)

random

wo ist von Adress? (what is your address)
wo ist alt? (how old are you)
wo ist Hauptmann? (what does Hauptmann mean)

YES/NO questions

target-like

haben Sie Durst?
möchten Sie ein Eis?
ist sie verheiratet?
haben Sie einen Hund?
wohnen Sie in Edinburgh?

uninverted

das ist eine Familie?
er ist tot?
Bauermeister ist in Deutschland?
er komme aus Edinburgh?
die Gulaschsuppe schmeckt gut?

particle

ist sie lerne Deutsch?
ist sie hat Kinder?

incomplete

und dann sie Student? (and did you then become a student)
Familie? (is that your family)
Edinburgh? (is that in Edinburgh)
ist in Deutschland? (is that in Germany)
Tennis? (do you like tennis)

random

sie heißt Familie? (do you have any family)

Altogether 245 information and 233 YES/NO questions were recorded. Only 6% of information questions are non-target like, compared with 25% of YES/NO questions. This difference may partly be explained in terms of repeated or imitated utterances. Although imitation is difficult to quantify with accuracy, around 40% of information questions occur in clusters of between 3 and 5 utterances of the same question pattern. In the case of YES/NO questions we find only 20% of this type of clustering. However, non-target like utterances are more than four times as common with YES/NO questions. If clustering is responsible for the difference in TL-like performance between information and YES/NO questions, we would have expected only twice as many non-TL like structures. The use of a particle is relatively rare in both types of questions (3 and 4 cases). There are approximately twice as many incomplete structures in YES/NO questions. The biggest difference is in the proportion of uninverted structures. These account for little more than 1% of information questions, but 15% of YES/NO questions. Uninverted YES/NO questions are possible in German. However, as in English, there is a difference in the use of inverted and uninverted YES/NO questions. Uninverted questions are used to confirm assumptions, inverted questions are used to obtain new information. There is a certain amount of overlap. However, all of the uninverted YES/NO questions in the adult data are inappropriate in their context.

There is no obvious reason why learners should prefer non-inversion with

YES/NO questions to non-inversion with information questions. Learners are instructed to invert both and the teacher does not use uninverted structures. The L1 has the same distinctions as the TL. It is possible that more of the information questions have formulaic status. Even though learners use a variety of information questions, they had with some exceptions all been taught at some point during the course. Learners appear to be more creative in their use of YES/NO questions, as many of the uninverted structures show. This impression is, however, difficult to quantify, since inverted structures also have to be taken into account. In addition the few uninverted information questions were not newly created questions. This issue cannot therefore be readily resolved with the available data.

What we can claim is that adult learners' language shows similarities with naturalistic and classroom children's language. With naturalistic learners adults share the use of "incomplete" questions, the use of a particle to mark interrogation and uninverted YES/NO and information questions. With classroom learners they also share some random combination of formulas.

6.2.3.3 Comparison of Group 1 and Group 2 Learner Language
Groups 1 and 2 produced very similar language. On the whole TL and IL structures are spread proportionately across the two groups. Thus the differences in the teaching between the groups do not seem to have affected the structure of their language. The differences were, admittedly, small. There is, however, one difference in the language produced which indicates a definite lack of effect of the teaching. This concerns the use of uninverted YES/NO questions. Group 1, who had received some explicit explanation of Subject-Verb inversion in YES/NO questions, produced 88% of all uninverted YES/NO questions. Group 2, who were given no such explanation, produced only 12%. Given that Group 1 had twice as many learners as Group 2, all things being equal, we would have expected the proportion to have been something like 66% to 33%. Group 1 did not receive repeated explanation of Subject-Verb inversion, nevertheless the difference between Group 1 and 2 is striking. On the other hand Group 2 did receive some explanation of SV-inversion with information questions. It is possible that providing instruction in a feature with the more marked structure led to increased suppliance of this feature in less marked structures. Zobl (1985)

and Pienemann (1984) note a similar effect of targeted instruction. What is important to bear in mind though is that this only increases rate of acquisition and does not affect its course. Both adult groups make use of the same structures.

6.2.4 Comparison of Adult and Child Classroom Learner Language

The language produced by adult and child classroom learners is very similar. Both types of learner produce the following negative and interrogative structures:

1. Constituent negation.
2. External negation.
3. Preverbal and postverbal negation with main verbs.
4. Postverbal negation with the copula.
5. Appropriate and inappropriate use of "nein", "nicht" and "kein". Lack of marking for indefiniteness and a preference for "nicht".
6. Uninverted YES/NO and information questions.
7. The use of a particle to mark information questions.
8. "Incomplete" questions (i.e. questions lacking a verb or a subject or both).

These similarities exist not only despite the differences in age and background between the learners, but also despite differences in the teaching.

In addition both types of learners rely on routines and patterns, resulting at times in randomly produced language.

We may therefore conclude that our adults and children have largely the same way of processing and developing a second language in a classroom setting. Both types of learners make use of imitation, and routines and patterns. Since the structures listed above cannot be explained in terms of input and interaction alone, we also have strong evidence of IL construction for both types of learners.

The main difference between adult and child learners appears to be their expectations of and approach to the foreign language classroom. Adult learners tend to treat the foreign language more as a means for communication and are less constrained by the classroom in their attempt to use and expand their language resource. Their response to foreign language learning is therefore from an early stage more flexible and varied and processes of IL construction are more prominent.

Grammar teaching is not prominent in either the child or the adult classroom in this study, although some explanation is present in both. The role of explicit

rule explanation and application will be discussed further in the following section in which we also examine learners' abilities to analyse language in relation to their second language development.

6.3 Analytic Ability and Grammar Teaching

Explicit grammar teaching did not feature prominently in either the teaching of the children or of the adults. This was unfortunate, since in this study we were interested in the effects of teaching, including the controversial role of grammar teaching. We did, however, find some interesting combinations of analytic ability and grammar teaching in the data, allowing room for some discussion of their relationship to second language development.

During the longitudinal studies of both adults and children any explanation of rules which was provided appeared only once. With regard to negation and interrogation the children did not receive any explicit explanations. Group 1 of the adults received some explanation regarding the use of negative particles and Subject-Verb inversion with YES/NO questions. Group 2 received some explanation of the use of "kein" with possessive "haben" and Subject-Verb inversion with information questions.

Both the adults and the children of the longitudinal studies had at the start of their foreign language instruction received a language analysis test (details are provided in Chapter 4 and the Appendix). The results of the test allows us to divide the 18 subjects tested into 3 groups. The adults had the highest average score, 32.25 (maximum 54), scores ranged from 20.5-46. The 6 highest scoring children scored on average 18.6, ranging from 13-24. The six lowest scoring children scored on average 5.6, ranging from 4-8.

Since the children produced very high levels of TL-like performance, it proved difficult to find and assess any differences between the high and low scoring groups (to be referred to as "H" and "L" respectively). For each group overall TL-like performance on NEG in tasks O and T were calculated. Negative structures and choice of negative particle were treated separately. Differences in negative structures are very small in both O and T, as illustrated by the following table (TABLE 2):

TABLE 2

Non-TL like negative structures

Group	O	T
L	5.25%	11%
H	4.55%	12.5%

Differences in the choice of negative particles are more substantial, as illustrated by the following table (TABLE 3):

TABLE 3

Non-TL like choice of negative particle

Group	O	T
L	28%	23.5%
H	15%	14%

The above figures are difficult to interpret. They may mean that children with higher analytic ability were simply better at remembering formulas, since this is what the teaching and learning at this level largely consisted of. It did not include explanation and learning of the grammar of negation. Analytic ability may therefore not have been called upon in the learners. However, even when the teaching does include grammar teaching, this does not necessarily lead to increased TL-like performance, as the following analysis of the adult data indicates.

In the previous section we noted similarities in learning and in language produced between adults and children. In the beginning stages adults also produced a larger proportion of non-target like utterances than the children. This is spread out among all subjects. We already indicated that the differences in the teaching between adults and children and their own approach to the foreign language classroom accounts for the more varied and flexible, and hence non-TL like, or IL-like responses of the adults. We would therefore not want to claim that adults high analytic ability and grammar teaching actually hindered their second language development. It is possible to claim that neither the adult nor the child classroom exploited learners' analytic abilities and that this accounts for the nature of their learning and development. Analytic ability may need an environment of more intensive grammar teaching in order to be applied to the process of language learning.

We would not want to deny this possibility, nor the potential contribution of analytic ability and grammar teaching to rate and ultimate achievement in second

language development. What we would like to claim, however, on the strength of the data in this study is that despite high analyitc ability in some learners and some explicit rule explanation in the adult classroom, all adult and child learners make use of very similar processes, including IL construction, in the early stages of classroom second language learning.

6.4 Summary of Findings: Chapter 6

In this chapter we examined a variety of factors which may influence the language of second language learners. Despite some context-dependent variation, we found that certain IL processes are evident in a variety of oral and written tasks of varying degrees of formality. Furthermore, IL processes appear to operate regardless of age, background and analytic ability of the learner. They also assert themselves despite differences in the learning context, including order of input, explicit rule explanation as well as imitation and formulaic language practice.

Notes

1. In the analysis of NEG in S at Level 3 no more than 5 modals were included for each subject. This was to allow for a more even distribution of negative structures and therefore a more meaningful analysis of subjects' TL-like performance . the inflated number of modals in task S is discussed in section 6.1.2 under Inter-Task Variation.
2. The fact that this picture emerges at Level 4 an O, yet at Level 3 in T is the result of increased TL-like performance in T in comparison to O, which is dicussed in section 6.1.2 under Inter-Task Variation.

Chapter 7
Discussion

In the analysis and presentation of results in Chapters 5 and 6 we have not always maintained clear distinctions in terms of our hypotheses as stated initially in Chapter 2. This is due to the complex nature of classroom SLA and is also necessary in order to convey as full a picture as possible of the interaction of classroom and learner variables. In this chapter we will attempt to separate out the various strands of our study and reexamine our original hypotheses in the light of the results. We will begin by summarising our hypotheses:

1. Our main hypothesis was that classroom SLA would involve systematic IL construction which would not be a direct reflection of input and interaction and which would resemble naturalistic acquisition.

2. A secondary purpose of our study was to show that classroom learners' IL construction would be manifest in a variety of language tasks and operate regardless of learners' age, background or analytic ability.

3. We also expected the classroom to have some effect on classroom learners' L2 production and development, such as encouraging imitation, memorisation of input and rule application in the attempt to produce TL-like utterances.

The results of this study are largely consistent with our hypotheses. The two main findings concern

1. The robustness of certain IL processes in the face of a variety of contextual and learner variables.
2. The contribution of the classroom to the use of imitation and formulaic language.

In the following discussion we will first of all consider the evidence of IL construction and raise questions concerning its significance within classroom SLA. We will also attempt to explain some aspects of the nature of IL negation and interrogation. Secondly we will consider classroom effects on learner behaviour. These will be discussed as effects of input and effects of interaction. The focus in relation to interaction will be on formulaic language use. Thirdly we will consider

the effect of task on learner language and fourthly the effect of learner variables such as age, background and analytic ability.

7.1 IL Construction

The results presented in Chapters 5 and 6 strongly suggest that at least part of classroom SLA follows its own principles in ways very similar to L1 and particularly naturalistic L2 acquisition. We found that despite the control over input and interaction exerted by the teacher, classroom learners regularly and systematically use non-target-like language which does not correspond to the input and show a preference for certain TL aspects which does not reflect input order or frequency. We also observed a degree of uniformity between different classroom learners and between classroom and naturalistic learners which allows us to rule out the hypothesis that the observed classroom-independent phenomena resulted from idiosyncratic learner behaviour. In particular we suggest that the following IL structures and phenomena constitute evidence of processes which work selectively on the available input to construct and develop learners' own language systems:

1. Constituent negation
2. External negation
3. Preverbal negation with main verbs
4. Lack of marking for indefiniteness
5. Preference for "nicht" over "kein"
6. Uninverted YES/NO and information questions
7. Particle use to mark YES/NO and information questions

Analysis of the input rules out any direct relationship between the above phenomena and the input. L1 transfer is also largely ruled out. Only particle use in questions and to a lesser extent preverbal negation may be linked to the L1. However, these phenomena are widespread in other language contexts and their occurrence in our data is therefore likely to indicate at least partially L1 independent processes.

Apart from supporting our first hypothesis, the above results raise a number of questions, both in the context of our own study and in more global terms. They are all basically concerned with the significance of our evidence of IL construction. First of all there is the question of extent, i.e. how pervasive is IL

construction in classroom SLA? It is possible to point to the relatively low numbers of some of the above structures and the overall high level of TL-like performance, which rarely drops below 60% for groups, and claim that IL construction plays a relatively minor role. There are, however, a number of reasons why the level of TL performance is misleading. Firstly, while systematic non-target-like production serves as evidence of IL construction, this does not mean that TL-like production is counterevidence. Many IL structures will be TL-like. This does not mean that their function always is, nor that learners do not themselves select those structures which they incorporate in their ILs. As we will discuss later, we have evidence that TL-like performance at lower levels is largely formulaic. The status of TL-like language at higher levels and in the written tasks is much more difficult to ascertain than the status of non-TL-like language. It is therefore important to keep the level of TL performance in perspective and bear in mind how it relates to the total picture of classroom L2 production and Lastly, it is also important to bear in mind that we looked at only two language areas and that the picture of IL construction is likely to be much more striking if we look at the learners' total production. We already find some indication of this in the difference between the percentages of TL performance for NEG and Q, with the figures for NEG, which is syntactically more complex than Q, being consistently lower than those for Q. Ultimately quantitative analysis of this kind relates more to the rate of acquisition rather than its course. We will return to this point later.

The second question regarding the significance of IL construction concerns the nature of IL processes. Although the exact nature of IL processes is not the concern of this study, our results raise the question of why ILs are shaped the way they are. Our classroom learners make use of a small range of negative and interrogative devices which are also widespread in natural languages and in L1 and L2 acquisition in a wide variety of settings. The predominance of external and particularly preverbal negation and of uninverted questions in a wide variety of contexts of language use suggests that these features have a special status. We will offer some very tentative explanations as these might go some way towards explaining why learners do not select postverbal negation and SV-inversion. They are to a certain extent related to the markedness explanation put forward by

Pavesi (1987b)), in that they partially rely on the notion of ILs starting off as simple systems which develop towards increasing differentiation.

We suggest that the universality of certain negative and interrogative devices may indicate that they are extremely powerful and robust solutions to problems of expressing meaning and the result of general processing constraints. We will first of all use the example of negation to illustrate our point. Anaphoric negation, i.e. the use of the negator on its own, may be seen as the most basic form of negation. With it the speaker signals disagreement, denial etc. in relation to the surrounding context. The need to say "no" in this basic sense is likely to be essential in a variety of human interactions. It is, however, a very crude device, which only very generally relates to its context. External negation may be seen as a step towards further differentiation in that it attaches the negator to specific elements, i.e. it limits its scope. An item which signals the negative import of an utterance is provided plus the utterance. We referred to this in Chapter 3 in Givon's terms as "pragmatic negation". Preverbal negation is the most widespread negative device in natural languages, in particular, as Dahl (1979) notes, pre-finite- element (FE) negation. Pre-FE negation indicates syntacticisation, i.e. integration of the negator into constituent structure. One reason why external negation is complemented or replaced by pre-FE negation may again be a need for differentiation of meaning, or for specifying more accurately the scope of negation. One way of achieving this may be by attaching NEG to the element which carries most of the information to be negated, i.e. the FE, especially in a context where the subject is clearly established. The predominance of preverbal negation may also indicate a perceived lack of need for further syntactic differentiation. If a particular constituent is to be negated, prosodic features are typically used, which may be "easier" than the processing required to move NEG around in the sentence. Similarly the predominance of questions marked by intonation or a particle may be less demanding on processing mechanisms than S-V inversion. Whereas the former consists of adding one feature to an utterance, the latter requires identification of functional categories and a change in basic word order. Further analysis is of course required to account for the fact that some languages do develop postverbal negation and SV-inversion.

The similarities between learner language and natural languages in the areas

of negation and interrogation are likely to reflect a combination of factors. We are aware that the above discussion touches on many controversial issues concerning the economy of natural language processing and the motivation behind the expansion of existing language resources. It is far beyond the scope of this investigation to examine all of these issues in detail. We offer some tentative, speculative answers in order to show that SLA and IL construction may at least partially be explained in terms of the need to express meaning, for increased differentiation and general processing constraints. Our speculations may account for the fact that NEG and Q develop the way they do in an environment where the emphasis is clearly on postverbal negation and SV-inversion in questions. They suggest ways of investigating the notion of simplicity and complexification in the construction and development of ILs. At the same time we are still left with the question of what motivates learners to move from preverbal to postverbal negation or to SV-inversion in questions. This question is part of the more general question of what motivates learners to move from one developmental stage to the next and again relates more closely to rate of acquisition. Both Pienemann (1984, 1989) and Zobl (1985) suggest that instruction at a certain developmentally "ripe" stage may accelerate acquisition.

The third and last question raised by the notion of IL construction, which again relates to rate of acquisition, is how necessary the various steps in its development are. From the results of our study it appears for instance that preverbal negation cannot readily be passed over, whereas external negation is not very prominent. This does not rule out the possibility of external negation being used at pre-production level.

7.2 Classroom Effects

We will discuss the effects of the classroom as effects of interaction and effects of input separately. The former relate to learners' general attitudes and expectations of foreign language use and general production strategies and learning processes, including the extent to which learners make use of imitation, formulaic language and IL construction. The latter relate to more specific aspects of IL construction. We will begin by considering the effect of input order on the development of the children's negative particle system.

Naturalistic learners use and acquire "nicht" before "kein". We may assume that they are exposed to these particles simultaneously and it is likely that "nicht" will be at least more prominent. On the other hand our classroom learners were exposed to, and consequently also used, "kein" long before "nicht" (about 12 weeks sooner). This raises the question of whether these differences have ultimately a positive, negative or neutral effect on subsequent acquisition. Despite a high level of initial TL-like performance, learners have not acquired the function of "kein" but use it to mark negation only, simply because for a long time this was the only negative particle available to them. Learners do supply "kein" in obligatory contexts, but they also overgeneralize it. Once they have been introduced to "nicht" they gradually extablish a preference for "nicht", and only when they have reached a level where "nicht" is used almost exclusively do they begin to use "kein" again. It would appear, therefore, that the order in which learners were introduced to the negative particles "nicht" and "kein" has added a stage in the acquisition of the negative particle system and it seems reasonable to assume that this delays acquisition. It is certainly not obvious from our data what advantage the early introduction of "kein" may have offered to our classroom learners. Instead we find that Level 3 learners' negative particle system resembles the early naturalistic system more closely than that of Level 1 and 2 learners. It is possible that the acquisition of the particle system would have started sooner if learners had not received early input which focused on "kein" exclusively, weeks before "nicht" was introduced.

"Kein" was not only introduced early, its use was also restricted to two types of structures which were drilled extensively in the classroom, resulting in their use as formulas, possibly throughout Levels 1-4. Although it is possible that the effect of the early introduction of "kein" is independent from the context of interaction in which it occurred, it is also possible that extensive drilling reinforced the barriers to a more "natural" course of acquisition. We cannot resolve this question with our data, but we will now consider in more detail the role of interaction in the use of formulaic language by classroom learners.

In Chapter 5 we noted a high level of TL-like performance at Level 1. We were struck by the extent to which both longitudinal and cross-sectional Level 1 data consisted of target-like negation and interrogation, produced both in and out

of the classroom throughout the period of instruction in which NEG and Q were taught and during elicitation 5 months later. In particular, learners produced a high proportion of postverbal negation and SV-inversion in questions. We also found a relatively high suppliance of "kein" in obligatory contexts. We found evidence to support the view that Level 1 and to a certain extent Level 2 TL-like performance was based partially on direct imitation and to a large extent on the use of patterns and formulas. In other words TL-like performance at the lower levels was not likely to reflect the operation of an internalised negative and interrogative rule system. We produced two types of evidence for the formulaic status of learners' TL-like performance. The first consisted of comparison of learner language with the input on negatives and interrogatives and their treatment by the teacher. We found that there was a considerable amount of correspondence between learner language and the input structures and that learners had been drilled extensively in the use of the input structures as whole unanalysed units. We also found that particularly Level 1 language was very restricted in vocabulary and included only a small number of different NEG and Q structures. In other words their repertoire was very limited. On its own this evidence for the formulaic status of learners' language is insufficient, but our interpretation is strengthened by a second type of evidence. This second type of evidence for the formulaic status of a large part of Level 1 and to a lesser extent Level 2 language was to be found in certain non-target-like structures. We noted, apart from errors pointing to IL construction, a certain amount of randomly produced language. This might consist of whole sentences being used for the meaning of other whole sentences, the substitution of parts which did not necessarily form meaningful units or the use of individual, but undifferentiated, lexical items. Learners would string these units together in a relatively unprincipled fashion, except that some sort of linear order is preserved. For instance the first part of a sentence is not substituted for the second part and vice versa. However, there is no apparent constituent structure.

On the basis of the above evidence we argued that learners did not operate according to postverbal negation and SV-inversion rules or use "kein" to mark indefiniteness in their TL-like performance, but relied largely on the use of formulas.

The extent to which learners rely on formulas decreases with increased input and variety of language use, both synchronically and diachronically. We found that TL-like performance decreased and IL construction increased in elicited data compared with classroom data. Even more striking was the drop in TL-like performance and the increase in IL structures at Level 2 compared with Level 1. This was then followed by increased TL-like performance at Levels 3 and 4. We consistently observed this U-shape behaviour with regard to TL-like performance in both NEG and Q. On the other hand there was also some indication that certain structures with "kein" to a large extent survived as formulas, although the status of these structures at higher levels is difficult to ascertain.

The type of interaction our learners were exposed to therefore clearly had an effect on the kinds of processes they made use of in their L2 production and development. In the case of Level 1 learners it encouraged imitation and memorisation of formulas. However, IL construction gradually asserts itself over time and generally as soon as the control over learners' production is relaxed, either because insistence on TL-like performance is relaxed or the focus of TL production shifts to other areas of language. Therefore the classroom can determine to what extent linear and imitative processes or organic and creative ones are activated, but it cannot for long suppress the latter. We will return to this point later in the discussion of the adult classroom. There is also some indication that the nature of the classroom shapes learners expectations and attitudes towards foreign language use. In the case of our child learners we found a reluctance to treat language as a means of communication. Instead learners treated the L2 as a school subject and saw L2 production as a case of getting the right answer, even in settings were they were called upon to use language for a communicative purpose.

Formulas are also part of naturalistic SLA and adult language use. The predominance of formulaic language in the children's data does, however, raise some questions, which again relate to rate of acquisition. Level 2 data regularly resemble early naturalistic learner language more closely than Level 1 data in terms of IL construction. Particularly marked is the drop in postverbal negation. The question is to what extent the building of a store of formulaic language at Level 1 may be regarded as a helpful step to subsequent aquisition or not. It

clearly blocked IL construction, although it did not suppress it altogether at Level 1. Lightbown (1983) suggests that "overlearning" as the result of rote memorisation may be detrimental to learners' progress by blocking "natural" mechanisms for dealing with language input. We also have some evidence of IL construction being blocked and a "natural" order gradually being restored. On the other hand we do not need to assume that the use of formulaic language is always detrimental to overall L2 development.

This brings us to the question of the respective roles of formulaic language and IL construction and their relationship in SLA. The issues involved are similar to those raised by the study of the role of explicit grammmar instruction and the acquisition/learning distinction. There are basically two questions. The first concerns the extent to which SLA is based on formulaic language use compared with more creative IL construction. The second is whether there is an "interface" between formulaic language and IL processes. Krashen (1981) argues that formulaic language plays a relatively minor role in SLA and that it is basically different from "real" acquired language, which is the result of acquisition processes working on comprehensible input. Ellis (1984), who also found early classroom L2 production to consist of a large proportion of formulas, argues that they are important psychologically and socially in allowing for a certain level of communication. He remains undecided about their contribution to acquisition. Wong-Fillmore (1976) provides the most forceful evidence of the interaction between stored formulas and creative acquisition processes by showing how formulas are broken down and analysed items reassembled. We also raised the possibility of formulas being broken down into meaningful smaller units in Chapter 5. Our study does not provide sufficient data to address the above issues, but suggests that the status of formulas in SLA may usefully be investigated further.

7.3 Language Tasks

Our hypothesis that IL construction would be evident in a variety of language tasks was confirmed. Children's production and development was strikingly similar in the different tasks, not only with regard to IL construction, but also in relation to the use of formulaic language. There was some indication that the

more formal, written tasks elicited greater TL-like performance than the oral tasks at higher levels only. We also noted differences in production due to differential opportunities for the use of formulas and individual learners' production strategies. These findings have implications for the study of variability in accuracy/TL performance. Presence of the variables time and formality do not always produce consistent differences and are not necessarily responsible for the differences that are found. This finding is consistent with Hulstijn and Hulstijn's (1984) finding that increased time does not necessarily improve accuracy and Makoni's (1989) finding that learners react differently to certain tasks depending on their level of proficiency.

7.4 Learner Variables

Although the adult study did not provide any data in relation to development over time, adults' L2 production bore many similarities to that of the children in terms of IL construction. This was despite differences in learning context and also learning experiences, with 5 of the 6 adults having studied at least one other foreign language. At the same time we noted that while both children and adults also relied on imitation and formulaic language, adults combined these with IL construction from the beginning of instruction.The adult classroom was less controlled in terms of input and interaction than the child classroom and allowed room for IL construction. Given the nature of naturalistic SLA there is no reason to assume that children cannot take advantage of a less controlled environment in their L2 development and combine imitation, formulaic language and IL construction at an early stage. The nature of the children's behaviour is likely to reflect more the teacher's preoccupation with correct TL form and also general practical requirements of classroom management than the availability of certain processes. In other words there may be perfectly valid reasons for the choices that are made in shaping the classroom, but these reasons do not necessarily relate to learning processes.

Finally, we found no significant differences between learners with respect to analytic abilities in terms of IL construction and only small differences in terms of TL-like performance which may in fact relate more to differences in memory capacity than analytic ability. In this context we noted in Chapter 6 an interesting

phenomenon in relation to explicit rule teaching. Explanation of rules did not feature prominently in the areas of NEG and Q in the child or the adult classroom. Of the Adults, Group 1 which did receive some explanation of SV-inversion in YES/NO questions was far less likely to use it than Group 2 which did not. Both adult groups obtained very high scores on the language analysis test compared with the children. Therefore even where high analytic ability and rule explanation are present, learners' language conforms to typical IL rules. On the other hand, as pointed out in Chapter 6, it is possible that instruction of SV-inversion in the more marked context led to its increased use in YES/NO questions in Group 2. But both groups made use of the same IL structures, indicating that the course of IL construction cannot be changed.

7.5 Summary

In this study we have been concerned with the relationship between teaching and L2 development in the classroom. We have defined our concern more specifically as relating input and interaction in the classroom to the course of L2 development and as determining what kinds of learner processes operate. We have found that the classroom may determine to what extent imitation, memorisation of formulas and IL construction are activated by controlling the amount of input and the type of interaction learners engage in. The classroom may focus on imitation and the memorisation of formulas, but IL construction cannot readily be suppressed. One of the main findings of this study is in fact the apparent robustness of certain IL processes in the face of a variety of contextual and learner variables. Our results are consistent with the view that classroom SLA involves organic and creative processes. On the other hand the results of this study suggest that linear, imitative processes are also involved. In particular the nature and status of formulaic language and its relationship to IL construction in classroom SLA might usefully be reconsidered.

Chapter 8
Conclusion

The final chapter is divided into four sections. In section 1 we will discuss the relevance of the present study to SLA research in general together with its limitations. In section 2 we will outline possible lines of future research which suggest themselves on the basis of the results and limitations of the study. Section 3 will raise the issue of teaching implications. In section 4 we summarise our main conclusions and briefly reexamine the notion of Interlanguage in the light of this study.

8.1 Relevance and Limitations of the Present Study

In the following we will outline what we perceive to be the strengths and limitations of our project in relation to SLA research in general and some recent approaches to the study of the relationship between teaching and learning in (classroom) SLA in particular.

The present study was conceived during the heyday of the "Interlanguage" approach to SLA in the Department of Applied Linguistics in Edinburgh. It assumed that second language learners have a "language" which can be described just like any fully fledged language system and took as its starting point the methodology of the descriptive linguist. It attempted to treat the learner's language as a system in its own right, i.e. as a system, which though goal-oriented towards the TL, nevertheless was likely to exhibit features independent of it. By the end of this chapter we hope to have shown that, even though the notion of Interlanguage itself has to be extended, this approach is still of relevance to the study of (classroom) SLA today.

As we pointed out in chapter 2, many SLA studies, particularly classroom studies, had focused on acquisition/accuracy orders of a set of apparently unrelated linguistic forms, providing relatively indirect evidence of context-independent learning processes. In this study we wanted to demonstrate the independence of IL systems by means of more direct evidence of IL construction. The occurence of transitional IL negative and interrogative structures as listed in chapter 7 together with striking similarities of these

structures to naturalistic data, provides such direct evidence. This evidence derives from data of learners who have been exposed to the L2 in the classroom only, including mainly children/adolescents but also some adult learners. We believe this to be one of the most comprehensive studies of transitional structures produced by classroom only learners which also includes data on input and interaction (and incidentally the only such study carried out in the context of foreign language learning in Scottish schools). The study includes both cross-sectional and longitudinal data, data from three different elicitation tasks and is based on approx. 75 negative and interrogative structures each for each of the 42 children/adolescents. In this context our results take on all the more importance, considering that as recently as Wode 1982, teachers claimed that their learners did not produce the types of transitional negative and interrogative structures Wode presented to them from naturalistic data. This is not to say that these teachers were necessarily wrong, although considering the results of our own study and also of Felix (1981) a total absence of such structures in the classroom seems surprising. It is our surprise at these claims which reinforce the need for systematic study of what it is that learners actually do and also the need to take into account the learner's overall use of language, especially in spontaneous use, which is after all a main aim of teaching.

In addition our study is also important with regard to its approach to the study of language use in different tasks. Whereas the majority of studies using different tasks are interested in intertask variability (Ellis 1984c); Lightwood 1981; Tarone 1979, 1982, 1983), considering quantitative differences in usage, we focused instead on intertask systematicity, showing that the developmental picture is essentially the same in all tasks (The pursuit of this possibility in this study owes much to personal discussion with H.Borland and M.Pavesi).

Our study also showed that adults make use of IL construction in ways very similar to children. Unfortunately, for practical reasons, the number of adults studied was only small and only a relatively short longitudinal study was possible. The results therefore have to be viewed with caution. At the same time, the 6 adults investigated were all highly educated and mostly experienced language learners. Therefore we managed to at least provide a group which contrasted with the school children, who were a social mix, with necessarily limited educational

experience and no prior second language learning experience. In Britain it is still difficult to have access to adult L2 learners consistently over long periods of time, although ab initio courses in universities and colleges are on the increase. Ellis (1986, 1989) were carried out in such a context. It is to be hoped that the opportunities for the systematic study of adult foreign language learners will continue to increase.

A further important finding of our study was that analytic ability by itself does not appear to affect the development of the syntax of negation and interrogation. Analytic ability was defined as the ability to discover, verbalise and apply formal language rules. We cannot rule out the possibility that different results would have been obtained had the learners actually received systematic instruction in the analysis and application of rules. We will return to this point in our proposals for future research.

To summarise our first main finding, we have shown that in some areas classroom and naturalistic SLA are strikingly similar in the operation of IL processes which are independent from input and interaction, and that these processes operate irrespective of task or age and analytic ability of the learner. While we believe our interpretation of the data to be correct, we do not wish to exaggerate the meaning of our results for an understanding of SLA in general. The present study of the syntax of negation and interrogation covers a relatively small area of language use and its results do not necessarily generalise to other areas. On its own it is necessarily of limited significance. On the other hand it does fit into a growing number of recent studies which investigate the development of syntactic phenomena in relation to the classroom or more directly controlled input in an experimental setting. Studies by Ellis (1985, 1986, 1989) and Pienemann (1984, 1989) adopt a similar perspective to our own. They are concerned with various aspects of the acquisition of word order in German. Although they are primarily studies of orders of acquisition, they are based on related phenomena which are linguistically motivated and therefore allow both for a more direct examination of the learner's system and also testable hypotheses about possible explanations for this system and its development.

The results of these studies together with the interpretation of our own data

now constitute a respectable body of evidence of the independence of the syntactic development from teaching. All studies raise, though do not resolve the issue of whether an explanation of this phenomenon will have to take recourse to the notion of language specific processes or whether it can be explained in terms of general cognitive processes. Due to our own orientation, whose primary goal was to provide evidence of context-independent IL processes rather than explaining their nature, we did not adopt a particular position, although our attempts to move towards explanation in chapter 7 place us in the general cognitive camp. While at this stage remaining agnostic on the issue, we believe that it makes sense as a first step to attempt a general cognitive account, rather than invoking a LAD on theoretical grounds of the logical problem of language acquisition and the controversial underdeterminacy hypothesis. Since so far neurological correlates of a LAD have not been demonstrated, general cognitive accounts remain to be attempted and pushed to their limits. Ellis' approach is similar to our own, whereas Pienemann has moved on, both in terms of his theory and in his empirical work towards explanation in terms of general cognitive processes.

The present study would have benefitted from a more sophisticated and extensive study of input and interaction. For practical reasons we had to decide whether to focus more on learner output or input/interaction and because of our main objective decided on the former. We believe that the relationship between learner output and input/interaction in the longitudinal studies was adequately portrayed. Although more detail would have been desirable, observation of all the adult classes ensured that no vital clues to the analysis of learner output were lost. With regard to the child classroom, even though only 20% of classes were observed, all materials used were examined for input and the teaching format was remarkably uniform in all observed classes, which makes the claims about the nature of the interaction likely to be accurate on the whole. Nevertheless, there is no doubt that further quantification of the input/interaction variables would have been desirable and that input data beyond Level 1 would have been a valuable addition to the study. We believe this could only have strengthened our interpretation of the data.

The studies by Ellis and Pienemann cited in this chapter contain

methodological refinements in the study of input and interaction, made possible either through larger scale projects or through microscopic study of a few subjects in more tightly controlled experimental settings. There still remain great methodological difficulties in the combined study of learner language and input/interaction which usually mean a trade-off between accuracy and detail on the one hand and generalisability of results on the other.

We would like to stress our conviction that the type of study which attempts to keep an eye on both input/interaction and learner production will continue to be necessary in order to contribute to the whole picture of SLA. We do not question the value of methodologies which pursue exclusively internal or external factors in SLA. They are necessary for an advancement in our understanding of the nature and complexities of both the learner's system and the learning environment. At the same time we do perceive a need for studies which attempt to relate the two at both the theoretical and the empirical level. This is as relevant for demonstrating the context-independence of the learner's IL system as it is for establishing where the relationship between input/interaction and learner production is a more direct one. In this study we found the latter to be the case with formulaic language. We will now turn to this, our second major finding.

There are two points to consider. Firstly, while the apparent independence of IL construction tends to move research towards internal explanations, the use of formulas takes us at least partially to the external. It does more than this, though. Not only is there a need to study the use and development of formulaic language in relation to input/interaction, there is also the issue of the role of formulaic language in SLA as a whole, and in particular its relation to IL construction. In the formulation of our hypotheses in chapter 2 and in our approach to data collection and interpretation, we have been inclined to keep these separate. Formulas were discussed mainly in an effort to show that TL-like performance is not necessarily based on an internalised rule system and therefore juxtaposed to evidence of IL construction. This is in fact a methodology frequently adopted by other researchers with similar aims. Ellis (1985), Pienemann (1984, 1989) and Felix (1978, 1981) all extract from their data cases of formulaic language use in order to concentrate on the rule-generated language, be it based on IL or TL rules.

We found that for the purposes stated, this approach was justifiable. We also found, like Lightbown (1983), that the exclusive use of formulas may have a detrimental effect on subsequent acquisition. At the same time we began to question whether it was indeed appropriate to relegate formulaic language to a peripheral role at all stages of SLA. That it may not be entirely justified to dismiss formulas in such a way has been suggested by among others Widdowson (1984) and, backed up by substantial empirical evidence, Wong-Fillmore (1976, 1985). In our own data we hint only marginally at the possibility of formulas being broken down and items being reassembled (chapter 5, p. 102). It therefore seems desirable to reconsider the role of formulas in SLA, in particular to attempt to relate them to IL construction. In view of the encouragement of the use of formulaic language in our study, this would seem to be particularly relevant in the case of classroom SLA.

It is difficult to see how the relationship between IL construction and formulaic language use can be studied without taking into account input and interaction, if only to determine as a first step which items in a learner's language are in fact formulaic in nature. This may not always be possible from a study of the learner's language in isolation, especially if it contains fairly homogeneous or simple structures, which, again, judging by our classroom data, may be more evident in a classroom setting. We will return to formulaic language in our proposals for future research.

Although we do agree with Lightbown (1985) that we need to study external factors such as input closely before concluding that they are not responsible for learner outcomes, we believe that in this study we have successfully ruled out teacher input as a direct model for a large proportion of learner structures.

Whatever else may therefore be going on in SLA, the uniform development of the syntax of negation and interrogation in classroom and naturalistic SLA are striking. They are entirely consistent with the view inherent in the Interlanguage Hypothesis that learners create and develop their own system of communication in at least partial independence from the way they are taught. There is, however, further explaining to be done. After this discussion of the relevance of our study to SLA research in general and of its limitations, we will now put forward some

more specific suggestions for future research which arise from it.

8.2 Future Research

We will propose possible lines of future research in the following areas of SLA:

1. Adult classroom SLA and the combined role of analytic ability and grammar teaching.
2. The nature of IL construction.
3. Formulaic language.
4. Rate of acquisition

These areas are usefully investigated separately, but answers found in one of them will ultimately have to be related to answers in all the others.

8.2.1 Adult Classroom SLA, Analytic Ability and Grammar Teaching

Compared with our study of children, our study of adults was carried out on a relatively small scale. Our examination of the role of analytic ability in conjunction with grammar teaching in the development of the syntax of negation and interrogation was even more restricted. Ellis (1986, 1989) provides evidence of classroom independent word order acquisition in the SLA of sophisticated adult language learners. In order to complement this research and our own, we suggest the following addition to the available data on classroom SLA: a study, which investigates the acquisition of the syntax of negation and interrogation by adult classroom only learners, adopting a methodology of elicitation similar to the one used for our cross-sectional study of children, but with improved data collection procedures for input/interaction. This study should also include the variables of analytic ability and grammar teaching, using four different groups of learners representing the four possible combinations of these two variables.

8.2.2 The Nature of IL Construction

If, as suggested by Pavesi (1987b)), the development of negation and interrogation can be explained in terms of typological and linguistic markedness, what psycholinguistic factors underly markedness conditions? In Chapter 7 we offered some tentative explanations for the development of negation and interrogation. Future research might address the issue of complexification or

increasing differentiation in more detail, taking into account factors such as the functional requirements of learners, processing constraints and the economy of linguistic marking in L2 development in general. It has to be stressed that a multitude of factors are likely to be involved and that what may explain the case of negation and interrogation may not apply to other language areas. Since negation and interrogation appear to be such basic categories (Dahl 1979; Felix 1978; Ultan 1978), an answer to our question may well lie deeply buried within the origins of language itself.

8.2.3 Formulaic Language

Widdowson (1984) suggests that language users and learners may not be as rule-fixated as we imagine. What is then the contribution of formulaic language to SLA and how does it relate to IL construction? Future research may investigate at least three questions:

1. What is the relationship between the use and development of memorised, unanalysed formulas and input/interaction?
2. To what extent and how does formulaic language become analysed into smaller meaningful units and how are these units reassembled?
3. Do formulaic language and IL construction processes interact, and if so, how?

In the words of Vihman (1979):

> "A great deal of further work, and some rather clever methodology, will be needed to ascertain the relationship between memory and analysis..." (p.90)

And, we would add, between memory and construction.

8.2.4 Rate of Acquisition

In relation to this study there are again the two issues of formulaic language and IL construction to consider. Lightbown (1983) suggests that excessive rote-memorisation may be detrimental to learners' progress by blocking essential acquisition processes. In this study we also suggest that the emphasis on formulaic language delays for a time IL construction, but we cannot be sure whether this impedes overall acquisition. The question is, since Level 2 data consistently and

Level 3 data occasionally resemble early naturalistic data more closely than do Level 1 data, what happened at Level 1? To what extent were learners hindered or helped by their Level 1 experience? Any study attempting to answer this question would run into serious methodological problems for which we cannot at this stage offer any detailed solutions.

We also suggested in this study that the input order of negative particles delayed their acquisition by adding a stage in their development. In other words, in order for IL processes to function efficiently, it is important that learners receive the right kind of input. Pienemann (1989) also produces evidence of a negative effect of premature instruction in structures for which the learner was not ready developmentally. Conversely, Pienemann (1984, 1989) and Zobl (1985) provide some indication that targeted instruction may accelerate acquisition. In relation to our own study, the question is to what extent can the development of the syntax of negation and interrogation be accelerated? This question is, naturally, closely related to the question of what motivates a learner to move from one IL stage to the next, i.e. to the explanation behind the nature of the development of negation and interrogation.

It is important in all this to bear in mind that even if there is a positive answer to the above question, we always have to return to consider the whole system. We have to attempt to assess the overall effect of any attempts at accelerating the development of small areas, which may appear to be self-contained, but may relate in subtle ways to other areas of development. This is important precisely because it is in this area that teaching implications are most likely to be sought.

8.3 Teaching Implications

It is difficult for a study of classroom second language development to avoid altogether the thorny subject of what the implications of its results are for the teaching of languages. Teachers are mainly concerned with establishing which methods bring about learning most effectively and to the highest standard. In other words, they are concerned with rate and ultimate attainment. This study, on the other hand, has primarily been concerned with the course of development. It therefore has relatively little to say to those interested in direct practical

applications. The only practical suggestion we feel comfortable about making concerns the introduction of negative particles in German. Based on the evidence discussed in Chapters 5 and 7, we would suggest introducing the negative particle "nicht" sooner, since exclusive focus on "kein" over a long period does appear to delay the acquisition of the negative particle system.

Apart from this modest offering, we will restrict ourselves to some general comments based on the results which anyone interested in language teaching might find useful to bear in mind. Our results show that the classroom can determine to what extent imitation, memorisation of formulas and IL construction are activated. At present we do not know what the ultimate combination of these processes in SLA might be. There is, however, some evidence to suggest that controlling the classroom in a way which allows little room for IL construction can have a detrimental effect on subsequent acquisition. This may include encouraging a limited view of second language use in the learner. The classroom therefore plays a crucial role in providing a judicious mixture of activities which do not straitjacket the learner. Since IL construction is unavoidable, indeed necessary to progress, suppressing it in an effort to ensure TL performance may not only delay acquisition, it may also erect additional barriers which have to be broken down before the learner can find his own optimal way of utilising the various learning mechanisms available to him.

Finally, we can say that our findings are generally consistent with the view of language use and learning adopted by the G.L.A.F.L.L. approach to foreign language learning which provided the context of the study of children. This applies both to the nature of the classroom and learner behaviour. We found the classroom to consist of both practice and communicative activities, although practice heavily dominates the Level 1 classroom. We found in the learners' language evidence of errors both as an effect of practice activities and of context-independent acquisition. In the case of negation and interrogation the former were not so much the result of overapplication of learnt rules, as predicted by G.L.A.F.L.L, than of constraints on memory and recall in the use of formulas.

8.4 Learner Processes in (Classroom) SLA and the Concept of Interlanguage

The results of this study provide strong support for the hypothesis that much of what goes on in classroom SLA cannot be directly related to the teaching but is the result of organic, creative IL construction. In other words, classroom learners act upon the language input available to them in whatever form to create and develop their own systems of communication. IL construction appears to operate in a variety of learning contexts, is made use of by learners of different ages, backgrounds and analytic abilities and surfaces in a variety of language tasks. There is strong indication that the course of IL construction is to a large extent context-independent. At the same time, the results of this study suggest that a theory of classroom SLA also has to take into account linear, imitative processes and in particular the role of formulaic language.

IL construction, imitation and formulaic language have also been shown to be part of naturalistic language development. We would therefore suggest that with regard to these processes classroom SLA is not different in kind from language development in other settings and that differences in language development in different settings may be due to different degrees of involvement of the various processes at different stages of development. The involvement of the various processes may within limits be influenced by external factors.

In his book "Error Analysis and Interlanguage" (1981), Corder defines Interlanguage as "a dynamic, goal-oriented language system of increasing complexity" (p.90), and he continually stresses the creative, organic and cognitive aspect of second language acquisition. In this sense the notion of Interlanguage can account for a large part of (classroom) SLA. However, in order to fully characterise learners' behaviour, it will have to be expanded to incorporate not only organic and creative processes but also linear and imitative processes. The strength of the concept of "Interlanguage" lies in its inherent flexibility. It can grow as our understanding of both language learning and language itself grows. The fact that it allows us to view language learners as having a "language", rather than merely deficient users of a TL, will always be its essential contribution to our understanding of SLA. At the same time, viewing learners' behaviour as just one

among many instances of language allows for insights gained in the study of SLA to filter through to our view of language itself.

A.1 NEG OralTask

Interview

Level 1

1. Wo wohnst du?
2. Wie heißt deine Schwester?
3. Ist dein Hund groß?
4. Wo arbeitest du?
5. Wann spielst du Fußball?
6. Wo wohnt dein Bruder?
7. Wo spielst du Gitarre?
8. Wie alt ist deine Katze?
9. Spielst du gern Rugby?
10. Wie heißt dein Hund?
11. Wo lernst du Karate?
12. Bist du müde?
13. Ist deine Mutter groß?
14. Wie alt ist deine Schwester?
15. Gehst du gerne einkaufen?
16. Wo lernst du Spanisch?
17. Bist du faul?
18. Spielst du Flöte?
19. Wie heißt dein Bruder?
20. Wo arbeitet deine Mutter?

1. Wo wohnst du?
2. Wann arbeitest du?
3. Möchtest du in Deutschland wohnen?
4. Wo bist du geboren?
5. Wie alt ist deine Schwester?
6. Ist dein Hund groß?
7. Was machst du in den Osterferien?
8. Wo wohnt dein Bruder?
9. Wie lange lernst du Spanisch?
10. Fährst du gerne Auto?
11. Wo lernst du Karate?
12. Kannst du Gitarre spielen?
13. Wie heißt deine Katze?
14. Wer spielt in deiner Jazzband?
15. Wo wohnt dein Französischlehrer?
16. Wie lange mußt du Russisch lernen?
17. Wann gehst du Sonntag in die Schule?
18. Kannst du Klavier spielen?
19. Wie heißt dein Freund in Deutschland?
20. Wo möchtest du in England wohnen?
21. Welche Farbe ist dein Fahrrad?
22. Wie oft kochst du Essen?
23. Was hast du gestern gelesen?
24. Wie heißt dein Hund?
25. Wo möchtest du arbeiten?
26. Wie lange kannst du auf dem Kopf stehen?
27. Wann hat dein Bruder Geburstag?
28. Wo hast du gestern getanzt?
29. Wieviele Zigaretten rauchst du am Tag?
30. Wann mußt du am Sonntag in die Schule gehen?
31. Wo spielst du Fußball?

1. Wo wohnst du?
2. Wann arbeitest du in deiner Freizeit?
3. Möchtest du in Deutschland wohnen?
4. Wo bist du geboren?
5. Wo hast du in der Schule geschlafen?
6. Wie alt ist deine Schwester?
7. Ist dein Hund groß?
8. Wo kannst du in der Schule rauchen?
9. Gehst du gern ins Kino?
10. Wohin fährst du in den Osterferien?
11. Wer hilft dir nach der Schule mit der Hausarbeit?
12. Wie oft besuchst du deinen Deutschlehrer?
13. Wann mußt du am Sonntag in die Schule gehen?
14. Wann bist du diese Woche im Zoo gewesen?
15. Wo wohnt dein Bruder?
16. Wie lange lernst du Russisch?
17. Wo lernst du Karate?
18. Fährst du gerne Auto?
19. Wann hast du Haggis gegessen?
20. Wie oft arbeitest du in deinem Garten?
21. Wieviele Fußballspiele hast du gesehen?
22. Wo kannst du in der Schule Judo lernen?
23. Wieviele Zigaretten rauchst du am Tag?
24. Spielst du gut Klavier?
25. Wie heißt deine Katze?
26. Wie lange bist du heute zur Schule gefahren?
27. Wer spielt mit dir in deiner Jazzband?
28. Wieviele Meerschweinchen hast du?
29. Wann bist du gestern ins Bett gegangen?
30. Wo wohnt dein Französischlehrer?
31. Wie lange muß du Russisch lernen?
32. Wann gehst du am Wochenende zur Schule?
33. Kannst du Gitarre spielen?
34. Was hast du gut gesungen?
35. Wie heißt deine Freundin in Deutschland?
36. Kannst du gut Chinesisch sprechen?
37. Wo möchtest du in England wohnen?
38. Welche Farbe ist dein Fahrrad?
39. Wie oft kochst du Mittagessen?
40. Was hast du gestern gelesen?
41. Wie lange mußt du noch zur Schule gehen?
42. Was für einen Hund hast du?
43. Wann hat dein Bruder Geburtstag?
44. Wo möchtest du nach der Schule arbeiten?
45. Wie lange kannst du auf dem Kopf stehen?
46. Wieviel Taschengeld bekommst du?
47. Wo hast du gestern Fußball gespielt?
48. Was für ein Auto fährst du?
49. Was hast du Sonntag in der Schule gemacht?

50. Was ist dein Lieblingsfach?
51. Wo hast du gestern getanzt?
52. Wo hast du in London gewohnt?

Listening Component

Levels 1-4

1. Glasgow ist die Hauptstadt von Schottland.
2. London ist die Hauptstadt von England.
3. Aberdeen ist in Südwestschottland.
4. Kelvinside in Edinburgh ist ein schöner Stadtteil.
5. Newcastle ist in Nordostengland.
6. Die nächsten Commonwealth Spiele sind in Glasgow.
7. Gordon Strachan ist ein Fußballspieler.
8. Sebastian Coe ist ein Schotte.
9. Dublin ist in Nordirland.
10. Iona ist eine kleine schottische Insel.
11. Schottland ist sehr warm.
12. Kenny Dalgleish ist ein Rugbyspieler.
13. Das Wetter in Westschottland ist sehr naß.
14. Zola Budd ist eine Schwimmerin.
15. Die Fußballspieler von Manchester United sind sehr schlecht.
16. Robert Burns war ein schottischer Dichter.
17. Edinburgh ist die größte Stadt in Schottland.
18. Portobello ist ein Stadtteil von Edinburgh.
19. Das Wetter in Südengland ist sehr rauh.
20. Die letzten olympischen Spiele waren in Los Angeles.
21. Die Usher Hall ist ein Museum in Edinburgh.
22. Nordirland ist sehr groß.
23. Elgar ist ein bekannter Komponist.
24. CND ist eine politische Partei.
25. Daley Thomson ist ein Zehnkämpfer.

A.2 NEG SituationTask

Levels 2-4

Below you will find a list of situations. Explain how each affects your life,
comparing how things were before and after the particular event happened.
Mention how you and other people in your situation¹don't do certain things,
things you²haven't done since the event happened, things you³can't or mustn't
do, things you⁴don't have, how things⁵are not what they used to be, whether
you like or⁶don't like things about the new situation etc. Try to write
_6_˄ sentences for each situation, or you can write more on one and less on
others. Your sentences should all be _negative_.

1. Since last week your town has no electricity.
2. Yesterday morning the water supply in your town froze up.
3. Last month all schools in Britain were abolished.
4. Since last week all public transport workers have been on strike.
5. Since Christmas your parents have not been giving you any pocket money.

A.3 NEG Transformation Task

Level 1

1. Mary tanzt gerne.
2. Das ist ein Heft.
3. Ich bin klein.
4. Du hast eine Schwester.
5. Anne spielt Gitarre.
6. John ist müde.
7 Ich bin ein Junge.
8 John hat eine Gitarre.
9 Ich spiele gerne Fußball
10. Das ist ein Hund
11. Er ist groß
12 Anne hat ein Fahrrad
13. Er hört Musik.
14. Du bist hungrig
15. Das ist ein Tisch.
16. Ich habe einen Bruder.
17. John kocht gerne.
18. Mary ist fleißig.
19. Sie ist eine Lehrerin.
20. Mary hat eine Katze.

Level 2

1 John hat eine Gitarre.

2. Ich bin müde.

3 Janet arbeitet.

4 Anne möchte in Edinburgh wohnen.

5 Ich habe ein Fahrrad.

6 Mary ist eine Lehrerin.

7 Mein Vater arbeitet in Hamburg.

8 Ich kann deutsch sprechen.

9 Meine Schwester hat ein Auto.

10 Das ist ein Computer.

11 Er kommt morgen.

12. Ich kann schwimmen.

13. Karen hat eine Schwester.

14. Mein Hund ist groß

15. Anne kocht.

16. Ich muß Montag arbeiten.

17 Mein Freund hat einen Hund.

18 John ist ein Busfahrer.

19 Mein Vater liest.

20 Mary möchte Sonntag in die Stadt fahren.

21 Ich habe einen Bruder.

22 Das ist ein Museum.

23 Ich fahre morgen nach London.

24 Du hast eine Katze.

25 Mary kann lesen.

26 Seine Schwester ist klein.

27 Ich spiele gerne Gitarre.

28. Du kannst gut deutsch sprechen.

29 Helmut hat einen Goldfisch.

30. Das ist ein Theater.

31. Ich schreibe.

32. Der Hund möchte schlafen.

33. John ist sehr freundlich

34 Du mußt arbeiten.

35 Er schläft.

36 Mein Vater hat ein Motorrad.

37 Ich lese die Zeitung.

38 John möchte gehen.

39 Du bist sehr fleißig.

40 Sie hat ein Kind.

Levels 3 + 4

1. John hat eine Gitarre.
2. Fiona arbeitet für eine Zeitung.
3. Jim kann deutsch sprechen.
4. Meine Mutter hat eingekauft.
5. Herr Schmidt ist der Lehrer von meiner Schwester.
6. Das Kind kann im Garten spielen.
7. Sie gehen Samstag in die Schule.
8. Der Affe hat Bananen gegessen.
9. Helmut ist ein Engländer.
10. Dein Bruder kann morgen kommen.
11. Mary lernt spanisch.
12 Es hat letzten Monat viel geregnet.
13. Das ist ein Musikinstrument .
14. Ich muß am Sontag in die Schule gehen.
15. David kommt morgen .
16. Mary hat einen Hund.
17. Der Hund hat im Bett geschlafen.
18. Anne kann fahren.
19. Mary ist sehr fleißig .
20. Ich gehe oft ins Kino.
21. Es hat gestern geregnet .
22. Meine kleine Schwester kann gut lesen.
23. Glasgow ist die Hauptstadt von Schottland.
24. Sein Bruder fährt schnell.
25. Heidi ist gestern in der Stadt geblieben.
26. Dawn möchte gerne in Deutschland wohnen .
27. Er ist schnell geschwommen.
28. Helmut hat eine Schwester.
29. Mein Vater wohnt in Hamburg .
30. Anne kann Auto fahren.
31. John ist gegangen.
32. Ian ist der Mann von Fiona.
33. Ich möchte in Australien arbeiten.
34. Meine Mutter kommt morgen nach Hause.
35. John hat deutsch gesprochen
36. Portobello ist eine Stadt in Schottland.
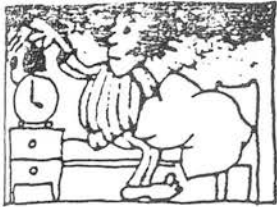37 Susan muß heute arbeiten .
38 Meine Schwester verkauft Blumen .

39. John ist letztes Jahr oft gekommen.

40. Das ist ein Gnu.

41. Karin bleibt morgen zu Hause

42. Mein Bruder hat eine Katze

43. Meine Schwester schläft im Moment.

44. Helga hat letzte Woche gearbeitet

45. Louise kann lesen.

46. Der Elefant ist ins Wasser gelaufen.

47. London ist schön.

48. Meine Mutter singt oft im Bad.

49. Meine Tante kann schnell stricken.

50. Wilson ist der Premierminister von Großbritannien.

51. Ich lese gerne.

52. Es hat gestern in Edinburgh geschneit.

53. Sein Bruder kann lange auf dem Kopf stehen.

54. Meine Schwester ist langsam gelaufen.

55. Anne hat ein Fahrrad.

56. Seine Mutter liest in der Küche.

57. Mein Bruder möchte Fußball spielen.

58. Janet hat ferngesehen.

59. Mary ist die Schwester von Ian.

60. Du mußt ins Bett gehen.

61. Mary fährt nächste Woche nach Manchester.

62. Susan ist Auto gefahren.

63. Peter ist ein Komponist.

64. Sie muß jetzt schlafen.

65. John spricht deutsch.

66. Ich habe heute gut gefrühstückt

67. Das ist ein Museum.

68. Er muß Mittwoch im Geschäft arbeiten
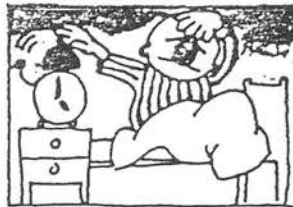
Levels 2-4

Frank Michel, Kellner , 33	Anne Hinkel, Krankenschwester , 25	Klaus Berger, Koch ,40	Frieda Still, Architektin , 28
fünf Uhr	fünf Uhr	fünf Uhr	fünf Uhr
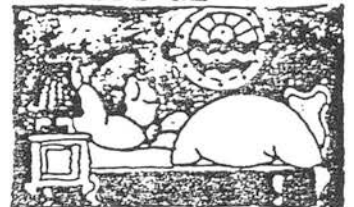
steht auf	steht auf	steht auf	schläft

sieben Uhr	halb sieben	sieben Uhr	sieben Uhr
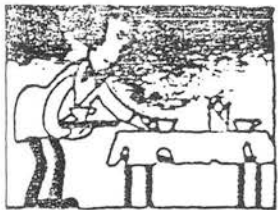
fängt seine Arbeit an	macht Betten	holt Fleisch	schläft
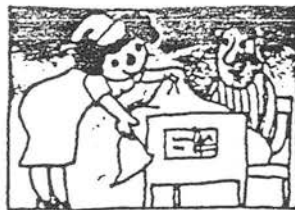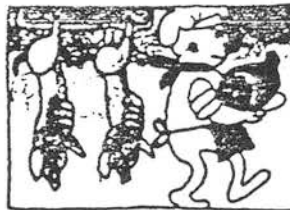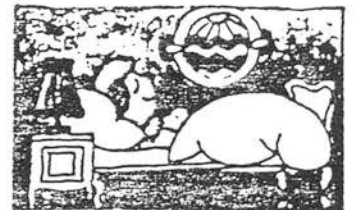
halb zehn	neun Uhr	halb neun	halb zehn

bedient Frieda	bringt Medikamente	schneidet Fleisch und Kartoffeln	Frühstück
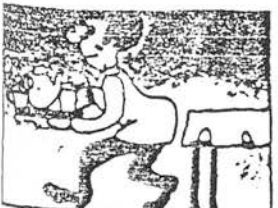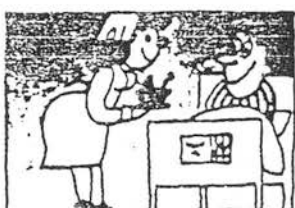
elf Uhr	zwölf Uhr	elf Uhr	von halb elf bis elf Uhr

räumt auf	bringt Essen	kocht Suppe	liest ein Buch

195

Frank Michel, Kellner	Anne Hinkel, Krankenschwester	Klaus Berger, Koch	Frieda Still, Architektin
halb eins	von halb eins bis eins	halb eins	ein Uhr

schreibt die Bestellung auf — macht Pause — gibt Essen aus — ißt zu Mittag
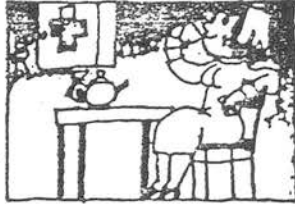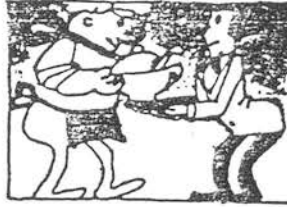
drei Uhr	halb vier	drei Uhr	von halb vier bis vier
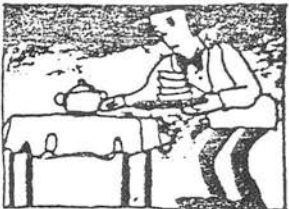
räumt auf — macht einen Verband — räumt die Küche auf — schwimmt
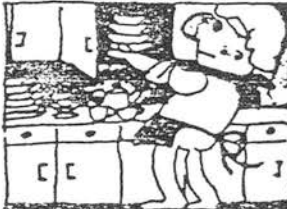
von halb sechs bis sieben	halb acht	halb acht	acht Uhr
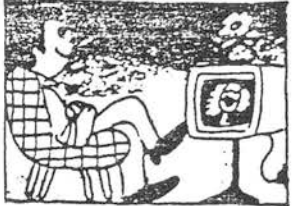
sieht fern — trifft Freunde — trinkt ein Bier — bestellt Essen

neun Uhr	halb zehn	halb zehn	von neun Uhr bis elf Uhr
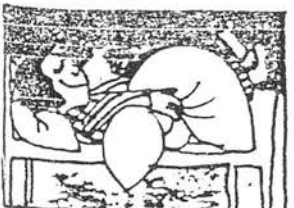
geht schlafen — geht schlafen — trinkt noch ein Bier — tanzt

A.5 Q Situation Task

Levels 2-3

You are working for a local newspaper and you are given the job of interviewing <u>two</u> people for articles.Write <u>10</u> questions to ask <u>each</u> person.Use <u>each</u> of the question words

<u>was,wo,wann,wer,wie</u>

<u>twice</u> for each person.

You are given the choice of interviewing two of the following people:

        1.Margaret Thatcher
        2.The Pope
        3.Gordon Strachan
        4.John MacEnroe
        5.The lead singer of your favourite pop group
        6.The headmaster of your local secondary school
        7.Any other 2 people you can think of

Then imagine you are one of the people who have just been interviewed. Write <u>5</u> questions you want to ask about the local newspaper.Use the question words <u>was,wo,wann,wer,wie.</u>

Level 4

You are working for a local newspaper and you are given the job of interviewing two people for articles. Write <u>12</u> questions to ask <u>each</u> person. Use <u>each</u> of the question words:

            <u>wie</u>, <u>was</u>, <u>wo</u>, <u>wann</u>, <u>warum</u>, <u>welch</u>
<u>twice</u> for <u>each</u> person.

You are given the choice of interviewing <u>2</u> of the following people:

        1.   Margaret Thatcher
        2.   The Pope
        3.   Gordon Strachan
        4.   John MacEnroe
        5.   The lead singer of your favourite pop group
        6.   The headmaster of your secondary school
        7.   Any other 2 people you can think of

Then imagine you are one of the people who have just been interviewed. Write <u>6</u> questions you want to ask about the local newspaper. Use the question words <u>wie</u>, <u>was</u>, <u>wo</u>, <u>wann</u>, <u>warum</u>, <u>welch</u>.

A.6 Q Transformation Task

Level 1

1   Er ist zehn Jahre alt.
2   Mary wohnt in London
3. John spielt gerne Fußball.
4. Sein Vater heißt William.
5. Ich habe am 14. Mai Geburtstag.
6. Das ist eine Flöte.
7. Mary ist 18.
8. Ich spiele Gitarre.
9. Sein Bruder heißt Simon.
10. Anne ist zu Hause
11 Es ist halb zehn
12. Das ist ein Wellensittich.
13 Ich koche gerne
14 Mein Hund heißt Ted.
15. John ist zu Hause
16. Das ist ein Meerschweinchen
17 Ihre Mutter wohnt in Glasgow.
18. Der Hund ist zwei Jahre alt.
19. Seine Schwester sieht gerne fern.
20. Duran Duran ist meine Lieblingsgruppe.

Level 2

1. Ein Gnu ist ein Tier.   was
2 Jim hat ein Haus in Deutschland.   wo
3 Fiona möchte morgen ins Kino gehen.   wann
4 Das ist seine Schwester.   wer
5 Es ist um vier Uhr dunkel.   wann
6 John schreibt einen Brief.   was

7 Die Katze schläft im Bett.   wo
8 Mary hat heute ein Interview.   wann
9 Susan kann gut Gitarre spielen.   wer
10. Helga ist in London   wo
11. Mary kann deutsch sprechen   was
12. Meine Schwester hat einen Hund.   wer
13. Er muß Montag in die Schule gehen.   wann
14. Louise möchte im Garten spielen.   wo
15. John ist mein Freund.   wer
16. Es kostet 20 Mark.   was
17. Er muß in der Stadt arbeiten.   wo
18 Mein Freund hat ein Auto.   was
19 Heidi arbeitet am Sonntag.   wann
20 Eine Flöte ist ein Musikinstrument.   was
21 Er sitzt in seinem Zimmer.   wo
22 Sie hat Donnerstag eine Prüfung.   wann
23 Janet muß nach Hause gehen.   wer
24 Seine Mutter ist in Newcastle.   wo
25. Er hat ein Fahrrad.   was
26 John wohnt in Edinburgh.   wer
27. Die Party ist um acht Uhr.   wann
28. Sie hat eine Freundin in Glasgow.   wo
29. Karin muß englisch lernen.   wer
30. Heidi hat eine Katze.   was
31 Er kommt morgen.   wann
32 Anne arbeitet in einer Schule.   wer

Ask questions about the underlined parts of the following sentences. Use the question words was, wo, wer, wann, wie.

1 John lernt seit drei Jahren _spanisch._
2. Die Katze hat _im Bett_ geschlafen.
3. Es ist _um vier Uhr_ dunkel.
4 Ihr Vater muß _dreimal im Jahr_ zum Arzt gehen.
5. Das ist _seine Schwester._
6. Sie lernt seit _zwei Jahren_ Karate
7. Er muß zu Hause oft _Mittagessen_ kochen.
8. Sie ist _in Los Angeles_ oft gelaufen.
9. Helmut schreibt _zwei Briefe_ pro Woche.
10 Er kommt _morgen_
11 _Heinrich Böll_ hat viele Bücher geschrieben.
12. Es kann _zwanzig Mark_ kosten.
13. Karin arbeitet jetzt _in Deutschland._
14. _Eine Flöte_ ist ein Musikinstrument.
15 Sie haben _1965_ viele Lieder gesungen.
16 Janet hat _zwanzig_ Freunde eingeladen.
17 Anne arbeitet für _eine Zeitung._
18 Sie verkauft _Bücher_ auf dem Markt
19 Sein Bruder muß _Montag_ zum Arzt gehen
20 Er ist _25_ Jahre alt.
21 _Zola Budd_ ist die 3000 Meter gelaufen.
22 Er sitzt alleine _in seinem Zimmer._
23 Die neue Brücke ist _500 Meter_ lang
24 John ist _mein Freund_
25. Es hat _eine Stunde_ gedauert.
26. Fiona möchte _nächstes Jahr_ nach Italien fahren.
27 _Ein Gnu_ ist ein Tier.
28 Er muß _in der Stadt_ arbeiten.
29. _John_ wohnt in der Nähe von Edinburgh.
30. _Morgen_ ist mein Geburtstag.
31. Er kann sehr gut _Gitarre_ spielen.
32 Louise möchte _im Garten_ spielen.
33. Helmut hat _gestern_ sein Fahrrad verkauft.
34. Mary kann gut _Klavier_ spielen.
35. Meine Katze hat _zwei Mäuse_ gefangen.
36. Helga ist _in Wien._
37 Sabine muß _morgen_ nach London fahren.
38. Heidi arbeitet _Sonntag_
39 Es hat _zehn Pfund_ gewogen.
40 Seine Mutter ist im Moment _in Italien._
41 _Meine kleine Schwester_ kann gut lesen.
42 Anne duscht _um vier Uhr._
43 Ich habe _einen Roman_ geschrieben.
44 Mary möchte _in Aberdeen_ wohnen.

Ask questions about the underlined parts of the following sentences
Use the question words

was, wo, wann, wie, welch, warum

1. John lernt seit drei Jahren spanish .
2. Louise möchte im Garten spielen.
3. Janet hat zwanzig Freunde eingeladen.
4. Es ist schon um fünf Uhr dunkel
5. Der Kellner bedient das Mädchen mit den roten Haaren .
6. Sabine kann gut spanisch sprechen weil ihre Mutter aus Madrid kommt .
7. Sie ist in Los Angeles für Deutschland gelaufen .
8. Helmut schreibt zwei Briefe pro Woche .
9. Meine Katze hat gestern zwei Mäuse gefangen .
10. Fiona möchte nächstes Jahr nach Italien fahren .
11. Anne hat ihre jüngste Schwester besucht.
12. Ich möchte in Australien wohnen weil es dort sehr warm ist .
13. Ein Gnu ist ein Tier.
14. Die Katze hat im Bett geschlafen.
15. Es dauert noch fünf Stunden.
16. Fiona möchte das blaue Kleid kaufen.
17. Er kommt morgen.
18. Er hat den ganzen Tag geschlafen weil er gestern krank war.
19. Sie verkauft Bücher auf dem Markt.
20. Seine Mutter ist im Moment in Italien.
21. Sie kennt den Mann mit dem grünen Pullover.
22. Ihr Vater muß dreimal im Jahr zum Arzt gehen.
23. Sie haben 1965 viele Lieder geschrieben.
24. Der Mann am Fenster ist mein Lehrer.
25. John besucht seine Mutter weil sie Geburtstag hat.
26. Sein Bruder muß Montag zum Arzt gehen.
27. Es hat zwei Gallonen pro 100 Kilometer verbraucht.
28. Ich habe das neue Buch von Heinrich Böll gelesen.
29. Er kann sehr gut Gitarre spielen.
30. Silvia ist braun weil sie in Spanien war .

31. Er sitzt alleine <u>in seinem Zimmer</u>.

32. Es kann <u>vier Meter</u> lang werden.

33. Karin arbeitet jetzt <u>in Deutschland</u>.

34. Mary hat Sonntag gearbeitet <u>weil sie eine Prüfung hat</u>.

35. Heidi kommt <u>Sonntag</u>.

36. Er möchte das <u>alte</u> Auto verkaufen.

37. Es kostet so viel <u>weil es ganz neu ist</u>.

38. Der Fernsehturm ist <u>132 Meter</u> hoch.

39. Sie muß zu Hause oft <u>Mittagessen</u> kochen.

40. Helga ist <u>in Wien</u>.

41. Die neue Brücke ist <u>500 Meter</u> lang.

42. Helmut hat <u>gestern</u> sein Fahrrad verkauft.

43. Sein neues Motorrad ist <u>rot</u>.

44. Es ist so billig <u>weil es sehr alt ist</u>.

45. <u>Morgen</u> ist mein Geburtstag.

46. Es hat <u>zwanzig Kilo</u> gewogen.

47. John muß <u>in der Stadt</u> sein.

48. <u>Eine Flöte</u> ist ein Musikinstrument.

A.7 Language Analysis Test

PART I

Directions:

The list below contains words from a foreign language
and the English meanings of these words.

> gade. .. ..father, a father
> shi ....horse, a horse
> gade shir le.....Father sees a horse.

By looking at the above list, work out how to make
the following statement in this language. Do this
without writing on paper

A horse sees father

Do not read ahead until you have decided on an answer

The answer to the problem is: shi gader le.
Notice the 'r' at the end of 'gader'; it is added
to the word in the sentence which receives the action
If you have not answered correctly, look at the problem
again to see if you now understand it. You may not ask
questions

There are 15 similar problems on page 2. I will tell you
when to turn the page. Read each problem carefully.Do not
write out the sentences but circle the answer which you
think is correct. If you make a mistake, make sure that
you indicate clearly which answer you have decided on in
the end.

DO NOT TURN THE PAGE UNTIL YOU ARE TOLD TO DO SO

LIST OF WORDS:

gade .... father, a father
shi .... horse, a horse
gade shir le .... Father sees a horse.
gade shir la .... Father saw a horse.
be .... carries

Using the above list, figure out how to say each of the statements below. As soon as you decide how to say a statement, look at the four answers given beneath it and choose the one which agrees with yours.

1 **Father carries a horse.**

[a] gade shir be   [b] gade shir ba
[c] shi gader be   [d] shi gader ba

2 **Father carried a horse.**

[e] gade shir be   [f] gade shir ba
[g] shi gader be   [h] shi gader ba

3 **A horse carried Father.**

[a] gade shir be   [b] gade shir ba
[c] shi gader be   [d] shi gader ba

4 **A horse carries Father.**

[e] gade shir be   [f] gade shir ba
[g] shi gader be   [h] shi gader ba

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The list below contains the same words as the list above and some additional ones. Use this list in figuring out how to say the statements in problems 5 through 15.

gade	father, a father	so	I, me
shi	horse, a horse	wo	you
gade shir le	Father sees a horse.	so shir le	I see a horse.
gade shir la	Father saw a horse.	sowle	I see you.
be	carries	so shir lem	I don't see a horse.

5 **You carry me.**
  [a] sowle   [b] sowbe
  [c] wosle   [d] wosbe

6 **You saw Father.**
  [e] wo gader le   [f] so gader le
  [g] so gader la   [h] wo gader la

7 **I carried you.**
  [a] wosba   [b] sowbe
  [c] sowba   [d] sowla

8 **You carried Father.**
  [e] wo gader ba   [f] wo gader be
  [g] wo gade ba   [h] so gade be

9 **You saw me.**
  [a] sowla   [b] wosba
  [c] wosla   [d] wosle

10 **You don't carry a horse.**
  [e] wo shir lem   [f] wo shir bem
  [g] wo shir bam   [h] wo shi bem

11 **You don't see me.**
  [a] sowlem   [b] wosle
  [c] wosolem   [d] woslem

12 **I didn't carry Father.**
  [e] so gader bam   [f] so gade bam
  [g] so gader bem   [h] so gader lam

13 **You saw a horse.**
  [a] wo shir le   [b] wo shir la
  [c] wo shir be   [d] wo shir ba

14 **I didn't see you.**
  [e] woslam   [f] sowlam
  [g] sowlem   [h] woslem

15 **Father doesn't carry a horse.**
  [a] gade shir bem   [b] shir gader bem
  [c] gade shi bem   [d] gade shir bam

DO NOT TURN THE PAGE UNTIL TOLD TO DO SO

PART II

gade...............	father, a father	so...............	I, me
shi...............	horse, a horse	wo...............	you
gade shir le......	Father sees a horse.	so shir le......	I see a horse.
gade shir la......	Father saw a horse.	sowle...........	I see you.
be...............	carries, carry	so shir lem.....	I don't see a horse.

Using the above list, try to write down rules about the language On page 1
you were asked to notice the 'r' at the end of 'gader' and how it was added
to the word in the sentence receiving the action. This is one way of
stating a rule. If you can think of other rules in this language, write them
down in any way which occurs to you. Use the space left on this page.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO

gade . . . . father, a father	so . . . . I, me
shi . . . . horse, a horse	wo . . . . you
gade shir le . . . . . . Father sees a horse	so shir le . . . . . . I see a horse.
gade shir la . . . . . . Father saw a horse.	sowle . . . . I see you.
be . . . . carries, carry	so shir lem . . . . . I don't see a horse.
bilo . . . . Bill	tal . . . . bad
jana . . . . Jane	mis . . . . good
ge . . . . beats, beat	fe . . . . rides, ride

This language has the following rules:

1. To make a question in this language the word which describes an action
   like 'beat' or 'ride' for example, is put in front of the sentence and
   has an 'u' put in front of its first letter.

   example: Does father ride a horse?   ufe gade shir?

2. Proper names like 'Bill' or 'Jane' do not have an 'r' added to them when
   they receive the action and always go to the end of a sentence when they
   receive the action.

   example: Father beats Bill.   gade ge bilo.

3. Adjectives, that is words which describe people, things and so on, like
   'good' or 'bad' always go after the word they describe.

   example: Father beats the bad horse   gade shir tal ge.

Now study the above list and the rules carefully and work out how to
say the following English sentences in this new language. Write your answers
in the spaces next to each sentence. If you make a mistake or run out of
space use the back of the page. Make sure that you put the right number next
to your answer.

1. Does father beat a horse? _____

2. A bad father beats Bill. _____

3. Do you carry Jane? _____

4. A good horse carried Bill. _____

5. Does Jane beat a horse? _____

6. Bill doesn't see Jane. _____

7. Bill rides a good horse _____

8. I didn't see Bill. _____

9. Didn't Bill beat a bad horse? _____

10. Do you see me? _____

gade.... ... .father, a father	so ....I, me
shi ....horse, a horse	wo.... .... .you
gade shir le......Father sees a horse	so shir le......I see a horse
gade shir la ....Father saw a horse	sowle...........I see you
be ....carries, carry	so shir lem.....I don't see a horse
bilo .. .. .Bill	tal.............bad
jana.. .. .. . Jane	mis......... ...good
ge ....beats, beat	fe. ....rides, ride

Look at the above list. Now arrange the words in this new language into groups which you think have something in common. You can make as many groups as you like and each group can have as many words as you like. Make clear which words belong to one group. write them down below in separate rows. DO NOT MOVE ON TO THE NEXT EXCERCISE UNTIL TOLD TO DO SO

Now do the same for the following list of English words. Use the back of the page if necessary.

good	man	to	table	like	house
apple	the	grow	on	book	loudly
quickly	but	this	slowly	those	and
a	green	or	small	at	I
eat	speak	silly	in	she	through

References

Abbreviations

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AL      = Applied Linguistics
ELT(J)  = English Language Teaching (Journal)
IRAL    = International Review of Applied Linguistics
ISB     = Interlanguage Studies Bulletin
LL      = Language Learning
SSLA    = Studies in Second Language Acquisition
WPB     = Working Papers on Bilingualism
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Allwright, R.L., 1984, *The Analysis of Discourse in Interlanguage Studies: the Pedagogical Evidence*. In A.Davies, C.Criper and A.P.R. Howatt (eds) 1984, Interlanguage, Edinburgh, Edinburgh University Press, 204-219.

Allwright, R.L., 1988, *Observation in the Language Classroom*. London, Longman.

Andersen, R., 1977, *The Impoverished State of Cross-sectional Morpheme Acquisition/Accuracy Methodology, or, the Leftovers are more Nourishing than the Main Course*. WPB 14, 47-82.

Andersen, R., 1978, *An Implicational Model for Second Language Research*. LL 28, 221-282.

Andersen, R., 1979, *Expanding Schumann's Pidginization Hypothesis*. LL 29, 105-119.

d'Anglejan, A. and Tucker,R., 1975, *The Acquisition of Complex English Structures by Adult Learners*. LL 25.2, 281-296.

van Baalen, T., 1983, *Giving Learners Rules: a Study into the Effect of Grammatical Instruction with Varying Degrees of Explicitness*. ISB 7.1, 71-96.

Bailey, C-F., 1973, *Variation in Linguistic Theory*. Washington D.C., Center for Applied Linguistics.

Bailey, N., Madden, C. and Krashen, S.D., 1974, *Is there a "Natural Sequence" in Adult Second Language Learning?*. LL 24.2, 235-243.

Bellugi, U., 1965, *The Development of Interrogative Structures in Children's Speech*. In K.F.Riegel (ed), The Development of Language Functions, Ann Arbor, University of Michigan Center for Human Growth and Development, 103-137.

Bellugi, U., 1967, *The Acquisition of the System of Negation in Children's Speech*. Disssertation, Harvard.

Bickerton, D., 1973, *On the Nature of the Creole Continuum*. Language 49, 640-669.

Bickerton, D., 1974a), *Creolization, Linguistic Universals, Natural Semantax and the Brain*. Working Papers in Linguistics, University of Hawaii, 6.3, 124-141.

Bickerton, D., 1974b), *Dynamics of a Creole System*. Cambridge, Cambridge University Press.

Borland, H., 1984, *The Acquisition of Some Features of English Syntax by Four Groups of Adolescent Migrants*. PhD Thesis, Edinburgh.

Brown, R.,1968, *The Development of WH-Questions in Child Speech*. Journal of Verbal Learning and Verbal Behaviour 7, 279-290.

Brown, R., 1973, *A First Language*. London, Allen and Unwin.

Brumfit, C., 1984, *Communicative Methodology in Language Teaching*. Cambridge University Press.

Bulach, N.A., 1968, *Zum Wesen und Gebrauch der Negation "kein"*. Deutsch als Fremdsprache 5.

Cancino, H., Rosansky, E.J. and Schuhmann, J., 1978, *The Acquisition of English Negatives and Interrogatives by Native Spanish Speakers*. In E.Hatch, (ed), 1978, 207-230.

Carroll, J.,1967, *Foreign Language Proficiency Levels Attained by Language Majors near Graduation from College*. Foreign Language Annals 1, 131-151.

Chamot, A.U., 1978, *Grammatical Problems in Learning English as a Third Language*. In E.Hatch (ed),1978, 175-189.

Chomsky, N., 1957, *Syntactic Structures*. The Hague, Mouton.

Chomsky, N., 1964, *A Review of B.F.Skinner's Verbal Behaviour*. In J.Katz and J.Fodor, 1964, The Structure of Language: Readings in the Philosophy of Language, 1964, Englewood Cliffs. N.J, Prentice Hall, 26-58.

Clark, J.+ Hamilton, J. (eds), 1984, *Syllabus Guidelines I: Communication, A Graded Communicative Approach Towards School Foreign Language Learning*. CILT.

Clark, J.+ Hamilton, J. (eds), 1984, *Syllabus Guidelines for a Graded Communicative Approach Towards School Foreign Language Learning, Part 2 - German, Suggested Language Resource*. Unpublished.

Corder, S.P., 1967, *The Significance of Learners' Errors*. IRAL 5, 161-170.

Corder, S.P., 1981, *Error Analysis and Interlanguage*. Oxford, Oxford University Press.

Dahl, Ö., 1979, *Typology of Sentence Negation*. Linguistics 17, 70-106.

Dulay, H. and Burt, M., 1972, *Goofing: An Indicator of Children's Second Language Learning Strategies*. LL 22, 235-252.

Dulay, H. and Burt, M., 1973, *Should we Teach Children Syntax?*. LL 23.2, 245-258.

Dulay, H. and Burt, M., 1974a), *Natural Sequences in Child Second Language Acquisition*. LL 24.1, 37-53.

Dulay, H. and Burt, M., 1974b), *A New Perspective on the Creative Construction Process in Child Second Language Acquisition*. LL 24.2, 253-278.

Dulay, H. and Burt, M., 1974c), *You Can't Learn Without Goofing: An Analysis of Children's Second Language Errors*. In J.Richards (ed), 1974.

van Ek, J.A., 1975, *The Threshold Level*. Strasbourg, Council of Europe.

van Ek, J.A., 1976, *The Threshold Level for Modern Language Learning in Schools*. Longman.

Ellis, R., 1984a), *Can Syntax be Taught?*. AL 5.2, 138-155.

Ellis, R., 1984b), *Formulaic Speech in Early Classroom Second Language Development*. In J.Handscombe, R.Owen and B.Taylor (eds), On TESOL 83: The Question of Control, Washington D.C.: Teachers of English to Speakers of Other Languages, 53-66.

Ellis, R., 1984c), *Classroom Second Language Development*. Oxford, Pergamon Press.

Ellis, R., 1985, *Teacher-Pupil Interaction in Second Language Development*. In S.Gass and C.Madden, (eds), 1985, 69-85.

Ellis, R. and Rathbone, M., 1986, *The Acquisition of German in a Classroom Context*. London, Ealing College of Higher Education.

Fathman, A., 1978, *ESL and EFL Learning: Similar or Dissimilar?*. In C.Blatchford and J.Schachter (eds), On TESOL 1978, Washington D.C. TESOL.

Felix, S.,1978, *Linguistische Untersuchungen zum natürlichen Zweitsprachenerwerb*. München.

Felix, S.,1981, *The Effect of Formal Instruction on Second Language Acquisition*. LL 31.1, 87-112.

Felix, S.,1982, *Psycholinguistische Aspekte des Zweitsprachenerwerbs*. Tübingen, Gunter Narr.

Felix, S. and Hahn, A., 1985, *Natural Processes in Classroom (Second Language) Learning*. AL 6.3, 223-238.

Gass, S., 1979, *Language Transfer and Universal Grammatical Relations*. LL 29, 327-344.

Gass, S.M., and Madden, G.C. (eds.), 1985, *Input in Second Language Acquisition*. Rowley Mass., Newbury House.

Gregg, K., 1984, *Krashen's Monitor and Occam's Razor*. AL 5.2, 79-100.

Givón, T.,1979, *On Understanding Grammar*. New York, Academic Press.

Hakuta, K., 1974, *Prefabricated Patterns and the Emergence of Structure in Second Language Acquisition*. LL 24, 287-297.

Hamayan, E.V. and Tucker,G.R., 1980, *Language Input in the Bilingual Classroom and its Relationship to Second Language Achievement*. TESOL Quarterly, 14.4, 453-468.

Hatch, E., 1974, *Second Language Learning - Universals?*. WPB 3, 1-18.

Hatch, E. (ed), 1978, *Second Language Acquisition, A Book of Readings*. Rowley Mass., Newbury House.

Huang, J. and Hatch,E., 1978, *A Chinese Child's Acquisition of English*. In E.Hatch (ed), 1978.

Huebner, A., 1983, *A Longitudinal Study of the Acquisition of English*. Ann Arbor, Karoma Press.

Hulstijn, J. and Hulstijn, W., 1984, *Grammatical Errors as a Function of Processing Constraints and Explicit Knowledge*. LL 34, 23-43.

Hyltenstam, K., 1977, *Implicational Patterns in Interlanguage Syntax Variation*. LL 27, 383-412.

Hyltenstam, K., 1981, *The Use of Typological Markedness Conditions as Predictors in Second Language Acquisition: The Case of Pronominal Copies in Relative Clauses*. Paper presented at the European North American Workshop on Cross-Linguistic Second Language Acquisition Research, Los Angeles, September 7-14 1981, published in the proceedings.

Jespersen, O.,1917, *Negation in English and Other Languages*, Historisk-Filologiske Meddelelser 1.5, 4-14.

Krashen, S.D., 1973, *Lateralisation, Language Learning and the Critical Period: Some new Evidence*. LL 23.1, 63-74.

Krashen, S.D., 1976, *Formal and Informal Linguistic Environments in Language Learning and Language Acquisition*. TESOL Quarterly 10, 157-168.

Krashen, S.D., 1977a), *Some Issues Relating to the Monitor Model*. In H.D.Brown, C.Yorio and R.Crymes, (eds), On TESOL '77, Washington D.C., TESOL, 144-158.

Krashen,S., 1981, *Second Language Acquisition and Second Language Learning*. Oxford Pergamon Press.

Krashen, S.D., 1977b), *The Monitor Model for Adult Second Language Performance*. In M.Burt, H.Dulay and M.Finnochiaro (eds), Viewpoint on English as a Second Language, New York, Regents, 152-161.

Krashen, S.D., 1981, *Second Language Acquisition and Second Language Learning*. Pergamon Press.

Krashen, S.D., 1982, *Principles and Practice in Second Language Acquisition*. New York, Pergamon Press.

Krashen, S.D., 1985, *The Input Hypothesis*. Longman.

Krashen, S.D., Seliger, H. and Hartnett, D., 1974, *Two Studies in Adult Second Language Learning*. Kritikon Litterarum 2.3, 220-228.

Krashen, S.D. and Seliger, H., 1975, *The Essential Contribution of Formal Instruction in Adult Second Language Learning*. TESOL Quarterly 9, 173-183.

Krashen, S.D., Sferlazza, V., Feldman, L. and Fathman, A., 1976, *Adult Performance on the SLOPE Test: more Evidence for a Natural Sequence in Adult Second Language Acquisition*. LL 26.1, 145-151.

Krashen, S.D., Houck, N., Giunchi, P., Bode, S., Birnbaum, R., and Strei, G., 1977, *Difficulty Order for Grammatical Morphemes for Adult Second Language Performers Using Free Speech*. TESOL Quarterly 11, 338-341.

Krashen, S.D., Zelinski, S., Jones, C. and Usprich, C., 1978, *How Important is Instruction?*. ELTJ 32 257-261.

Krashen, S.D. and Terrell, T., 1983, *The Natural Approach: Language Acquisition in the Classroom*. Oxford, Pergamon.

Kürschner, W.,1983, *Studien zur Negation im Deutschen*. Tübingen, Gunter Narr.

Labov, W., 1966, *The Social Stratification of English in New York City*. Washington D.C., Center for Applied Linguistics.

Labov, W., Cohen, P., Robins, C. and Lewis, J., 1968, *A Study of the non-Standard English of Negro and Puerto Rican Speakers in New York City vol. I: Phonological and Grammatical analysis*. (Cooperative Research Project 3288) New York, Columbia University.

Lado, R., 1957, *Linguistics across Cultures*. Ann Arbor, University of Michigan Press.

Lange, D., 1979, *Negation im natürlichen Englisch-Deutschen Zweitsprachenerwerb: eine Fallstudie*. IRAL 17, 331-348.

Larsen-Freeman, D., 1975, *The Acquisition of Grammatical Morphemes by Adult ESL Students*. TESOL Quarterly 9.4, 409-419.

Larsen-Freeman, D., 1976a), *ESL Teacher Speech as Input to the ESL learner*. UCLA Workpapers in TESL vol. 10, 45-49.

Larsen-Freeman, D., 1976b), *An Explanation for the Morpheme Acquisition Order of Second Language Learners*. LL 26.1,125-134.

Lenneberg, E., 1967, *Biological Foundations of Language*. New York, Wiley.

Levy, Y., 1983, *It's Frogs All the Way Down*. Cognition 15, 75-93.

Lightbown, P.M., 1983, *Exploring Relationships between Developmental and Instructional Sequences in L2 Acquisition*. In H.Seliger and M.Long (eds), Classroom Oriented Research in Second Language Acquisition, Rowley Mass., Newbury House, 217-245.

Lightbown, P.M. and Spada, N., 1979, *Performance on an Oral Communication Task by Francophone ESL learners*. Paper presented at the SPEAQ Convention, Montreal, May 1979, also in SPEAQ Journal 1978 2.4. 34-54.

Lightbown, P.M., Spada, N. and Wallace, R., 1981, *Some Effects of Instruction on Child and Adolescent ESL learners*. In R.C.Scarcella and S.D.Krashen (eds), Research in Second Language Acquisition, Rowley Mass., Newbury House, 162-172.

Lightbown, P.M. and d'Anglejan, A., 1985, *Some Input Considerations for Word Order in French L1 and L2 Acquisition*. In S.Gass and C.G.Madden (eds), 1985.

Lightfoot, D., 1983, *The Language Lottery*. MIT Press.

Littlewood, W., 1981, *Language Variation and Second Language Acquisition*. AL 2.2, 150-158.

Long, M.H., 1981, *Questions in Foreigner Talk Discourse*. LL 31.1, 135-157.

Long, M.H., 1983a), *Does Second Language Instruction make a Difference?*. TESOL Quarterly 17.3, 359-382.

Long, M.H., 1983b), *Native Speaker/Non-Native Speaker conversation and the Negotiation of Comprehensible Input*. AL 4.2.

Long, M.H. and Sato, C., 1983, *Classroom Foreigner Talk Discourse: forms and functions of teachers' questions*. In H.W. Seliger and M.H. Long (eds.), Classroom Oriented Research in Language Acquisition, Rowley, Mass. Newbury House.

Long, M.H. + Sato, C.J.,1984, *Methodological Issues in Interlanguage Studies: An Interactionist Perspective*. In Davies,A., Criper,C. and Howatt,A.P.R. (eds), 1984, Interlanguage, Edinburgh, Edinburgh University Press, 253-279.

Makino, T., 1979, *English Morpheme Acquisition Order of Japanese Secondary School Students*. TESOL Quarterly 13.3, 428.

Makoni, S., 1989, *Variability in the Interlanguage of Shona Learners of English*. PhD Thesis, Edinburgh.

Mason, C., 1971, *The Relevance of Intensive Training in English as a Foreign Language for University Students*. LL 21, 197-205.

McLaughlin, B., 1978, *The Monitor Model: Some Methodological Considerations*. LL 28, 309-322.

Meisel, J., Clahsen, H., and Pienemann, M., 1979, *On Determining Developmental Stages in Natural Second Language Acquisition*. SSLA 3.2, 109-135.

Milon, J.P., 1974, *The Development of Negation in English by a Second Language Learner*. TESOL Quarterly 8, 137-143.

Mitchell,R., Parkinson,B. and Johnstone,R., 1981, *The Foreign Language Classroom: An observational study*. Stirling Educational Monographs No. 19, Dep. of Education, University of Stirling.

Nemser, W., 1971, *Approximative Systems for Foreign Language Acquisition*. IRAL 9.2, 115-123.

Pavesi,M., 1984, *The Acquisition of Relative Clauses in a Formal and in an Informal Setting: Further Evidence in Support of the Markedness Hypothesis*. In D.M.Singleton and D.G.Little (eds) 1984, Language Learning in Formal and Informal Contexts, Dublin, IRAAL.

Pavesi, M., 1987a), *A Study of Markedness in Second Language Acquisition*. PhD Thesis, Edinburgh.

Pavesi, M.,1987b), *Negation and Interrogation in English: The Acquisition of two Structures in Terms of Markedness*. In M.Pavesi, 1987a).

Perkins, K. and Larsen-Freeman, D., 1975, *The Effect of Formal Language Instruction on the Order of Morpheme Acquisition*. LL 25.2, 237-243.

Peters, A., 1983, *The Units of Language Acquisition*. Cambridge University Press.

Pica, T., 1983, *Adult Acquisition of English as a Second Language under different Conditions of Exposure*. LL 33.4, 465-497.

Pica, T., 1985, *The Selective Impact of Classroom Instruction on Second Language Acquisition*. AL 6.3, 214-222.

Pienemann, M., 1984, *Psychological Constraints on the Teachability of Languages*. SSLA 6.2, 186-214.

Pimsleur, P., 1966, *Pimsleur Language Aptitude Battery*. New York, Harcourt, Brace & World.

Politzer, R., and Ramirez, A., 1973, *An Error analysis of the Spoken English of Mexican-American Pupils in a Bilingual School and a Monolingual School*. LL 23.1, 39-62.

Prabhu, N.S., 1987, *Second Language Pedagogy*. Oxford University Press.

Ravem, R., 1968, *Language Acquisition in a Second Language Environment*. IRAL 6, 175-185.

Ravem, R., 1974, *The Development of WH-questions in First and Second Language Learners*. In J.Richards (ed), 1974, 134-157.

Richards, J., 1971a), *A non-Contrastive Approach to Error Analysis*. ELT 25.3.

Richards, J., 1971b), *Error Analysis and Second Language Strategies*. Language Sciences 17, 12-22.

Richards, J., 1974, *Error Analysis*. Longman.

Rosansky, E.L., 1976, *Methods and Morphemes in Second Language Acquisition Research*. LL 26, 409-425.

Sajavaara, K., 1981, *The Nature of First Language Transfer: English as an L2 in a Foreign Language Setting*. Paper presented at the First European North American Workshop on Second Language Acquisition Research, Lake Arrowhead, California.

Savignon, S., 1972, *Communicative Competence: An Experiment in Foreign Language Teaching*. Philadelphia: Centre for Curriculum Development.

Schumann, J.H., 1976, *Second Language Acquisition: The Pidginization Hypothesis*. LL 26, 391-408.

Schumann, J.H., 1978a), *The Pidginization Process - A Model for Second Language Acquisition*. Rowley Mass., Newbury House.

Schumann, J.H., 1978b), *The Relationship of Pidginization, Creolization and Decreolization to Second Language Acquisition*. LL 28.2, 367-379.

Selinker, L., 1972, *Interlanguage*. IRAL 10.3, 219-231.

Sidwell, D. and Capoore, P., *Deutsch Heute. Teil I*. Nelson.

Shapira,R.G., 1978, *The non-Learning of English: A Case Study of an Adult*. In E.Hatch (ed), 1978, 146-155.

Stauble, A.E., 1978, *Decreolization: A Model for Second Language Development*. LL 28, 29-54.

Stickel, G.,1970, *Untersuchungen zur Negation im heutigen Deutsch*. Braunschweig, Vieweg.

Tarone, E., 1979, *Interlanguage as Chameleon*. LL 29.2, 181-191.

Tarone, E., 1982, *Systematicity and Attention in Interlanguage*. LL 32.1, 69-84.

Tarone, E., 1983, *On the Variability of Interlanguage Systems*, AL 4.2, 142-163.

Trim, J.M., Richterich ,R., van Ek, J.A. and Wilkins, D.A., 1980, *Systems Development in Adult Language Learning*. Pergamon Press.

Ultan, R., 1978, *Some General Characteristics of Interrogative Systems*. In J.H.Greenberg (ed), Universals of Human Language, vol.4, Stanford California, 211-248.

Usphur, J.,1968, *Four Experiments on the Relation between Foreign Language Teaching and Learning*. LL 18, 111-124.

Valdman, A., 1978, *On the Relevance of the Pidginization - Creolization Model for Second Language Acquisition*. SSLA 1.2, 55-77.

de Villiers, J. and de Villiers, P., 1973, *A Cross-sectional Study of the Acquisition of Grammatical Morphemes in Child Speech*. Journal of Psycholinguistic Research, pp.267-78.

Vihman, M.M., 1979, *Formulas in First and Second Language Acquisition*. Stanford Papers and Reports in Child Language development 18, 75-92.

Widdowson, H., 1984, *Comments on the Implication of Interlanguage for Language Teaching*. In A.Davies, C.Criper and A.P.R. Howatt (eds), 1984, Interlanguage, Edinburgh University Press.

Wode, H., 1976, *Developmental Sequences in Naturalistic Second Language Acquisition*. WPB 11, 1-31, reprinted in E.Hatch (ed), 1978, 101-117.

Wode, H., 1977, *Four Early Stages in the Development of L1 Negation*. Journal of Child Language, 4, 87-102.

Wode, H., 1978, *Free vs. Bound Forms in Three Types of Language Acquisition*. ISB 3, 6-22.

Wode, H., 1981, *Learning a Second Language*. Tübingen, Gunter Narr.

Wode, H.+ Schmitz, T.,1974, *Some Developmental Trends in the Acquisition of*

Negation in several Languages. Arbeitspapiere zum Spracherwerb Nr.3, Englisches Seminar der Universität Kiel.

Wode, H., Bahns, J., Bedey, H. and Frank, W., 1977, *Developmental Sequences: An Alternative Approach to Morpheme Orders*. LL 28, 175-183.

Wong-Fillmore, L., 1976, *The Second Time Around: Cognitive and Social Strategies in Second Language Acquisition*. Doctoral Dissertation, Stanford University.

Wong-Fillmore, L., 1985, *When Does Teacher Talk Work as Input*. In S.Gass and C.Madden, (eds), 1985, 17-50.

Zobl, H., 1980a), *Developmental and Transfer Errors: Their Common Bases and (possibly) Differential Effects on Subsequent Learning*. TESOL Quarterly 14, 469-479.

Zobl, H., 1980b), *The Formal and Developmental Selectivity of L1 Influence on L2 Acquisition*. LL 30, 43-57.

Zobl, H., 1985, *Grammars in Search of Input and Intake*. In S.Gass and C.G.Madden (eds), 1985, 329-344.

Processes in Classroom Second Language Development: the acquisition of negation in German

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The question of whether, to what extent and how second language development is affected by the learning environment has attracted considerable interest among SLA researchers and language teachers in recent years. This interest is at least partly due to the fact that the results of SLA research, in particular of the morpheme order studies, with informal or mixed subjects have led some researchers to formulate implications for language teaching. Thus attempts have been made to apply knowledge gained about language acquisition[1] in one setting to practical problems of language development in another. Many researchers therefore feel the need for a closer look at the language development of learners who have been exposed to the target language (TL) in the classroom only, and to compare this with the development of naturalistic learners.

Inherent in the view that language development in classroom-only settings ought to be investigated separately from SLA in naturalistic settings, is of course the assumption that the former differs markedly from the latter and that this may have an effect on the processes of language development. The problems of dividing learning settings into 'formal' and 'informal' without further analysis of the exact nature of each environment have been demonstrated repeatedly in the literature (Krashen, 1976; Allwright, 1984; Ellis, 1984a), often with particular reference to studies attempting to measure the effect of instruction on proficiency. It has also been argued that classroom settings may share crucial characteristics with naturalistic settings[2] (Allwright, 1984; Ellis, 1984a). The present author does not deny the possibility that classroom and naturalistic settings share common properties. However, it is her contention that there are considerable differences between the two settings in terms of organization of input and interaction. With the exception of immersion programmes, some comprehension approaches and task-based teaching, the following represent essential characteristics of most language classrooms, irrespective of particular syllabus, methods and techniques employed. These features are not typically found in naturalistic settings and furthermore constitute a deliberate and principled attempt, recognized by most teachers, at guiding target language development.

(1) Skill-getting precedes skill-using, i.e. aspects of the language[3] have to be mastered before they can be used in natural language.

(2) Following the principle of (1), teaching proceeds essentially through presentation of TL items or aspects in one form or other; followed by practice of these items to achieve mastery of the TL aspects in the form of imitation, drill,

substitution exercises etc., which may be structured to allow learners to express their own meaning to a very limited degree; followed by 'activity' designed to capture some aspects of natural language use, during which learners are expected to apply what they have learnt previously.

(3) In most cases description or explanation of the TL is provided to varying degrees of explicitness. Usually this forms part of presentation, or of error correction and explanation.

(4) Aspects of the TL are selected for teaching in a linear order and selection is based on notions of what it is the learner needs to know (either because of what is considered 'essential' or 'basic' knowledge of the TL or because of more specific communicative needs of particular learners), and on notions of grammatical and/or functional complexity, derived from a variety of TL descriptions. Recycling of items is done for remedial purposes. It is only during 'activity' that the opportunity arises for a coming together of the various items and aspects taught.

(5) Errors are frequently corrected, particularly during practice. Remedial teaching in terms of 2 and/or 3 is frequently carried out, and learners are required to produce the corrected versions.

It is because of these differences that it makes sense to compare classroom second language development with naturalistic SLA at all. Briefly, classroom teaching attempts to develop language through presentation and practice for use in 'activity',[4] whereas naturalistic learners develop language essentially through 'activity'. The deliberate and principled attempts at structuring the learning environment in terms of 1–5 imply, at least implicitly, that guidance in TL development activates learning processes which are, presumably, more efficient than those found in naturalistic SLA. The model of second language learning implied regards language learning largely as a matter of memorization, be it of chunks of language or of an analyzed system of rules, and as a transfer from stored language knowledge to automatic language use reflecting that knowledge, through practice. Therefore comparison between the actual performance and learning processes of classroom language learners with those of naturalistic learners potentially yields important insights into the kind of processes which operate when human beings acquire second languages.

In keeping with the above perspective, i.e. maintaining that classroom and naturalistic settings differ in essential characteristics, two main aims in recent approaches to the study of classroom second language development can be identified:

(i) To investigate to what extent classroom language development involves the same or different processes from those apparently involved in naturalistic SLA.

(ii) To determine to what extent various aspects of the classroom which constitute a deliberate and principled attempt on the part of the teacher to guide language development affect or do not affect the language and language development of learners.

Considering the popularity and enormous impact of the morpheme studies, it is not surprising that researchers of classroom language development should have

attempted to establish whether morpheme rank orders obtained in naturalistic or mixed settings would also be found in the classroom. If this was the case, it would indicate the existence of similar acquisition processes in both types of setting. The majority of classroom studies focus on this area of language development. However, results of these studies are contradictory and difficult to interpret, presenting a largely inconclusive picture. The difficulties inherent in performance analysis per se[5] are confounded by uncertainties as to the exact nature of the learning environment and the use of different elicitation tasks. Furthermore, studies which do report disturbed orders may not necessarily be taken as evidence against the hypothesis that processes in classroom second language development are the same as those in naturalistic SLA, since classroom learners may have received very different input from naturalistic learners. Lightbown (1983) suggests the possibility of different surface phenomena stemming from differential input, rather than indicating different underlying processes. Detailed analysis of teaching materials, teachers' speech etc. in her study supports this view for her data. It is also the view of the present author that performance studies of seemingly unrelated grammatical morphemes present only a partial and potentially misleading picture of SLA due to their focus on linear orders, of acquisition in TL terms. They do not reveal a great deal about *processes* underlying the construction and development of interlanguages.[6]

To date there are only a handful of studies which have investigated processes in classroom second language development, giving consideration not only to target-like structures and functions in the learners' language but also to non-target-like structures and functions and to target-like structures with non-target-like functions. Although the paucity of these studies and the limitations of some of them do not at present justify the conclusion that classroom second language development follows exactly the same principles as naturalistic SLA, they do provide some evidence that very similar processes are involved, and support the view that classroom learners act upon the language input available to them in whatever form to create and develop their own systems of communication, rather than react directly and immediately to the guidance of teachers to develop the target language (Ellis, 1984; Felix, 1981, 1982; Lightbown, 1983; Pavesi, 1984; Pica, 1983b, 1985; Pienemann, 1984; Schumann, 1978b.) Furthermore some classroom practices may in fact be detrimental to learners' progress by blocking their own mechanisms for dealing with language input (Lightbown, 1983).

The purpose of the present study is to further investigate differences and similarities between classroom and naturalistic second language development. The study is concerned with the *course* of development only.

Language subsystem

The area to be investigated is negation. There are two reasons for this choice:

(1) A problem with the study of ILs is that they may operate with units other than those used for the analysis of full languages and the TL in particular. The structure–function relationship of negation was assumed to be readily identifi-

able even within IL systems. Thus it was considered unlikely that learners would express negation using items which were completely unrelated to negation in the TL, and, more importantly, would use items related to negation in the TL to express completely different functions.

(2) Negation has been widely researched in the naturalistic SLA of German and of other languages, offering data for comparison.

The investigation will be restricted to:

(a) Learners' *placement* of the negator in relation to the sentence and the verb in main clauses. Of the different verb types, the copula, possessive 'haben', main verbs, modals and auxiliaries will be considered.

(b) Learners' *choice* of the negative particle (excluding holophrastic usage). Reference will be made to different (object) NPs.

Negation in German

Placement of the negator in relation to the verb

In main clauses where the subject is in initial position the negator is placed after the finite verb.

Examples:

Main verb   ich koche nicht
            'I cook not', i.e. I don't cook

Copula   ich bin nicht gross
            'I am not tall'

Modal   ich kann nicht kochen
            'I can not cook'

Auxiliary   ich habe nicht gekocht
            'I have not cooked'

In subordinate clauses the negator precedes the verb:

Use of negative particles 'nein', 'nicht' and 'kein'

'Nein' is used holophrastically in answer to yes/no questions, to negate part or whole propositions at sentence or text level, as a response to commands etc. It is not used sentence internally. 'Nicht' and 'kein' are used for sentence internal negation. 'Kein' is used to mark indefiniteness of NPs or objects, otherwise 'nicht' is used. 'Kein' is also marked for gender and case; however this aspect will not be discussed in this

Examples:

Copula   das ist kein Buch
                'that is not a book'

As opposed to   das ist nicht das gute Buch
                'that is not the good book'

Possessive   ich habe kein Buch
'haben'   'I have not a book'

As opposed to   ich habe das gute Buch nicht
                'I have the good book not'

The use of 'kein' in types of the above structures containing the copula and possessive 'haben' and indefinite NPs is obligatory. The choice of negative particle with main verbs (excluding possessive 'haben'), modals and auxiliaries is more complex. Indefiniteness can be marked optionally, 'nicht' can be used for emphasis etc. Thus the following are acceptable sentences:

Main verb   ich fahre kein Auto
                'I drive not a car' i.e. I don't drive

                ich fahre *nicht* Auto
                'I drive not car', i.e. I don't drive

The same sentences are possible with modals and auxiliaries. The rules governing optional and obligatory marking of indefiniteness with regard to structures containing main verbs, modals and auxiliaries are too complex to be discussed in this paper. They will only be referred to marginally in the data analysis.

Naturalistic SLA

Placement of the negator and sentence structure

L1 and naturalistic learners of German typically proceed from external negation to sentence internal negation and within the latter from preverbal to postverbal negation. External negation typically precedes the item(s) or sentence to be negated. Learners initially negate single words followed by one or more constituent negation and sentence negation. Within sentence internal negation learners distinguish finite main verbs from other verb-types such as the copula, modals and auxiliaries. Finite main verbs are negated preverbally at the same time as other verb types are negated postverbally.

Choice of negative particle

Naturalistic learners select 'nein' as a negative particle before they use 'nicht'. This applies to both sentence external and sentence internal negation.

to appear in early L2 acquisition to any great extent. Lange (1979) reports sporadic occurrences of 'kein' during the early stages which are similar to those found in early L1 acquisition. Instead of 'kein' learners use 'nicht ein'. Felix (1978) reports that first regular occurrences of 'kein' always appear with 'nicht'. Later, while 'nicht ein' is still used, 'kein' appears target-like. Unfortunately (Lange, 1979) only reports on the use of 'kein' for 'nichts' and does not give examples of other uses (e.g. for 'nicht'), which he considers 'not productive' in terms of the TL.

TABLE 1

Naturalistic SLA examples: placement of the negator and sentence structure

sentence external negation, (NEGX/S)	sentence internal negation and sentence structure
nein kaputt ('no broken')	no verb (Subject NEG X)
nein helfen ('no help')	das nein aua ('that no sore')
nein essen ('no eat')	Milch nicht da ('milk not there')
nein spielen Katze ('no play cat')	
preverbal negation	*postverbal negation*
nein du nicht kommt ('no you not come')	ich kann nicht ('I can not')
du nicht spielen Keller ('you not play cellar')	das ist nicht so ('that is not so')
Julie nicht spielt mit ('Julie not plays with us')	Ich fällst nicht runter ('I fall not down')

(Felix 1982)

TABLE 2

Naturalistic SLA examples: Choice of negative particle

use of 'nein'	use of 'nicht'	use of 'kein' target-like
nein kaputt ('no broken')	das ist nicht eine Schaf ('that is not a sheep')	nicht fahren (Lange 1979) ('not drive')
nein essen ('no eat')	das ist nicht ein Hund ('that is not a dog')	du nicht spielen Keller ('you not play cellar')
		(Felix 1982)
double negative with 'nicht' and 'kein'	*use of 'kein' target-like*	
Ich hab nicht keine	Ich hab keine Auto	
('I have ___')	('I have no car')	
Ich seh die kein nicht	nein, da ist keine (Puppe)	
('I see it ___')	(no, there is no (doll))	

(Felix 1978)

Subjects

The study is part of a cross-sectional and longitudinal investigation into the acquisition of German in the classroom by English-speaking children and adults. Subjects of the present study were 42 English-speaking children aged 11–16 at a secondary school in Edinburgh representing each of the first four years of instruction in German. German was their only second language. With the exception of the first year subjects, who were picked at the very beginning of the school years, subjects considered by

Subjects had been exposed to teaching based on a communicative syllabus. However, within the structure of the syllabus there was room for the isolation of grammatical points (implicitly or explicitly). Teaching was based partially on the textbook *Deutsch heute* (especially in the first year), which includes summaries of grammatical points, explanations of grammatical structures and grammar-based exercises. In addition, typical 'communicative' activities were engaged in. In general the teaching approach can be described in terms of the five characteristics listed in the introduction in this paper. More detailed information will be provided at the relevant points in the discussion of the data.

Data elicitation

An approximation to spontaneous oral production was considered the only valid source of data for the purposes of this study since:

(a) it is spontaneous spoken language use which classroom teaching seeks primarily to develop;

(b) it is spontaneous spoken language data which is available from naturalistic SLA studies for comparison.

Data for the longitudinal study consist of utterances produced during classroom observations and of elicited responses outside the classroom with pairs of subjects giving and requesting information about personal data, collected during the first four months of German instruction of the first year only.

Cross-sectional data for the 1st–4th year were obtained at approximately month 8 of the school year. Data were elicited by means of individual oral interviews lasting between ten and fifteen minutes. Subjects were asked questions concerning their own personal circumstances, e.g. family background, hobbies, school subjects etc. The majority of questions were information questions to avoid simple yes/no answers. Questions were designed to potentially elicit a large proportion of negative constructions based on the interviewer's assessment of the likelihood of certain facts to be true of the subject. Examples included: 'Wo lernst du Karate?' with most but not all subjects not learning karate. The entire questionnaire potentially yielded a reliable number of negative responses without the questions seeming absurd to the subjects. Contexts were created to allow for the use of different verb and object types. A proportion of the questions were designed to elicit affirmative, descriptive answers. Thus a reasonable mixture of negative, affirmative, short and elaborate answers were allowed for in order to divert subjects' attention from the purpose of the elicitation. In addition a small listening task was administered, designed to elicit some further structures containing the copula, difficult to elicit by means of questions. Learners were asked to spot false statements.

Learners' exposure to negative structures

The learners were introduced to and extensively drilled in the following structures

(a) das ist *Kein N*
('that is not a *N*')

(b) ich habe *Kein N*
('I have not a *N*')

(c) Subject copula nicht adjective
(e.g. ich bin nicht gross)
('I am not tall')

(d) ich main verb nicht gern X
(e.g. ich spiele nicht gern Fussball)
('I don't like playing football')
'gern' is an adverb expressing 'liking' or 'enjoyment'.

(e) ich kann nicht infinitive
(e.g. ich kann nicht schwimmen)
('I can not swim')

From the 2nd year the learners were also given general word order rules, including the placement of the negator after the verb. Whenever possible, comparison with English was made.

Description of data

Some preliminary comments concerning the subjects' reaction to the interviewer's questions seem appropriate at this stage, as they shed some light on some of the effects of the nature of the classroom. Given the conditions of the elicitation task within the school context, it is not surprising that subjects felt their ability to speak German correctly was being assessed. However, the interviewer noted some striking examples of subjects seemingly unable to treat her questions at face value, i.e. as real questions. This was particularly true of the lower two years. Subjects would 'invent' cats, hobbies, etc., as though it seemed inappropriate to them to negate the assumptions of the questions. Furthermore they appeared to be guessing the purpose of the interview, frequently asking for confirmation as to the appropriateness of their answers, not only in terms of TL norms, but also in terms of the kind of responses which might be expected of them. In other words they treated the interview as a game or exercise of some sort, to which they had not been given the rules, or detailed instructions. More advanced learners tended to respond more directly to the questions but also in much more detail than was required, which suggests an emphasis in the teaching on complete sentences and practice in responding to oral examination questions, requiring learners to display as much of their TL knowledge as possible. Subjects in lower years also, not infrequently, refused to respond to certain questions or instructions, on the grounds that they 'hadn't done it yet' in class, rather than attempt to negotiate meaning.

Thus the learners were constrained by classroom practices to such an extent that

tedly formal) conditions of natural language use, as a means of communication, and had at times to be asked specifically to do so.

Formulaic speech

It was observed during the longitudinal study of the first four months of instruction and during data collection as part of the cross-sectional study, that 1st year learners relied heavily on routines and patterns in speech production. To a small extent they were used for routine classroom activities, i.e. learners would respond to instructions such as:

'Hebt die Hand'
('lift your hand')
'Zieh die Jacke aus'
('take off your jacket')
'Frag . . . .'
('ask . . . .')

and would produce formulas on appropriate occasions, e.g.

'Lisa fehlt heute'
('Lisa is absent today')
'Trevor fehlt auch heute'
('Trevor is also absent today')
'Ich habe mein Heft vergessen'
('I have forgotten my exercise book')

However, the use of routines and patterns extended beyond these routine activities. Evidence for the largely formulaic status of learners' utterances is manifest in a number of ways. Learners produce and respond to questions with the meaning of other questions. Most common are confusions of 'Wie heisst . . .?' with 'Wie alt . . .?' patterns. Examples include:

S1: Wie heisst du? (What is your name?)
S2: Ich bin zwölf Jahre alt. (I am 12 years old)

and during a card game:

I: Hast du ein Heft? (Do you have an exercise book?)
S: Nein, das ist keine Heft. (No, that is not an exercise book)
I: Hast du einen Pullover? (Do you have a pullover?)
S: Nein, das ist kein Pullover. (No, that is not a pullover)

Learners also combine parts of questions with parts of other questions:

S: Wie alt dein Geburtstag?
('How old your birthday')
S: Hast du Geburtstag?

and they respond to questions using part of it:

I: *Lernst du Karate?*
S: Nein, *learnst du gern nicht Karate.*
I: *Bist du gross?*
S: Nein *bist du gross*
I: *Hast du eine Katze?*
S: Nein *hast du eine Katze*

Explanation for the extensive use of routines and patterns can be found in the teaching. During the first four months, which were observed regularly between once and twice a week, subjects received very little input. They were drilled extensively in the use of a limited set of questions and answers concerning personal data such as name, age, brothers and sisters, pets etc. The use of routines and patterns also accounts for a large proportion of 1st year learners' negative structures.

Considering the beginners' status of our learners, the high proportion (90%) of postverbally negated sentences containing finite main verbs from other verbs, placing the negator in front of finite verbs, at the beginning stage of sentence internal negation. Postverbal finite main verb negation is evidence of a later acquisitional stage. However, there is evidence that these structures when produced by our learners are formulaic, rather than being generated by a learnt system of TL negative rules. In almost 75% of cases of postverbally negated finite main verbs, subjects insert the adverb 'gern' into the sentence where it is inappropriate or not required. In a number of cases 'gern' is also inserted into sentences containing 'sein'.

Structures of the kind 'Ich *main verb* nicht gern *X*' (corresponding to the English 'I don't like _ing *X*') were the first negative main verb structures to be introduced (at about 3½ months) and were drilled extensively over a long period, with a limited set of verbs, 'spielen' being the most common. This also accounts for the fact that subjects always choose 'nicht' appropriately as negative particle in sentences containing main verbs.

Approximately 85% of all structures containing possessive 'haben', all of which contain indefinite objects, are negated appropriately with 'kein'. Again this can be explained in terms of formulas. Learners had been drilled extensively in the use of formulas, using them at times randomly and at times combining parts of different formulas in ways which are to my knowledge not the case in naturalistic SLA. This may be explained in terms of constraints on memorization and as a result of the emphasis in the teaching on memorization of language chunks. Furthermore the learner is required to produce utterances in the TL from the very beginning and is under constant pressure to respond to the teacher. He is therefore not given the chance of a silent period, nor of selecting from the input those items which will serve him as formulas, unlike naturalistic learners. Because of this, and due to the close interrelatedness of the forms and functions of the structures involved, learners do

Placement of the negator and sentence structure in classroom data

First year data include a considerable amount of non-TL-like negative structures, indicating some processing of the input and IL creation by learners. Learners produce one-word-negation and sentence external negation; sentence internal negation in structures without verbs; preverbal negation with main verbs at the same time as postverbal negation with other verb types.

Thus despite the emphasis on memorization of TL-like structures in the teaching, 1st year classroom learners produce very similar structures to those found in natural-istic acquisition, indicating similar input processing and IL construction.

While the use of formulas decreases between 1st and 2nd year, there is a consider-able increase in the use of the above non-TL structures by 2nd year learners. The proportion of postverbally negated finite main verbs drops from 90% for the 1st year to 60% for the 2nd year. Instead preverbal negation is used by 70% of subjects. There are now also cases of possessive 'haben' being negated preverbally. At the same time all structures containing the copula 'sein' and the small number containing modals, are negated postverbally. Thus 2nd year data resemble early naturalistic data more closely than do 1st year data.

Third year learners do not produce sentence external negation. There are a number of negative structures which do not contain a verb. Preverbal negation is restricted to finite main verbs, excluding possessive 'haben'. At the same time finite main verbs are also negated postverbally, except by one subject. The data now also include a greater number of modals and a few auxiliaries, all of which are negated postverbally.

Choice of negative particle in classroom data

First year learners show evidence of their own particle system. The use of 'nein' is generally restricted to sentence external negation. Only one example of sentence internal negation with 'nein' was found. Although learners use both 'nicht' and 'kein' in their respective obligatory contexts, they also use both inappropriately, i.e. using 'kein' instead of 'nicht' and vice versa.

A closer look at the data reveals that, despite some target-like performance, learners do not distinguish the functions of 'nicht' and 'kein', but rather use both to mark negation only.

Earlier I argued for the formulaic status of structures containing main verbs and possessive 'haben' negated appropriately with 'nicht' and 'kein' respectively. All responses elicited were either of the type 'Ich spiele nicht (gern) *X*', or 'Ich habe *Kein*', with either brothers, sisters or pets as indefinite objects. With regard to sentences containing the copula, a larger variety was elicited. Structures were of the following type (excluding negation):

(a) Subject copula adjective
     (with a large variety of adjectives used)
(b) Das ist indef N
     (with a large variety of nouns)

Subjects supplied 'kein' in half of all obligatory contexts, supplying 'nicht' inappropriately in the other half. 'Nicht' was supplied appropriately approximately 75% of the time, in the remaining 25% of cases 'kein' was used instead. Thus despite the early use of 'kein' by classroom learners in comparison with naturalistic learners, learners do not distinguish the respective functions of 'nicht' and 'kein', but rather select one or the other, or both, to mark negation, with a slight tendency to favour 'nicht' as a negative particle. The lack of TL indefiniteness of 'kein' in learners' ILs is further indicated by occasional structures such as 'das ist keine ein Sessel'. The relatively early use of 'kein' can be explained in terms of the teaching. After 'nein' 'kein' was introduced, approximately two months before 'nicht' and structures containing it were drilled extensively.

First year learners also use the occasional double negative e.g. 'Ich habe nicht keinen Bruder'. Thus again, once learners move away from the use of formulas in their production of the TL, they process the input and produce output in ways very similar to naturalistic learners. This includes the use of 'nicht ein' instead of 'kein', indicating lack of marking for indefiniteness even when 'kein' is used; the tendency to favour 'nicht' over 'kein' as a negative particle; the occasional double negative.

As with 1st year learners, the use of 'nein' by 2nd year learners is restricted almost entirely to sentence external negation, although it occasionally appears within the sentence. Similarly to 1st year learners, 2nd year learners use 'nicht' and 'kein' both appropriately and inappropriately, i.e. using 'nicht' instead of 'kein' and vice versa. However there are differences in the use of these two negative particles. The inappropriate use of 'kein' instead of 'nicht' is restricted almost entirely to sentences containing main verbs. Many of these structures do in fact contain indefinite objects. However, since all of them are negated preverbally it is highly unlikely that subjects were operating according to the target rule. 'Kein' was almost never supplied where required. The proportion of the use of 'kein' with main verbs is relatively small (20%). (Comparable naturalistic data were not available.)

Fourth year learners categorically negate structures containing finite main verbs, modals, auxiliaries and the copula, postverbally. Thus once learners cease to rely entirely on memorization of formulas in their L2 production, their development towards postverbal negation is essentially the same as that of naturalistic learners, i.e. from sentence external to sentence internal, and preverbal to postverbal, with finite main verbs being distinguished from other verb types.

At the same time the use of 'kein' and 'nicht' in structures containing the copula is distributed in the following way: 'kein' is supplied when required only 4% of the time, in 96% of cases 'nicht' is supplied instead. 'Nicht' is supplied almost 98% of times required. 'kein' is used in approximately 2% of cases instead.

Thus the tendency to favour 'nicht' over 'kein' as a negative particle, becomes very strong with 2nd year learners indicating that the influence of the teaching during the first year with its early emphasis on 'kein', has diminished substantially.

Third year learners do not use 'nein' sentence-internally: 'nicht' and 'kein' are both used. Learners no longer use 'kein' inappropriately instead of 'nicht' and in structures containing 'sein', they never use 'kein' where required, but instead always use 'nicht'.

stronger than that of 2nd year learners. The difference may again be explained in terms of the use of formulas. Second year learners' utterances included a number of 'das ist Kein' structures which had been drilled extensively in the first year of instruction. Such data were not found for 3rd year learners.

Like 3rd year learners, 4th year learners do not use 'nein' as a negative particle and 'kein' is not used appropriately. Learners supply 'kein' when required in 'sein' constructions only 5% of the time, using 'nicht' instead in all other cases. However, subjects sometimes use 'kein' appropriately in constructions containing main verbs and indefinite objects where either 'kein' or 'nicht' would be appropriate (20% of the time).

Examples include:

ich fahre kein Auto
ich koche kein Mittagessen
ich lerne kein Französisch

This may indicate that subjects are beginning to distinguish the functions of 'nicht' and 'kein'.

As was the case with the placement of the negative particle, the use of negative particles with formulas by our classroom learners has also been reported for naturalistic learners.

'Nein' is used only in the 1st and 2nd year, i.e. in the very early stages. Differences are mainly surface differences. Thus the early use of 'kein' by classroom learners is a result of its early introduction in the input and extensive drilling of structures containing it, and the absence of 'nicht' in the early input. However, over the years, 'nicht' establishes itself clearly as the favourite negative particle.

Unfortunately, data on the development of marking indefiniteness are virtually non-existent, both for our classroom learners and for naturalistic learners. However, the lack of marking for indefiniteness is a feature of both types of early learners' language.

Summary and discussion

Despite some early TL-like performance, which can be explained in terms of the limited input and the use of routines and patterns, learners are found to process and analyse the TL input to construct their own IL system of communication. This is apparent in the use of non-target-like negative structures which are not found in the input. Moreover, the change from sentence external negation to sentence internal preverbal negation to postverbal negation, with finite main verbs being the last to be categorically negated postverbally, observed from the 2nd to the 4th year, resembles very closely the development of negation in naturalistic SLA. Thus we are justified in assuming that these changes are developmental. With regard to choice of negative particles, learners also create their own system. Although comparable data are sparse and some differences in surface phenomena can be observed, classroom learners' performance evidences at least some similar processes in the acquisition of

unbound 'nein' in the early stages of acquisition, i.e. in sentence external negation; marking for negation only before marking for indefiniteness; a preference for 'nicht' over 'kein' as a marker for negation.

Since the kind of structures produced by naturalistic and by our classroom learners are not found in the input, language development, in the area of negation at least, cannot be explained in terms of input and interaction only, but rather has to be seen as evidence of internal acquisition mechanisms (not necessarily language specific).

Considering the formal nature of the elicitation procedure and the difficulties encountered in attempting to obtain spontaneous natural language data from classroom learners, these results take on all the more importance in our attempt to determine what kinds of process operate in second language development. It appears that to a large extent the same mechanisms operate irrespective of the learning environment. However, the structure of the classroom and classroom activities designed to develop TL performance and requiring immediate production from learners can result in heavy reliance on routines and patterns, blocking for a time learners' processes of IL construction and development, including the ability to treat language as a means of communication for negotiating meaning. More specifically, one might ask at least two questions about the nature of the effect of the classroom on L2 development in this study:

(1) Since 2nd year learners' language closely resembles very early naturalistic learner language, what happened in the 1st year? Can it be regarded as a necessary step towards L2 acquisition, in the same way as the 'silent period' may be regarded as preparation for later IL production, or would learners actually have proceeded to IL construction and production sooner if they had not been required to produce immediately and 'correctly'?

(2) In terms of choice of negative particle 3rd year learners resemble early naturalistic learners more closely than do 1st and 2nd year learners. Is it possible that the acquisition of marking for indefiniteness would have started sooner if learners had not received early input which focused on 'kein' exclusively before introducing 'nicht'?

Conclusion

The results of this and other studies suggest that naturalistic and classroom second language learners process language data in similar ways to construct and develop their own systems of communication. In the light of the results of the present study we may ask ourselves whether organization of input and interaction in terms of the Presentation–Practice–Activity principle always results in a temporary 'blockage' of IL construction, at any point in the development. We may also 'ask to what extent and how this may be a necessary or at least helpful preliminary to acquisition, and to what extent and how it may impede it. Ultimately these questions relate to the issues of what triggers acquisition and what constitutes the optimal environment for what we now know to be a highly complex, systematic and organic process of

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Notes

1. The use of the terms 'acquisition' and 'learning' is neutral with regard to Krashen's distinction and is intended to signify 'development'.
2. The observation that classroom and naturalistic settings may share crucial characteristics was in fact made retrospectively, in view of the similarities of development in the two types of setting.
3. 'Language' or 'language system' is used to refer to all aspects underlying a speaker's use of it, i.e. including grammatical, semantic, lexical, pragmatic etc. features.
4. This is not to deny, however, that there may be considerable differences between classrooms with regard to individual teachers' interpretation of the PPA-Principle.
5. For a detailed review and criticism of morpheme order studies see Long and Sato (1984).
6. For a detailed review and criticism of classroom morpheme order studies see Pica (1983b).
7. Because of its special status in the data, possessive 'haben' is treated separately from the other main verbs.

Appendix

TABLE 1

Classroom data examples: placement of the negator and sentence structure*

Formulas

I: Wo lernst du Karate?
    ('Where do you learn Karate?')
S: Ich lerne nicht gern Karate
    ('I don't like learning Karate')
I: (statement) Zola Budd spielt Fussball
    ('Zola Budd plays football')
S: (corrected statement) Zola Budd spielt nicht gern Fussball
    ('Zola Budd doesn't like playing football')
I: Wo spielst du Gitarre?
    ('Where do you play the guitar?')
S: Ich spiele nicht gern Gitarre
    ('I don't like playing the guitar')
I: Bist du müde?
    ('Are you tired?')
S: Ich bin nicht gern müde
    ('I don't like being tired')
I: Bist du faul?
    ('Are you lazy?')
S: Ich spiele nicht gern faul
    ('I don't like playing lazy')

Sentence external negation (NEGX(S)

L   nein hässlich
    ('no ugly')
L   nein das ist ein Haus
    ('no that is a house')
L   nein das ist ein Sessel
    ('no that is an armchair')
L   nein mein Vater ist schön
    ('no my father is good-looking')
L   nein Zigaretten
    ('no cigarettes')
L   nein ich lerne Karate

Sentence internal negation

no verb (subject NEG X)

ich kein gross
('I not tall')
ich nicht gern faul
('I not _____ lazy')
ich keine Rugby
('I not Rugby')
nein ich keine Katze
('no, I no cat')

Preverbal negation

Zola Budd nicht spiele Fussball
('Zola Budd not plays football')
Zola Budd nicht spielen Fussball
('Zola Budd not play football')
Gordon Strachen nicht spielt Eishockey
('Gordon Strachen not plays ice-hockey')
Gordon Strachen nicht spiel Eishockey
('Gorden Strachen not play ice-hockey')
ich keine arbeitet
('I no/not work')
ich keine lerne Karate
('I no/not learn Karate')
ich keine hast ein Hund
('I no/not have a dog')
ich keine habe Haustiere
('I no/not have pets')

Postverbal negation

ich kann nicht spiele Gitarre
('I can not play the guitar')
ich bin nicht gross
('I am not tall')
Hamburg ist nicht in England
('Hamburg is not in England')

Use of 'nein'

L   nein hasslich
     ('no ugly')
L   nein das ist ein Haus
     ('no that is a house')
Ich habe nein Katze
('I have no cat')
ich nein (koche)
('I no (cook)')
ich habe nein Freundin in Deutschland

*Unless otherwise stated, data are taken from the cross-sectional part of the study. Examples marked 'L' are taken from the longitudinal study.

TABLE 2
Classroom data examples: choice of negative particle

Use of 'nicht' and 'kein'

'nicht' in obligatory contexts:
sie ist nicht gross
('she is not tall')
ich bin nicht faul
('I am not lazy')
Zola Budd spielt nicht Fussball
('Zola Budd plays not football')
ich spiele nicht gern Rugby
('I play not Rugby')

'kein' in obligatory contexts:
ich habe keine Schwester
('I have not a sister')
ich habe keinen Bruder
('I have not a brother')
das ist keine Tür
('that is not a door')
das ist keine Tafel
('that is not a blackboard')

'kein' used inappropriately:
Hamburg ist kein in England
('Hamburg is not in England')
mein Hund ist keine gross
('my dog is not tall')
Ich bist keine müde
('I am not tired')
ich keine spiele Fussball
('I no/not play football')
ich keine Klavier spiele
('I no/not piano play')

'nicht' used inappropriately:
das ist nicht eine Tafel
('that is not a blackboard')
das ist nicht eine Tür
('that is not a door')
Ich habe nicht Katze
('I have not a cat')
die Usher Hall ist nicht ein Museum
('the Usher Hall is not a museum')
ich habe nicht Bruder
('I have not a brother')

double negative
Ich habe nicht keinen Bruder
('I have _____ brother')