CROSS LINGUISTIC INFLUENCE AND TRANSFER IN SECOND LANGUAGE ACQUISITION

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UNIVERSITY OF EDINBURGH
1988
ABSTRACT

The purpose of this thesis is to evaluate critically the literature and research findings of SLA pertaining to the phenomenon variously known as transfer, interference, or crosslinguistic influence. The first chapter focuses on different models of second language acquisition and accounts of transfer therein. By examining different views of the acquisition process it is hoped to highlight the interaction between universal and language specific features of language learning. Chapter Two deals with the competence performance distinction as it relates to crosslinguistic influence. While there is relatively little dispute about the presence of L1 influenced features in interlanguage production, there is more debate about whether these features reveal anything about the knowledge which is acquired, or whether such features are an artefact of the production process itself. Chapter Three looks at attempts to give a principled account of what gets transferred where, under what conditions, and why. One criticism sometimes aimed at transfer research is the concentration of empirical studies into particular language domains such as phonology and grammar while other important areas of language acquisition are relatively under-researched. Chapter Four therefore looks at research into crosslinguistic influence as it relates to pragmatics and discourse features of language learning. The stated objective of this thesis is a critical evaluation of SLA literature in an attempt to account for the role of crosslinguistic influence in the overall acquisition of a second language.
DECLARATION

I certify that all material in this thesis which is not my own work has been identified, that no material is included for which a degree has previously been conferred on me, and that this thesis has been composed by myself.

[Signature]

George [Name]
ACKNOWLEDGEMENTS

I would like to thank my supervisors, Dr A Davies and Miss A P Sorace for their guidance and encouragement during the preparation of this thesis, and also Susan Sandeman for typing the manuscript.
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CONCLUSION
INTRODUCTION

The main aim of this thesis is to evaluate critically the second language acquisition (SLA) literature, including the important research findings pertaining to the phenomenon variously known as transfer, interference, or crosslinguistic influence (CLI). I do not intend to address directly the issue of whether transfer exists per se for this is dealt with adequately elsewhere (see, for example, Kellerman 1984) and from the language teacher's perspective mother tongue influence is such a prominent feature of learner English that the need for empirical proof of its existence is subordinate to the need for explanation. In general terms the thesis attempts to assess the role and nature of CLI in the process of second language acquisition. The approach is therefore global and holistic in the sense that it does not deal exhaustively with particular language domains but collates evidence from a wide range of language domains in an effort to show that CLI is pervasive and important in accounting for SLA. While recognising the ubiquitous nature of CLI a modular approach to what has traditionally been called transfer is necessary to show how the nature of LI influence and the mechanisms which give rise to it are different according to the model of language acquisition adopted and to demonstrate that an explanatory account of CLI at the syntactic level is not necessarily suitable at the level of phonology or discourse.

Essentially the framework of the thesis is determined by the need to find answers to a number of central questions. The first chapter looks at some well-known models of SLA and attempts to assess their authors' views on the role of CLI and transfer.
A chronological approach illustrates the pendulum swings which have characterised attitudes to this question. At one extreme we have the view of contrastive analysis which sees SLA as little else than the need to overcome LI influence where it is structurally different from the target language. On the other hand the Creative Constructivist view sees little difference in the process of SLA from first language acquisition and LI influence is considered negligible. The other models examined range between these extremes in the role they assign to LI influence, but generally speaking the models adopt a unitary approach which underestimates the range and complexity of crosslinguistic influence.

The argument against CLI which emerges from chapter 1 is that it is a feature of language use rather than acquisition. In other words some theorists view CLI as a performance phenomenon only, and not a competence phenomenon. There is no attempt to deny the presence of LI related features in interlanguage production but this influence does not extend to the nature of the underlying system of representation which makes up a learner's knowledge of the target language, or the processes which give rise to, and develop, that knowledge. Chapter two argues that this depends very much on which model of competence one adopts, but even from the relatively narrower linguistic (or grammatical) perspective, evidence exists which suggests CLI can be a competence phenomenon. Moreover, if one adopts a more sociolinguistic perspective which is less restrictive in the type of data taken in evidence the degree of CLI increases dramatically. This approach is largely based on the notion of sociolinguistic competence stemming from Hymes (1972) and brings into consideration the notion of appropriacy of language use.
The pervasive nature of CLI is further revealed by adopting a more psycholinguistic orientation. Within this framework the basic notion of the competence/performance distinction is retained though it is described differently by different authors. Nevertheless there seems general agreement on the utility of distinguishing between CLI which affects underlying knowledge and the processes and mechanisms involved in utilising knowledge. Chapter 2 is also concerned, therefore, with characterising the nature of CLI during language production, or CLI purely as a performance phenomenon. While the debate about whether CLI is a feature of language acquisition or an artefact of language use is of central importance it must not be concluded that one is more important than the other in an overall account of SLA, and certainly being productive in the target language is part of what most learners would consider 'knowing' a language to be.

In addition to looking at different approaches to the question of the competence/performance distinction this chapter also attempts to look at the relationship between these two aspects. Particular attention is paid to the relationship between transfer and borrowing, and the arguments against CLI as a competence phenomenon which suggest transfer is a 'communication strategy' typically employed when the learner overstretches his linguistic capabilities. Some theorists would argue this is a performance phenomenon only, while others have posed the question of whether the way language is used partly determines the way it is represented in the learner's mind and the way competence develops. Canale and Swain (1980) actually talk of 'strategic competence' which includes knowledge of strategies which are used to get meaning across when interlanguage users communicate in the target language.
The question which arises is to what extent strategic competence reveals CLI and how using this competence affects the developmental process.

Some theorists accept that CLI is a competence phenomenon and Chapter 2 also attempts to characterise the nature of that influence. Attempts to describe the role of CLI as a competence phenomenon demonstrate that methodological problems remain which make overall conclusions difficult. There does not seem to be any widely accepted way of isolating transfer in a way which demonstrates unambiguously that a particular interlanguage product reflects CLI at the competence level. The problem is one of deciding what, if anything, a particular interlanguage feature reveals about the underlying process of acquisition which has resulted in the interlanguage feature taking the form it does. In other words does CLI apparent at the surface structure level reveal anything about the role of CLI in the development of underlying competence. Ultimately the answer to that question depends on the model of competence and acquisition adopted but a sociolinguistic approach based on Labovian notions of 'style shifting' such as those underlying Tarone's 'Capability Continuum' (Tarone 1982) suggests that whatever features are used to explicate notions of developing competence account must be taken of the context and method of collecting data. A learner's competence is difficult to characterise not only because it is by definition transitional, but because it is unstable and the nature of competence may seem to vary according to the context and task used for data collection.
Chapter Three moves on from questions about the role of transfer to the question of predictability and constraints. A number of studies have shown that structural 'identity' or 'similarity' between L1 and L2 is not sufficient for transfer to take place (see, for example, Andersen 1983; Zobl 1983). Identification of constraining factors might help us identify natural language acquisition principles and from the pedagogical perspective enable some prediction about the form of interlanguage production.

There seems to be general agreement that language 'distance' is a crucial factor in determining what gets transferred, and learners seem more willing to transfer when they perceive the L1 and L2 languages to be 'closer'. At the beginning stages this idea of 'closeness' may be based on folklinguistic knowledge, but as the learner gains more knowledge formal similarities are likely to shape perceptions of what is transferable. Not surprisingly it is predicted that 'closer' languages are easier to learn but Ard and Homburg (1983) argue that this is not merely because such learners acquire items 'free' (positive transfer) but that language background actually plays a part in the psychological process of language learning.

Where the notion of language distance rests on the learner's perception of the interaction of L1 and L2 some theorists (see for example Kellerman (1979) have argued that transferability can be predicted on the basis of L1 characteristics independent of the L2. Such theorists use notions of core/periphery, marked/unmarked, or language universal/language specific, to support their arguments but it is somewhat difficult to see how such notions facilitate predictability.
as their claims tend to be indistinguishable from longer established ideas going back to Contrastive Analysis.

The central question which theorists have tried to answer by such notions as markedness, is how to reconcile those aspects of language which linguists identify as complex with what language learners perceive as difficult. In other words much of the work on transferability fails because it lacks psychological validity and therefore doesn't predict much that we don't know already. Some critics have argued that part of the problem lies in the preponderance of work concentrating on surface syntax, phonology and morphology and Rutherford (1982) shows the potential inaccuracy of predictions based on the interplay of markedness, transfer and language distance if discourse considerations are not taken into account.

One of the central problems with attempts to explain the nature and role of transfer is that they seem inadequate and over-simplistic as soon as one begins to consider the acquisition of more complex language. Chapter 4 therefore is concerned with pragmatic transfer and CLI in discourse. This is a potentially rich area of investigation for CLI which is still relatively understudied. For large numbers of learners successful communication in the target language is the goal of learning, but realisation of this goal involves more than achieving grammatical competence, fluent production, or the acquisition of a suitable vocabulary. Ultimately, successful communication demands adhering to conversational norms of appropriacy which require a degree of cultural insight as well as linguistic knowledge.
It is not uncommon to find learners of English who seem linguistically proficient but who feel a certain degree of inadequacy in fully getting their meaning across. Often this is due to pragmatic transfer which may go unnoticed since it is not identifiable at surface structure level. Indeed it is ironic that native listeners are perhaps more tolerant of less advanced learners since their difficulty in communicating is immediately apparent. A learner who appears fluent, however, but who is unsure of the norms of appropriacy, may transfer from the L1 without the difficulty being apparent in surface structure. As Chapter Four illustrates this is often seen as a reflection of the language learner's personality rather than a communication difficulty.

This difficulty is one which text book writers and course designers are only beginning to realise and more empirical research is needed since much of the evidence is currently anecdotal in nature. The suggestion that language teachers involve themselves in 'cultural awareness' training might seem a little premature given the scanty evidence available but drawing learners' attention to the way language is used should be an obvious role for the teacher. The evidence from Chapter four suggests, however, that it may be pedagogically and theoretically useful to distinguish between 'sociolinguistic' and 'sociopragmatic' transfer. The issue here is whether the communication difficulty stems from ignorance of the cultural norm or lack of knowledge about how to encode the cultural norm during language use. The latter is clearly an area for language pedagogy.
The chief difficulty with much of the evidence supporting pragmatic transfer is that it is often anecdotal and descriptive in nature rather than analytical. There is no reason to doubt that pragmatic transfer occurs but what is needed is a principled account of the determinants of pragmatic transfer. In particular it would be useful to relate learners' perceptions of cultural norms as universal or language specific to actual occurrence of transfer and CLI. Bearing in mind the inherent difficulties with judgement tests, it would nevertheless be useful to know whether learners are able to recognise appropriate utterances in a given situation, even although interlanguage production data demonstrates that they are not yet able to produce these situationally appropriate responses themselves. In other words the competence/performance distinction could usefully be applied here to find out if pragmatic transfer is a competence or performance phenomenon. If it turns out to be a competence phenomena it would then be necessary to account for the development of pragmatic competence.
There is a major potential problem with terminology in this thesis since the same phenomenon has been termed transfer, interference, crosslinguistic influence, mother tongue or first language influence, and so on. The traditional and most widely used term is transfer but this is problematical since this term is used differently by different authors though often with similar or partially overlapping meanings. An attempt is made throughout the thesis to retain an author's original terminology even although it may not have been rigorously defined in the original text. It is useful, therefore, to provide a brief explanatory account of the terminology.

Terms such as transfer and interference are still current though some scholars have argued that they are appropriate parlance only within a particular theoretical framework, namely that of the behaviourist school of psychology and its linguistic counterpart, contrastive analysis (see, for example, Corder 1983). It might be useful for the reader to regard the term transfer as meaning the processes that lead to the incorporation of elements from one language into another. (Kellerman and Sharwood Smith 1986). It is distinguishable from the superordinate term crosslinguistic influence which includes transfer but may also refer to influence not resulting in incorporation of L1 structures into the interlanguage, such as 'avoidance' or differential rates of acquisition of certain L2 features.
Where possible I have avoided the term 'interference' because of its negative connotations and association with particular theories. It is difficult enough to isolate CLI per se without making value judgements about its contribution to psychological processes which are not yet fully understood.

For the sake of simplicity, where it is necessary to use the term, 'interference' may be thought of as negative transfer, which means incorporation of LI structures into the interlanguage where those structures are different from the target language. 'Positive transfer' is therefore the more 'facilitative' counterpart of negative transfer.

Despite the fact that many of the above terms are 'loaded' in the sense of not being theory-neutral, it is still easy to find current publications using them without description, definition, or theoretical justification. A good example of this is a recent (1987) publication of 'Learner English' which is subtitled 'A teacher's guide to interference and other problems', edited by Michael Swan and Bernard Smith. Here learners' problems are described in terms of the way their "typical interlanguages deviate from a standard variety of English" but by their own admission the authors do not attempt to "distinguish systematically between interference mistakes and others". The trouble with not making this distinction, however, is that all problems appear due to CLI which is now known to be very wide of the mark. From the pedagogical perspective it must be recognised that different errors may have different aetiology if we are to help learners overcome them.

Contributors to the above publication deal with a particular language or language group and it is interesting that many of the 'errors' arise across a
Grouping these errors under interference tells us very little about the nature of CLI as well as drawing attention away from the very products which might provide a window on universal processes of language acquisition. One of the conclusions which I hope will be able to be drawn from this thesis is not whether SLA can best be explained by reference to transfer or universal processes but by the interaction of universal and language specific phenomena.
SUMMARY OF CHAPTER OUTLINES

Chapter One examines how the role of CLI has been presented in various models of SLA.

Chapter Two tackles the question of whether CLI is a competence or performance phenomenon and attempts to characterise the nature of CLI in each case. Additionally, the question is raised of whether CLI at the performance level can affect the way competence develops.

Chapter Three is concerned with predicting where CLI will occur, under what conditions, and why. An attempt is made to identify the factors which constrain CLI.

Chapter Four illustrates the interaction of cultural and linguistic knowledge in successful communication and looks at the role of pragmatic transfer during language use.
CHAPTER 1

CLI AND MODELS OF SECOND LANGUAGE ACQUISITION

1. Introduction

One of the central areas of interest for second language acquisition studies has been the relationship between first and second language learning and the extent to which the processes are similar. The debate as to whether SLA is more, or less, like L1 acquisition is not the main topic of this thesis but it is important to note from the outset that both sets of learners are confronted with the task of making sense, and gaining mastery of, an enormous volume and variety of data. Exactly how learners set about and, to a greater or lesser extent succeed, in acquiring the rules of correct and appropriate language use, is not entirely known. Nevertheless, a certain amount of uniformity in learner data across learners from different language backgrounds would seem to indicate that learning does not happen in a haphazard fashion but proceeds according to specific principles, only some of which have been identified.

While the overall goal of L1 and L2 learners may be similar the nature of the learners is fundamentally different in certain respects. First language acquisition in children is concurrent with general cognitive development. Whatever the nature of the interaction between the various processes of language development
and maturation it is clear that adults begin the task of acquiring a second language with a fully developed cognitive system and knowledge of at least one language, the mother tongue. The obvious question becomes, then, what use does the adult learner make of this existing knowledge?

Clearly language learning, and indeed the acquisition of any body of knowledge, cannot take place in a vacuum. There has to be interaction between knowledge in store and incoming knowledge, and so even if we could identify and describe all the principles of language learning we would still be faced with the task of explaining how L1 influence works in conjunction with these principles, and explication of the circumstances and conditions under which the L1 plays a role. Of course there are theories of SLA which deny a developmental role for L1 influence, as we shall see shortly, but given the strength of the prima facie case for arguing that existing knowledge is bound to affect perception and processing of incoming knowledge I believe the onus is on such theories to adequately explain how SLA can proceed without L1 influence.

I propose to look at the extent of L1 influence by examining some of the models of SLA in conjunction with some theories of transfer. Such models will not of course be dealt with in their entirety but only to the extent that they provide a theoretical framework within which we may evaluate the role of L1 influence.
As Kellerman (1984) puts it...

"it is impossible to discuss, let alone assess, the evidence for such influence unless one has a theory (hunch, model or hypothesis) however implicit, to guide one in the search for the evidence. Without at least a rudimentary theory, there can be no data, or at least no way of interpreting data, and when one looks at the mass of material that has been presented as evidence for L1 influence, and then the counter-evidence that is brought forward which contradicts it, it will be apparent that a theory of sorts is necessary."

2. Contrastive analysis and behaviourism

Before looking at some models of SLA, however, I wish first of all to look at the contribution of Contrastive Analysis (CA). While CA itself was developed largely in response to the perceived pedagogical need to identify and predict learner errors, it was never intended as a model of SLA, though of course it drew upon psychological and linguistic theories thought relevant at that time. Assumptions about the nature of language learning, implicit in CA, were later challenged, and the methods and conclusions from this type of interlanguage comparison discredited. While CA has a useful and respected tradition in comparative linguistics, its adoption as a tool necessary to explicate language learning can now be seen as unsound. Nevertheless CA remains important so far as L1 influence is concerned, if only because it emerged
before many of the influential models of SLA and theories of interlanguage which, in many cases, were a reaction to, and an attempt to overcome, the inadequacies of CA as a means of explaining learners' behaviour. Indeed the various criticisms levelled at CA might now be seen as yardsticks with which to measure later models and explanations of SLA and L1 influence.

2.1. Learning theory implicit in contrastive analysis

The psychological aspect of CA was deeply rooted in the learning theory proposed by the behaviourist school of psychology which treated language learning as being no different from other types of learning. Essentially the learning process began by associating a particular response with a particular stimulus. Regular linking of response to stimulus resulted in habit formation, and the learning process was complete when a response became automatic in the sense that it occurred spontaneously, automatically, and without awareness. This meant 'undesirable' habits were extremely difficult to eradicate, which is why language teaching based on this psychological approach stressed the importance of avoiding error, lest the error became habit. This is somewhat curious since errors were supposed to be a reflection of learning the 'wrong' habits in the first place.
2.2. Role of transfer in language learning

In L1 acquisition children were thought to learn their mother tongue by mimicking adult utterances, while the positive or negative reaction of parents was seen as reinforcing the stimulus - response links eventually resulting in adoption of the 'correct' language habits. SLA was seen as proceeding in much the same way, except that habits appropriate for the L1 but not the L2 were thought to 'get in the way' of learning new habits. This 'interference' was the result of proactive inhibition which was the term applied to the psychological process whereby previous learning interfered with attempts at new learning.

Within this behaviourist framework, then, SLA was a process of formation of habits appropriate to the L2 which often necessitated overcoming L1 habits. Initially, the L1 habit would be transferred to the L2 setting. Sometimes this would be appropriate and lead to the correct response (positive transfer) and sometimes inappropriate leading to error (negative transfer). The degree of practice required to eradicate an inappropriate response and master the appropriate L2 habit depended upon the notion of language distance. The further apart the languages, the more difficult it was to learn the appropriate habit and therefore the greater the persistence of learner error due to transfer of the L1 habit. This
is somewhat paradoxical considering later theories regarded similarity between languages as a key factor in determining whether transfer would take place. Thus for example Wode (1978d) states:

"Only if L1 and L2 have structures meeting a crucial similarity measure will there be interference, ie reliance on prior L1 knowledge."

2.3. Contrastivist methodology

The linguistic aspect of CA, then, was to identify and categorise differences between languages likely to lead to learning difficulty and error. For this purpose CA drew heavily upon the methods and categories from structuralist linguistics. Essentially the method of comparison involved establishing translation equivalence between the surface categories of languages. The more sophisticated applications of contrastive methodology not only took account of differences, but the types of difference revealed by comparison. For example, Stockwell, Bowen and Martin (1965) proposed a hierarchy of difficulty for certain L1/L2 contrasts, depending on whether movement from L1 to L2 involved acquiring new distinctions, refining existing ones (divergence), merging existing ones into a simpler set (convergence), abandoning distinctions altogether, or recognising isomorphism.
2.4. The significance of errors

Pedagogical approaches rooted in the contrastivist/behaviourist theory of learning stressed the importance of preventing learners from making errors. If properly applied it was believed that contrastive analysis could pinpoint where errors were likely to occur. Errors which did occur were analysed by comparing learner output with the L1 form and the target language norm. In other words learner output was seen only in terms of correct usage according to the target norm, or as an error, in which case it was seen as a reflection of non-learning as opposed to wrong learning. Errors were regarded as evidence for L1 intrusion and lack of mastery of the correct L2 form. They were not, however, analysed with a view to finding out what was going on inside the learner's head since mental processes were not under consideration within this framework. Ideally, CA would reveal areas of potential difficulty and some errors might be 'pre-empted' by teachers isolating and practising the relevant forms, with the aim of fostering correct language habits.

In sum then we might see CA as an attempt to explain the psychological process of learning by a kind of linguistic reductionism. As James (1980) puts it:
"Contrastivists see it as their goal to explain certain aspects of L2 learning. Their means are descriptive accounts of the learner's L1 and the L2 to be learnt, and techniques for the comparison of these descriptions. In other words, the goal belongs to psychology while the means are derived from linguistic science."

2.5. Weaknesses of the contrastive analysis approach

2.5.1. Weakness of learning theory

Fundamentally I think it is possible to identify three general areas of weakness in the CA approach. Firstly it was not based on an adequate psychological theory. In particular the correspondence between linguistic difference and psychological difficulty on the one hand, and the causal link between difficulty and error, on the other, reflect unwarranted assumptions rather than sound theory or empirical observation. By pointing out that, for example, the theory was unable to cope with the creative aspect of language learning, ie the ability to produce language which the user has not heard before or for which there was no obvious stimulus, Chomsky's criticisms acted as a catalyst in swelling the tide of opinion against the stimulus-response model of learning. While the various criticisms tended to come from researchers interested in L1 acquisition there were obvious implications for SLA. Empirical observation suggested parents did not in practise 'correct' children's utterances, bringing into question the whole idea of habit formation through stimulus-response and reinforcement. If language acquisition did not result from habit formation then interference from L1 habits would be unlikely. For example in L2 learner output...
2.5.2. Inadequate theory of language structure

A second major area of weakness was the rather unsophisticated means of comparing languages. Very often this involved comparison of surface features only, which is now regarded as reflecting the lack of an adequate theory of language structure. The idea of comparing surface structure features by translation equivalence presupposes that the languages under scrutiny share the categories serving as the basis for comparison. While this might be the case for closely related languages such as English and German, it was less true of 'distant' languages such as English and Chinese. Ideally, categories should be universal, but the 'universal' grammars which emerged later were based not on surface features but underlying abstract principles. Even if these universal grammars were used as tools for comparison, however, they could at best account for correct language use while a full explication of SLA demands consideration of appropriate language use as well. Furthermore, CA could at best explain what was learned and could have said nothing about how, reflecting an orientation toward the product of learning rather than the process.

2.5.3. Emphasis on product

This emphasis on product at the expense of process is a third area of weakness, reflected in the contrastavists treatment of learner errors. By focusing upon the full forms of the two existing languages as spoken by native speakers of each, CA ignored the contribution of the learner to the developmental steps necessary
before the target norm is reached. By treating errors as evidence of non-learning, analysts missed what errors might reveal about the intermediate stages between the start and finishing posts in language learning. Relevant here is the failure of CA to distinguish between competence and performance errors. A learner may make an error for a variety of reasons, one of which might be because he hasn't acquired the necessary rule. In such a case we can say the learner has not acquired the necessary linguistic competence. On the other hand, an error may be due to the fact that the learner has not acquired the necessary processing routines necessary for production, but knows perfectly well the linguistic rule necessary. This is hardly 'non-learning'.

2.5.4. Empirical evidence

In short, contrastive methodology misses most of the significance of errors. A simple example would be to analyse a couple of errors, common in L1 and L2 acquisition, of the type,

Mary doesn't likes apples
John goed to his house

Within a contrastivist framework this is evidence of non-learning, but misses the possible explanation of learner over-generalisation, which is itself evidence of a learning strategy. Not only do the above examples provide evidence for some sort of hypothesis
testing on the part of the learner, but may be seen as a manifestation of the learner's rule system at that stage of development. In other words, some errors may offer a window to the processes of language development, but can only do so if learner output is examined in terms of the learner's own internal system rather than by comparison with the native and target language.

In addition to theoretical weakness, the value of CA to language pedagogy was questioned by a variety of empirical evidence which seemed to show that contrastivist methodology seriously underestimated some types of error, while overestimating others. Since errors were said to arise through transfer from the L1, CA both overemphasised and underestimated the role of transfer and the nature of L1 influence. In short, the validity of CA was called into question by empirical studies which claimed that learner behaviour, as predicted by CA, did not correspond with what learners actually did. Thus according to some research (eg Wardaugh 1970; Richards 1971) CA was simply unable to handle learner data. This lack of validity according to the data revealed through empirical studies was not confined to the prediction of learners' errors. A study of 2,500 Japanese learners of English by Whitman and Jackson (1972) indicated it was similarities between Japanese and English which caused the greatest problems.
2.6. The reaction against contrastive analysis

The demise of CA and behaviourist learning theory was accompanied by a reaction against transfer and L1 influence which had been associated with it. An increasing number of studies comparing the output of learners from different language backgrounds drew attention to errors which not only indicated the possibility of a common path of development but highlighted the methodological inadequacy of comparing output in terms of the native and target languages only. The following study by Von Statterheins (1982) of the acquisition of German by Turkish immigrants, illustrates how transfer tends to be overpredicted by comparison of learner output with the native and target languages.

Since Turkish requires obligatory aspectual marking, it would be predicted that learners might look for linguistic (lexical) means to mark the relevant concepts, and it was thought they used 'immer*' for aspectual marking. The frequent and deviant use of 'immer' was thus explained by transfer at the conceptual level. However Meisel (1981) found that Italian and Spanish learners of German also used 'immer' in deviant ways. So learners with different language backgrounds showed the same pattern in their speech which apparently rules out transfer.

2.6.1. A cognitive framework

Partly in response to the inadequacies of CA, behaviourism, and

* 'immer' = always, ever.
pedagogical theory and practice rooted in this framework, a theoretical reorientation in SLA research was proposed by Corder (1971), Nemser (1971) and Selinker (1972). Common amongst their approach was a view that second-language learners continually revise their underlying grammatical systems as they progress along a developmental continuum until the target grammar is reached. The psychological framework for such interlanguage studies is cognitive with the learner making an active contribution to the learning process. The fundamental aim of interlanguage studies was to describe and explain the nature of the underlying rule system which makes up the learner's grammar. The goal was therefore process oriented in that interlanguage studies hoped to shed light on the process of development. Initially the methodology adopted was error analysis which is somewhat ironic since errors can only be identified by comparing learner output with the target language norm, ie product. Nevertheless the goal of error analysis was to generate hypotheses about the nature of the SLA process.

2.6.2. An alternative view of the significance of errors

An example of this approach is the study by Richards (1971)
Richards suggested four causes of errors: overgeneralisations, ignorance of rule restrictions, incomplete application of rules, and false concepts being hypothesised by the learner. Meanwhile other research concentrated on the development of grammatical subsystems, which seemed to suggest common stages of development, irrespective of language background. An example is the acquisition of English negation, which developed in sequence 'no V', 'don't V', 'aux-neg', and finally analysed 'don't', irrespective of the learner's L1 (Cazden, Cancino, Rosansky, and Schumann 1975).

2.6.3. A common pattern of development

These common patterns of development across interlanguages, patterns in common error types, and common sequences in the emergence of linguistic subsystems such as interrogatives, negation, and relative clause formation, offered strong evidence for the systematicity of interlanguage output and against the ubiquitous nature of L1 influence. But perhaps the most telling blow to transfer came with the hypothesis offered by Dulay and Burt which stressed the similarities between L1 and L2 acquisition and minimised the influence of the L1. Dulay and Burt (1972) re-analysed a number of 'interference - like goofs' within their own L1 = L2 hypothesis and explained them as over generalisations of L2 material or development errors which parallel L1 acquisitional forms. In a later paper (Dulay and Burt 1973, 1974a) they calculated
the frequency of error types in the output of Spanish speaking children learning English. Their conclusion was that 85% of errors were developmental, 12% unique, and only 3% were attributable to interference. Such evidence was offered to support the authors' claim that L1 influence was significant only within the linguistic domain of phonology.

2.6.4. Minimising CLI

In addition to this type of error frequency count, the series of investigations called morpheme studies also provided evidence which seemed to support the view that L1 influence in SLA was minimal or even non-existent. A longitudinal study by Brown (1973) of three American children acquiring English as their mother tongue reported a common order of appearance of a set of English grammatical morphemes accurately supplied in obligatory contexts. This finding was subsequently confirmed by a number of cross-sectional studies by de Villiers--and de Villiers (1973). The application of morpheme studies duly followed in SLA research and can, with hindsight, be seen as a catalyst for the minimalisation of L1 influence in SLA. Several studies (Dulay and Burt 1974b; Bailey, Madden and Krashen 1974; Larsen - Freeman 1975a) confirmed a common acquisition order for English morphemes. These cross-sectional studies involved both children and adults from a variety
of language backgrounds and while differences were found according
to subjects' L1 and the types of task used to gather data, (Larsen
- Freeman 1975a), these differences were thought insufficient
to obscure the common pattern in the order statistically. Longitud-
inal studies, though revealing some variation at the individual
level, did not find accuracy orders significantly different from
orders obtained cross-sectionally (Andersen 1977, 1978; Krashen
1977). The exception here was Hakuta's study of 'Uguisu', a
Japanese child learning English. Thus when Krashen (1977) reviewed
21 longitudinal and cross-sectional L1 and L2 studies he found
evidence for what he termed a 'natural order' for SLA. According
to Krashen this 'natural order' is the manifestation of a common
underlying learning process which he termed 'acquisition' in
distinction to learning which is a different psychological process.
Before looking at the model of SLA proposed by Krashen, however,
it is necessary to put into perspective the type of evidence
thrown up by error counts and analysis and morpheme studies which
was used by those who saw a minimal role for the L1 in the SLA
process.

2.7. Assessment of error analysis

First of all, although the goal of error analysis was to provide
a picture of the SLA process, it was inherently product oriented.
By comparing learner output with the target norm, error analysis misses the functional significance of a particular form at particular stages of development. To this extent it focuses attention away from the process of SLA and does not contribute to our knowledge of how languages are acquired. Furthermore, many of the studies carried out within the error analysis framework tended to attribute a single cause to an error despite the logical possibility of variability in the aetiology of such errors.

2.7.1. Errors due to transfer

This tendency to attribute a single cause to errors for which two or more plausible sources exist goes some way to explaining the wide divergence of views on what proportion of errors can be put down to transfer. The extent of the discrepancy may also be a reflection of the fact that analysis has to take place within some theoretical framework. The range of opinion can be seen from the following table which suggests that Dulay and Burt's 3 per cent estimate of error attributable to transfer is significantly lower than the mean.
<table>
<thead>
<tr>
<th>Study</th>
<th>% of interference errors</th>
<th>Type of learner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grauberg (1971)</td>
<td>36%</td>
<td>First language German - adult, advanced</td>
</tr>
<tr>
<td>George (1972)</td>
<td>33% (approx)</td>
<td>Mixed first languages - adult, graduate</td>
</tr>
<tr>
<td>Dulay and Burt (1973)</td>
<td>3%</td>
<td>First language Spanish - children, mixed level</td>
</tr>
<tr>
<td>Tran-Chi-Chau (1974)</td>
<td>51%</td>
<td>First language Chinese - adult, mixed level</td>
</tr>
<tr>
<td>Mukattash (1977)</td>
<td>23%</td>
<td>First language Arabic - adult</td>
</tr>
<tr>
<td>Flick (1980)</td>
<td>31%</td>
<td>First language Spanish - adult, mixed level</td>
</tr>
<tr>
<td>Lott (1983)</td>
<td>50% (approx)</td>
<td>First language Italian - adult, university</td>
</tr>
</tbody>
</table>

Percentage of interference errors reported by various studies of L2 English grammar - table cited in Ellis (1985), pp 29.

2.7.2. Avoidance behaviour

A more important criticism of error analysis as far as transfer is concerned, is that it fails to analyse learner output which does not overtly result in error. In particular it misses the phenomenon of avoidance induced by the L1, identified by Schachter (1974) and supported by a later study by Kleinmann (1977). Schachter investigated the relative clauses produced by adult L2 learners from different language backgrounds. She found that fewer errors were made by Chinese and Japanese learners, whose first languages do not contain English-like relative clauses. Arabic and Persian learners, however, whose languages do resemble English in relative clause structure, did make significantly more errors than their Japanese and Chinese counterparts. Schachter concluded, however,
that this was due to the fact that the Japanese and Chinese learners made fewer attempts at using relative clauses in the first place and she attributed this avoidance to the L1. Another study by Bertkau (1974) of Japanese and Spanish learners further suggested that the Learner's L1 played a definite role in both production and comprehension of an L2. It is interesting to note that the error frequency count of the type used in the studies by Dulay and Burt, and CA, both miss the phenomenon of avoidance, suggesting that while the L1 may have a role in SLA it is certainly not described accurately within these frameworks.

2.8. Morpheme studies and CLI

Morpheme studies also missed 'avoidance' since a learner might easily bypass a particular morpheme, for example by circumlocution, as in 'the death of his adversary' instead of 'his adversary's death'. While it is true that morpheme studies looked at all performance data rather than just erroneous performance, it was still oriented toward the target language norm. As Brown (1973) points out it looks at the order in which morphemes 'cross the finishing line' which may not be the order in which they first appear and/or develop prior to that moment.

These, and a number of other criticisms have been noted by Long and Sato (1984). In particular they point out that 'supplied in obligatory
contexts' analysis overestimates learners' level of development and may attribute to them a degree of competence which they do not have by concealing a lack of mastery shown elsewhere in non-obligatory contexts, thereby disguising a certain lack of competence to use the language creatively. Long and Sato also point out a number of ways in which results may be distorted, eg a native speaker of Polish might omit all articles in English, and thereby obtain credit for non-suppliance in obligatory context for zero article. Similarly, an English speaking child learning Spanish studied by Andersen (1982b) would have scored approximately 50% for gender marking on Spanish definite and indefinite articles on 'supplied in obligatory contexts' analysis (had this been used) by virtue of having just one definite article (feminine 'la') and one indefinite article (masculine 'un'), which he used in all contexts. The child therefore marked 100% of the contexts for the feminine definite article correctly, but none of the masculine form.

2.8.1. Relationship between form and function

In addition, accuracy of usage in obligatory context does not mean a learner knows the function of a given form. Mastery of form coupled with less than adequate functional competence may well lead to overproduction of a specific feature eg the -ing
form of the verb may be used in all contexts, both appropriate and inappropriate. This is also the view put forward by Lightbown, Spada and Wallace (1983) following a longitudinal study of ESL development of 175 French speaking students. They conclude that the cross-sectional 'obligatory contexts' methodology fails to capture important aspects of the development of learners' control of particular linguistic structures.

'Even 90% correct supplying of a form in obligatory contexts cannot by taken alone as sufficient evidence that the learner knows the functions of the form or the restrictions on its uses. That is, incorrect utterances as well as correct ones may be generated by the same rules. For example, in this study, many students appeared to use the copula, -s, -ing and, in many cases, the auxiliary, almost without error. However evidence from outside the obligatory contexts showed that they also over-extended these forms, using them where they did not belong.'

Perhaps the most potent criticism, however, is that, like CA, the morpheme studies focus on the final product and tell us nothing about the stages of transitional competence and the developmental processes taking place before the mastery of forms in production (Meisel, Clahsen and Peinemann 1981). The correspondence between order of accuracy and order of acquisition leading to claims of a 'natural process of acquisition' is therefore based on assumption rather than empirical evidence. The claim is further weakened by the biased nature of the studies which
concentrated on English learners, making cross-linguistic generalisation impossible.

3. The monitor model and CLI

Despite these criticisms Krashen's claim that evidence exists of a common underlying process and his distinction between learning and acquisition was an important advance in SLA research because it directly attempted to account for the learning process itself. While Krashen's 'Monitor model' still minimised the role of the L1 there was no attempt at classifying particular features of learner output as transfer-induced or otherwise.

3.1. Acquisition and learning

The distinction between acquisition and learning is central to Krashen's model and relates to the way new (L2) knowledge is internalised and added to the existing knowledge store, and is also relevant to the way the different types of knowledge are used in production. In SLA acquired knowledge is the result of comprehensible input just beyond the learner's current level of knowledge (the i + 1 level). The process of making sense of the input and adding it to the knowledge store is subconscious but requires participation in 'natural communication' with the
focus on meaning rather than form. Knowledge acquired in this way is stored in the left hemisphere of the brain in specific language areas where it is automatically processed. Learnt knowledge on the other hand, is essentially metalinguistic in nature and is achieved by focus on form rather than meaning. Numerous studies indicating focus on form is a feature of classroom interaction (for a review see Long 1983) have perhaps reinforced a tendency to associate 'learning' with the classroom setting and 'acquisition' with a natural setting. While learnt knowledge is also stored in the left hemisphere it is not processed automatically but through conscious effort, and storage is not in the language specific area of the brain. While 'acquired' knowledge is used for both comprehension and production 'learnt' knowledge can be utilised only by the Monitor to edit language output.

3.1.1. Acquired knowledge and learnt knowledge

The Monitor may be thought of as an extra step in production, using 'learnt' knowledge to modify utterances based on 'acquired' knowledge. In other words it is acquired knowledge which determines the level of competence. Production may sometimes outstrip competence if learnt knowledge is used to modify acquired knowledge but this requires the learner to spend extra time thinking metalinguistically about the form of the utterance with the necessary prerequisite
that the learner knows the linguistic rule. Learnt knowledge therefore cannot be used, and according to Krashen cannot ever become, acquired knowledge available for use automatically and spontaneously.

The natural order of acquisition referred to previously is claimed to be a reflection of the natural process of acquisition, with the implication that 'learnt' knowledge may be manifested by a non-standard order in the appearance of the relevant language features. Variation in the rate of development, but not the route, is explained with reference to the 'Affective Filter' proposed by Dulay and Burt (1977), which claims that learner specific factors such as level of motivation, anxiety and so on determine the amount of input which becomes intake. In other words even if the same input is available to different learners, affective factors will filter the input so that for example high anxiety learners will take in less of the input.

3.1.2. CLI and learnt knowledge

According to Krashen, the L1 has a role to play only in the monitoring of output and is not part of the acquisition process which is the same irrespective of the L1 or target language. Language distance is therefore not a factor in determining the nature
of the task in acquiring an L2. Thus even when L1 influence is shown to be a factor in output, Krashen would argue that it was a manifestation of 'learning' and not 'acquisition'. Thus, while transfer may be a feature of learner output, it has no part to play in the developmental process. L1 influence is therefore seen as a performance feature only and not influential in transitional competence. This point will receive further consideration in the section dealing with the competence/performance distinction but in the meantime I shall attempt to evaluate Krashen's model from the perspective of L1 influence in SLA.

3.2. Assessment of the Monitor model and CLI

Krashen's model is useful in that it addresses the fundamental question of how learners make sense of the L2 and how incoming knowledge is processed and added to the existing store. It explains lack of L1 influence in acquisition by postulating separate 'subconscious' and 'conscious' processing routines which distinguish acquisition from learning. To a certain extent the separation of systems receives support from Lamendella's Nuerofunctional Theory which assigns communicative function and general cognitive functions to separate parts of the brain. (Lamendella 1977). 'L1 induced' and 'learned' features are processed and stored in a different way from 'acquired' features. The problem is,
however, that Krashen does not really describe the actual cognitive processes involved in either acquisition or learning, and since there is no adequate way of tapping subconscious processes without making them conscious, there is no empirical way of testing this theory. In addition the claim that learning can never become acquisition is questionable given that learners have acquired second languages in a variety of settings including classrooms where focus on form rather than meaning is the norm. To be fair Krashen's approach is strongly nativist with a minimal role for learner setting, so presumably he would argue that comprehensible input is available in a classroom, albeit probably inadvertently. Nevertheless a number of researchers have challenged Krashen's complete separation of learning and acquisition on the grounds that when 'learnt' knowledge is automatised through practice it becomes 'acquired' in the sense that it can be used automatically and spontaneously. (Rivers 1980; Sharwood-Smith 1981; Gregg 1984).

4. Universal and language specific aspects of SLA

At this point it may be worth reflecting for a moment on the pendulum swings in SLA theorising with regard to L1 influence. In many ways the framework of behaviourism/CA on the one hand, and that of Krashen, Dulay and Burt, on the other, represent opposite ends of a continuum. Within the behaviourist framework progress in acquiring an L2 is largely dependent on factors external
to the learner. The way in which a particular L2 is learned depends crucially on the extent of interference from the L1 and the 'linguistic distance' between the native and target language which determines the level of difficulty likely to be encountered in adopting and adapting to L2 habits. Within the mentalist framework, on the other hand, emphasis is put on a person's innate mental capacities for acquiring a language, with the linguistic environment of peripheral importance to development. The idea of learners responding to a 'built in' syllabus perhaps not unlike that suggested by Corder (1967) a decade earlier drew upon evidence from the morpheme studies and the pattern of acquisition of various linguistic subsystems which stressed the similarity in the path of development irrespective of language background. The pendulum had swung from a position which saw second language learning as little else than a process of transfer, to a view of acquisition proceeding completely independent of L1 influence.

It would appear in retrospect that while CA clearly overestimated the role of transfer and misconstrues the nature of L1 influence, the strongly nativistic framework adopted by Krashen and others underestimates the importance of environmental factors in general, and L1 influence in particular. Such a conclusion need not appeal to new evidence but merely requires existing evidence to be re-examined from a different theoretical perspective. In particular,
re-assessment of the morpheme studies and the pattern of acquisition of the various linguistic subsystems allows for a greater degree of L1 influence, and the extent to which they offer evidence for a universal and natural order of acquisition is open to question.

4.1. Evidence of a natural order of acquisition

As I pointed out earlier, the assumption that the order of accuracy is the same as the order of development need not be accepted. Indeed attempts to test the validity of the morpheme studies against case studies of individual learners (Hakuta 1974; Rosansky 1976) suggested that 'accuracy order' was not the same as 'acquisition order'. Perhaps the strongest evidence for a natural route in the development of grammar comes from the acquisition of particular subsystems. Evidence from the acquisition of negatives, interrogatives, and relative clauses is, however, far from conclusive. While there is evidence that a common path of development is followed by all learners, this is not universal in the sense that all learners acquire every item in exactly the same order. Variation exists at the individual level, perhaps due in part to different learning styles and affective factors (Hatch 1974), and also between groups of learners with different language backgrounds.
4.1.1. Pattern of acquisition of English negation

Turning firstly to studies of negation, Ellis (1986) provides the following outline of the sequence and order of development of the negative in English. His outline is based on the path of development common to a number of studies (Ravem 1968; Milon 1974; Cazden et al. 1975; Wode 1976 and 1980a; Adams 1978; Butterworth and Hatch 1978).

The first stage of development is characterised by external negation eg 'no like English'. This is followed by a stage where the negative particle is moved inside, as in 'I no like English'. A third stage is marked by the negative being attached to modal verbs eg 'I won't speak', though 'won't' may be somewhat irregularly used as an analysed unit. Finally the target norm is reached, at which point 'not' is used regularly as the negative particle with marking for tense and number. While this may be the 'normal' sequence, Ellis notes that learners with German or Norwegian as L1 go through an additional stage involving main verb negation. There are also individual differences as to choice of negative particles, all starting with 'no' but some adding 'not' and others 'don't' in the next stage.
This influence from the native language is further illustrated by Kellerman (1984) in a review of empirical evidence on the acquisition of the negative. In particular he cites the reanalysis by Hammarberg (1979) of a study by Hyltenstam (1977) showing that learners with different native languages go through the same sequence of development with regard to the placement of the negative particle in Swedish in both main and subordinate clauses.

Hammerberg suggests, however, that English speaking learners, and others with native languages which do not have preverbal negation as the norm, do not pass through the first stage marked by preverbal negation. As Kellerman puts it, English as an L1 provides learners with a 'leg-up' along the developmental ladder because English is more like Swedish in negative construction than the other source languages studied by Hyltenstam. The other side of the same coin is that Spanish speaking learners spend longer on the external negation stage. Other studies by Wode (1976b; 1984); Cancino, Rosansky and Schumann (1978) and Schumann's (1979) overview, all support the view that the so-called 'universal' order of acquisition masks differences traceable to L1 influence.

It is perhaps worth emphasising the obvious point that the degree of similarity in patterns of development noted by many of the studies above does not mean that all theorists share similar
views on why the patterns emerge as they do. While Krashen views them as evidence for common processes, Wode (1984) sees the developmental sequences as a reflection of the internal complexity of the structure being learnt, which for Wode means the degree of markedness. Similarly the acquisition order for Wh-questions of Burt and Dulay (1980) has been reanalysed by Rutherford (1982) to show the influence of markedness factors.

4.1.2. Relative clause formation

The way in which learners acquire relative clause formation and reflexive pronouns has also received much attention from the 'universal route of development' perspective. Mention has already been made of Schachter's (1974) study on 'avoidance' of relative clause formation amongst Japanese and Chinese students. Schachter made use of the work of Keenan and Comrie (1972) on relative clauses and the noun phrase accessibility hierarchy, which showed a general ordering of relative clause types in languages according to the function of the relativized noun phrase head in the clause. The order of the Accessibility Hierarchy is Subject - Direct Object - Indirect Object - Oblique (object of preposition) - Genitive (possessive) - Object of comparative particle. What the hierarchy means is that if a language permits relative pronouns with a given grammatical function (eg, genitive) then it will also permit relative clauses with all the pronoun functions higher
in the hierarchy (e.g., direct object). Languages differ according to the lowest position where relativization can take place. Schachter's study showed not only that Persian and Arabic speakers produced almost as many relative clauses as native speakers, but roughly two or three times as many as the Chinese and Japanese learners. As we have noted, this is put down to L1 influence, Chinese and Japanese both being left branching while Arabic and Persian are right branching like the target language. It was also found, however, that Persians make more errors than Arab learners due to erroneous insertion of a reflexive pronoun. Data from Comrie and Keenan suggest that obligatory use of reflexive pronouns is maximal in Persian relative clause formation while in Arabic it is compulsory for all positions except subject and direct object. Thus the higher proportion of errors by Persians in using reflexive pronouns is predictable from contrasting Arabic and Persian within the framework of Comrie and Keenan's accessibility hierarchy.

Relative clause formation has also been the focus of a number of studies by Gass (Gass 1979; Gass and Ard 1980) who used three different types of elicitation task - a grammatical judgement task, a sentence-combining task and a free composition task. Comparing the accuracy order for different pronoun functions, Gass found it followed the (1979) accessibility hierarchy. That is to say the easiest position to relativize, or the relative clause type most used, was that of subject, followed by direct
object etc. This was true whether the task was free composition or sentence combining, except that in the latter case learners performed better with the genitive than predicted by position in the hierarchy. Gass suggests this may have been because 'whose + noun' may have been perceived as one unit. In the judgement task, Gass noted a possible transfer effect with subjects much more likely to accept reflexive pronouns in the first three positions of the hierarchy if their native languages shared this property with the target.

Firm conclusions on the extent of L1 influence on relative clause formation are difficult due to methodological problems in isolating the L1 as a variable. Hylenstam (1983) and Liceras (1983) report different results according to the nature of the task used for elicitation and general agreement seems restricted to the predictive power of the accessibility hierarchy vis a vis frequency of reflexive pronoun use in free composition. While the balance of evidence is weighted slightly in favour of L1 influence, there is also evidence to suggest that other learners with different native languages also accept and produce reflexive pronouns in a variety of tasks.
4.1.3. Reconciling universal and language specific aspects of SLA

The apparently opposing claims about the universality of the developmental continuum, on the one hand, and differences traceable to native language influence on the other, can be reconciled according to Ellis (1985) by distinguishing between the sequence of development and the order of development. Sequence refers to the overall development and is universal in the sense that all learners pass through predictable stages eg external negation will always precede internal negation. Ll influence may be apparent, however, in the order in which specific features are acquired or may be manifested by an extra stage such as main-verb inversion, (eg as in some German learners of English). As Ellis puts it, "Learners take the same road but they do not necessarily drive along it the same way". If we add to this the finding that some learners may get temporarily stuck at one point (eg Spanish with external negation) we can also conclude that they may proceed along the road at different speeds on different stretches of road.

4.2. Transfer and natural principles of acquisition

Whatever the precise nature of the relationship between natural
or universal features of acquisition and L1 induced forms, many theorists have accepted both types of phenomena and have sought to incorporate both aspects into their models of SLA. In other words, from this perspective there is no attempt to deny the existence of transfer or of the natural principles of acquisition, whatever they may be. Rather the focus of attention is on how transfer operates in conjunction with these natural principles. An important distinction here is made between those who see transfer occurring in place of natural acquisition processes and those who view transfer as part of the natural acquisition process. An example of the former view can be found in the explication of SLA found in Zobl (1983; 1984).

4.2.1. Transfer in place of natural acquisition processes

Zobl's account of SLA appears to draw on two different theoretical sources, universal grammar and language typologies. According to Zobl (1983; 1984); Kean (1984); Cook (1985); and White (1985a) L2 learners, like L1 learners, acquire a complex system of language and linguistic knowledge which is underdetermined by the input. The learner is assisted with the learnability problem by 'innate', biologically endowed principles which constrain the way human languages are formed and perceived. In other words there are
constraints on the kinds of hypothesis that learners form, or within the terms of Zobl's account, on the kinds of projections that learners can make. In addition to UG, the way in which languages are acquired depends crucially according to Zobl (1983c), on the structure of language which is presented in the following way:

```
Language
Type
Langue +\n  
  norm specification
```

Zobl's model views natural languages as "instantiations of a set of universal principles and a series of structural options which more or less stringently define subsequent options until the level of langue is reached". Another way of interpreting the model is to view the arrow as a continuum from the core to the periphery of language structure. At the core are the 'universal' features of language while language specific or unique features are found at the + specification end of the continuum. So the way in which a learner perceives the L2 is constrained by the principles of UG which make up the core. The learner is equipped
with a projection capacity which enables the learner to acquire core features. It is activated upon exposure to data which uniquely define a correlated attribute of the language. The postulation of uniquely defined projections follows from a number of inviolable typological implications; e.g., if the word order of a language is verb-subject-object then the language will also have prepositions. So the projection device is triggered once one rule in a cluster or hierarchy has been acquired and implicated rules are acquired 'free'. It can be expected then that learners will rapidly acquire features belonging to the core, or implicationally predicted by the core if the L2 is typologically consistent. Very little input is needed for learners to acquire core properties and the language acquisition device can project implicationally-predictable features of the L2 without explicit L2 input that contains these features. At this stage the L1 is not involved at all, but as the periphery is approached (+ specified end of the scale of linguistic differentiation), projections become indeterminate and the device ceases to operate. At this point other learning strategies take over and the role of the L1 may become more influential.

According to Zobl the L1 serves as an 'auxiliary evaluation measure' which takes over when the projection device ceases to operate. L1 knowledge is used as a substitute for acquisition when the learner faces a learnability problem which may arise for at least
three reasons, typological indeterminacy, typological inconsistency, or because of typological specialisation. Examples of the latter case cited by Zobl are subject prominence and grammatical word-order prominence which are specialised features falling in the (+ specified) range and are peripheral rules outwith the scope of the projection device. In the other two learning problems the learner substitutes an L1 rule because the L2 rule is obscure. Where the L2 is typologically inconsistent, universal implicational relationships among rules are not manifest in the L2, so that the projection which the learner makes on the basis of his expectancy that the 'normal' implicational patterns will hold is refuted by the L2 data. The learner solves this problem by turning to the L1, especially if the equivalent L1 rule is more typologically consistent. This is analogous to Kellerman's (1983b) postulation of a 'reasonable entity principle' which states that learners "will strive to maximize the systematic, the explicit, and the logical in their L1", consequently, L1 structures which would serve to work against the assumed reasonableness of the L2 will tend not to be transferred and those that would bolster it can serve as transfer models. An L2 rule may also be obscure as a result of typological indeterminacy, or 'fuzziness'. This may arise with properties not stringently controlled by the overall typology eg the order of adjective and noun, or the position of adverbs, which is highly variable in different languages.
The limited extent of the influence of the L1 in this account of the acquisition process is made explicit by Zobl who concludes, 'the theoretical position adopted in this paper assigns a rather restricted role to the L1 in interlanguage'. Just how restricted a role it is, however, seems to depend crucially on the nature of the core/periphery distinction which has a central position in Zobl's account. The problem is that the model begs the question of what exactly is in the core and what is in the periphery. In particular one is left to wonder where Zobl would place discourse -semantic and discourse pragmatic features of language. I suspect that within such a syntax-led model these features would be assigned to the periphery which arguably undervalues the function of other areas of language and language use. It may even turn out that the core is such a small core that the role of the L1 is not so limited after all, by virtue of the fact that the projective capacity is unable to function outside the core which could mean the bulk of language features.

As we have already noted, Zobl's account draws heavily from two different theoretical sources, Universal Grammar and language typologies. The motivation for doing so is not made explicit by Zobl but one possibility is that he sees typological groupings falling out as they do because of the constraints on the form of human languages imposed by universal grammar which provide the principles upon which any particular language is based. These are the principles which are available to learners by genetic
endowment and enable learners to project core rules within Zobi's model. Essentially this takes us back to the 'innateness' argument which, though plausible, is not very amenable to empirical testing.

4.2.2. Transfer in conjunction with natural acquisition processes

By way of contrast some theorists have accepted linguistic universals and typological groupings as limiting the ways languages can differ, without necessarily accepting the 'innateness' of their origins. An example here would be Andersen (1983b) who views the L1 as a filter which governs the learner's perception and retention of specific features of the L2 input. His 'Transfer to Somewhere' principle outlines conditions for the operation of transfer from the L1 to either promote or delay acquisition of a given form or construction in the target language. Andersen is concerned to show transfer operating in conjunction with natural acquisition processes based on the operating principles of Naro, Slobin (1973), and Traugott (1973). Andersen is not concerned with identifying all of the principles involved nor of arguing for their validity, but seeks to illustrate how transfer works in conjunction with these general principles, whatever they are. For Andersen then, the L1 constrains a learner's perception of the L2 and transfer is likely where some congruence between the L1 and L2 exists.
In many ways Andersen's account is similar to Zobl's except that Andersen explicates the learning process by reference to cognitive principles available for use as a learning strategy. Presumably some learners are better at using some principles than others which would account for a certain degree of variability at the individual level, while the availability of the same operating principles to all learners irrespective of language background would go some way to explaining the 'commonality' of much of the developmental process.

4.2.3. Transfer as a constraint in hypothesis formation

Another model which views transfer as a constraint is that of Schachter (1974) who is one of a number of theorists who view language learning as a process of hypothesis testing. (See also, for example, Adjemian 1983; Gundel and Tarone 1983). Though the kinds of hypothesis formed by learners are not thought to be constrained by innate principles, this does not mean learning proceeds in an ad hoc fashion. Learning proceeds by inductive and deductive inferencing, using the same cognitive mechanisms responsible for the learning of concepts. Having formed a hypothesis learners use L2 data to verify or disconfirm. Disconfirming evidence results in the learner abandoning the current hypothesis and looking for another one. As far as transfer from the L1
is concerned it is "both a facilitating and limiting condition in the hypothesis testing process, but it is not in and of itself a process". In other words the L1 may assist or hinder the process of hypothesis formation but transfer is not the learning mechanism, as it is within the Contrastive Analysis framework.

Having said that, Schachter's model assigns a far greater influence to the L1 than any of the other models outside Contrastive Analysis, especially at the beginning of the learning process which seems to be a restructuring of the native language. L1 knowledge and the learners' conceptualisation of the target language determine the domain from which the correct hypothesis will be taken.

"The learner infers from previous knowledge the domain within the universe from which the solution to the current target language problem will be taken". What this means is that when a learner strives to make sense of the L2, he will first of all select a domain or group of hypotheses, and will then select a sample hypothesis from that domain and see how it fits the data. Previous knowledge includes not only L1 knowledge but what has already been acquired of the L2. There are three possible outcomes;

1) The learner may choose the wrong domain, either because the input has misled him or been inadequate, or because the learner has assumed a pre-established domain of the L1 is the relevant domain for the target language. The latter is a case of transfer.
2) The learner gets the correct domain and correct hypothesis, either due to correct analysis, or because the target language and native language structures are identical and the learner has recognised it. This is positive transfer.

3) The learner gets the domain right but chooses the wrong hypothesis, either because of mistaken analysis or because the learner correctly equates the relevant domains of the native and target languages but incorrectly assumes a hypothesis that would be appropriate for the native language but not for the target language. This is a transfer error.

In Schachter's view L1 knowledge is as relevant in the learning of an unrelated L2 as a related one. The evidence may differ, but the influence is still there. The claim is that slower learning, overproduction or avoidance, and choice of wrong domain, should be relatively more evident in the data of a learner of an unrelated target, whereas interference (choice of correct domain but wrong hypothesis) and positive transfer (choice of correct domain and correct hypothesis) should be more evident in the data of one who learns a related language. As well as transfer, there are other constraints. Learners with different language backgrounds choosing the same domain is a reflection of the way linguistic universals and typological groupings limit the ways languages
can differ. Similarly, even learners from two unrelated languages will exhibit certain similarities such that it is possible on the basis of native language alone to arrive at the same (wrong or right) hypothesis in the target language.

4.3. The role of hypothesis testing in SLA

Critics of the hypothesis testing model tend to focus attention on the role of feedback to the learner, and in particular question the role of negative feedback. Brown and Hanlon (1970) and Braine (1971) suggest that negative evidence in the form of correction is not reliably available to children, and tends not to be used by them when it does occur. This view has been challenged by Schachter (1984). White (1985) suggests that even if negative evidence is available by way of correction, it might not work in many cases because frequently the same proposition can be expressed by a variety of constructions. White provides the following example. If a child produced a sentence like (1a) and the mother repeated it as (1b) it would be misleading if the child interpreted this as a form of correction.

1) a. John gave Mary the book
   b. John gave the book to Mary

In such a case it is not clear how the learner is to know when a repetition altered by someone is to count as a correction or not.
It could be, however, that the important process is hypothesis confirmation, with the role of feedback enabling the learner to decide between two 'competing' hypotheses relating to a particular rule. The idea of learners simultaneously entertaining different hypotheses about the same rule, with only a gradual tendency to favour one, gives recognition to the variability in interlanguage phenomenon. Since hypothesis testing is not carried out to discover rules as such, but in order to communicate, the variability characteristic of learner behaviour may also reflect different types of communication situations to which different learners are exposed, some of which may hinder, and others facilitate, the acquisition process.

The view of SLA proceeding by way of learners testing different hypotheses about the target language is intuitively appealing and there is some empirical evidence that learners do 'experiment' in this way with language. Hypothesis testing might possibly account for some of the learning process, though it is unlikely to be the whole story since it is a very inefficient way of learning, and learning any language by a process of inductive and deductive reasoning would be likely to take a great deal longer than it actually does in real life. Moreover, people's ability to reason and form concepts is known to vary widely which would seem to be at odds with the finding that most children by about age five have reached the same stage of language development.
4.4. Universal grammar and transfer

Another problem for the hypothesis testing model is contained within 'the poverty of the stimulus' argument put forward by those working within the framework of universal grammar (UG).

Simply put, this argument rests on a mismatch between the quality and quantity of evidence available in the input in relation to the complex and subtle knowledge necessary to gain mastery of a language. Since successful language learners are able to produce language to which they have never been exposed, and are able to do this in a remarkably short time, it is argued that learners must be constrained in the range of hypotheses they form about language. Since these constraints are not found in the input data, they must be biologically endowed. As White (1981) puts it:

"it is a reasonable working hypothesis that children's grammar construction is limited by the constraints of universal grammar so that they do not have to evaluate the full range of grammars that would be logically possible were they working from inductive principles alone".

4.4.1. Parametric variation and transfer

Here White is referring to first language acquisition, but she believes that UG is available in SLA, and the fact that learners do not form certain kinds of logically possible but non-occurring
hypotheses about languages is evidence that second language learners have at their disposal certain universal principles which help to overcome deficiencies in the input. In short, UG may be seen as a set of principles which guide the learner along part of the developmental route by constraining the way in which he makes sense of the incoming L2 data. Of course the situation in SLA is complicated by the fact that many of the parameters of UG have already been set in a particular way which may result in the 'intrusion' of the learner's first language. The variability in the ways parameters are set is contained in the idea of 'parametric variation' and is explained by White as follows:

"The idea is that a particular principle is responsible for a number of properties within a language. If the language has that principle "set" in a particular way, a certain range of consequences results. Another language might have the principle "set" differently, with different consequences. A limited number of parameters, or options, associated with principles of UG, will account for considerable diversity in the world's languages. In acquisition, data from the language being learned are assumed to trigger the appropriate parameter setting for that language with the full range of consequences which that parameter entails".

As far as learning a second language is concerned, there would seem to be no great difficulty in acquiring a 'new' parameter since this will be triggered by the data. Difficulties may arise,
however, in situations where a learner has to re-set or drop an L1 parameter, and we may expect to find evidence of negative transfer. It is worth noting that from a 'pure' UG standpoint, there is no problem here since interaction of UG principles and incoming data will be sufficient to ensure successful acquisition. For White, however, and those working from a UG/transfer perspective, the learner may have difficulty in re-setting parameters depending on the L1 and L2 situation. White produces some evidence for the UG/transfer hypothesis in an investigation of the so-called pro-drop parameter.

4.4.2. The pro-drop parameter

Properties of the pro-drop parameter include the possibility of omitting subject pronouns, the free inversion of subject and verb in declarative sentences and the ability to extract subjects out of clauses containing a complementizer. Italian and Spanish have these properties while English and French do not, so English and French learners of either Spanish or Italian would have to gain this parameter. This should not be problematical since it will be triggered by the L2 data. Spanish and Italian learners of English (or French) however, have to 'lose' the parameter and White's hypothesis would predict the possibility of transfer
of the L1 parameter setting to the L2 situation. In fact this prediction is borne out in her investigation of Spanish and French adult learners of English L2. White found that in grammatical judgement tests Spanish learners were more likely than their French counterparts to accept (ungrammatical) English constructions with subject pronouns missing. Results from extraction of subjects from embedded clauses showed differences in the predicted direction whether from a judgement task or question formation task. White's conclusion is the L1 parameters influence the adult learner's view of the L2 data, at least temporarily. So the principles set in a certain way for the L1 may act as a constraint on the way the learner perceives the L2.

4.4.3. Assessment of the UG/transfer model

Returning to an earlier question of how learners make sense of L2 data, the UG/transfer perspective offers a view of L1 specific parameters as an additional constraint on the range of hypotheses the learner may adopt, besides the limits imposed by UG. It is perhaps paradoxical that in some ways the UG/transfer framework takes us back to the approach of CA in the sense that comparison of the native and target languages ought to enable predictions to be made about which areas of the target language are likely
to cause difficulty and where transfer is likely to occur. Of course there is a fundamental difference in the basis of comparison, since UG is concerned with underlying principles as opposed to surface structure features of language. The UG/transfer perspective marks an advance on the traditional approach of CA since it is based on a sounder psychological account of how learning proceeds and the actual basis for comparison is universal in nature. In addition, transfer errors and developmental errors are seen as being derived from the same source, so there is no need to account for a process of transfer separate from development.

Having said that there are a number of questions which the UG/transfer model has to address. For example, it would be useful to know how much data is required to trigger a particular parameter. Presumably there is variation between parameters on the required amount of data, depending on the L1 and L2. It would also be useful to know how much variability exists between learners with the same L1. There are at least two reasons why individuals may differ with regard to the requisite amount of data. In the first place, if we take White's example of the pro-drop parameter, Spanish learners of English are quite likely to hear utterances in everyday discourse where the subject pronoun has been omitted, eg
Such utterances are quite common, with the subject being recoverable from the context, but Spanish learners may take this as evidence that English is a pro-drop language. Presumably learners differ in the amount of data required to trigger the correct rule. Variability at the individual level is also likely due to different learning styles and approaches to learning eg risk takers versus risk avoiders (Corder 1978c), holists or serialists (Pask 1976), deep versus surface approaches (Marton and Saljo 1976) and so on.

To be fair UG is only concerned with acquisition of the formal properties of grammatical systems but in seeking an overall view of transfer and SLA we must recognise that the self-imposed constraints of the UG approach do not help us to understand the role of transfer and L1 influence in areas of language such as discourse, thematic structuring of utterances, speech acts, and so on. It is also true that some theorists (Heubner 1979, and Eisenstein 1982) have argued that by ignoring other areas of language UG distorts the way grammatical development proceeds, since different areas of language do not develop separately but are interrelated.
Whether or not that is the case it is certainly true that studies of transfer as a phenomenon in its own right have shown transfer to be a much more subtle and pervasive influence than many of the models show.
CHAPTER 2

CLI AND THE COMPETENCE PERFORMANCE DISTINCTION

1. General introduction

There is little dispute in the literature about the presence of L1 influenced features in interlanguage production. One only has to consider the ubiquitous 'foreign accent' to recognise how extensive and pervasive that influence can be. It might even be argued that the uniqueness of distinct varieties of English spoken as a second language, such as Nigerian or Indian English, stems largely from L1 phonology. The extent to which a learner's L1 is identifiable through interlanguage production is an interesting empirical question, but even if this is the case some theorists would still argue that CLI is more apparent than real. The argument here stems from different views on whether CLI affects the process of SLA or is an artefact of language use. In other words there is a fundamental dispute about whether CLI is a competence or performance phenomenon.

The term competence has been widely used in interlanguage studies to refer to the system of rules and representations which underly
comprehension and production in the target language, while performance refers to actual language use. So the debate centres around whether or not L1 influence extends to the level of competence, and has a role to play in the development of that competence, or whether it is restricted to the processes involved in language production and use.

Leaving aside for the moment the theoretical problem of describing the nature of competence and the way it develops we are also faced with a substantial methodological problem in isolating competence features per se and those which have been influenced by CLI. The type of knowledge and representations which make up competence are not directly observable, and therefore we can only infer what the system consists of by indirect means such as extrapolating from performance data. The assumption that performance data reflect competence in a direct way may not be justified and this difficulty is compounded by the fact that different descriptive accounts of competence restrict the type of data which might be used to characterise the role of CLI in the development process. Having said that it should be recognised that a certain degree of idealisation is inherent in all descriptive accounts of the acquisition process and is a methodological necessity given the wide range of variation which exists among users.
In essence the methodological difficulty is twofold: firstly of showing unambiguously that a particular feature has arisen because of transfer or has been influenced by the L1, and secondly the problem of determining whether that feature reflects competence or is a pure performance phenomenon.

Given the major problems outlined a pertinent question to begin with might be why we should wish to make a distinction between competence and performance at all. It is perhaps helpful to consider that such a distinction is not unique to language acquisition studies but is applicable to many other disciplines. The acquisition of many skills may be seen in terms of knowledge about 'what to do' coupled with knowledge of 'how to do', which are separable from each other and from 'actual doing'. If we take as an example a commonly acquired skill such as learning to cook, knit or drive a car, we may see it in terms of acquiring different types of knowledge and different sets of skills. In each case part of the task involves acquiring knowledge of rules and the procedures for applying those rules, possibly in a way which has not been done before, hence the creative aspect. In each case the type of knowledge which underlies the ability is different in nature to the type of knowledge involved in actualisation, i.e. actually cooking, knitting or driving.
It is true of course that some theorists postulate the existence of some kind of special acquisition device for language which makes it different from skills acquisition or concept formation involved in other types of cognitive learning. Nevertheless the separation of knowledge and procedures involved in the 'what' and 'how' from actual performance can still be usefully applied. Thus in SLA it is useful to know whether a particular interlanguage feature reflects the learner's current level of competence in terms of rules and representations of the target language or if it is a reflection of the processing routines necessary for the utilisation of that knowledge.

In pedagogical terms the language teacher may wish to treat differently an 'error' which appears to reflect lack of knowledge about the 'rules' of the target language from one which indicates the learner has grasped the aspect in question but is somehow unable to actualise the knowledge during language use. Of course mastery of a second language involves a great deal more than internalisation of a set of rules, whether grammatical, sociolinguistic or pragmatic in nature, and the learner must also develop the appropriate processing routines and procedures relevent to the target language if mastery or 'control' is to be attained. From the CLI perspective it may be the case that the L1 has a role to play in all these aspects of SLA but we must at least try to capture the nature of that influence by differentiating between the various aspects of language acquisition.
1.1. Langue and parole

The origins of the competence performance distinction illustrates the perceived need to distinguish between the system and use of the system. It can be dated at least as far back as Saussure (1916) who referred to the distinction in terms of langue and parole. The link between them is a common structure 'underlying' the utterances which an individual produces when speaking a particular language. Lyons (1970) explains this distinction as follows:

"Utterances are instances of parole. The underlying structure in terms of which we produce them as speakers and understand them as hearers is the langue in question". (page 15).

While it is debatable if language is as structurally determinate as Saussure implied it is now generally accepted that some kind of distinction between langue and parole is necessary.

1.2. Grammatical competence

In modern linguistics a broadly similar distinction was drawn by Chomsky (1957) who introduced the terms competence and performance and argued for the methodological necessity of studying language through idealised abstractions and ignoring details of actual language use. A number of commentators, such as Cambell and Wales (1970) have pointed out Chomsky's use of the term in both
a weak and a strong sense. The weak sense is indicated in the following extract from Chomsky (1965):

"We thus make a fundamental distinction between competence (the speaker-learner's knowledge of his language) and performance (the actual use of language in concrete situations)... In fact, it (performance) obviously could not directly reflect competence. A record of natural speech will show numerous false starts, deviations from rules, changes of plan in mid-course, and so on."

Here competence is knowledge of grammar and other aspects of language while performance refers to actual use. The weaker claim seems to be relatively uncontroversial and has been accepted by most linguists, with Halliday (1970) a notable exception. He rejects it as either unnecessary (if the distinction refers merely to what can be described in the grammar and what cannot) or undesirable since it may restrict the types of data one considers.

Chomsky's stronger claim is that competence refers to the underlying linguistic system (or grammar) that an ideal native speaker of a given language has internalised whereas performance mainly concerns the psychological factors that are involved in the perception and production of speech, e.g., memory limitation and parsing strategies. Here a theory of competence is equivalent to a theory of grammar and is concerned with the linguistic rules that can generate and describe grammatical sentences of a language. A theory of
performance on the other hand, focuses on the acceptability of sentences in speech perception and production, and is a theory of the interaction between the theory of grammar and the set of non-grammatical psychological factors bearing on language use.

1.3. Sociolinguistic competence

The Chomskyan notion of competence has been challenged by Hymes (1971) who argues that this version of the competence/performance distinction provides no place for consideration of the appropriateness of the sociocultural significance of an utterance in the situational and verbal context in which it is used. According to Hymes there are:

"rules of use without which the rules of grammar would be useless."

Hymes dramatically underlines his point by arguing that a child whose language development was restricted to a knowledge of grammar without rules of use would likely be 'institutionalised'. In effect Hymes is arguing for the necessity of accounting for the fact that a normal child acquires knowledge of sentences, not only as grammatical, but also as appropriate.
For Hymes then, competence is the system of rules and representations which make up the intuitive mastery the native speaker possesses of how to use and interpret language appropriately in the process of interaction and in relation to social context. It is a competence "when to speak, when not, and as to what to talk about with whom, when, where, and in what manner".

1.4. Communicative competence

For some language teachers the major goal of second language pedagogy is to enable the learner to become 'communicatively competent' in the target language. The development of full communicative competence in a second language is a very difficult task and possibly only a minority of learners will gain 'native-like' proficiency. For the analyst the problem is how to describe and account for communicative competence, to say precisely what it means. There is little difficulty in citing a number of necessary conditions such as grammatical knowledge, sociolinguistic appropriateness, fluent speech production, and so on, but it is more problematical to describe the conditions which are sufficient to account for communicative competence. The problem is essentially one of defining the limits of competence, of deciding at what point one 'knows' a language. It is perhaps easier to see the nature of the problem by posing a slightly different question, namely, what does it mean to say a native speaker is communicatively
incompetent? Considering the linguistic diversity and degree of language variety within any language it is difficult to imagine anyone having 'total' communicative competence in the sense that they intuitively know the correct and appropriate rules for every sociocultural situation and context with respect to all the varieties of a language. We must therefore accept that there are degrees of communicative competence amongst native speakers, or different competences. We are still faced with the problem of describing which degree of competence, or type of competence encapsulates the notion of native proficiency.

1.5. Minimum levels of competence

As far as SLA is concerned the problem is slightly different since by definition learners lack total communicative competence. The difficulty becomes deciding at which point learners reach an adequate level of competence and for what purpose. Van Ek (1976) has claimed there is a 'threshold level' for survival in a second language, although it is not always clear exactly what skills are included in such theories of 'basic' communication, or the extent to which such skills include the ability of appropriate usage even though Van Ek talks of such factors as role, setting, topic, notion, function, and so on, when outlining his model.
There is no clear sense in which any theory of language specifies what minimum level of skills is necessary to communicate in a given language. Notions of a minimum or threshold level based on language varieties such as pidgins and creoles do not help much in terms of SLA minimum competence since these language varieties are generally not mutually comprehensible with the superordinate and subordinate languages they are based. A further problem is that threshold levels described by Van Ek from a linguistic perspective bear little or no relation to those reflecting more psychological orientation, such as the views of Cummins (1979). Cummins' work suggests there may be threshold levels in the native language that the learner of a second language must attain to avoid cognitive disadvantage, and that must be attained in the second language to allow the potentially beneficial aspects of bilingualism on cognitive development and educational achievement to develop. While Cummins is interested in the psychological and educational aspects of bilingualism, Van Ek is more interested in the communication notion i.e. at what point can communication be effected in the L2. In neither case, however, do we have any empirical evidence for the respective threshold levels.
1.6. Competence and proficiency

Before going on to discuss other notions of competence it is perhaps useful to explicate and draw together the different senses in which the term competence has been used up to this point. First of all we can refer to competence as a 'technical' term within linguistics, in which case it refers to the abstract rules and representations which underly language use. From the Chomskyan perspective, the nature of this underlying system can be described in terms of linguistic rules. The sociolinguistic perspective adopted by Hymes, however, demands that 'other knowledge' be included in this underlying representation which cannot be adequately described by grammatical rules alone. The grammar rules used by linguists to capture native speaker intuitions about acceptability can only account for 'correct usage' while 'appropriateness' calls for consideration of sociocultural rules of situation and context.

Competence has also been widely used in a non-technical sense where the meaning is essentially that of proficiency. This notion of competence is close to the common usage of the term which implies both underlying knowledge and the ability to utilise that knowledge. In other words acquiring competence in the sense of developing proficiency includes both competence and performance
in our 'technical' sense. In native language acquisition this begs the question of what it means to 'know' a language. Related to SLA we can put the question slightly differently and ask what it means to 'acquire' a language. In effect there are two central questions here, a descriptive one of defining what it is the speaker 'knows' and an explanatory one of accounting for how that knowledge is acquired. In terms of a general explanatory account of how languages are acquired it is important to remember that while the competence performance distinction is useful its utility is somewhat diminished if one kind of phenomenon is treated as being more theoretically important than the other. For example Faerch and Kasper (1986) cite error analysis as an example of the popular idea of distinguishing competence errors as those reflecting the stage of interlanguage proficiency from performance errors which are seen as a relatively uninteresting artefact of language use.

1.7. Strategic competence

Perhaps because communicative competence is such a difficult target for L2 learners, Canale and Swain (1980) have added a 'third dimension' to Hymes' components of grammatical and socio-linguistic competence. They have put forward the idea of 'strategic competence' which may be described as knowledge of strategies which are used to get meaning across in spite of an imperfect command of the language. This component will be made up of verbal
and non-verbal communication strategies that may be called into action to compensate for breakdowns in communication due to performance variables or to insufficient competence. Such strategies may relate primarily to grammatical competence (e.g., how to paraphrase grammatical forms) or sociolinguistic competence (various role-playing strategies etc). As Stern (1978) has pointed out, such 'coping' strategies are more likely to be acquired through experience in real-life communication situations but not through classroom practice which involves less 'meaningful' communication.

This theory of communicative competence minimally includes three main competencies: grammatical competence, sociolinguistic competence, and strategic competence. The amount of non-linguistic or 'other knowledge' involved in the account is obviously much greater than in the account of Chomsky or Hymes since it includes types of knowledge such as how to address strangers when unsure of their social status. Canale and Swain do not distinguish between the effects of different types of strategies but there is a certain amount of disagreement about the extent to which they are equally 'developmental'. Tarone (1977) suggests that all strategies help to expand a learner's resources since they keep the communication going thereby exposing him to more language. Such a view seems to ignore the distinction between input and intake and ignores the fact that learners may not attend to all parts of the available
L2 data. Faerch and Kasper (1980) argue that a basic condition for communication strategies to have a potential learning effect is that they belong to 'achievement' behaviour rather than 'reduction' behaviour, since only achievement behaviour encourages hypotheses formation, and that risk is necessary for automatization of knowledge. The nature of the role which strategies play in developing L2 competence is therefore not a straightforward matter and the influence of the L1 in the use of strategies is an issue which will be taken up shortly.

1.8. Competence and capacity

A more educational framework is provided by Widdowson (1983) who is concerned to relate the competence performance distinction to the processes involved in learning to use language. Widdowson distinguishes between competence and capacity and relates this to the distinction between education and training. While the latter is described as emphasising 'skills' involving a very specific set of responses linked to specific stimuli, education develops 'abilities' which involves a much more open-ended repertoire of activities. These concepts are linked to applied linguistic theory by identifying those skills imparted by training with the notion of communicative competence associated with Hymes and other sociolinguists. Education, on the other hand produces
a deeper quality, communicative capacity. Here the essence of the distinction is that competence is the product and expression of rules, both linguistic and behavioural, whereas capacity, while presupposing competence, can supercede the rules and so permit a speaker a much wider range of creative expression.

Widdowson is interested in the pedagogical implications of the competence/performance distinction and argues that the idealisation of the Chomskyan linguistic model fails to take account of the process of learning language use and is thus unsuitable for course designers and teachers. Instead Widdowson advocates a framework which relies heavily on cognitive psychology and Gricean discourse analysis.

Widdowson's model of language is psycholinguistically oriented and centres around another pair of polar concepts: schemata and procedures. Schemata are frames of reference which allow one to predict linguistic or illocutionary meaning of an utterance. In the former case they are exemplified by rules governing such things as pronoun reference or co-occurrence of vocabulary items. In the latter case they are rhetorical routines, such as moves which designate invitations, rejections etc. Schematic knowledge is not operational itself however and must be realised by other forms of activity called procedures. A procedure is the ability to negotiate schematic knowledge between two speakers and thus
realise its content. Widdowson equates the learning of specific schemata with the relatively limited concept of competence, while the development of the broader communicative capacity requires extensive procedural knowledge, which amounts to the ability to realise an unlimited variety of schemata in unforeseeable circumstances.

Widdowson's notion of competence seems to follow a general tendency which has extended the concept of linguistic competence into a concept of communicative competence by changing the focus from an abstract study of language to concrete acts of language use. Labov (1971; 1972) has argued that the study of language in its social context is linguistics. Linguistic analysis, phonology, morphology, syntax, discourse analysis and so on continue to be the areas of study, but studying them in a 'pure' or 'abstract' form, as linguists from Saussure to Chomsky have done, leaves out the whole area of varieties of language use though it has to be said that even Labov's studies acknowledge the methodological necessity of a certain degree of idealisation of empirical data. The relationship between varieties of use and L1 influences will be taken up shortly, but in the meantime it is worth noting that Chomsky's position seems to be changing slightly from the one noted by Labov. In Aspects he insists that
"the investigation of performance will proceed only in so far as our knowledge of competence permits" (1965:10).

thus evidently seeing competence theories as primary. Similar views emerge in Reflections on Language (1976), but in Rules and Representations theories of competence and theories of performance are described as 'mutually supportive' (1980:226).

2. Methodological considerations

In the first part of this section some competing accounts of ways of characterising the nature of the underlying system which is the basis for language comprehension have been outlined. Clearly there are major differences between the theoretical descriptive accounts of what type of knowledge makes up underlying competence. To some extent this is a reflection of methodological approach. For example those working within the Chomskyan paradigm may wish to argue that while 'other knowledge' may have a role to play in developing proficiency, they choose to concentrate their research on questions of grammatical competence. When it comes to overall SLA considerations, however, an explanatory account would have to deal with the question of interaction of grammatical knowledge with other knowledge. Thus in accounting comprehensively for CLI in SLA we have to deal with pragmatic competence since it is essentially here that knowledge of the world becomes inextricably bound up with linguistic knowledge.
2.1. Isolating CLI and competence features

It would appear that with certain types of CLI whether one accepts them as a competence phenomena or not depends very much on which model of competence one accepts. Whatever model is adopted, however, one still faces certain methodological problems so far as empirical research is concerned. We must first tackle the difficulty of isolating transfer per se, that is to say we must show that a particular production feature has arisen at least partly due to L1 influence. In addition we must decide on the nature of that influence and how the L1 influenced knowledge interacts with the system of rules and representations which make up the existing underlying competence. Since a learner's competence is a developing one it is very unstable and may well change many times in a very short period of time. What this means is that we have to find the best 'products' for viewing the 'processes' which lead to change in the underlying system over time and try to select the most accurate descriptive account of the nature of competence at a certain point in time.

2.1.1. Competence or performance errors

If we consider for a moment the question of interlanguage 'errors' as particular examples of learner output the problem is one of distinguishing competence errors from errors arising through
language use. Faerch and Kasper (1986) conclude that this particular problem has never been satisfactorily solved. In their view:

"the learner's interlanguage competence is typically transitional"; (unstable) "it comprises components of a hypothetical nature", and "different degrees of automatization.... The complex structure of competence is reflected in the performance data, and it is therefore neither possible nor desirable to determine a priori the analytical relevance of various phenomena".

The problem is, however that performance data doesn't always reflect competence in a direct way. Indeed Jordens (1986) claims there is

"no direct link between an interlanguage rule system and interlanguage performance data. The learner's output is directly determined by rules of language production and only indirectly by the corresponding linguistic rule system".

In reminding us that interlanguage rules are an abstraction from the observable performance data, Jordens is pressing for the need to establish the notion of an "interlanguage production system".

Jordens illustrates his point by looking at error types produced by Dutch learners of German in relation to the processes of L1 (Dutch) sentence production. The model of speech production used by Jordens is the Incremental Procedural Grammar of Kempen
and Hoenkamp (1982). The author notes that agreement errors in L1 Dutch parallel case errors in L2 German which he takes as evidence that L1 processes of incremental sentence production are responsible for specific types of case error in L2 German. Further evidence for language production processes causing specific types of case errors in L2 German is the fact that the same error types also occur as performance errors in L1 German. The argument is that these errors are not therefore explicable by reference to an underlying rule system but are based on procedures that are typically related to language performance.

2.1.2. The pattern of competence development

The relationship between competence and performance is certainly not straightforward since the products under analysis do not obviously reveal the processes which give rise to them. Even if the interlanguage product is correct when compared to the target norm there is no guarantee that the knowledge representation is the same in the learner's mind as in that of a native speaker. A further problem exists in that acquisition does not proceed in linear fashion. That is to say competence does not develop in sequential steps toward the target language norm. An early example of this is provided by Ervin (1964), showing how children, having apparently mastered English irregular past-tense morphology (came, went, brought etc) proceeded to partially supplant these
forms with regularized past forms such as *goed, *bringed, *comed, and so on. These forms are themselves supplanted by the irregular forms already evident at stage 1, and finally disappear. This type of learner behaviour has also been reported by Marley and Swain (1984), and Kellerman (1983a) who refers to it as u-shaped behaviour which can be represented graphically as follows:

![Diagram](image)

This evidence would seem to contradict the view put forward by Taylor (1975) that L1 influence decreases as competence increases. Harley and Swain for example claim there is a distinct continuing effect of the L1 at all grades although the effect becomes less superficially obvious at the higher grades. Kellerman's conclusion is the same:
"Cross-linguistic influence may operate at many levels of linguistic structure and perhaps via a variety of psycholinguistic processes, conscious and unconscious. It is misleading to say that it does not afflict the more advanced learner more than the less advanced; this hoary old chestnut should finally be squashed underfoot as an unwarranted overgeneralisation based on very limited evidence. If one only looks at development in simple syntax, then such an observation is inevitable and trite. Advanced learners are afflicted by cross-linguistic influence in different ways from beginners, but simply because they know more and their knowledge opens up new susceptible areas."

2.1.3. Process and product analysis

Leaving aside for the moment the problem of choosing products which reflect competence there is the further problem of showing that competence has been influenced by the L1. Kohn (1986) suggests elicitation techniques designed to home into transfer as a process, to close the gap between the interlanguage products we see and the processes which give rise to them. The procedures favoured by Kohn are sensitive to his distinction between knowledge and the processes whereby that knowledge is retrieved, and the author illustrates how L1 influence may operate at the knowledge and/or retrieval level.

In order to assess a subject's knowledge of correctness and his knowledge of retrieval Kohn proposes a judgement test whereby a value of correctness can be assigned to each variant by taking the difference between the number of 'certainly correct' and 'certainly incorrect' answers and dividing this by the total
number judgements per variant. Applying this procedure to the
judgements enables the researcher to obtain a value of correctness
for each of the interlanguage variants for the structure under
investigation. In addition subjects are given a performance
test where they are asked to 'fill-in-the-blank' test (cloze)
on the same variants. For each variant, the number of occurrences
divided by the number of possible occurrences multiplied by 100
gives the actual value of occurrence, indicating how often a
particular variant was used.

What is most relevant as far as transfer is concerned is the
difference between the actual value of occurrence and a theoretical
value of occurrence. The latter is derived directly from a learner's
knowledge and indicates what the learner's output would be like
if it were a true copy of his knowledge. Differences between
the actual and theoretical value of occurrence indicate the influence
of factors involved in retrieval of knowledge in production,
one of which is cross linguistic influence.

The author uses these rather sophisticated analytical procedures
to distinguish between CLI at the knowledge and retrieval level.
To that extent perhaps it is successful but one is forced to
conclude that these elaborate techniques fail in their original
purpose of identifying transfer per se. We are still left with
the problem of showing how the 'observed patterns' reflect an
underlying process of transfer, which is a long standing problem
in establishing transfer as a process since the same product
patterns may be compatible with different processes. Indeed
as Kohn himself observes, the variant forms of the past progressive
under consideration in his study may have arisen through other
processes such as over-generalization or simplification. This
leaves us with an unanswered question, namely, what is the test
which decides on the occurrence of transfer? We might wish to
share Selinker's opinion on this one:

"The jury is still out on that". (Selinker 1984).

Selinker's conclusion is certainly shared by Faerch and Kasper
(1983) who identify three ways of analysing learner data:

a) the data have been produced on the basis of the
learner's interlanguage system;

b) the data have been produced on the basis of a system
different from the relevant LL system and more highly
automatized than this (typically the L1 system);

c) the data have been produced as a result of the learner
having made use of a communication strategy.

The authors cast doubt on the possibility of distinguishing
between elements (a) and elements which are brought about by the spontaneous transfer in speech production. Essentially then Faerch and Kasper are interested in the kinds of CLI which characterise performance.

3. CLI during language production - a performance phenomenon

3.1. Knowledge in language production

First of all Faerch and Kasper distinguish between declarative and procedural knowledge, a distinction similar to competence/performance and Sharwood Smith's competence/control (1987). Though the author's notion of competence differs from that of Widdowson there are links between procedural knowledge and the 'schemata' in the latter's explication of capacity. Declarative knowledge is a user's underlying knowledge about linguistic structure. This type of knowledge cannot be employed immediately but only via procedures activating relevant parts of declarative knowledge in speech reception and production. The function of procedural knowledge is to select and combine rules and elements from different parts of the declarative knowledge, for example from different linguistic levels within the language system (in first language production), or from a cross linguistic perspective, from different language systems. What the authors
try to show is how various modes of cognitive control, such as attention and automatization are essential to an understanding of CLI in procedural terms.

3.1.1. Attention and automatization

Attention is not an 'all or nothing' affair but is described as a continuum referring to information currently stored in short-term memory. Here all accessed information is not attended to the same degree. Attention interrelates with automatization, which refers to the ease and speed with which a procedure can be activated. Again automatization is presented as a continuum comprising procedures that require close attention at one end, and fast, automatized procedures at the other. Attention and automatization then, are presented as two relevant factors in the activation of procedural knowledge.

3.1.2. Different types of transfer during production

A further distinction introduced by Faerch and Kasper is between 'primary' and 'secondary' areas of declarative knowledge. The former refers to the linguistic rules and items which the individual primarily utilises when encoding a specific communicative intention.
in a specific circumstance. So in interlanguage communication
the primary area of declarative knowledge belongs to the individual's
interlanguage system, while the secondary area is made up of
L1 knowledge. The role of transfer in speech production, then,
is to activate linguistic knowledge. At the 'planning' stage
of production transfer is centrally involved in combining and
coordinating knowledge from different components, and differs
from non-transfer planning procedures only in that transfer
procedures combine knowledge from a secondary area with knowledge
from a primary area.

In addition to characterising transfer as a planning procedure
of a specific type the authors also discuss the cognitive dimensions
of transfer which involve further distinctions between automatization
and attention as they relate to primary and secondary linguistic
knowledge. 'Strategic' transfer, or transfer during the 'planning'
stage, presupposes a) the learner's focal attention is directed
towards a planning problem and b) the 'strategic plan' is based
on (L1) secondary knowledge.

It is possible to further differentiate different types of transfer
according to which parts of the L1 declarative knowledge are
activated in solving the communication problem. Thus we can
distinguish borrowing (using an L2 lexical item with L1 pronunciation) and foreignising (adjusting L1 lexical items to L1 phonology and/or morphology). Strategies such as foreignising or literal translation require that the learner is aware of the structure of the L1 material to be transferred, whereas borrowing has no such requirement.

Another type of transfer worth mentioning is automatic transfer which involves activating highly automatized knowledge, where attention is concentrated on something else. This type of transfer according to the authors often occurs in discourse with gambits used such as uptaking, turn-keeping and turn-giving. This is the type of knowledge referred to by Widdowson as schemata and in practice it is difficult to distinguish from grammatical knowledge. This is a common type of transfer and even advanced learners occasionally exploit L1 gambit forms when their attention is focused on what they are communicating rather than how, according to the authors. It is interesting to note that this is the opposite of the conclusion reached by Tarone etc when dealing with the question of transfer and variability. According to the 'style-shifting' explanation, L1 influence is more likely to be apparent in the formal style with a relatively high focus on form. Of course the type of transfer under discussion in
this context was sociolinguistic in nature and involved a prestige variant of the L1 being used in an L2 environment (L1 form → L2 function). Faerch and Kasper are talking about 'automatic transfer' which presupposes routinised L1 sub-plans. It therefore seems inappropriate, as Corder pointed out, to talk of a process of transfer. Instead transfer is a blanket term used to cover a variety of processes.

3.2. A psychological view

While a great deal of research has been concerned with the nature of competence and the types of knowledge which underly performance, other studies have adopted a more psychological orientation and have sought to separate the knowledge dimension from the processing dimension, though writers differ in the way the distinction is elaborated. Sharwood Smith (1983), for example, makes a distinction between competence and control, with competence described in Chomskyan terms as;

"abstract mental representation of a set of linguistic principles, describable by linguists in terms of rules and conditions (constraints) on those rules..."

Control, on the other hand,
"involves mechanisms which access knowledge in long-term memory and integrate the various bits of information that have been accessed in acts of utterance comprehension and utterance production".

3.2.1. Types of knowledge

What we have here then is not so much a distinction between 'linguistic knowledge' and 'behaviour' as between different types of knowledge. On the one hand we have knowledge of linguistic categories etc. which is termed LK1 by the author, and on the other language processing knowledge (LK2) which allows a speaker to produce or comprehend utterances in terms of LK1. This conception of control and the type of knowledge in LK2 may be seen in terms of Widdowson's notion of capacity and the type of procedural knowledge. The distinction between competence and control opens up the possibility that they may develop independently so that, for example, the order in which English morphemes are acquired in competence terms may be different from the order in which control is achieved. Accuracy in supplying correct morphemes in obligatory context may then be seen as an instrument of measuring the order in which control over the features in question is achieved rather than the order in which competence develops. The point here is similar to that raised with regard to Krashen's account, namely the degree to which learners are able to use newly acquired competence straight away.
3.2.2. CLI and language processing

As far as L1 influence is concerned Sharwood Smith prefers the term Crosslinguistic Influence (CLI) to transfer and the effect is evident in both the processing dimension and the competence dimension. At the processing level the author points to two types of crosslinguistic influence CLI (1) and (2). Learners may channel new knowledge via old processing routines CLI (1), or during online comprehension or production may fall back on well-automated processing mechanisms appropriate to the competence knowledge they posses with regard to another language, commonly the L1 (CLI(2)). These two types of CLI are distinguishable by the fact that CLI (1) is relatively stable and habitual whereas CLI (2) is sporadic and typically occurs in 'overload' situations. CLI (2) is claimed to represent a more advanced developmental stage.

Clearly mechanisms involved in processing language in the L1 are not necessarily appropriate for the L2 and fluent speech processing may require the acquisition of new processes. Sajavaara (1986) shows how such adjustments would have to be made by English learners of Finnish, or vice versa, and L1 influence would be expected at different levels eg the detection of cue patterns, lexical identification, and reconstruction of target structures. Sajavaara notes that processing takes place on-line and operates over stretches
of speech longer than single elements. For example in English the stress peaks are important indicators of processing segments, while in Finnish the processing proceeds word for word, each word containing more information about how the input is going to continue.

In fluent speech processing a recognition of incoming messages on the basis of percept skeletons is the norm but in many cases L2 learners are unable to employ the knowledge driven processes necessary for inferencing and making predictions about the structures about to appear. Processing becomes a problem solving exercise instead of being automatic and learners have to resort to pragmatic information related to the L1 or look for translation equivalents for L1 structures. Such translation schemata may become automatic and may result in the fossilization of L1 features in the L2.

Transfer during on-line processing is the phenomenon of 'naive reflexification' discussed in Kellerman and Sharwood Smith (1979) as the Procrustean Bed phenomenon. Here learners are said to generate (in a processing sense) an L1 syntactic frame which is then filled with substitute L2 material. This seems to be the subconscious counterpart of a literal translation, and self-correction may take place when the learner perceives the mismatch and reformulates the syntactic frame. Native speakers may be seen to act similarly
when re-phrasing in mid-utterance though in this case they are choosing between competing alternatives for a particular syntactic slot rather than processing native language data under the influence of non-native knowledge.

Many researchers working in the area of L1 influence on the processing dimension of language acquisition agree that underlying linguistic competence can outstrip the processing knowledge necessary for utilisation of the knowledge. The problem is that there are a great number of different models of processing and therefore little agreement about the actual mechanisms of transfer. This makes general conclusions more difficult to draw.

4. A performance phenomenon only?

4.1. The learning process without CLI

Generally speaking those who see L1 influence as a performance phenomenon only characterise CLI as ad hoc solutions to temporary production problems in the target language. This view is made explicit by Corder (1977) who claims it is virtually impossible to distinguish transfer from 'borrowing' which he says
"is a performance phenomenon, not a learning process, a feature therefore of language use and not of language structure. It is a communication strategy...." (p92).

Corder's conclusion is in accordance with those of Dulay and Burt and Krashen, all of whom argue for the possibility of development of competence being determined by internal factors and uninfluenced by situational factors such as L1 influence. While there may be some agreement over the conclusions, there are differences between these accounts and divergent arguments as to explanations of why L1 influence is restricted to performance phenomena.

When considering Corder's account it is important to consider that much of his work, like that of Chomsky, was aimed at questioning the assumptions and approach associated with contrastive analysis and behaviourist theory. Indeed Corder called for an end to the use of the term 'transfer' and 'interference' pointing out that they are both 'technical' terms in a particular theory of learning, and unless one is adopting that particular theory in one's discussion, it is best to find other terms for any alternative theoretical position.

4.1.1. An inbuilt syllabus

Corder's rejection of transfer can therefore be seen as the rejection
of the idea of transfer as a learning process and a competence phenomenon which doesn't mean he denies a role for the L1. The mother tongue may be facilitative in acquiring an L2 where the two languages are close. Starting from a stripped down version of the mother tongue, possibly universal in nature, acquisition is a recreation process as opposed to a restructuring one. The basic (or universal) grammar is elaborated in the direction of the target language and proceeds according to an 'inbuilt syllabus' which determines the order and sequence of acquisition. The L1 acts as an heuristic tool in the discovery of the formal properties of the L2 and where languages are closest structurally the facilitating effect is maximal. The actual mechanism by which the L1 facilitates development is by borrowing items and features from the mother tongue as a communicative strategy. While Corder distinguishes borrowing as a communication strategy and a performance feature from the actual mechanism of learning he does admit that successive and successful borrowing may lead to structural transfer. In other words a performance feature can be incorporated into the interlanguage grammar and so becomes a competence feature. Unfortunately Corder doesn't elaborate on this point and he doesn't go into detail about the mechanisms by which it takes place.

Corder's central idea of language development proceeding according to an internal syllabus has parallels with the Creative Constructivist (Dulay and Burt, 1980) view of acquisition proceeding unhindered by environmental influences including the L1.
4.1.2. Acquisition and Learning

I would like to return to this idea of borrowing and transfer shortly but first I would like to consider different arguments against CLI as a competence phenomenon by looking at the views of Krashen. Krashen (1983) agrees with Corder that L1 influence is a performance phenomenon which doesn't affect development and that as a communication strategy the role of the L1 is maximalised when communicative demands outstrip the learner's level of competence, when he has to 'borrow' from the mother tongue in order to communicate. To this extent Krashen accepts the principle of Newmark's (1966) 'ignorance hypothesis' which predicts L1 influence whenever the learner has not acquired the necessary target language rule. Krashen modifies this view however and agrees with Zobl (1980), Kellerman (1978, 1983), and Wode (1978) that there are psychological and linguistic factors which constrain transfer. Nevertheless Krashen's view is that L1 influence is a feature of language use and does not affect the developmental process.

Bearing in mind Corder's concern about the use of the term interference, Krashen provides an account of L1 influence that is 'classical' in the interference sense. As Krashen (1981) puts it,
"interference in the syntactic domain is the use of a rule of the first language in place of some transitional form or mature form of the L2. It occurs when the acquirer has not yet acquired some i + 1 and substitutes a first language rule for it."

According to this account the L1 rule is 'interfering' with normal development in that it is preventing access to the proper transitional rule. Even where 'positive' transfer occurs, ie where the L1 and target rules are identical, Krashen denies it is true acquisition since L1-based rules

"simply do not have the same psychological reality as L2 rules do in the brain".

Real acquisition eventually 'catches up' with the positively transferred structure which though formally correct is not under the 'control' of the learner, a fact which according to Krashen may be manifested by mistakes with register. This is a strange explanation by Krashen whose view of acquisition seems very much one of acquisition of appropriate rules. Being able to control L2 data, however, requires a certain amount of procedural knowledge and processing skills over and above knowledge of rules. Krashen seems to imply that 'acquired' rules are available for use immediately while L1 affected rules will result in some kind of deviant use (eg wrong register). Yet Krashen's account of how acquisition (vis a vis learning) takes
place gives no account of how the procedures and processing skills necessary to control language are acquired. Clearly Krashen's concept of competence and control differ from that of Widdowson or Hymes who would view using wrong register as a possible manifestation that the necessary underlying sociolinguistic competence has not been achieved. In other words when underlying competence develops to the point where the $i + 1$ is correct, then in Krashen's terms the learner and a native speaker share the same underlying representation and knowledge of the target language, even although the learner may not be able to use that competence in using language in a sociolinguistically appropriate way. For sociolinguists, however, the knowledge of how to use language appropriately is part of competence and should not be seen as a performance phenomenon.

4.2. Evidence from grammatical judgement tests

As noted earlier in the first section on models of acquisition, much of Krashen's theory is empirically untestable, but at least one part of his account is open to empirical investigation and offers an opportunity to test whether or not L1 influence can be a competence phenomenon. As Krashen puts it,

"according to this hypothesis, the L1 rule is not a stable part of second language competence. This hypothesis predicts that L1 rules would not be helpful in comprehension, would not interfere with comprehension, and that performers would not utilise them in making grammatical judgements."
In fact evidence exists which suggests that learners do accept transfer-affected variants in their interlanguage intuitions (Kellerman 1983; Liceras 1983; White 1983,1984; Adjemian 1983; Sorace 1984). White, for example, investigated the so-called pro-drop parameter experimentally in a study involving grammaticality judgements and a question formation task, and found that Spanish learners of English do assume that English has two of the three characteristics of a pro-drop language such as Spanish eg they accept missing subject pronouns and produce questions such as

*'who do you think that will come?'

French subjects acted as controls since theirs is not a pro-drop language and these subjects did not accept missing subjects in English. White takes this as evidence for transfer of the pro-drop parameter and there is no doubt this kind of judgement task does provide some evidence that transfer can affect the interlanguage grammar of a learner.

4.2.1. Interpreting the evidence

Such evidence has to be accepted with caution, however, due to the questionable methodology and interpretation of studies such as White's. For example White's experiments are open to criticism
due to lack of proper statistical controls, while from a psychological perspective a more fundamental question is raised, namely the problem of what such judgements mean. Apart from the fact that we can only guess at why a judgement arises, or indeed that the subject is attending to what we want him to judge, there is evidence to suggest that this approach provides a picture of the learner's formal style while it might be more desirable to tap the vernacular style used in conversation, (Tarone 1984). The possibility that learners have a range of discourse styles raises fundamental questions about the nature of competence and will be dealt with shortly in the section dealing with variation.

4.3. Reconciling borrowing and transfer

Returning to the question of grammaticality judgement tasks we can say that the evidence which exists does not support Krashen's account of transfer as a pure performance phenomenon. Rather the evidence supports Adjemian (1983) who elaborates on the connection between borrowing and structural transfer first suggested by Corder. Adjemian is interested in the transfer of lexical rules and agrees it may be difficult to separate transfer, as a competence feature, from borrowing, a performance feature on the basis of performance data. However, transfer can be expected to result in the appearance of the feature or rule over a class of lexical items. As Adjemian puts it,
"the use of a specific word or feature in a given context may be borrowing, but the (more or less) regular appearance of a type of verb, let us say (with particular morphological, syntactic, or semantic properties) in a way which differs from target language usage, will undoubtably reflect some sort of hypothesis formation on the part of the learner. If the hypothesis or generalisation is motivated by languages familiar to the learner, we have a case of transfer."

Adjemian goes on to speculate that transfer resulting from hypothesising about the target language, will affect the abstract properties of the target language, while regular borrowing will be restricted to the superficial properties of language. Adjemian concludes that while learners will be consciously aware of a borrowing, transfer-affected knowledge will be at the grammatically intuitive level since the underlying system of rule representation has been affected.

4.3.1. Communication strategies as learning strategies

It will be recalled that the arguments put forward by Corder and Krashen were against CLI as a competence phenomenon. Both theorists see the role of the L1 as a feature of a communication strategy. The assumption is that such strategies are themselves a pure performance phenomenon which has no bearing on the development of the underlying system of competence. While it is possible to separate communication strategies and learning strategies from the perspective of the learner's motivation in using the strategy,
one must question the validity of making such a distinction when considering the effect of using that strategy. Indeed this is surely implied by Corder's admission that successive and successful borrowing may lead to structural transfer. Similarly Adjemian's distinction between borrowing and transfer rests on the stability of the borrowed feature which depends on the kind of representation which it has in the learner's mind. In both cases then it would appear that even where a learner consciously borrows from the L1 the borrowed feature may be incorporated into, and therefore influence, the way in which the target grammar is represented in the underlying system. The implication here is that language use may influence the way the interlanguage competence develops.

4.3.2. A psycholinguistic explanation of development

The question which naturally arises out of this is how does use of knowledge influence the way that knowledge is represented in the brain. One possible explanation is provided by Bialystok (1983) who views the development of language proficiency in terms of two separate factors, the Analysed and the Automatic. Again we have the idea of separation of knowledge from control, or capacity, or whatever term we may wish to use for the processes involved in utilisation of that knowledge. The analysed factor is the type of mental representation assigned to the information which differen-
tiates degrees of control over that information. The information represented as analysed knowledge is not different from unanalysed knowledge, per se. The difference is that with analysed knowledge the learner is additionally in control of the structural properties and relations governing the knowledge already known in unanalysed form.

The developmental path from non-analysed to analysed knowledge may be seen in terms of the extent to which underlying knowledge or competence becomes available for conscious manipulation. The idea is not dissimilar to Widdowson's notion of capacity involving the ability to creatively utilise language. To cite an example from Bailystok,

"if a structural regularity of a language is known in analysed knowledge, then the learner may use that structure in new contexts, decipher language, especially written forms which make use of that structure, and modify or transform that structure for other literary or rhetorical purposes".

The automatic factor refers to the ease with which information may be accessed by the learner, irrespective of its extent of analysis. Individuals vary in their ability to retrieve information and different tasks impose different demands on this ability. According to the author fluent conversation, for example, requires better access
to the relevant linguistic information than does the preparation of written texts. Here, then, we have an argument for the reasonableness of separating the learner's representation of knowledge from access to that knowledge, and that each of these dimensions contributes to the learner's control over that knowledge.

4.3.3. Language use and language development

Returning now to the role of strategies in SLA we can see the relationship between the two factors of language proficiency, Analysed and Automatic. The use of strategies, irrespective of learner intention regarding learning or communication, have the effect of promoting development along one of these dimensions. Strategies which assist in the automatization function might consist primarily of those strategies associated with practice (activities such as memorization, use of routines and prefabricated patterns). Strategies which primarily promote the analysed control of the language would be those in which the learner uses knowledge of the language to arrive at deductions and inferences about the language. As an example we might consider 'borrowing' as described by Corder within his framework. If we think of borrowing in terms of an attempt to create a new word to fill a gap in proficiency this may well have the effect of making the learner's knowledge of some portion
of the lexicon more analysed. For example the learner may notice a regularity in that portion of the lexicon which was exploited in the construction of the 'coined' (borrowed) word.

The point here is that it is not always possible, and perhaps not even desirable, to distinguish between the learning and communicative effects of a strategy. Use of different strategies assist the learner in the movement towards more analysed control over the target language, and may therefore have an important developmental role. It is interesting to note, bearing in mind Canale's notion of strategic competence, that some authors such as Bachman and Palmer (1981) have suggested that learners themselves differ along a measurable dimension of what can be called strategic ability. There is also some evidence to suggest that more advanced learners benefit more from the use of strategies than less advanced, (Bialystok 1979; Bialystok and Frohlich 1980).

4.4. Establishing the status of CLI

The major problem with characterising CLI as a competence phenomenon is that particular instances of transfer are seen as competence features by some theorists and regarded as performance features by others. For example Sharwood Smith (1986) describes transfer at the competence level (CLI 3) which occurs when:
"learners assume or hypothesise equivalence between competence systems or some subdomains of competence."

This view is close to the notion of 'blind transfer' proposed by Kean (1986) which occurs when learners

"fail to take cognizance of some relevant property of the target language which is at variance with the native language."

Typically this situation is said to arise because a learner's linguistic resources are exceeded by demands and in this sense compensates for L2 limitations. This characterisation of transfer seen as a competence performance is not irreconcilable with Newmark's 'ignorance' hypothesis which is the basis of Krashen's account of CLI as a performance phenomenon only. In each case transfer occurs when learners fail to incorporate the L2 rule into their interlanguage and use the L1 rule as a substitute.

Clearly there is little dispute that learners actually indulge in transfer though as yet we have no generally accepted means of establishing the status of transfer vis a vis competence and performance. The evidence from grammaticality judgement tasks etc designed specifically to tap competence provide fairly strong evidence in favour of transfer at the competence level but problems remain. As Sharwood
Smith notes, tests designed to tap competence should reduce the stress factor to a minimum, while elicited imitation, which is a common experimental task used to tap competence, involves a deliberate introduction of processing complexity. In short we are in the 'observer's paradox' of trying to observe natural data in an experimental situation which may only provide an 'outdated' picture of competence since subjects may react to the conditions of the experiment by relying on well-controlled competence acquired much earlier than on recent insights into the target system.

4.5. Dealing with variability

As previously stated, evidence from tests involving grammatical intuitions support the view that transfer is a competence phenomenon but we must be careful about how we interpret such data in the light of evidence suggesting speakers have different discourse styles, and that grammatical judgement tasks tap only intuitions about a formal style. This raises fundamental questions about the nature of underlying competence and the theoretical problem of how to reconcile the variability of learner performance with the claim that interlanguage is systematic (Selinger). The status of variability in language use depends on whether we adopt a homogeneous competence model or a heterogeneous competence model. Where the
underlying rule system is viewed as homogeneous all variability is classified as non-systematic. Where linguistic knowledge is separated from non-linguistic knowledge, even 'pragmatic knowledge' that is systematic needn't be taken into account when explaining linguistic competence.

4.5.1. A heterogeneous view of competence

A heterogeneous view of competence favoured by some sociolinguists accepts that some variability stems from 'pure performance' factors such as the affective, emotional and psychological state of the user, but insists that systematic variability be seen as part of competence. So from this perspective variability deriving from a user's knowledge of how to use language appropriately is systematic and constitutes part of communicative competence.

In native language studies the name most commonly associated with a heterogeneous model of competence is Labov (1970) whose study of the characteristics of New York speakers revealed a range of speech styles. Labov examined the frequency of certain socially marked sounds as they occurred in each speech style and found that style shifting took place systematically according to the amount of attention the users paid to their speech in different contexts.
As well as variability according to the situational context Labov also found variability determined by linguistic context. For example in the Black English Vernacular in New York he found the presence or absence of the copula ('be') depended on the specific linguistic context provided by an utterance. For example, the copula was more likely to be used when the preceding syntactic environment constituted a noun phrase rather than when it was a pronoun. Similarly, it was more likely to occur when the following grammatical structure was 'gonna' than when it was a noun phrase.

4.5.2. Types of variability in interlanguage behaviour

If the claim that interlanguage is a 'natural' language is true (eg Adjemian 1977) then we should expect similar types of variability in interlanguage behaviour. Indeed Ellis (1986) suggests that while there is no difference in degree and that variability is in fact one of the chief characteristics of interlanguage behaviour. Tarone (1983) has proposed an interlanguage continuum of styles ranging from the vernacular, where least attention is focused on form, to a careful style with a relatively greater degree of attention to form. The latter style is most clearly evident in tasks requiring learners to make grammatical judgements, a factor not always considered in interpretation of data elicited by this technique. The interlanguage continuum is represented by Tarone as follows:
The stylistic continuum is the product of differing degrees of attention paid to form as opposed to meaning in a variety of performance tasks. According to Tarone the stylistic continuum reflects competence, or in Tarone’s own terms, ‘capability’, which refers not to linguistic knowledge as reflected in grammatical intuitions, but more broadly to that which underlies all regular language behaviour.

"Interlanguage capability consists of that which underlies regularities in learner production and perception, writing and reading, as well as in making judgements on grammaticality".

4.5.3. CLI and variability according to context

Further evidence of style shifting comes from Dickerson (1975); Beebe (1980); and Schmidt (1977) whose studies indicate that the role of the L1 can also vary according to the style adopted and/or to the linguistic/situational context. For example, Schmidt (1977) found that Arabic learners of L2 English were more accurate in their use of the English dental fricative [θ] (‘th’ sound) in a formal task than in an informal task. What is interesting is
that the L2 English pattern followed the L1 pattern in Arabic where style-shifting from low to high frequency in the use of [\~e] depends on whether they are speaking colloquial Arabic (informal) or classical (formal). Thus we may wish to conclude here that we have evidence for transfer of an L1 sociolinguistic pattern to the interlanguage.

Beebe (1980) provides further evidence of transfer of a formal feature of the L1 into the L2 when the context demands a formal style. She found that Thai learners of L2 English produced fewer instances of the target norm [r] in formal than informal occasions. Again this may be seen as transfer of a sociolinguistic 'rule' since the subjects used the prestige Thai [r] variant, which they associated with formal use in their own language, in formal English situations.

Other studies have indicated the influence of task on variation, a finding with obvious implications for empirical research. Again Labov demonstrated how different kinds of regularities in the production of socially marked forms in native speaker speech depend on the task given them. We can therefore expect variability as a product of task to be a characteristic of interlanguage behaviour. Burmeister and Ufert (1980) compared data from spontaneous speech and translation tasks in the L2 English of a group of German children, and found
L2 influence was higher in the elicited data than in spontaneous data. Larsen-Freeman (1975b) reported the rank orders of morpheme production varied in speaking, listening, reading, writing, and elicited imitation. Fairbank (1982), reported in Tarone (1983), found a Japanese learner of English produced the third person singular present '-s' inflection very rarely in casual speech but almost always produced it in careful style.

4.5.4. Social and psychological considerations

In addition to the methodological implications of these findings, certain questions are raised here regarding the role of consciousness in transfer, and the social and psychological factors which inhibit or favour transfer. This is the main theme of the next section so I do not intend to pursue it here except perhaps in relation to the study into the acquisition of French negation forms by Trevise and Noyau (1982) who explicate the difference between elicited data and natural speech, and look at transfer from a style-shifting point of view. With regard to the question of a learner's consciousness about transfer, they conclude it is difficult to divorce linguistic and psychological phenomena from sociolinguistic considerations. When using elicitation techniques the authors urge researchers to bear
in mind the question of relationship between metalinguistic verbalisation and mental representation, and what kinds of processes remain beyond consciousness, which cannot be adequately verbalised, or inferred by an observer. Elicitation procedures often yield only additional data of a more formal style but do not give direct access to the subjects' more or less conscious activity.

The subjects in Trevise and Noyau's study are Spanish migrant workers in France. The authors note the subjects' speech patterns in (L2) French and then ask questions designed to reveal something of their metalinguistic awareness of L2 normative rules. Results tended to vary at the individual level with some subjects using idiosyncratic versions of the negative, but systematic variation was found in that the normative form was used when subjects monitored their speech. In less formal styles, they tended to use idiosyncratic forms closer to their L2 Spanish.

In conclusion the authors remind us that language is not simply a neutral communicative tool, whether we are dealing with a native tongue or an L2. Subjects do not seek only to make themselves understood but are deeply involved in language as a social behaviour. So one should study not only linguistic forms summed up in quantified results but also contexts, situations, and psychological and social factors at play.
Taking up the authors' last point we may wish to bear in mind that results from language contact situations such as those described by the present authors or Sharwood Smith (1981) and Py (1986) dealing with language loss, have to be treated differently from classroom research precisely because of the potential influence of social and psychological factors. It may well be the case that learners in a classroom situation with strong integrationist motives may consciously attempt to limit manifestations of L1 influence in their output, whereas migrant workers with weaker integrationist motivation may consciously (or unconsciously) emphasise L1 influence. Relevant here perhaps is Labov's finding that some older sections of the community in Martha Vineyard used particular language varieties to distinguish themselves from the influx of newcomers into the community. It is also interesting to note in this respect the finding by Meisel, Claesen and Peinemann (1980) that presumed length of stay was a more important variable than actual length of stay, in determining the overall success in acquiring German amongst migrant workers.

Such evidence leads to the firm conclusion that transfer is very much a variable phenomenon and not a mechanistic kind of linguistic reflex. Certainly a great deal of evidence supports Tarone (1983) who concludes that interlanguage form varies systematically with elicitation task, and that when a task elicits a relatively more
careful style, that style may contain more target language forms, or more prestige native language variants, than the relatively more casual style elicited by other tasks. The more casual style may contain structures traceable neither to the L1 or the L2, structures which seem to arise spontaneously in the casual style and which occur in pidgins, in early child language acquisition, and early untutored SLA.

5. Concluding remarks

In conclusion it might be tentatively suggested that empirical evidence exists which suggests that transfer is a variable phenomenon which sometimes affects a learner's interlanguage grammar while at other times it may be the manifestation of a borrowing strategy designed to overcome some communication problem. The question of whether a particular instance of transfer represents a competence or performance phenomenon is a difficult issue which remains largely unresolved and partly depends on the model of competence one starts with. In addition, account has to be taken of the methodology used to collect and analyse data and, of course, the nature of the task used for elicitation. Long and Sato (1984) regard the effect of the task as a fundamental methodological consideration in empirical research and point to three implications for those conducting studies:
1) Researchers need to control for task within studies in order to isolate that portion of variability in IL data which is related to acquisition processes.

2) Researchers need to gather data on a range of tasks before assuming that they have a representative sample of IL performance.

3) Researchers need to ensure that data are comparable across studies (in terms of the tasks set for learners) before concluding that any differences are due to acquisitional types as opposed to task types."
CHAPTER 3

TRANSFER CONSTRAINTS AND PREDICTABILITY

1. Predicting transfer

It will be recalled from Chapter 1 that one of the main weaknesses in the Contrastive Analysis hypothesis was that it made wrong predictions about which language features were transferable. Indeed, the CA hypothesis rested on the view that any language feature may be transferred, but observation and analysis of actual behaviour suggests that learners do not transfer willy nilly when they perceive structural identity or similarity between the L1 and target language, however one may wish to define them. (Andersen 1983; Kellerman 1983; Zobl 1983). This fact adds weight to the evidence for systematicity in interlanguage behaviour and suggests there are constraints on which features of the L1 are transferable. Identification of these constraining factors might shed some light on natural acquisition principles and enable us to predict something of the form of inter-language production.

First of all it is necessary to say something about the term 'predict'. Ard and Homburg (1986), argue that transferability is proportionate
to the degree of similarity between language features, in this case, lexical items. They make the strong claim that transfer always occurs under conditions of 'greater similarity', though the authors do not give us a detailed account of what constitutes 'similarity'. Kellerman (1983) on the other hand, uses 'predict' in a probabilistic sense since a complex human phenomenon like language behaviour can never be predicted in the absolute sense. The best we can hope to achieve is to be able to identify the determining principles which enable us to say that one feature is more likely to be transferred than another and describe the conditions of its occurrence and range. As we shall see shortly, Kellerman seeks to pinpoint factors relating to the L1 which determine transferability but whether or not actual transfer takes place depends on the interaction of L1 knowledge and the learners' perception of the L2 and the 'distance' between the two languages.

Adjemian (1983) argues that one cannot predict where language transfer will and will not occur even in a probabilistic sense, a view that seems to directly oppose that of Kellerman above. The basis of Adjemian's negative view is the fact that there are so many variables to consider in predicting language transfer, such as affective variables, perceived distance, and language universals, all of which Kellerman tries to take into account. One might also wish to take into consideration other variables not considered, however, such as discourse domains and situational and contextual factors relating to the type of interaction which the learner is engaged in.
1.1. The role of language distance

There seems to be considerable agreement that one crucial factor in determining whether transfer occurs is 'language distance'. The general view seems to be that languages which are 'close' induce transfer and facilitate the learning process (Corder 1977), though it is important to qualify this since it is the learner's perception of similarity which may be responsible for the facilitation and willingness to transfer, rather than what linguistics may categorise as close or similar.

At the beginner stage knowledge/perception of the L2 may well be at the 'folklinguistic' level, eg, English is like German but unlike Russian. Such beliefs may promote inappropriate transfer in the sense that the degree of similarity perceived is greater than in reality and errors occur, though increasing knowledge of the target language will lead to changes in the perception of similarity and difference. In other words, the perception of which features can be transferred is likely to change over time.

1.1.1. Positive transfer and language distance

At first sight the statement that closer languages are easier to learn might seem obvious, but the explanation of why this should be the case is deceptively simple. It might be the case that there is simply less to learn, since 'positive transfer' means learners
acquire similar or identical target features free. The more learners perceive similarities the more they are encouraged to transfer and the closer in reality the languages are the more transfer will be facilitative. Ard and Homburg discovered through informal interviews, for instance, that Spanish speaking learners of English assume that if a Spanish word resembles an English word then the English word probably has the same meaning as the Spanish word. Arabic speakers, on the other hand, do not make this assumption, and assume that formal resemblance between English and Arabic is due to chance.

Ard and Homburg argue that it is not simply the case that Spanish learners acquire English items 'free' but that language background actually plays a role in lexical learning. They cite evidence from Popov (1978) who found that Bulgarians learning Russian scored better on both lexical items similar between the two language and items dissimilar, compared with a group of Vietnamese speakers learning Russian. According to the authors these results may be due to overall closeness in lexical structuring or perhaps to closer overall structure of Spanish and English, and Bulgarian and Russian, vis a vis Arabic and English and Vietnamese and Russian. Alternatively, it is also possible that similarity in lexical structure means more 'cognitive effort' can be directed to fewer features. It is not only that positive transfer means there is less to be learnt, but more cognitive processing space is available for learning those features which are dissimilar.
1.1.2. Learners' perceptions of language distance and psychotypology

Kellerman (1979) also considers language distance to be the crucial factor in determining whether or not actual transfer takes place. He argues that whether a particular L1 feature is a candidate for transfer can be predicted from structural considerations but whether transferability is realised depends on the learner's perception of the distance between the L1 and target language, or to use Kellerman's term, the learner's psychotypology. If the perceived distance is small (eg, German and Dutch) transfer is more likely than when perceived distance is great (eg, French and Japanese). In other words, it is the interaction of L1 knowledge with L2 perceptions which determine transfer. Prediction of actual transfer therefore requires insight into the subtle differences in the way L1 knowledge is stored and the way such representations interact with the learner's evolving knowledge of the target language. This requires tapping learner intuitions about the target and native languages, but even this information, if obtainable, only enables prediction in a probabilistic sense. What Kellerman means is that we can only say that a particular language structure/feature X is more likely to be transferred than structure/feature Y. This doesn't mean that either will or will not appear in context A or B, but, if they do then it is a statistical probability that X will appear more than Y.
1.1.3. An example of psychotypology in practice

Before discussing L1 features which are thought to determine transferability, we will examine Kellerman's notion of psychotypology and language distance in the light of Sjoholm's (1976) study of Finnish learners of English, some of whom speak Finnish as their mother tongue and who are compared with compatriots who have Swedish as their first language. Where Swedish is the L1, Finnish is a second language, but where Finnish is the L1 there is generally a much less proficient grasp of Swedish and indeed, many Finns have a superior command of English (L3) than Swedish.

Here it was found Finnish speakers made errors in English that could not be traced to Finnish but to Swedish (ie, the L2), while errors produced by Swedish speakers reflected their L1, or English L3, but not Finnish (L2). In Kellerman's terms this could be explained by learners perceiving that English is closer to Swedish than Finnish and therefore being more willing to transfer. This is not altogether surprising given the previous evidence and while we may wish to say it is learners' perceptions which determine if transfer occurs it has to be recognised that ultimately this is another way of saying structural identity determines transfer since learners' perceptions are increasingly based on what they know about the target language and, in this case, the findings merely reflect the fact that whereas Swedish and English are related Germanic languages, Finnish is totally unrelated to either.
2. Potential and actual transfer

While actual transfer depends on the interaction of L1 knowledge and perceptions of L1/L2 language distance, Kellerman (1979) argues that transferability can be established solely on the basis of L1 specific characteristics independent of whichever L2 is being learned. Transferability is Kellerman's term for what Kurt Kohn (1976) calls transfer potential and refers to preconditions inherent in the L1 which remain constant. This rather begs the question of how these language features are manifest in the language and how learners of an L2 recognise that certain features of their L1 might be suitable candidates for transfer i.e., that there is correspondence between the two languages in relation to that feature.

2.1. Markedness considerations

Most explanations of these phenomena revolve around the related concepts of markedness and language features which may be ascribed as core or peripheral. Though these terms are used quite differently by different authors, the fundamental idea stems from Chomsky. The core grammar of a language consists of the principles of universal grammar and parameters which have invariant and variant realisations respectively. The periphery consists of language particular phenomena outside the core. As Kean (1986) points out, the core of any language
is only unmarked relative to the periphery and there is no strict sense in which any particular core grammar can be said to be unmarked. The core itself can be thought of as being made up of marked (parameters) and unmarked features (universals). The universals are unmarked because they are invariant and require no data for fixing. A marked parameter is one which is adopted unless there is specific evidence in the input to the contrary (null-hypothesis) while an unmarked parameter can be set only through experience to the data. Most accounts of markedness are derivative of this early Chomskyan model.

2.1.1. Non-transfer of marked features - idioms

In his investigation of the transferability of idioms (1979) Kellerman found evidence supporting his hypothesis that 'marked' structures tend not to be candidates for transfer because they are perceived as being special or particular to a language. Idioms, however, are by their very nature special features of a language and their uniqueness is particularly salient, hence the reluctance to transfer. The key question here would seem to be that of establishing a principled means of assigning a degree of markedness to a language feature, perhaps a continuum of relative degrees of markedness on which idiomatic expressions, being very marked, would be at one end with more universal features at the other. To understand Kellerman's
view of how learners perceive markedness we have to consider some of his work investigating which senses of a polysemous word are transferred and why. (1979; 1986).

2.1.2. Lexical transfer and prototypicality

In his investigation of the polysemous Dutch verb 'breken' (to break), Kellerman found evidence to support his view that the extent to which a sense of 'breken' is transferable depends on its 'prototypicality'. A prototypical sense is the one 'normally' associated with a given word. The following definition of 'semantic prototype' is provided by Coleman and Kay (1981):

"a semantic prototype associates a word or a phrase with a prelinguistic cognitive schema or image;...speakers are equipped with an ability to judge the degree to which an object (or...the internal representation thereof) matches this prototype schema or image".

Like markedness, prototypicality or 'coreness' of meaning is a matter of degree. Thus for English speakers the prototypical sense of 'red' is the colour typically associated with blood or tomatoes. There is unlikely to be any dispute about this core meaning, but at the periphery there are shades such as orange or pink which may or may not be considered a sense of 'red'. One question which arises here is why 'she broke her leg' is a more typical use of the verb 'break' than 'he broke into a run'. According to Kellerman
one factor is frequency of use and his (1986) study of polysemous 'eye' suggests that native judgements of similarity and frequency can be used to approximate to judgements of transferability for body part metaphors.

In practise, there are probably many contributing factors to prototypicality which need not concern us here. It is an intuitively appealing idea that lexical items do have 'core' meanings which are more 'universal' than metaphorical usages. Universal in this sense means 'transferable'. For example, I would guess that 'kill' in the sense of causing to die would be judged by most English speakers to be more universal and transferable than the more peripheral meaning of 'killing time'.

2.1.3. Core and peripheral language features and markedness

The idea of universal language features being more transferable is shared by Zobl (1983) who distinguishes between universal and typologically inconsistent or specialised features. This distinction is complementary to Kellerman's core and periphery. Core features are more universal while peripheral features include typologically inconsistent items. This relationship can be represented diagramatically to include markedness:
Drawing such a diagram is problematical, however, since one doesn't know how large to make the circle representing the core in relation to the periphery, since this would necessitate knowing exactly which proportion of total language features make up the core. Kellerman (1979) acknowledges this problem when he admits he cannot "offer any linguistic or other a priori means of determining the 'coreness' of an item". There is clearly a danger of circularity in arguing that the core is what learners appear to transfer from their L1 and defining the periphery as those L2 areas most susceptible to be the target of L1 transfer.

Nevertheless a great number of theories contain the idea of languages being made up of core (universal and unmarked) and peripheral features
Ross (1974) claims the order of acquisition for both L1 and L2 can be explained using such a distinction, and that in cases of 'language death' peripheral features are lost first. The explanatory value of markedness is undermined, however, by the conflicting accounts of which 'difference' is crucial in determining degree of markedness, or distance from the core. In other words, markedness itself appears to be polysemous and different theorists attribute different senses to the 'core-meaning'.

For Kellerman, markedness is ultimately a psychological term even when used in linguistic descriptions of syntactic features:

"a structure or meaning will be marked in the native language if there are related syntactic structures which express the same message in psychologically simpler ways, or meanings of the same word or lexical units which the native speaker considers more central". (1979: p 38).

The precise meaning of 'marked' remains elusive, however, and again there is danger of circularity. Is a particular language feature or construction 'marked' because it is "psycholinguistically complex", or is it the other way round?
2.1.4. The markedness differential hypothesis

Despite these problems Eckman (1977) uses 'typological markedness' in an effort to revamp the strong version of the Contrastive Analysis hypothesis. It will be recalled from chapter 1 that a major problem was the lack of a principled means of relating degree of difficulty to degree of (linguistic) difference. Eckman has developed a 'Markedness Differential Hypothesis' which states that the areas of the target language which will be difficult are those areas which are both different from the L1 and relatively more marked than the L1. Like Kellerman, Eckman supports the view that transfer is more likely if the L1 feature in question is unmarked.

An example of the kind of evidence offered by Eckman from phonology has to do with the distribution of voice contrast in pairs such as (t) and (d) in English and German. In English this contrast is found at the beginning of a word (eg, 'tip'; 'dip'), in the middle of a word (eg, 'wetting'; 'wedding'), and at the end of a word (eg, 'bat'; 'bad'). In German, however, the contrast is found only in initial and medial positions but not in final position and - the 'old' Contrastive Analysis hypothesis would suggest that English learners of German would have more difficulty than German learners of English with this feature. Eckman claims that empirical evidence suggests that the opposite is true, and that the correct
prediction can be made by considering the maintenance of a voice contrast word finally as being more marked relative to that contrast in medial and initial positions. It is further argued that application of the same principles incorporating the concept of typological markedness can predict degrees of difficulty in syntax. This concept of markedness is defined thus:

"A phenomenon A in some language is more marked than B if the presence of A in a language implies the presence of B; but the presence of B does not imply the presence of A".

2.1.5. Markedness and complexity

This notion of markedness appears to be derivative of the 'complexity principle' put forward by Clark and Clark (1978) which states that complexity in thought tends to be reflected in complexity of expression. This relates to typological markedness since 'more complex' is reflected in the addition of features such as morphemes or rules. A corollary of this notion of 'complexity through addition' is the principle of contextual neutralisation which, according to Clark and Clark, means "if expression A can neutralise in meaning in contexts that the almost equivalent expression B cannot, then B is more complex than A". Relating this to Eckman's markedness hierarchy we can assume 'more complex' equates with more marked.
The idea of linguistic complexity is central to a number of definitions of markedness. For example, according to Rutherford (1982) the criteria for degree of markedness is whether one of a pair of rules or features is more grammatically restricted than the other. Thus adjectives like 'tall', 'intelligent', or 'beautiful' are unmarked in relation to 'short', 'stupid', or 'ugly' because they occur in both declarative and interrogative sentences. Markedness again relates to complexity since marked rules have a greater occurrence.

2.1.6. Linguistic complexity and psychological difficulty

The problem of reconciling linguistic complexity with psychological difficulty, however, appears to remain unsolved. It is still not clear why additional rules or features necessarily result in learners experiencing conceptual difficulty. Somehow, the necessary causal link remains elusive and the arguments circular. Take, for example, Wode's argument (1984) that developmental sequences reflect the internal complexity of the structure being learned (ie, the degree of markedness). Wode cites development of the negative and argues that subject plus negative plus verb phrase (preverbal negation) is the unmarked negative form. The evidence presented for such a claim is that preverbal negation is the most frequent and geographically more widespread. And why is it most frequent? Because it is less marked!
The point is that the pattern in which learners acquire the negative is relatively well known and it is not clear how it helps our understanding of the acquisition process to describe known phenomena using terms like markedness. The problem is exacerbated by the variety of criteria used to explicate markedness — complexity, saliency, explicitness, frequency, etc. Different concepts of markedness make it more difficult to usefully employ as a tool in explaining and interpreting data from empirical research. For example, White (1984) regards 'pro-drop' as marked while Hyams (1983) considers it unmarked. White argues that learners carry over the (marked) pro-drop parameter when learning a non pro-drop language such as English. Liceras (1983) also offers evidence that Spanish learners transfer a marked form, preposition stranding.

As we have noted, however, Kellerman, Zobl, Wode, and Eckman have all put forward different cases for the non-transfer of marked forms.

2.2. Assessment of markedness theory as a predictor of transfer

In general it is difficult to disagree with the conclusion drawn by Kean (1986):

"whatever the proper role of markedness in transfer, it will only be discovered when it is recognised that markedness cannot solve the questions posed by transfer but only contribute to their solution".

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Kean examines some of the contradictions in the claims made about markedness and transfer, in particular those relating to the pro-drop parameter and preposition stranding. She supports the above conclusion by showing how data from research into SLA can be cited to support either the view that marked values are transferred, or unmarked values. More fundamentally she argues that much of the data cited in support of markedness as a valid predictor of transfer could be predicted by straightforward Contrastive Analysis (see, for example, the criticism of Wode, above).

As Kean puts it:

"what is required is a class of examples which demonstrate the necessity for appealing to markedness theory to explain transfer; the markedness theory must do some work".

2.2.1. Discourse considerations

A criticism levelled by Rutherford (1982) of many of the attempts to predict transfer is that too much of the work concentrates on surface structure syntactic features at the expense of discourse considerations, and he argues that even much of Kellerman's useful work on psychotypology suffers from this. As an example, he takes up Kellerman's prediction that a combination of highly marked L1 items and a perception by the learner of typological distance between L1 and L2 will result in the smallest amount of transfer. This
may be justifiable when considering lexical items but contradictory evidence exists at the discourse level.

The typological distance between Mandarin and English would, according to Kellerman's hypothesis, suggest a reluctance on the part of Chinese learners of English to transfer to (subject-prominent) English the discourse features of topic-prominent Mandarin. Yet as the study by Schachter and Rutherford (1979) shows, such transfer does take place, manifested by particular kinds of overgeneralisation and unique error types. Transfer along these lines is also predicted by Hakuta (1974).

It is certainly the case that markedness theory has concentrated overwhelmingly at the levels of phonology, morphology, and low-level syntax and the predictive validity and explanatory effectiveness appears to decrease as one considers more abstract and complex examples of language use. Having said that, it is evident that only a modular approach to such a pervasive and ubiquitous phenomenon like transfer is likely to yield positive results, provided all linguistic areas are explored. The next section will therefore deal with aspects of discourse and pragmatic transfer, an area largely underdeveloped in SLA research.
CHAPTER 4

PRAGMATIC TRANSFER AND CLI IN DISCOURSE

1. Introduction

The difficulty of pinning down transfer has undermined many of the attempts to give a principled account of the overall determinants and effects of transfer, which may have differential manifestations and causes in different language domains. It is not necessarily the case that CLI results in L1-like features in interlanguage production. Reference has already been made to underproduction and overproduction, where L1 influence is manifested by learners avoiding certain problematical structures, or relying on a particular form to express meaning in a greater range of functions than a native speaker would use. If we consider for a moment the general area of communication and therefore include paralinguistic phenomena, phatic communication, gesture, and facial expressions, and so on, it becomes clear that the possibilities for CLI become enormous in range and complexity. It is clearly beyond the scope of this study to deal with these areas but they are worth mentioning in passing since they are part of native communicative proficiency and failure to match facial expression with the propositional content of what is said, for example, reduces the effectiveness of the communication.

The SLA literature dealing with transfer and CLI contains a great deal of empirical data and theorising which predominately concentrates on grammar.
Similarly in language teaching there are areas of language which have had a relatively low profile in syllabus and text book design. Again these areas may be considered part of a native speaker's proficiency and are crucial in mastering a second language: when to talk; what to say; pacing and pausing; intonation and prosody; cohesion and coherence; and so on. These are not extra-linguistic paralinguistic or peripheral areas of linguistics but as D. Tannen (1984) puts it, "are the essence of language.

2. CLI and sociolinguistic appropriateness

2.1. CLI and conversational competence

Research into the above areas of language is relatively underdeveloped and description of pragmatic and discourse features of language have not reached the precision of grammatical descriptions. Nevertheless, it is a potentially interesting area from the perspective of CLI since one of our aims is to characterise transfer in overall SLA rather than constrain our thinking to particular language domains. The nature and amount of empirical evidence coupled with a lack of theoretical refinement make general conclusions about pragmatic transfer difficult though a number of possible hypotheses emerge.

In the following account many of the articles referred to are concerned with sociolinguistic competence or appropriateness of language use, though authors differ in the actual terms they use. For example, Richards and Sukwiwat (1983) are concerned with 'conversational competence' which they distinguish from grammatical competence since the former takes the utterance as the basis for description while the latter makes reference to the sentence as the unit for
The authors are interested in the transfer of conversational norms which determine the appropriateness of 'speech acts'. There are certain speech acts which fulfil language functions that may be considered universal, in the sense that all languages have the function of requesting, apologising, praising, criticising, etc. Of course differences arise with the range of forms used to realise such functions and breakdown in communication can occur if learners transfer conversational norms or routines from the L1.

2.2 Appropriateness of use and selection of register

Appropriateness of use involves more than selection of register, for while all languages contain different registers and speech styles, what is marked in language A in the lexicon or morphology may be communicated by stress or intonation in another. As an example Richards and Sikwiwat cite the differences in the way Indian languages mark politeness compared to English. The English style of 'indirect request' communicated by set phrases such as 'I wonder if I might ask you to...' or 'would it be possible', are inappropriate in Indian languages because such phrases imply social inequality and so are generally avoided in speech. Unfortunately, the authors do not attempt to quantify the extent to which such differences lead to avoidance of indirect requests in English and one is left to speculate whether this is a potential area for CLI or whether actual transfer or avoidance behaviour occurs in practice. In particular it would be useful to know if Indian speakers regard their indigenous way of requesting as being more or less universal relative to English. In other words, is there a 'marked' and 'unmarked' way of requesting based on language typologies?
The above example clearly brings out the importance of sociolinguistic competence since flouting of pragmatic norms is likely to reflect on the speaker as a person rather than on their linguistic ability. While grammatical incompetence is usually apparent in the surface structure of an utterance and is therefore recognised and tolerated more easily by native speakers, pragmatic failure can be extremely difficult to recognise by those not alerted to it. Ironically, then, the more fluent the speaker appears the less tolerant a native speaker may be of pragmatic failure. Failure to 'mean what is said' may lead to labelling of individuals and stereotyping of nationalities as aggressive, rude, obsequious, and so on.

2.3 Transfer of sociolinguistic norms of appropriateness
It is not difficult to find examples of pragmatic failure apparently due to inappropriate transfer of L1 sociolinguistic norms to the L2, and the effects this can have on interaction. Richards and Sukwiwat (1983) describe how changes in voice quality, rate of delivery, and appropriate intonation pattern accompany different styles in Thai and that interactional style is dictated to a great extent by the perceived need to mark social distance. The marking of social distance is possibly a universal feature of language use, but the authors postulate that Asian learners search in vain for the English equivalents to express a sufficiently 'high' form and this leads to overuse of honorifics or titles to accompany address in spoken English or a 'florid' prose style in written language. An important question emerges here, however, for it is not clear whether transfer occurs because Thais make the wrong social judgements about social distance in English culture, or whether they recognise the nature of the
social distance but lack the linguistic resources to encode it in the appropriate way.

2.3.1 Cultural Transfer

Cultural factors have an important role to play in determining who says what to whom, and how. Indigenous cultural norms may be inappropriately transferred to the L2 setting, and though this may not lead to errors which are apparent at the grammatical or structural level, nevertheless the quality of the interaction is affected. A case in point is described by Richards and Sukwiwat (1983) who claim that Thais are taught to mask negative emotions whereas some western cultures actively encourage their expression. The authors argue that Asian speakers therefore 'tend' to avoid expressions of open disapproval, criticism, or displeasure and this kind of avoidance has led to the caricature image of Thais being obsequious. A similar observation has been made by Loveday (1982) who points out that Japanese speakers are not inclined to express open disagreement and are likely to transfer 'ceremonial formulae' for apologies or thanks.

The other side of the same coin is where pragmatic transfer leads to speakers being labelled 'forward' or aggressive because they transfer norms which allow a more direct way of expressing oneself. Blum - Kulka (1982) illustrates how Hebrew speakers are more likely to use direct ways of making requests than English speakers while Kasper (1979) and House and Kasper (1981) claim that German speakers also differ from English speakers in this respect. These examples are valuable reminders of the close relationship between language
and culture and where cultural transfer occurs it may reduce the effectiveness of communication. The problem is that there is no attempt to provide a principled account of cultural transfer. It will be recalled from chapter three on transfer constraints and predictability that not everything is transferable and not everything which is transferable gets transferred. The examples cited above, though interesting, are more observational than analytical and we are left wondering precisely what situational factors promote or constrain the transfer of cultural norms. Again it would be helpful to know the extent to which learners actually indulge in transfer rather than speaking of 'tendencies', and the role of learners' perceptions of what is universal and cultural specific.

2.4 Cultural acceptability and CLI

A useful study here is that of Olshtain (1983) who interprets sociocultural rules of speaking as the ability to react in a culturally acceptable way in a given context, which means that in certain situations there is likely to be wide ranging norms amongst native speakers. The objective of Olshtain's study was to compare interlanguage performance with that of native speakers across a range of situations which might lead to a speech act incorporating an apology. The 'norm' for each type of situation was established by observing the behaviour of native speakers of English, Hebrew, and Russian, before investigating interlanguage behavioural patterns of Russian and English learners of Hebrew.

2.4.1 Situational Factors

Olshtain found differences in the types of situation calling for an apology. In
general terms English speakers accept responsibility and express apology in a wider range of situations than either Hebrew or Russian speakers. What is interesting, however, is that transfer by English learners of Hebrew was not straightforward in the sense that they apologised less in Hebrew, suggesting they perceived cultural differences and that English was more 'marked' with regard to this feature. On the other hand, Russian learners of Hebrew were found to have a more universal perception of the apology act and maintained almost the same level of frequency of semantic formulas in Russian and Hebrew.

2.4.2 Linguistic Variation

Important linguistic differences emerged in the way speakers chose to encode apologies, with Hebrew speakers favouring explanation to direct apology, while Russian speakers showed a preference for accepting responsibility as opposed to using a performative verb.

2.4.3 Situational and Linguistic Factors

Thus Olshtain's findings illustrate how linguistic appropriacy may be both situation and language specific. While it is possible to speak of general tendencies, eg English speakers apologise more than Hebrew speakers while Russian speakers can be said to have an overall higher tendency toward acknowledgement of responsibility, the actual choices are situation dependent. These tendencies, when they differ from target features, might be transferred by the learner into the new language across all situations. It is partially the result of this type of transfer by overgeneralisation that can lead to labelling of Hebrew speakers as 'arrogant' or claims that English speakers are 'insincere'
because they say polite things they don't mean.

2.5 Meaning what you say, and saying what you mean

One consideration which has to be borne in mind is the level of learners and the circumstances under which they are learning. Students of English who come to Britain may well receive a great deal more exposure to social and linguistic conventions not normally directly taught in classrooms. At the other extreme, learners may only have a few hours exposure to English with a non-native speaker and perhaps in a classroom setting with traditional approaches concentrating on language form. It is difficult to see how such students are expected to acquire conventions about appropriate L2 use unless they are taught or this area is brought to the attention of students.

2.5.1 Illocutionary Force and Propositional Content

A case in point here is provided by Jenny Thomas (1983) and is concerned with the way speakers interpret the illocutionary force of a statement vis a vis its propositional content. For present purposes illocutionary force may be described as the actual meaning which a listener understands while propositional content is the literal sense of the sentence. Thomas rather amusingly describes how she 'invited' her students to read in class by using the conventionally polite English form, i.e.,

"would you like to read ..........".

She was somewhat taken aback when students replied,

"No". They'd rather not!

The students in question did not mean to be rude, of course, but were ignorant
of the illocutionary force of the teacher's utterance which was closer to the function of 'ordering' despite being in the form of a request. In her experience of teaching in Russia, Thomas claims that 'the inappropriate transference of speech act strategies from L1 to L2 is a frequent cause of pragmalinguistic failure', an example of which might be using a direct speech act where a native speaker would use an indirect speech act. In the case of Thomas's example, the point is that polite usage in Russian permits many more direct imperatives than English and pragmatic failure arises through transfer of the form - function relationship appropriate in Russian usage.

2.5.2 Pragmatic Competence

Though much of Thomas's evidence is anecdotal in nature she introduces some theoretical distinctions which many of the other writers in this field ignore. In the first place she argues that pragmatic failure may be either a competence or performance phenomenon. Whereas Richards and Sukwiwat see pragmatic competence as synonymous with communicative competence, Thomas prefers to discuss different levels of knowledge including grammatical, psycholinguistic and 'social' knowledge. Pragmatic failure can arise through lack of knowledge on any of these levels, although it can also result from an imperfect command of lower-level grammar. She is not concerned with the latter, however, nor with performance errors which she terms 'blurts'. Her actual definition of pragmatic competence is the ability "to behave linguistically in such a manner as to avoid being unintentionally offensive, for most of the time, to strangers who speak the same language or variety of language as oneself".
2.5.3 Pragmatic Competence and Sociolinguistic Competence

What pragmatic competence appears to be, then, is the ability to "mean what you say, and understand the meaning of what is said to you". This involves more than the linguistic knowledge of how to encode and decode the propositional content of sentences since it implies an ability to understand utterances in their context. I cannot see how it differs substantially from sociolinguistic competence, however, which according to Hymes includes the knowledge of how to say what, to whom, and when. But at least Thomas attempts to draw a distinction between the types of knowledge which may result in pragmatic failure through transfer. This can be illustrated through another of her examples from Russian, which involves the speech act of 'requesting'.

2.5.4 Pragmalinguistic and Sociopragmatic Failure

In Russia cigarettes are very cheap and asking a stranger for one is no more of an imposition than asking for a match in Britain. The ability to make judgements about the degree of imposition involved is part of a speaker's 'social competence' as distinct from 'linguistic competence'. Cross cultural mismatches in the assessment of social distance, of what constitutes an imposition, or in evaluating relative power status are not based on linguistic knowledge, and wrong judgements about such matters is what Thomas calls sociopragmatic failure. Thus a Russian learner of English may inappropriately ask for a cigarette by using a more direct speech act than dictated by British social conventions, such as:

"Give me a cigarette please".
This way of requesting cigarettes from strangers may be very good for the health since it is likely to be interpreted as 'rude' or 'pushy'. The key question is why the request might be encoded in this way. If it was because the learner did not understand the size of the imposition involved then clearly it would be an example of sociopragmatic failure, but it is equally possible that he does know the size of the imposition but lacks the linguistic competence to correctly encode the illocutionary force of a polite request in English in which case we have a case of pragmalinguistic failure.

While sociopragmatic failure stems from the social conditions placed on language in use, pragmalinguistic failure occurs when the pragmatic force (or illocutionary force) mapped onto an utterance is systematically different from the force most frequently assigned to it by native speakers, or when speech act strategies are inappropriately transferred from L1 to L2. The basis for differentiation is therefore type of knowledge involved, linguistic or social. In practice this distinction cannot be absolute since pragmatics is the area where social knowledge comes into contact with linguistic knowledge. Correctly interpreting or encoding the illocutionary force of an utterance requires a speaker to take account of contextual and linguistic cues at different levels. As well as the attitude of the speaker towards the information (topicalisation, connotation, focusing of information, etc) one must also take account of the attitude of the speaker towards the hearer (degree of deference, social distance, perception of status, etc). As one moves from the former to the latter one is moving along a continuum with pragmalinguistics and sociopragmatics at alternate ends. Similarly, the knowledge base changes from language specific to culture specific.
2.5.5 Cultural and Linguistic Appropriateness

Thus Thomas concludes that the distinction between pragmalinguistic and sociopragmatic failure is not absolute but forms a continuum with a grey area in the middle. Outwith that grey area, however, it is possible to distinguish between uncertainty as to the pragmatic force attached to a particular utterance (a linguistic concern) and uncertainty as to what is socially appropriate linguistic behaviour (ie it is as much a cultural as a linguistic problem). Since pragmalinguistic failure is language specific it is an area which could be tackled pedagogically through teaching, course design, syllabus structuring, and so on.

2.6 Conversational Constraints

In post-behaviourist linguistics much emphasis has been placed on the 'creative' aspect of language, which refers to the native speaker's ability to 'generate' novel sentences or sentences which they have never encountered before. Native speakers may well have this ability but clearly in practice there are constraints involved since only a fraction of sentences which are logically possible are ever used in speech and so a difficult task for the learner is to realise the constraints on what is possible. A very proficient learner may well reach the point of being able to generate formally correct language which is never used by native speakers, and often transfer of L1 conversational norms flout L2 constraints which results in 'awkwardness' rather than overt error.
2.6.1 Topics

One study which has dealt with the awkwardness of communication resulting from transfer and flouting of conversational constraints is that of Scarcella (1983) who uses the term discourse accent to refer to conversational features in the L2 which are used in the same way as in the L1. The author studied the interaction patterns of three groups, native speakers of Spanish to native speakers, native speakers of English to native speakers, and finally the interlanguage of learners. In deciding which topics were suitable for discussion Spanish learners clearly had an idea of constraints in English which didn't exist in Spanish. Thus between Spanish natives there was a great deal of discussion of what British culture might consider to be intimate private matters unsuitable to be the topic of conversation among strangers. In short, the topics would have been 'taboo' in English since they violate the participants' rights to privacy (Brown and Levinson 1978). Significantly, however, the Spanish speakers avoided such intimate topics in interlanguage interethnic conversations.

2.6.2 Perceptions of Cultural Distance

In other words, there was no sociopragmatic transfer here, in a situation where a straightforward cultural contrast might have predicted it. It may well be that these learners regarded this particular aspect of their culture as specific or distant from the American norm. In Kellerman's terms, it could be argued that learners have a psychotypology not only of language distance but of cultural distance and that somehow the two interact to determine transfer.
2.6.3 CLI and Conversational Constraints

Getting back to Scarcella's study, while no evidence was found for transferring taboo subjects, 'discourse accent' became apparent through the sequential order in which topics occur. While it was relatively easy to predict the sequence of appearance of topics in native-native interaction (Spanish and English) topics were much less predictable in the L1 interethnic conversations.

Another piece of interesting evidence to emerge from this study, and which demonstrates the 'grey area' between sociopragmatic and pragmalinguistic transfer, was the different ways Spanish and English speakers have of signaling that they are listening. Spanish speakers show interest in the conversation by repeating the speaker's previous utterance, whereas the use of repetition as a back channel cue is rarer in English. Consecutive back channel cues may also be used in English to display sarcasm whereas in Spanish they indicate listener support. In the study English speakers misinterpreted the back channel cues believing them to be signals that the speaker wished to give up his 'turn' at speaking.

2.6.4 The Subtlety of CLI

During the playback interview part of the study, subjects claimed they were aware of the 'awkwardness' of the interethnic interactions but were ignorant of what the linguistic difficulties were. As Scarcella puts it,

"while the speakers seemed to share the same use of syntax, morphology, and lexicon, this study demonstrates that the use of CF's (conversational features) was quite different".
Since learners were unaware of this fact we may conclude their perception of the L2 with respect to these conversational features was that they were identical to those existing in the L1. It would therefore appear to be a case of 'blind transfer' (Kean 1986). More controversially perhaps, Scarcella suggests this 'blindness' is likely to continue and fossilization may result at the discourse level. It will be recalled that Selinker's (1972) definition of fossilisation is,

"the permanent failure of L2 learners to develop complete mastery of TL norms, ie a cessation of L2 learning".

Scarcella suggests that since the subjects' use of conversational features results from wholesale transfer (rather than creative adaptation of these features into English) we might conclude that conversational features emerged early on in the learner's L2 production and remained unchanged over time. But the conclusion that fossilisation has occurred might appear to be a little premature since this study was concerned only with one 'discourse domain'. (Selinker and Douglas; 1985).

3. Discourse Domains

Discourse domains may be thought of as internal contexts which individual learners create to make sense of L2 data, and within which interlanguage structures are created differentially. The authors claim that important SLA processes such as transfer and fossilisation do not occur globally across interlanguage but differentially within discourse domains. The suggestion here is that one determinant of transfer can be context and so complements the work of Tarone (see Chapter 2) who looked at interlanguage variation according to the task, which can be thought of as a 'subset' of variation with context.
The methodological approach of Selinker and Douglas is to combine ethnomethodology with that of a subject-specialist informant procedure. They aren't interested in comparing linguistic units per se but wish to investigate native - non-native interaction in a situation where the learner's 'capability' (Tarone; 1983) is stretched. What they do in their study is to compare and contrast the rhetorical strategies for compensation in the interlanguage produced by a learner in juxtaposed contexts.

3.1 Interlanguage Variation According to Discourse Domain

The authors claim this investigation provides examples of different linguistic behaviour in different discourse domains. In an LSP domain (Language for Specific Purposes) the subject is able to exercise precise control over the domain in spite of a lack of linguistic precision. This control is demonstrated by the use of communication strategies to get his meaning across whereas in the second non-specialist domain he shows less control and indeed, seems ready to give up his attempt to communicate rather than resort to the rhetorical strategies which he readily used in the first resort.

It has to be borne in mind that the authors' main concern is the design of tests which will offer a better view of the learner's competence. The argument here is that where existing domains are engaged we can gain a clearer picture of the interlanguage competence. As the interview part of the investigation revealed, the specialist domain promoted positive affective factors which enabled the subject to control all aspects of the task except the presentation of information. Lack of control brings with it an increase
in cognitive load since the individual is forced to split his attention between the information and how the information is structured, and so on.

3.2 Discourse Domains and Learner Control

Support for Selinker and Douglas is provided by Shatz (1978) who claims that the information burden is heavier on participants in contexts not under control. Ellis (1985) has also argued that degree of control of topic in discourse is an important factor in the developing interlanguage and the evidence from his data suggests that syntactic progress was most noticeable when the learner was able to nominate the topic of the conversation and have sufficient control over it.

If we accept the view of Selinker and Douglas then we may well conclude that Scarcella is somewhat premature in the judgement that wholesale transfer of conversational features from the L1 to the L2 leads to fossilisation. The Scarcella study only examined one 'discourse domain' and we do not know if the domain chosen was the most favourable for promotion of affective factors which lead to greater control over the discourse. If Selinker and Douglas are correct then we must find the 'correct' discourse domain before making judgements about learners' competence.

The problem is that there is an almost infinite number and variety of discourse domains. In the study carried out by Selinker and Douglas it was claimed that choosing the learner's specialist domain promoted positive affective factors which enabled the subject to control all aspects of the task except presentation of information. Just because this particular learner responded positively to his
specialist domain, however, does not mean all learners would react in a similar way and it is logically possible that a different learner might have reacted in the opposite way. As far as designing tests is concerned we have no possible way of knowing in advance which discourse domains are going to promote the positive affective factors which enable the learner to exercise control over the discourse.

Given the importance of promoting positive affective factors it would appear that Selinker and Douglas are using competence in the sense of proficiency and not in our technical sense of underlying knowledge and representation of the target language. It is hard to see how the subconscious representation of knowledge is determined by affective factors though it is plausible that retrieval and use of that knowledge is affected by contextual considerations. In other words some contexts promote positive affective factors which allow underlying competence to be manifest at the performance level, while the 'wrong' context increases the work load of the language processing mechanisms which prohibits competence being manifest at the performance level.

In the case of transfer, for example, if we wish to establish whether a particular interlanguage feature is a competence or performance phenomenon then according to Selinker and Douglas we would have to ensure that we used the correct discourse domain to collect the evidence. The problem is we have no way of knowing which discourse domain is the most suitable for tapping an individual learner's competence. It would therefore appear more sensible to assess
a learner's competence by taking data from a range of discourse domains or contexts. In other words particular instances of transfer in a particular situation or context have to be considered in relation to other data taken from different contexts before judgements about underlying competence can be made. In the context of Scarcella's study, if the subjects had used the same back channel cues in a similar way in a variety of contexts and situations this would have provided stronger evidence that 'blind transfer' had occurred, and that this particular instance of transfer is a competence phenomenon.

It is true that the evidence from the playback interview part of Scarcella's study suggests transfer in this case was at the competence level since the subjects were conscious of a communication problem but were unaware of the linguistic factors giving rise to the 'awkwardness' of the interethnic interaction. Bearing in mind that the Spanish subjects in this study showed some awareness of the differences in sociocultural norms between Spanish and English, it would have been interesting to find out if these learners had any perception of the differences between English and Spanish regarding the use of back channel cues. We may speculate that they were not conscious of these differences since they expressed their ignorance of the causes of the awkwardness of communication, but it would have been useful to know if the learners could recognise appropriate back channel cues in English even though they themselves couldn't reproduce them during interaction, possibly because they were concentrating all their mental efforts on other aspects of communication.
4. Concluding Remarks

Clearly pragmatics and discourse are valuable areas for investigation for SLA researchers interested in the role of CLI. Many of the studies are interesting and potentially of much pedagogical value, but some important work remains to be done before firm conclusions are possible. It is not enough to contrast cultural norms, pick out differences and then use these differences to explain communicative difficulties by reference to sociolinguistic or sociopragmatic transfer. There is enough evidence to demonstrate that where learners are aware of cultural differences they do not engage in wholesale sociolinguistic or pragmatic transfer. What is needed is empirical data which demonstrates that transfer has actually taken place, rather than to talk of 'tendencies'. Examples of transfer have to be accounted for within a suitable theoretical framework which explains why transfer occurs in a particular place at a particular time. This implies finding out more about learners' perceptions of what is transferable and what isn't, and the nature of the constraints which determine whether actual transfer occurs or not.

The fundamental problem with much of the SLA literature dealing with pragmatic and discourse transfer is the proliferation of descriptive accounts of transfer based on straightforward contrastive pragmatics. The necessary causal links seem to be missing from such descriptions, and what is required is a more principled explanatory account of why transfer occurs where it does and the constraining factors which inhibit transfer where cultural contrastive analysis suggest CLI might be evident.
From this point of view an important future research area is the relationship between actual instances of transfer and learners' perceptions of what is universal and what is particular to their language and culture. Presumably learners' perceptions of what is culturally specific or universal change over time as knowledge of L2 pragmatics increases, and investigation of these changes might well offer insight into how pragmatic competence develops.
CONCLUSION

At the beginning of this thesis it was stated that the prima facie case for regarding CLI as important in the developmental process of SLA is very strong. The principle reason is that in learning anything new knowledge and experience have to be blended with pre-existing knowledge. Whatever the actual principles involved in language learning account has to be taken of how such principles operate in conjunction with pre-existing L1 knowledge and newly acquired L2 knowledge. The first chapter on models of acquisition looked at descriptions of the principles and processes of language acquisition and views on the role of the L1 in that process. At this point it would be useful to draw together and emphasise some of the main points and themes running through this thesis.

The starting point of our discussion was C.A. which ironically was never intended as an account of the process of SLA but as a means of predicting learners' errors due to transfer. Essentially it failed in its goal for the simple reason it made wrong predictions. But it is significant that predictions are avoided or only conservatorily made by current theorists discussing transfer and no self-respecting psychological theory would claim to predict actual behaviour at the individual level on particular occasions. Prediction can only be used in the sense
that Kellerman (1982) uses it to mean the statistical probability of X happening rather than Y given certain conditions. This is a much weaker claim but is still difficult to substantiate as Rutherford's (1982) application of Kellerman's psychotypology-based predictions illustrates.

Supporters of the C.A. approach have argued that while theoretical weaknesses exist nevertheless the fundamental approach of comparing languages to establish relationships between the two and offering insights into language learning based on the outcome has not been entirely abandoned, and the method is sound if only adequate means of comparison can be found. Indeed some working within a U.G. framework (see, for example, White, passim,) appear to have adopted the contrastivist methodology in an effort to relate universals of acquisition to language specific aspects. One of the most serious flaws in the original contrastavists view of language learning was that it ignored the role of the learner in the process of acquisition. At first sight these processes of acquisition appear to be the main focus of attention within the U.G. framework, and such an approach would seem to promise much in the way of insight into the role of CLI since it seeks to identify universal processes involved in language acquisition and account for the way in which these processes operate under conditions imposed by particular languages. In other words it holds out the prospect of reconciling process and product in language acquisition.
In the final analysis however, neither C.A. or U.G. take sufficient account of the role of the learner in the process of acquisition in general, and the account of transfer in particular. If we take as an example the U.G. view that specific data 'trigger' a specific reaction in the learner, this does not seem radically removed from the stimulus-response mechanism of learning advocated by the behaviourist school. What exactly does 'trigger' mean in this context and what are the psychological processes involved? Not only are such fundamental processes left undescribed and key concepts undefined but the implication of such an account is that the learners' role is passive. The problem with such deterministic accounts is that they do not explain individual variation in language learning and transfer is depicted as a mechanistic response to linguistic stimuli.

A common problem with many of the models of acquisition is that they obscure in an effort to illuminate the principles of language acquisition, often because the theories are untestable. An example is Zobl's account which seeks to show how transfer operates in place of 'natural' or universal processes. Here the role of CLI is inversely related to the universal principles of acquisition available to the learner. Such principles are based ultimately on biologically endowed or 'innate' qualities of the human mind which explain why language typologies take the form they do. It certainly appears to be the case that learners are constrained in the kinds of hypothesis they form about the target language,
since many logically possible forms never appear in the inter-
language, but unless such 'innate' properties are identified
and made explicit we have no way of relating them to the actual
mechanism of language learning and of course no way of testing
the theory empirically.

A more fruitful approach is provided by Andersen who views CLI
as occurring in conjunction with natural acquisition processes.
The evidence cited in chapter one in connection with the pattern
of acquisition of the English negative and relative clause formation
certainly suggests a certain degree of universality, though Andersen
is probably correct in his view that there is no need to invoke
the 'innateness' argument as explanation. Of course it would
be ideal to be able to identify all the principles involved
in accounting for this universality but this is not necessary
to argue that such principles exist given the empirical evidence
and systematicity in interlanguage production of learners from
different language backgrounds. Generally speaking Andersen's
account is not incompatible with Ellis's (1985) conclusion that
universal principles may determine the order and sequence of
acquisition of particular grammatical sub-systems but language
background is an important factor in accounting for the rate
of acquisition.

CLI affecting rate of acquisition may be a reflection of the
constraining influence of the L1, or in Andersen's terms, of
the L1 acting as a filter. Kellerman's work on psychotypology suggests some of the factors involved, especially the learner's perception of the relationship between the L1 and the target language. Again evidence from the acquisition of the English negative shows how learners from certain language backgrounds are able to miss out certain stages in the developmental process while learners from other language backgrounds are 'held up' at a particular point. Such evidence underlines the point that new knowledge must interact with pre-existing knowledge, which includes knowledge of the L1 and what has already been acquired of the target language. The fact that language background constrains the way learners perceive the L2 and the kinds of hypothesis they make, does not mean that Schachter is correct in depicting hypothesis testing as the only mechanism in the language acquisition process. The account of language learning proceeding by inductive and deductive reasoning appears inadequate to explain overall SLA since such a process would undoubtedly take longer than it actually does in real life. Furthermore it has not been shown empirically that measurements of inductive and deductive reasoning are accurate predictors of language learning ability. Nevertheless it is entirely possible that part of the process can be accounted for in this way. Further evidence from studies of pragmatic transfer (see for example Olshtain's study of apologising, ch. 4) indicate that learners have an intuitive grasp of what is unique or particular to their language in relation to universal factors and this partially accounts for the apparent contradiction of
those empirical findings which highlight universal aspects of SLA and different studies which indicate variability according to language background.

An alternative explanation is offered by Krashen and those theorists who see SLA as proceeding independently of the L1. Their explanation for empirical findings indicating CLIL might be that L1 influence manifested at the product level does not reflect anything about the underlying process of acquisition but is due to the processing mechanisms involved in language production. Krashen distinguishes acquisition from learning and suggests that if we could gain sufficient insight into the processes of SLA we would see them operating independently of the L1 knowledge already in store. It is unfortunate that such 'pure' insights into the SLA process cannot be gained, but the evidence from grammatical judgement tests, though they have to be accepted with reservation, suggest that the learners knowledge at the competence level may be influenced by language background, suggesting that enough 'comprehensible input' may not after all ensure SLA independent of language background. 'Affective factors' appear inadequate in explaining variation in rates of acquisition since many highly motivated language learners with an abundance of comprehensible input still fail to achieve 'native-like proficiency' where that is the goal. Furthermore, such learners' interlanguage still appears to reflect difficulties traceable to language background though with advanced learners this is often reflected in discourse.
and pragmatic difficulties rather than by structural or grammatical errors.

Nevertheless Krashen's claim that the role of CLI is a performance phenomenon only is important since it forces attention onto the process level and requires us to describe the way CLI affects developing competence and how this differs from CLI which affects the mechanisms of interlanguage production. At this point we come up against some major difficulties, both theoretical and methodological. First and foremost we have to clarify the meaning of 'competence'. It was earlier suggested we may think of competence in its everyday sense of 'proficiency' and distinguish this from the 'technical' notion of competence which has to do with the type of knowledge and representations of language which underly production and actual language use. It is this latter sense of competence which Krashen claims develops independently of language background. In making such a distinction I recognise of course that ultimately 'proficiency' presupposes the technical sense of competence.

As previously stated, evidence exists which suggests that learners accept as correct constructions which have been affected by transfer. (see for example White, 1983; 1984). Krashen explicitly predicted such tests would not reveal CLI, but the evidence cannot be said to be conclusive due to methodological problems and difficulties.
in interpretation. Nevertheless we might wish to say that even
with the grammatical notion of competence the balance of evidence
is against those who view CLI as a performance phenomenon only
and certainly they have not shown interlanguage development occurring
unaffected by language background. If one adopts a more sociol-
inguistic approach to competence the scope for CLI increases
and becomes more complex. As one moves from the Chomskyan or
linguistic notion of competence through to sociolinguistic,
communicative and strategic competence, and onto Widdowson's
notion of capacity, one moves from a focus on the abstract study
of idealised language to acts of language use. The type of know-
ledge underlying competence is therefore different according
to which model of competence one adopts, and so too the nature
of CLI varies according to the theoretical account of competence
taken as the framework for interpreting empirical data. Whatever
the framework for analysis however, evidence of CLI at the competence
level exists, though of course the nature of the evidence is
different in each case.

One of the central problems in characterising CLI at the competence
level arises out of the fact that a learner's competence is by
definition transient and also extremely unstable. Thus tapping
the learner's competence at point A in time might not reveal
any CLI, but further investigation later at point B might suggest
that underlying knowledge has been affected by the L1 after all.
The pattern of learning depicted in Kellerman's 'U' shaped
learning curve is valuable in reminding us that learning does
not take place in a neat linear way. That is to say learners don't start at a fixed point and move directly towards the target language norm, but progress and regress along the way during many stages. As well as the possibility of production outstripping competence, a learner may correctly hypothesise about a particular language feature but later reject this hypothesis only to return to it later. A similar pattern may be evident with transfer, so that at point A the L1 and L2 are not seen to correspond in some respects but this view may shift as more target language knowledge is gained. It does not seem to be the case that CLI decreases as proficiency increases (Taylor, 1975) but that the nature of CLI changes and becomes more complex as knowledge and use of the target language grows more complex.

Evidence from Douglas and Selinker (1985) about discourse domains apparently supports Tarone (1983) in her conclusion that [underlying] competence itself is variable according to context. While there is plenty of evidence to show that competence in the sense of proficiency varies either with the nature of the task or degree of control over discourse domain, it has not been conclusively shown that there is variation in the nature of the underlying competence, or our 'technical' sense of competence. It seems more plausible that the variation may be a reflection of a variety of factors preventing utilisation of underlying competence.

The competence/performance distinction is a useful concept in
understanding and explaining many aspects of SLA and is of pedagogical value since it enables one to guess whether a particular aspect of the target language has been grasped and merely requires the processing mechanisms to catch up with competence development or whether there is misunderstanding at a more fundamental conceptual level. Language teachers might wish to treat these two phenomenon differently. While there are justifiable reasons for strictly separating the concepts it should be borne in mind that the distinction is not neat in practice and the methodological difficulties involved in isolating competence features per se suggest that in reality it is not always possible to differentiate between language use and underlying knowledge which makes the use of language possible. For example the evidence cited in the discussion of the relationship between borrowing and transfer suggests that CLI may initially be manifested as a communication strategy, in Corder's terms of borrowing from L1 knowledge to make up for lack of L2 knowledge, especially in a situation where the learner is more intent on keeping the communication going than on focussing on the correctness of form of an utterance. Such a conscious strategy might be regarded as a performance phenomenon since the underlying representation of the target language is not affected and the learner would be able to recognise that his interlanguage production is different from the target norm.

Corder himself suggests however, that successive borrowing may result in structural transfer, though unfortunately he doesn't
describe this process of how performance influences competence. It may be the case that successful borrowing is more important here than successive borrowing. Even where a learner consciously borrows from the L1 to maximise meaningful communication, the degree of success of the communication may determine subsequent hypotheses about the way the target language works. Kellerman has suggested it is the learner's perception of the L1-L2 relationship that determines transferability and it may be the case that successful communication is paramount in shaping that perception.

Current hypotheses about the target language based on previously borrowed features which have led to successful communication may still manifest CLI though not now at a conscious level. In other words, Corder is right to point out that borrowing is not the mechanism of acquisition but that is not to say it does not have an effect on the mechanism. So we may wish to agree with Corder that transfer is not the process of learning but that does not mean it does not influence the process. Whatever the principles and processes of SLA there is enough evidence to suggest that language background is a crucial factor in determining how those principles and processes operate. The argument that CLI is a performance phenomenon only appears to rest crucially on the separation of learning strategies from communication strategies. While this may be valid in terms of the learner's intentions one cannot be as sure of the validity of separating the effect of using such strategies since they may affect subsequent hypotheses
about the target language. The way this process proceeds depends very much on the model of acquisition adopted.

One of the problems about accepting CLI as a competence phenomenon is that it is too easy to overestimate the role of language background in language learning. In other words there is a danger of describing all learner problems as being related to language background. It is important to remember, therefore, that not everything is transferable and not everything that is transferable gets transferred. There are constraints on which L1 features are regarded as candidates for transfer, and further constraints on whether such features actually get transferred. The evidence does not appear to support Ard and Homburg (1986) who make the strong claim that transfer always occurs where conditions of 'greater similarity' exist. Degree of similarity is only one factor in transferability and it is worth remembering that the linguist's account of similarity may be different from a learner's perception. Additional variables such as the role of language universals, affective factors, or whether attention is focussed on correctness or communicative effect, are some of the other considerations to be taken account of in transferability. Indeed it is hard to disagree with Adjemian's conclusion that it is impossible to predict actual transfer even in a probabilistic sense given the large number of variable factors involved.
Similarly attempts to predict transfer solely on the basis of L1 or L2 structural features in terms of 'markedness' fail since they do not succeed in accounting for all the variables. Leaving aside the theoretical problem of what constitutes 'markedness', or which elements make up the 'core and periphery' of language, such concepts cannot account for transfer on their own but may contribute to our understanding of the phenomenon if they can be linked to the other variables. It would be a considerable step forward if a class of examples emerged as predicted by markedness theory which have not been thrown up by other methodological approaches. Again however, a modular approach is required since markedness defined at the syntax level is unlikely to account for transfer at the discourse level.

Olshtain's study of CLI during the apology speech act is indicative of the multitude of variable factors which determine what form CLI takes, or indeed whether it is manifest at all. Again a crucial factor seems to be the relationship between perceived universality and the degree to which something is regarded as language specific. The speech act of apology is universal in the sense every language has different ways of apologising, either directly through use of a performative verb or by indirect expression. Whether an apology is appropriate depends, of course, on situational factors, but the fact that English learners did not apologise in Hebrew in a number of situations where they would have expected to apologise
in English indicates a perception on the part of these learners of English as 'marked' in this context. In other words English speakers seem to know they tend to apologise in more situations than would be appropriate for different cultural situations. Nevertheless CLI was still evident since they continued to apologise in a wider range of situations than either Hebrew or Russian speakers. Transfer was affected by the learners' knowledge of cultural and linguistic factors.

Cultural factors include the perceived relationship between English and Hebrew norms about the type of apology required in a given situation, if it is required at all. At the linguistic level the learner has to have knowledge of the correct form of apology as well as the ability to recognise the form - function relationship, the sociolinguistic appropriateness of particular situations including the illocutionary force of the forms, and so on. In other words CLI may be manifest at any of these levels. The factors which determine transfer occurrence may be different at each level but the common constraining factor appears to be perception of what is universal in relation to what is language particular.

From the pedagogical perspective it is obviously useful to be able to separate cultural knowledge from linguistic knowledge but this distinction is not absolute. Pragmatic knowledge is
the amalgamation of knowledge of language and knowledge of the world, and the distinction cannot always be made. This raises a rather interesting theoretical problem if we accept the existence of a special language learning device which may partially account for the process of SLA, namely how does the device cope with the cultural knowledge necessary for pragmatic competence to develop? It would be interesting to know which psychological processes are responsible for reconciling knowledge of the world with knowledge of language.
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