ON THE ACQUISITION OF GRAMMAR AND MEANING IN INSTRUCTED SECOND LANGUAGE LEARNING

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A CASE STUDY OF THE DEVELOPMENT OF PAST VERB FORMS BY ADULT FRENCH LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE

by

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ABSTRACT

A corpus of written English produced by three groups of adult French
beginning learners of English as a foreign language over a period of
approximately eight months was examined for evidence relating to the
acquisition of past tense forms and related meanings.

The findings provide evidence to support several hypotheses which can
be usefully grouped within a single framework which sees language
acquisition as a process of hypothesis formation and testing whose
constraints are both first and second language in origin. These
hypotheses can be summarised as follows:

(1) Language learning involves the acquisition of a new system of
expressing meaning. As a result, the learner engages in a process of
matching linguistic form to underlying meaning both within and
between languages. Only such a hypothesis, we believe, can satisfac-
torily explain the apparently random variation that was observed in
our subjects' acquisition of past tense.

(2) Language transfer is thus necessarily a widespread phenomenon,
constraining learners' formation of hypotheses, but is itself con-
strained by the inter- and intra-language form-meaning transparency
of the language item in question. In other words, whenever form-
meaning relationships are not wholly transparent, transfer is to be
expected.

(3) Moreover, even when form-meaning relations are transparent,
transfer may take place due to the learner's shortage of processing
capacity. When this is lacking, learners tend to maintain communica-
tion by relying on existing procedural knowledge, which, at least in
the early stages, means well-established first language procedures.
This is because, even though humans can process at phenomenal speeds,
this is only possible with procedures which are solidly in place. For
the vast majority of language learners this implies that first
language procedures will always take precedence over weaker second
language procedures because they were later traced and are less
frequently used.

Under the circumstances, where demands are made on the learner, for
example, to produce language in real time, there will be a tendency
to bypass second language networks and rely on first language
circuitry. Consequently, learners make use of their ability to
operate a number of strategies (such as planning and monitoring their
language output) to produce comprehensible language. This ability,
labelled strategic competence, is identified as a key aspect in
language use in general.

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INTRODUCTION

How do human beings learn languages other than their first language? Over the past 20 years an increasing amount of research and theorising have proposed answers to this question. It was, to a large extent, dissatisfaction with much of this that provided the initial stimulus to the research reported in this thesis; dissatisfaction in particular with so-called acquisition orders and the kind of research protocols that acquisition order research seemed to encourage: ie the dominance of mass over unit, and the group at the expense of the individual. Moreover, second language acquisition research seemed overwhelmingly concerned with language form, whereas the view adopted in this thesis is that learners manipulate form above all as a means of expressing meaning.

The situation has evolved since this dissatisfaction took on the more concrete form of actual research, but many of the questions I asked myself at that time remain equally valid today, and it is as a contribution to this ongoing debate that this thesis should be viewed.

To begin with, the research reported here is essentially data-driven; in other words, insofar as is humanly possible (see Fayerabend, 1979), I have begun from the data and extrapolated from this into

what I then considered relevant areas of theory. It is for this reason (and for reasons of length) that certain important areas of current thought (in particular, Universal Grammar) have been ignored.

Data, however, is not an exogenous variable. It, too, comes into the equation of the research, for one's choice of which data to seek, how to collect it and the final treatment all depend on a (more or less conscious) predisposition within the researcher. As I have already mentioned, my own biases led me to be sceptical of the kind of research that used unsophisticated statistical methods to identify common features in second language acquisition. No other criticism of this work is intended; it was undoubtedly a necessary initial step. However, there are other ways of investigating the mass without neglecting the individual differences, and it was a research protocol of this type that I sought to put into operation. This led inevitably to an examination of the philosophy of scientific method, which is the substance of chapter one, where a framework of theory types is adopted within which are placed (1) the model of acquisition for past time markers developed in chapter four, and (2) the modified theory of second language acquisition outlined in chapter five. Moreover, criteria for criticism of second language acquisition theories, adapted from Popper (1973), are discussed in chapter one before being applied to this modified theory in chapter five.

Moreover, my concern that language was more than a grammatical system, and that, in any case this grammatical system served

essentially as a means of constructing meanings which the learner wished to express, led me to investigate (1) the nature of language as activity rather than as a static, autonomous system, which (2) led inevitably to a discussion of language as meaning potential, which, in turn, when two languages come into contact, inescapably implies an examination of meaning potential within a framework of language transfer. Chapter two concerns itself with these questions.

The chapter opens with a discussion of the appropriate concept of competence for second language acquisition research, concluding that a generally Hallidayan-type perspective is potentially the most fruitful. Such a 'notional' approachl is then applied to the concept of 'pastness', in particular to the notional-contrastive framework between the various forms and meanings as expressed by English and French. The predictions derived from this framework are then applied to the results of the present research, before an attempt is made to develop a notional model of transfer in second language acquisition.

We then move on to chapter three which examines the acquisition order question using alternative quantitative methods which seek to iden- tify not only commonalities but also significant differences. It opens with a historical overview of the 'acquisition order' question before moving on to a critical examination of the quantitative methods commonly used in this type of research, concluding that these typically obscure more potentially useful information than they reveal.

The chapter closes with an investigation of the acquisition orders calculated for three groups of adult French learners of English as a foreign language derived from the data obtained from our longitudinal study. The conclusions of this investigation stress that: (1) 'acquisition' orders are unreliable indicators of a 'natural' order; (2) variation is a widespread feature of second language acquisition; (3) this variation is commonly obscured by the quantitative methods used; and (4) this variation can nonetheless be revealed by the application of relevant statistical methods.

Chapter four then focuses on one element from the morpheme study in chapter three: the acquisition of past tense marking. Such closer inspection, it is argued, calls for a case study approach. The chapter therefore follows the individual acquisition paths of 32 learners, once again in an attempt to identify both similarities and differences, but this time also as a means of seeking to explain them.

The chapter opens with a review of the small amount of previous research into this domain before moving on to an examination of the factors that seem to influence the acquisition of past tense forms by adult French learners of English as a foreign language. In particular four features are identified: (1) macro-notional - especially (a) the attempt to maintain a distinction between the imparfait and passé composé, together with some evidence of the application of discourse conventions; (2) transfer - both direct (ie simple relexification of L1 strings) and mediated (ie with the application of L2 rules to the

L1 strings, leading to target forms which are inappropriate to the meaning expressed); (3) relexification - ie the tendency to relexify L1 strings directly into the L2 (mediated or not); and (4) cognitive complexity (related to the concept of ease of processing - ie that cognitively complex operations are more difficult to process, thus leaving less processing time and space for other mental operations). In addition, other factors related to acquisition sequence are also identified: the tendency to avoid structures until the learner feels comfortable with their use; the use of timeframing to fix the moment referred to; and the development of discourse ability to increase cohesion.

The chapter ends with a brief outline of Extrapolation Theory, which seeks to explain how learners are able to spontaneously produce in their output structures which they have not previously come across. This, together with a more fully developed Notional Theory of second language acquisition, will be further developed in chapter five. The final chapter, chapter five, brings together the various strands that have been identified in the other chapters and argues that they can best be understood as part of an integrated whole within a framework based on Cognitive models of language acquisition. Each strand - or fragment - is dealt with individually, not only in terms of the findings of the research reported here, but also within theoretical frameworks exposed elsewhere: our findings on the importance of form-notion groupings, for example, are discussed in terms of a Notional Approach, the existence of variation leads inevitably to an account of Variable Competence Models of second language acquisition. Howe-

ver, it is argued that the latter are only of direct relevance insofar as they have adopted the former. There then follows an extended discussion of strategic competence, encompassing accounts by Faerch and Kasper (1983) and Bachman (1990). It is concluded that strategic competence does indeed have a significant role to play. It is also argued that this role is linked to transfer, which is held to be an inevitable (although far from unique and not necessarily dominant) feature of second language acquisition, partly because of this role in strategic competence, but also because of its impact on hypothesis formation. There then follows a section on hypothesis formation.

The chapter continues with accounts of Cognitive models of second language acquisition. No attempt is made to concentrate on one model rather than another. Rather, it is suggested that a cognitive framework (within which several competing theories are clustered), is the best currently available to account for the various fragments outlined in the early part of the chapter.

From the Cognitive framework thus developed, predictions relating to other morphemes are derived, and research protocols suggested for their investigation as a potential means of seeking falsification. The whole model is then subjected to the criteria of criticism developed in chapter one, leading to the conclusion that such a framework is indeed a 'scientifically' fruitful means of investigating second language acquisition.

The Conclusion recaps on the findings in the thesis and briefly further justifies the adoption of a Cognitive Model of second language acquisition. It ends, however, with a number of caveats related to the interpretation of these findings given the context of the data - ie the fact that we are dealing with *adult beginner* learners, whose L1, French, is closely related, both notionally and formally to English, whose 'passive' exposure to English is relatively large due to the pervading presence of English in French everyday life, and whose 'active' exposure was the classroom, which is a privileged environment.

NB It is important to note at this point that the review of relevant literature is not concentrated in a single early chapter, but rather is distributed through chapters two, three and four according to the particular questions being examined.

Notes

1. Such an approach has variously gone under the names of *functional* [Sampson (1982), Klein, Dietrich & Noyau (1993), Pfaff (1987)] and *concept* [von Stutterheim & Klein (1987)]. The former, associated with the European Science Foundation Project on cross-linguistic perspectives of adult second language acquisition, would appear to be the candidate most likely to be adopted. However, at the risk of proliferating unnecessarily confusing jargon, our own preference is for a *notional* approach. This is simply because the terms *function* and *notion* have already gained wide currency with clearly defined uses. Under the circumstances, the expression of temporality - of which past time is a subset - comes more clearly under a notional, as opposed to a functional, category.

CHAPTER ONE

ON THEORIES AND RESEARCH IN SECOND LANGUAGE ACQUISITION

THE DIALECTIC OF SCIENTIFIC EVOLUTION

"I was just thinking that detection must be like science. The detective formulates a theory, then tests it. If the facts he discovers fit, then the theory holds. If they don't, then he has to find another theory, another suspect."

Dr Howarth said drily: "It's a reasonable analogy. But the temptation to select the right facts is probably greater."

P.D. James

1.1. INTRODUCTION

In this chapter we discuss the crucial question of theory construction, particularly in relation to the data-driven nature of the research undertaken for this thesis.

The chapter opens with a discussion of the potential and complementary contributions of both theory- and data-driven research, arguing that the latter has a distinct role to play in the early stages of theory construction.

But theory construction itself is seen not only as a development over time, but also as a multi-levelled process. Following Stern (1983), three levels are identified, of which two - termed T2 (a macro-level theory) and T3 (micro-level modelling) - will be applied in chapter five to the research in this thesis, in which we seek to construct a model to describe and account for the development of the ability to use past time markers within a specific learning environment, and then to incorporate this T3 level model into a higher level T2 theory.

The chapter continues with an outline of the criteria of criticism, derived from Popper (1973), which can be applied to a second language acquisition theory to judge its soundness. These critieria will be applied to the T2 constructs developed in chapter five.

One feature related to the testing of data is, however, of particular significance at this stage: the importance of the role and nature of quantitative analysis. It is argued that too much credence is often given to statistical findings, although the widespread use of unsophisticated quantitative analysis may actually obscure more than it reveals, whereas the use of appropriate statistical procedures can be extremely valuable. Findings from the research in this thesis are given to support this contention.

1.2. THEORY AND RESEARCH: THE DIALECTIC OF SCIENTIFIC EVOLUTION

1.2.1. INTRODUCTION

Nagel (1961) defines theories as

conceptual frameworks deliberately devised for effectively directing experimental enquiry, and for exhibiting connections between matters of observation that would otherwise be regarded as unrelated.

Within this definition, we can identify two types of theory: one that is heuristic, "effectively directing experimental enquiry"; and one that derives from observation, which it seeks to explain by "exhibiting connections ... that would otherwise be regarded as unrelated".

This places us on a continuum between what McLaughlin (1987) classifies as *deductive* and *inductive* research. The former is what Ellis (1985) calls *theory-driven*, in that an initial theory is developed which generates hypotheses which can then be tested. The best example of this type in current second language acquisition theory is Universal Grammar. Designed to explain first language acquisition, and indeed the development of language itself, second language acquisition researchers have derived hypotheses from it about the nature of second language acquisition and have tested these hypotheses using a variety of research techniques (See, for example, contributions in Gass & Schachter, 1989).

Inductive research might be described as *data-driven*, insofar as it derives from collected data, within which certain regularities have

been observed, which the theory attempts to explain. In many ways, one might claim that Monitor theory was of this type, since it was initial research on morpheme acquisition orders and the creative construction hypothesis which originally generated the theory.

Ellis (op cit) argues that both forms of research have their place, in that theory-driven research helps decide which data are relevant and hence which experiments are best adapted to advancing knowledge of a particular phenomenon. The Variability Hypothesis, for example, derived from Labov's (1970) work, argues that the vernacular is the 'base state' variety of a person's repertoire of language styles, and ought therefore to be the variety most studied. Similarly, the same hypothesis claims that interlanguage style shifts along a vernacular/ careful style continuum according to the demands of the production situation. Once again, to test this hypothesis, experimental proto-cols which allow for language production in different situations are required.

However, this does impose on a theory the requirement that it present its propositions as something testable. This is a problem, for example, with Monitor Theory, which argues for the existence of two knowledge sources, *learning* and *acquisition*, but offers no means of testing whether they exist, other than whether a given acquisition order is disturbed or not, which is a circular argument (if there are two acquisition orders there is *acquisition* and *learning*, and there is *acquisition* and *learning* because there are two acquisition orders).

Bailly (1984:48), in a critique of Popperian scientific technique,

notes a more serious drawback to theory-driven research

On peut craindre ... que la complexité et l'hétérogénéité de ce qui
au départ se donne comme totalité dans une expérience ne se voient
reconstruites et biasées par le regard raisonneur du théoricien

[It is to be feared ... that the complexity and heterogeneity of that
which at the beginning is seen as the whole in an experiment becomes
reconstructed and biased by the reasoning of the theoretician]

In other words, the theory the researcher is following and the

methods which this theory imposes may very well set limits both on

the questions that can be asked and on the answers that can be found.

To take a simple example, Dulay and Burt (1974) in a famous article

argued that the vast majority of errors from a sample collected among

Spanish-speaking children could *not* be traced to the Ll. Abbott

(1980,1984) claimed that " almost a half of the errors ... *are*

influenced by Spanish".

The main weakness, in my opinion, was that the researchers set out
with an attractive new theory, applied it to some data ... and
inevitably found ample evidence to support that theory, simply
because they were only looking for evidence of that one theory
(Abbott 1984:68)

This is obviously a danger, the moreso in that in a situation where a

number of theories compete, as with second language acquisition

research at present, how is one to decide which is the best without

having already tested them? This will surely often be a matter of

personal preference. But then so will the interpretation of results,

which itself is a function of researcher-related factors such as how

data are sorted, how regularities are identified (eg using or not using quantitative methods), presuppositions based on previous knowledge and experience, etc.. As McLaughlin (op cit) puts it "there is no single scientific truth": truth will necessarily be mediated through the assumptions of observers who therefore provide multiple accounts of reality.

In other words: where there is a researcher, such researcher bias cannot be avoided. The important thing is not to condemn theory-driven research, nor to place it on a pedestal as *the* scientific method because of its success in the natural sciences, but to seek means of counterbalancing any possible in-built bias. Research in ethnography suggests one possible solution, as stated, for example, in the advice derived from the American anthropologist Boas by his celebrated student, Margaret Mead: "Important concepts and strange viewpoints had to be checked with other material and with a number of informants" (quoted in Stern, op cit). This is an argument for *triangulation* - ie the viewing of a particular problem from several angles. Thus, within a theory-driven perspective, the same data could be viewed from different theoretical angles, either by a single researcher, or via replication experiments by other researchers. Unfortunately, both replication experiments and the viewing of data from different viewpoints are lacking in the field of second language acquisition research.

Similarly, there would appear to be a continuing need for data-driven research. Such descriptive studies collect samples of learner lan-

guage, typically compare them to target language norms, seek for regularities and try to account for discrepancies. They thus provide the insights which are the raw material of theorising.

Indeed, one might be tempted to argue that in the initial stages of enquiry data-driven research should preponderate, until sufficient raw material is available to generate worthwhile theories. However, this would be to discount the power of abstract theorising. As already mentioned, for example, Universal Grammar has generated a great deal of useful and interesting research into second language acquisition.

Nonetheless, it is difficult to conceive of 'pure' data-driven research. As should be clear from Bailly's statement concerning the interpretation of results, researchers do not work in a vacuum. They are therefore subject to the influence of the external environment, in particular to arguments and theorising within their field, and their judgements will inevitably be coloured accordingly. It may be tempting to follow Fayerabend's (1979) 'anarchic' theory of knowledge, with the scientist as opportunist, and indeed it is difficult to see how certain sudden shifts of currents of thought could occur otherwise, but even anarchists work within constraints imposed by their knowledge and experience of the world.

1.2.2. SUMMARY

No discipline can advance without both data-driven and theory-driven research: the former to provide a source of hypotheses which can be retested and incorporated into more general theories; the latter whereby the power of logical thought is applied to a problem and solutions suggested which are proposed in the form of testable hypotheses which, once tested, can be modified, rejected or incorporated into a theory strengthened by this process. As Brown (1980:228, my emphasis) expresses it:

A full second language acquisition theory has yet to be constructed, though a good deal of research ... has begun to dictate the general framework of a theory. We are in the process of theory building at the present time, but are much in need of further observation and feedback in order to press towards the goal of a *viable, integrated theory of second language acquisition.*

But what are the characterisitics of a "viable, integrated theory"? That it should be:

1. capable of interpreting and criticising observations derived from data-driven research;

2. capable of unifying separate hypotheses, perhaps apparently unrelated, which derive from the same source or other, related disciplines;

3. capable of generating useful, testable hypotheses and hence of advancing knowledge of the subject at hand (ie of driving research forward via predictions about given

phenomena);

4. flexible and pliant, so that its various propositions can be modified to fit data unforeseen in the original formulation;

5. capable of being tested and consequently asserted or denied.

This brings us very close indeed to Mclaughlin's (op cit:3) definition:

> ... a way of interpreting, criticising and unifying established generalisations. A theory is flexible and pliant, in that it allows its generalisations to be modified to fit data unforeseen in its formulation, and a theory is heuristic in the sense that the theory itself provides a way of guiding the enterprise of finding new and more powerful generalisations.

Yet theories can be at different levels. Brown (op cit:228) talks of a "viable, integrated theory of second language acquisition" (ie one that encompasses all that is known about the acquisition of second languages). This is a theory at the *macro*-level, something holistic which seeks to explain a complete, wide-ranging phenomenon. While such a theory may be the *ultimate* goal of research, as Brown notes, we are far from being ready to develop one. Indeed, it would seem to me that, in the nature of things, such a theory is impossible to obtain. It is improbable, for example, that even a unified theory such as Newton's Law of Motion is the whole truth (or even the only possible truth).

At an intermediate stage, therefore, it may be useful to develop *micro*-level theories designed to explain *specific*, individual pheno-

mena, such as individual acquisition sequences. Yet even here there is much debate.

With this in mind, Stern (op cit:25/6) offers a similar, but slightly broader taxonomy, with theories at three different levels:

1. T1 refers to the systematic study of the thought related to a topic as activity ... [It] offers a system of thought, a method of analysis and synthesis, or a conceptual framework in which to place different observations, phenomena or activities.

It would thus seem to correspond to our macro-level theory.

2. T2 is different schools of thought ... each with their own assumptions, postulates, principles and models, and concepts.

This is a different, perhaps earlier stage, conceptualisation of a macro model, and reflects in many ways the current state of second language acquisition research.

3. T3 is a logically connected set of hypotheses whose main function is to explain their subject matter.

This is a somewhat broader definition than our micro-level, but seems to encompass that level fairly well.

In conclusion, then, we are at a stage in the development of second language acquisition research where micro-level theories are being developed to account for certain observed phenomena, such as inter-language variability, and where competing and sometimes conflicting T2 macro-level theories, like Monitor Theory or Universal Grammar are

being developed. What is needed under the circumstances is a means of critically assessing such theories. A clear definition of what we expect from a good theory has been outlined above. Critical assessment requires both this and means of verifying whether a theory does this well. It is to this that we now turn.

1.3. THE CRITERIA OF CRITICISM

Popper (op cit) proposes the classic and currently most widely accepted criteria for criticising theories:

1. that scientific statements be publicly available for testing;

2. that propositions be clearly formulated so that they can be tested;

3. that no demonstrated scientific 'fact' should be accepted as 'truth', since, in the long run, there is no absolute truth;

4. as a corollary of (3), that a hypothesis cannot be proved correct, but only incorrect, since 'correctness' can only be a temporary phenomenon.

To these, Brown (op cit) adds the requirement of usefulness.

We shall now examine these criteria in more detail, in particular in relation to theories of second language acquisition.

1.3.1. THE PRINCIPLE OF PUBLIC AVAILABILITY

Scientific knowledge is a series of proven statements publicly available for testing and modification. This, it seems to me, has profound implications for research in our discipline, for, if statements are to be "publicly available for testing and modification", then accounts of research in journals need to be sufficiently explicit that another researcher could (and, indeed, should) replicate the experiment(s) exactly. It is the tendency towards the *absence* of such information that led Abbott (1980:121) to complain that

One major requirement of any process rigorous enough to be called an analysis is that its results should be verifiable by other scholars using the same procedure. In order to be able to do this, they must of course have access to each other's blueprints; but no information on these is given in papers on the subject as a rule, and where procedural matters are mentioned they are usually incomplete.

1.3.1.1. The Mystique of Quantity

A related question is that of *how* theories and hypotheses are to be tested. Popper leaves open the method to the discipline concerned. Increasingly, in our field, this means recourse to quantitative methods. While these are an essential element in the armoury of any discipline which hopes to classify itself as scientific, the moreso if findings are to be generalisable, there are a number of problems associated with statistics. Perhaps the greatest danger is that expressed by McLaughlin (op cit:5, my emphasis) as the *mystique of quantity*. "Numbers", he points out,

have no magical powers; they do not have scientific value in and of themselves. Yet often one senses an exaggerated regard for the significance of measurement, so much so that complex statistical analyses are used to salvage sloppy observation or bad experimentation. *Statistics are tools of thought, not substitutes for thought.*

Bailly (op cit) makes a similar point when arguing that what she calls *clinical studies* - ie case studies and the use of learner accounts of learning experiences - should be allowed methodological acceptability. This is clearly a valid claim given our own earlier plea for greater use of triangulation in second language acquisition research. The present study provides evidence in support of this position, relating to the acquisition of past time markers. In chapter three, for example, traditional 'acquisition order' methodology is compared to more revealing quantitative methods; whereas the former is only able to indicate an 'order' of acquisition, the latter is able to show some development over time. However, neither are capable of furnishing enough evidence for the formulation of well-founded hypotheses about *why* development takes place in this way. On the contrary, it is only the case study approach adopted in chapter four which makes this possible. Yet even here, an associated question emerges: the presentation of quantitative data. Chapter two, and especially chapter four use not only simple tables of figures, but visual (graph and histogramme) presentations, which prove very useful in identifying (1) similarities and differences between groups and periods; and (2) developments over time.

Grotjahn (1983: 237, my emphasis) makes a somewhat different, but equally valid criticism of the use of quantitative methods in second

language acquisition research.

If the IL researcher wants to know whether certain individual or interindividual characteristics of IL utterances are merely the product of chance or whether these are statistically significant tendencies reflecting probabalistic rules in the competence of the learner, he or she certainly cannot avoid applying methods of inferential statistics. Although in IL research the number of studies which make use of such methods is increasing, there is unfortunately still a relatively large number of researchers drawing (far-reaching) conclusions on the basis of purely descriptive statistics *calculated from very small samples of IL utterances*.

In other words, Grotjahn is complaining, not of an uncritical over-reliance on quantitative methods, but rather of their inappropriate application, particularly in relation to small sample sizes. This raises two questions:

(1) statistical analysis is often inappropriate when sample sizes are small, yet sample sizes are frequently small in longitudinal research, especially where only one subject is involved. This, it appears to me, in no way invalidates the case study approach, which can bring and indeed has brought important insights to the study of second language acquisition. [See, for example, Hatch (1978) and Pfaff (1987).] Moreover, Grotjahn (op cit:237) himself states

I am perfectly aware that the application of quantitative methods is only *one* step in the course of an empirical investigation and that the use of even the most sophisticated quantitative methods does not supply valid and reliable results if, for instance, the data have not been adequately collected.

(2) an inappropriate use of quantitative methods can lead to

incorrect inferences about the data processed. This is an altogether more serious problem in our discipline given the 'mystique of quantity', which encourages an uncritical acceptance of findings which are statistically based. In the present research, for example, (see chapter three) the application of tests for fit was able to demonstrate the misleading nature of 'acquisition' orders derived from the quantitative techniques traditionally used.

1.3.2. THE PRINCIPLE OF CLEARLY FORMULATED PROPOSITIONS

Any hypothesis is necessarily based on the current state of knowledge. This body of knowledge is open to refutation, thus invalidating the hypothesis. Similarly, a refuted hypothesis will call the body of knowledge into question. To give an example from psychology, Chomsky's criticism of Skinner's theory of verbal behaviour brought into doubt the whole of Behaviourist theory. ~~Once again~~ However, this is only possible if a theory clearly states its propositions so that they can be tested. Any vagueness in the formulation of propositions opens the theory up to complaints of 'shifting the goalposts'. This is a criticism commonly aimed at Krashen, for example, as with McLaughlin's (op cit:26, my emphasis) statement that

It appears to be rather difficult to demonstrate the operation of the Monitor ... and Krashen's repeated failures to do so *are explained away by changing the requirements*.

1.3.3. THE PRINCIPLE OF THE TIME SCALE OF REFUTATION

In the nature of things, the state of future knowledge cannot be predicted. It follows, therefore, that there can only ever be a temporary solution to problems, and thus any hypothesis may become falsifiable in the future - providing it is set out in such a way that it is testable.

In second language acquisition research, this has repercussions especially related to the principle of pragmatic value (See below, 1.3.5.).

1.3.4. THE PRINCIPLE OF FALSIFICATION

The prime task of science, therefore, is to state problems suffi-ciently clearly for them to be tested. However, as with the nul hypothesis in statistics, given 2 and 3 above, a hypothesis cannot be proved right, it can only be falsified or fail to be falsified.

1.3.4.1. Explicitness

Related to this is the need for a theory to be explicit. Its principal assumptions need to be stated and defined in such a way that critical discussion of them can take place: in other words, in such a way that different people will interpret them in the same way. A particularly glaring example of lack of definitional adequacy is the concept of interlanguage, which, if it has come to mean a

learner's provisional competence both at any point in time and over time, remains nonetheless vague in the sense that researcher's investigating interlanguage from different theoretical viewpoints will regard it as having different constituent parts. Yet the notion of interlanguage is a central concept in second language acquisition research.

1.3.4.2. Economy

Another aspect of a theory's ability to be falsified is the level of its complexity. One might expect complex phenomena like second language acquisition to require complex theories to explain them, but a theory should also be simple, economical and expressed in as straightforward a language as possible, since the more complicated a theory, the more difficult it is to falsify, and hence the less useful. The danger here is that a theory's very simplicity, economy and straightforward expression, despite other drawbacks, and even flaws, give it credence over other theories which are relatively less straightforward. This is certainly, for example, one of the causes of the widespread acceptance of Monitor Theory among language teachers.

1.3.4.3. Comprehensiveness and Coherence

Nevertheless, a theory should be comprehensive, providing a framework within which all relevant phenomena are included and given adequate attention. Moreover, the different parts of the theory should have internal coherence; that is, should relate to each other logically,

clearly reflecting their inter-relations.

1.3.4.4. Explanatory Power

Even a theory which meets the criteria listed above should, in addition and above all, have explanatory power; not only in the sense that it can explain the data that it was created to explain, but also in such a way that it makes testable predictions which are not falsified. Such a theory is thus heuristically rich since it acts as a source of future hypotheses to be tested. As McLaughlin (op cit:18) expresses it,

> Good theories fit the data well, are consistent with related formulations, are clear in their predictions, and are heuristically rich.

1.3.5. THE PRINCIPLE OF PRAGMATIC VALUE

A final criterion which one could apply to theories is one of pragmatic value.

Brown (op cit:230) claims that

> ... theories are of little use to anyone without pragmatic applications. For the teacher of a foreign language, a theory of second language acquisition becomes valid insofar as that theory has applications, or at least implications for certain practices in the classroom.

It is not clear at all to me that this *must* be true. Ideally, of course, it is desirable that a second language acquisition theory

provide a sufficient understanding of the process that classroom practice can at the very least avoid blocking successful second language acquisition, and at best offer suggestions to teachers which will lead to more successful second language acquisition by learners. Indeed, this was one of the prime moving factors in my own interest in the area. However, there are dangers attached to the principle of pragmatic value, in particular related to the question of at what stage in theorising one should begin to make practical suggestions. Behaviourism was a simple, elegant, comprehensive, widely-accepted theory with clearly set-out assumptions and hypotheses. Audio-lingual and related methodologies were derived from it and yet the results were disappointing. This may not be surprising, after all, the theory was 'wrong'. But over what period of time must one wait before agreeing that a theory has stood the test of time sufficiently to begin making practical recommendations?

More insidious are theories like Monitor Theory which purport to explain everything and whose supporters are confident enough to begin making pedagogical recommendations. Yet many second language acquisition theorists (See, for example, Gregg 1984, McClaughlin, 1978) see it as only one theory among many, and a much discredited theory at that.

Premature recommendations, therefore, are to be avoided, especially when they are of a particularly radical nature (as with Monitor Theory's 'no grammar' dictum, and its reliance on comprehensible input). Theories at a T2 stage, then, where there is no general

agreement as to what is and is not likely to prove correct, should not be willing to make other than very tentative pedagogical proposals. Theories at T1, however, are better placed, since this agreement has been achieved, but it is necessary to allow a(n undetermined) lapse of time to pass during which it has not been refuted before making firm pedagogical proposals.

1.3.6. SUMMARY

To summarise briefly the above discussion, we are left with three main criteria (including three related corollaries) and two minor criteria to bear in mind when examining theories and hypotheses:

1. A theory should have explanatory power. In other words, it should be capable both of explaining the data as it exists, and of making correct predictions about other areas. For example, the discovery that second language learners used different phonological variants in different language production situations led to the hypothesis that phonological style-shifting was present in language learners in much the same way as with native speakers. It was then but a short step to hypothesise that learners would also manifest *syntactic* style shifting according to situational changes. This also has been demonstrated. However, the fact that, as we shall see in chapter five, a number of problems remain with the Variable Competence Model, indicates that, although a necessary criterion, explanatory power is not sufficient.

2. A theory and its propositions should be falsifiable. This means both that the propositions should be stated in such a way that they are testable, and that any research which tests them should present its findings in sufficient detail that it can be replicated by other scholars. This criterion gives rise to three corollaries:

(a) A hypothesis should be stated clearly and unambiguously to allow testing and to avoid 'shifting the goalposts'.

(b) To encourage this, a hypothsesis should be explicit, simple and economical.

(c) Testing and falsifiability are clearly related to different means of data processing. Within second language acquisition, the concept of triangulation, borrowed from ethnology, can be of particular use in this domain. Nor is quantitative analysis a sine qua non of research in our discipline, and other kinds of data collection and examination (such as case studies) are equally valid. In addition, where quantitative analysis is used, great care needs to be taken as to its appropriateness to the particular problem under consideration.

3. A theory should be heuristically rich. In other words, it should generate a large number of useful, testable hypotheses which will help advance our knowledge of the subject.

4. In the long run, a theory should be comprehensive, although there are strong arguments in favour of avoiding T1-type fully comprehensive theories until sufficient knowledge of the area exists to allow such an enterprise a reasonable chance of success. Nonetheless, partially comprehensive T2-type theories which are heuristically rich can be of great service.

5. A theory may, ultimately, be practical.

1.4. CONCLUSIONS

In the first part of this chapter we identified five characteristics for a viable and integrated theory. In chapter five we shall seek to apply them to the extension of a T2 level theory derived in turn from features identified in chapters two, three and four at a micro-, T3 level.

We then stated four essential elements in the presentation of a theory, if this theory is to be realistically testable. These too will be applied to the T2 level theory developed in chapter five.

Before moving on to data processing, it will be useful to examine the nature of the object being learned: language.

This is the object of chapter two, in which we shall argue that language is best viewed as a cognitive *activity* and that, in particular, the second language learner's task is essentially one of attaching new forms to concepts already possessed in the L1. This hypothesis is developed by identifying 12 different past notions which can be encoded in language. An attempt is then made to trace the development of these concepts in the interlanguage of our subjects to see whether they are acquired differently. It is to this that we shall now turn.

CHAPTER TWO

ON LANGUAGE AS ACTIVITY

A NOTIONAL VIEW OF SECOND LANGUAGE ACQUISITION RESEARCH

"Then you should say what you mean", the March Hare went on.

"I do", Alice hastily replied, "at least I mean what I say - that's the same thing you know".

"Not the same thing a bit" said the Hatter.

Lewis Carroll

2.1. INTRODUCTION

This chapter argues that the most appropriate concept of competence available for research into second language acquisition is one that views language as an *activity*, since the view adopted in this thesis is that the second language learner's task is essentially that of attaching new forms to language meanings already possessed in the Ll. This 'Notional' approach to language is consistent with the adoption of a generally Hallidayan perspective.

The chapter continues with an application of such a notional approach directly to past time reference in second language acquisition, including a review of previous research in this area. We then move on to a cross-linguistic comparison between the ways in which French and English encode the concept of 'pastness'. The resulting notional-contrastive analysis is then used to derive predictions about the acquisition of this concept by French learners of English as a foreign language. These predictions are then applied to the results of the present research and found to be only partly fruitful, as other factors, both formal and related to processing capacity, come into play and interact with the concept of notion.

Further notional evidence for transfer is then provided, which will be used in chapter five to attempt to develop a notional model of transfer within the framework of a wider second language acquisition theory. In other words, a T2 level theory of second language acquisition will be constructed, in part, from the T3 perspective on language transfer developed in this chapter.

2.2. A THEORY OF LANGUAGE AS USE

One cannot begin to talk about language learning - whether first or second - without addressing the question of what language is. This implies adopting a linguistic theory, and which linguistic theory one adopts will depend fundamentally on one's view of language, since "Linguistics is the scientific study of language." (Crystal 1971: 9).

What, then, is language?

First and foremost, language is a semiotic system, a system of symbolic representation. Without entering into a discussion of the relationship between language and thought, we can add that what language symbolically represents is meaning: human beings use language to communicate meanings.

An inherent property of language, then, is its ability to assure communication between humans. This is the essential behaviour permitted by de Saussure's (1916) concept of *langue*, is made explicit in Jakobson's (1963) theory of code and communication, and leads Crystal (ibid: 243) to define language as "human vocal noise (or the graphic representation of this noise in writing) used systematically and conventionally in a community for purposes of communication."

Taking this as our point of departure, we can begin by examining how language fulfils this role.

Halliday (1970, 1973, 1985) identifies three macro-functions of language:

All languages are organised around two main kinds of meaning, the 'ideational' or reflective, and the 'interpersonal' or active. These components, called 'metafunctions' ... are the manifestations in the linguistic system of the two general purposes which underlie all uses of language: (i) to understand the environment (ideational), and (ii) to act on the others in it (interpersonal). Combined with these is a third metafunctional component, the 'textual', which breathes relevance into the other two. (ibid 1985: xiii).

Thus the *ideational* expresses propositional content, allowing the speaker to convey information; whereas the *interpersonal* "embodies all use of language to express social and personal relations, including all forms of the subject's intrusion into the speech act." (ibid 1973: 41). The *textual*, on the other hand, "is embodied throughout the entire structure, since it determines the order in which the elements are arranged, as well as patterns of information structure" (ibid 1985: 170). In other words, it represents the thematic structure of discourse. And, as Halliday stresses elsewhere (1978: 2) "Language does not consist of sentences; it consists of text, or discourse - the exchange of meanings in interpersonal contexts of one kind or another."

These three macro-functions together provide all the meaning potential which can be expressed through linguistic structure, since a speaker's language system "consists of a meaning potential, represented as a network of options, which are ... realized, in their turn, by structures whose elements are related directly to the meanings that are being expressed." (Halliday 1973: 29).

In speaking, we choose: whether to generalise or particularise, whether to repeat or add something new, whether or not to intrude our own judgement, and so on. It would be better ... to say that we opt, since we are concerned not with deliberate acts of choice but with symbolic behaviour ... The system of available options is the 'grammar' of the language, and the speaker, or writer, selects within this system: not in vacuo, but in the context of speech situations. (Halliday 1970: 142).

We shall turn to the options available to the speaker later when we discuss the notion of pastness, but it should be noted that the first

option is necessarily semantic, since the speaker is concerned with meaning. This clearly has important implications in second language acquisition research, where the learner's initial - semantic - option must then be transposed formally into actual language production; ie the learner moulds L2 form on to shared L1/L2 meaning. Evidence of this process can then be looked for in areas where the L1/L2 meaning is only partially shared. As shown later in this chapter, this is the case with the English and French concepts of pastness.

Furthermore, Halliday's insistence on the primary importance of text, as opposed to the sentence also has ramifications in terms of research protocols, since it implies that text - realised in interpersonal communication situations - should be the basic raw material.

It will be noticed that the view of language we are taking here is strictly non-Chomskyan. This is not a judgement on the value of transformational generative grammar as a study of language as a formal system (ie grammar, or, more strictly, syntax), but it does reveal a necessary dichotomy between the view of language which may be acceptable in purely linguistic terms (language as system) and that which is essential from the viewpoint of language acquisition research (language in use, as a human cognitive activity). Research into second language acquisition deals with humans who are:

(1) struggling to construct meaning via new linguistic forms;

(2) trying to learn the new formal system.

It would therefore seem essential that any model of language adopted

for the purposes of such research takes these into account. A model

which conceives of language as an activity as well as a system will

therefore take priority over one which does not. In a sense, this is

Chomsky's own stated position:

We can judge formal theories in terms of their ability to explain and
clarify a variety of factors about the way in which sentences are
used and understood. In other words, we should like the syntactic
framework of the language that is isolated and exhibited by the
grammar to be able to support semantic description, *and we shall
naturally rate more highly a theory of formal structure that leads to
grammars that meet this requirement more fully.*" (Chomsky 1957: 102,
my emphasis).

This is not to say that Chomsky dismisses language in use, but he

does quite deliberately seek to ignore it:

... we are studying language as an instrument or a tool; attempting
to describe its structure with no explicit reference to the way in
which this instrument is put to use. (Chomsky ibid: 103).

This necessarily outlaws meaning: "Grammar is autonomous and indepen-

dent of meaning." (Chomsky ibid: 17).

Whilst there is a certain amount of truth in this (Chomsky's

assertion is evidently true that "Curious green ideas sleep fur-

iously" is clearly recognisable as grammatical, whereas "Furiously

sleep ideas green colourless" is not), there is also obviously more

to it. It is equally true, for example, that the assertion that

"Flying planes can be dangerous" is ambiguous only holds if the

sentence is kept distinct from its use: ie, in the hands of a linguist. This is because transformational generative grammar derives ~~its~~ meaning from the surface structure: "Understanding is determined by the structural description provided by the generative grammar" (Chomsky 1964: 26). In terms of the quotation at the head of the chapter, "I mean what I say", whereas in Halliday's formulation, beginning as it does from a meaning source, "I say what I mean".

Moreover, what the speaker says is modulated by his or her intrusion into the speech situation. Hence this situation is seen as of primary concern. Chomsky's famous "Flying planes can be dangerous" is thus not ambiguous since it derives its *value*1 from the meaning implied by a speaker, which in turn will be interpreted according to the speech situation. Indeed, meaning is very often only attributable to a sentence if we can associate it with a(n imaginary) speech situation.2

In addition, Chomsky differentiates between *competence* and *performance*, and whilst he now (Chomsky 1980) seems to accept the existence of some form of pragmatic competence parallel to grammatical competence, the fact that meaning emerges from the interplay of the three meta-functions betrays Halliday's concern with a *general* competence in which no such compartmentalisation is necessary:

> Such a dichotomy [between competence and performance] runs the risk of being either unnecessary or misleading: unnecessary if it is just another name for the distinction between what we have been able to describe in the grammar and what we have not, and misleading in any other interpretation. (Halliday 1970: 145).

2.2.1. SUMMARY

We have shown in the preceding section that the view of language required by research into second language acquisition is one where language is seen not only as a formal system, but also as a cognitive activity. The view of language competence which emerges as a result is one that includes, therefore, both knowledge and use components (rules of use).

Through reference to Halliday these components have been identified as:

(1) a formal grammatical system;

(2) a textual system to take account of formal properties beyond the sentence;

(3) a meaning potential;

(4) a means of modulating speech production and interpretation around the speech event;

(5) rules of use.

We shall turn in the next sections to an examination of how these components can be related to the problem of language learning within a specific context: adult French learners of English as a foreign language attaching form to an exisiting L1 notion: the expression of past time.

2.3. A NOTIONAL VIEW OF SECOND LANGUAGE ACQUISITION

A notional approach emerged in first language acquisition research from the work of Halliday himself (op cit 1973), who identified the development of *macro*-functions - ie means of producing illocutionary effect - in the first language acquisition of his son. In second language acquisition research, however, the term has taken on a broader meaning, to include not only notions, in this sense, but also semantic meaning (including the expression of notions, in the sense intended by Wilkins, 1976). To avoid confusion between the terms, however, we shall henceforward refer to a 'Notional' Approach. Such an approach involves redirecting "our attention from the surface products to the underlying pragmatic and linguistic meanings and semantic intentions speakers are attempting to communicate" (Pfaff, 1987:81); it means that

> ... instead of searching for possible 'interpretations' of a feature,
> we must define the concepts and functions which have to be encoded,
> and then analyse the devices used by different learners or types of
> learner to express these concepts and functions at different points
> on the developmental continuum. (Meisel, 1987: 206)

In second language acquisition research, however, the appearance of a notional approach is relatively recent, and more directly derived by Huebner (1979) from the work of Bickerton (1975). What it adds to most earlier paradigms is the pursuit of meaning. Previously, research had tended to follow the development of form in interlanguage, paying only scant attention to what meaning these forms are being used to express. And, while researchers paid lip service to the

idea of interlanguage as internally systematic, the search for
systematicity was nonetheless essentially one of external systemati-
city; ie the concept of obligatory occurrence imposed an external
norm - the target language itself - on the study of interlanguage. As
Huebner (op cit: 22) puts it:

Although an approach which looks at only those morphemes found in
Standard English obligatory contexts can tell us when morphemes are
acquired with respect to one another, it may not be the most
insightful approach to the question of *how* they are acquired.

While it may seem obvious to outside observers that the study of
interlanguage should be principally the investigation of how learners
map meaning onto grammar (or vice versa) - how they make use of the
meaning potential of their interlanguage - the study of form has a
long and distinguished history in linguistics (see, for example, the
contributions of both structural linguistics and transformational
generative grammar). It should come as no surprise, therefore that
language acquisition studies - at least in the 60s and 70s - should
follow the same tradition.

Huebner's approach, which he calls a *dynamic paradigm*,

assumes that language is systematic but dynamic, and that variation
is the precursor of change; it also assumes that forms are introduced
in one linguistic environment, then spread to other linguistic
domains as the speaker revises his hypotheses about the language. To
discover what these environments are, all occurrences of the form in
question (not just those found in environments in which its Standard
English source morpheme would be obligatory) must be examined.
(Huebner ibid: 22)

The criteria for systematicity thus become *internal*: is the learner systematically using a given form to express a particular meaning, irrespective of whether the target language would use that form to express the same meaning.

Similarly, Sampson (1982) has argued that the development of inter-languages is a construction process in which (1) the learner requires notions to express him or herself; (2) the learner is thus motivated to attend to the target language to find out how to express that notion; (3) forms are therefore detected; (4) these forms are then produced - and hence practised; (5) depending on the feedback received, the forms are then internalised or reanalaysed. The development and maintenance of internal consistency as a way of expressing meaning thus become the driving force - the power mechanism (Ellis 1984) - behind second language acquisition.

But what evidence is there for the existence of a notion-form relationship in second language acquisition? It is to this that we shall now turn.

2.3.1. RESEARCH EVIDENCE SUPPORTING A NOTIONAL APPROACH

Hakuta (1976) noted the large number of prefabricated patterns in the speech of his informant, a five year old Japanese girl acquiring English in the USA, and speculated that they were used to express a wide range of functions from the beginning. As these prefabricated patterns were gradually replaced by analysed forms, variability was

observed. Wong-Fillmore (1976) similarly found that the five Spanish L1 children in her study, who were acquiring English in kindergarten in the USA, used a majority of such patterns. She argues that these prefabricated patterns are central to the acquisition process, since they "evolve directly into creative language" (ibid: 640). For first language acquisition, Clark (1974) and Peters (1977, 1983), have described the means by which such prefabricated patterns are analysed into constituents which are then free to combine with other constituents by syntactic slot filling before becoming conventional, rule-governed morpho-syntax and lexis.

Huebner (op cit) followed the interlanguage development of a young adult Hmong speaker living in Honolulu over a 54 week period. An obligatory context examination of article use revealed no development over that period. However, an examination of his subjects' *use* of articles revealed that he had moved from an L1-based topic prominence to an L2 (English)-based subject prominence over the period in question, and that his use of articles had reflected this shift. Tarone and Parish (1988) used Huebner and Bickerton's (1975) 'semantic wheel' to reanalyse Tarone's (1985) findings on article usage among 20 advanced learners of English. They found that task variation may result from different tasks encouraging different noun phrase - and hence different article - usage. They also found that accurate use of articles increased for reasons of discourse cohesiveness. As we shall see below, discourse recurs throughout the Notional Approach research as a source of both variation and development.

Dittmar (1987) found that Spanish immigrants in Germany had acquired the notion of temporality, although they had *not* acquired the necessary verb morphology; they simply used temporal adverbs. Von Stutterheim and Klein (1987) claim that these temporal adverbs are themselves the surface reflection of discourse level notional constraints, with the learner acquiring adverbial means of expressing the beginning of a sequence, establishing a temporal reference point, expressing this temporal relation, and ending a sequence. Meisel (op cit) has developed what he calls a "developmental chronology" for the emergence of past tense reference based on a notional perspective. Once again, although it is clear that the morphological marking of reference to the past develops relatively late, a Notional Approach reveals the early use of discourse and adverbial means to express the concept.

Schachter (1986) re-examined the apparently random variability reported by Cazden et al (1975) and claimed that there was

a surprising regularity in [the subject's] pairing of forms and functions, with a strong tendency to associate with each function a very limited set of syntactic forms and to associate with each syntactic form a very limited set of functions. (Schachter op cit: 131)

In other words, variation is not random, but notionally determined.

Wagner-Gough (1978) found, in her longitudinal study of a Persian boy acquiring English, that he used the progressive and simple verb forms for the same functions. In a cross-sectional study of the same verb

forms by adults, Eisenstein et al (1982) also found that the progressive and simple forms were initially used to express the same meanings, and only became separated later.

Ellis (1985ab) places this, which he calls free variation, at the heart of the second language acquisition process:

> Free variation serves as the impetus for development, as the learner strives to make his interlanguage system more efficient ... [It] is the major source of instability in interlanguage, because the learner will try to improve the efficiency of his interlanguage system by developing clear-cut form-function relationships ... [because] ideally a linguistic system will contain enough and no more distinctive features than are required to perform whatever functions the user wishes to communicate (Ellis 1985b: 94/5)

Thus, Ellis' explanation of second language acquisition closely parallel's Sampson's. However, Ellis (1984) takes the model one step forward and posits the existence of developmental stages in language acquisition of which the form-notion dialectic is only a surface emanation. He argues for two levels in language acquisition, which he calls *primary* and *secondary*. The former is made up of three stages: a semantic core and base syntax which together form the building blocks in pidginisation, and the beginnings of morphology (those features which apparently require little or no effort to acquire). The second level also consists of three stages: it begins with morphology (but those features which require considerable effort and perseverance to acquire), the development of complex sentences, and formulaic utterances.

One way of capturing the difference between the 'primary' and 'secondary' levels is to picture the learner using two resources to develop a knowledge of the L2; he can use his knowledge of language together with his general world knowledge (i.e. draw on 'internal input') or he can work on cracking the code by attending to the language addressed to him (i.e. draw on 'external input'). To begin with the learner faces inward and regresses to a set of primitive semantic categories, but as he becomes exposed to external input he extends his competence by incorporating language specific features of the target language. (Ellis ibid: 175)

We shall see later in this chapter, and again in chapter four, how learners do indeed draw on these two knowledge sources as a means of constructing and testing hypotheses concerning the nature of the second language.

2.3.2. SUMMARY

It should be clear from the discussion above that the Notional Approach has not been developed as a unified model, but is rather a series of hypotheses made by different researchers working within a similar framework. What I shall try to do here, therefore, is pull these hypotheses together into a single viable model, which will itself be incorporated into a more general, T2 level theory in chapter five.

1.   The Notional Approach sees second language acquisition as the result of a learner's efforts to create meaning.

2. To create meaning, the learner must make use of all the resources at his or her disposal. These will include world knowledge and, in the case of learners who have already acquired a language system, linguistic knowledge - both in terms of knowledge of the meaning potential of language (i.e. what meanings language can express), and in terms of the means of expression of one (or possibly several) actual languages. In production situations, learners can also exploit their situational and contextual (schematic and pragmatic) knowledge. In addition, greater familiarity with and proficiency in the target language makes this an increasingly valuable source of information for the learner. Thus, what is being suggested here is that the learner may very well have to perform communicative acts - create meaning - before having analysed the relevant parts of the target language, in which case he or she will have to fall back on 'primary' knowledge or lexical reformulation and the L1.

3. The search for meaning drives the learner to look for ways of expressing these meanings. Analysis of the target language provides knowledge of forms which are then appropriated to the notions which the learner needs to express. However, it should not be automatically assumed that learners will necessarily succeed in matching target language-like form-notion relationships, at least at first. As a result, some variation is to be expected in the learner's interlanguage, both because no suitable form has yet been detected to deal with a particular notion, and because the form being used is not being used in a target-like way.

This has repercussions for the processing of data. Rather than using the external criterion of the target language, researchers need to use the internal criterion of the interlanguage to identify systematicity. In other words, the notions which need to be expressed need first to be identified and then the data investigated to find which forms the learner is using to express them. It is to a description of this within the context of the expression of past time that we shall now turn.

2.4. A NOTIONAL APPROACH TO PAST TENSE IN SECOND LANGUAGE ACQUISITION

Our intention in this section is to provide a description of a notional, or concept-oriented use of 'pastness'.

Every utterance, no matter what communicative purpose it fills, involves the expression of various concepts such as temporality, modality and locality. It seems clear that in order to produce an appropriate utterance, a speaker must somehow 'have' these concepts ... In addition he also must have some specific conventionalized means of expressing them; these are provided by the individual's language ... We may assume that a second language learner ... does not have to acquire the underlying concepts. What he has to acquire is a specific way and specific means of expressing them ... Hence, we may gain some insight into the 'logic' of the acquisition process as well as into the organisation of learner languages by looking at the way in which specific concepts, such as temporality, are expressed at various stages of the acquisition process ... It seems reasonable, then, to assume that the way in which the learner organizes his utterances is heavily influenced by the conceptual structure present and by the way this conceptual structure is encoded in the source language. In many cases, this provides a guideline for answering questions on why a learner builds up his utterance in a specific way, on why he acquires a specific form of marking something before another one, on why he ignores certain features that might be

important in the target languages, and consequently on why the acquisition process proceeds in the way that it does. (von Stutteheim & Klein, op cit: 194)

In short, what is being suggested here is that the learner's acquisition of L2 forms will be influenced by which notions these forms express and how the same notions are encoded in the L1. This is highly plausible, and there exists a certain amount of empirical evidence to support it. It is to this that we shall now turn, before moving on to a notional-contrastive examination of the expression of past time in English and French.

2.4.1. PREVIOUS RESEARCH FINDINGS

Meisel (op cit) undertook a cross-sectional study of 45 adults and adolescents and a longitudinal study of a further 12. These L1 speakers of Spanish, Italian and Portuguese were learners of German. Data was gathered via conversations. He identified two broad means of expressing past time reference: implicit and explicit.

Implicit reference makes use of two devices: shared knowledge between speaker and hearer (eg via the situation of past events through the mention of places which both interlocutors know to have been previously lived in); and discourse ordering, where order of mention is asumed to be order of occurrence.

Explicit reference makes use of free (adjuncts) and bound (morphological features) morphemes.

Meisel found that in the initial stages learners made use of implicit reference (ie were essentially discourse-oriented), before gradually introducing free morphemes. However, free morphemes were themselves discourse-constrained in that (1) one temporal marker per 'conversational unit' (ie dealing with the same subject within the same time frame) was used; (2) locative adverbials (related to identifying the place - necessary in shared knowledge situations) appear first, then connectives (for ordering) and then only temporal adverbials; and (3) although adverbial expressions appeared at first in final position, they quickly moved to initial position. Meisel suggests that this is so that they can be used as scene setters - ie to establish a time frame - for what is to follow. Only then did bound morphology appear, accompanied by "great confusion ... as a consequence of the beginning acquisition of verb inflection, there is considerable variation instead of the prevailing invariance, but also great uncertainty." (Meisel, ibid: 217).

Similarly, the European Science Foundation Project on Adult Language Acquisition (Perdue, 1993) identified three stages in the acquisition of temporality among 20 subjects from a variety of first language backgrounds. Although the *notion* of pastness emerges at the earliest stage, morphological marking does not appear until stage three (which some learners never reach), but even here a number of forms coexist and the researchers claim that "form precedes function" (ibid: 108).

2.5. A NOTIONAL APPROACH TO PAST TENSE: A CROSS-LINGUISTIC COMAPRISON BETWEEN ENGLISH AND FRENCH

2.5.1. A WORKING DEFINITION OF PAST TIME REFERENCE

Past time is defined as that which has gone before now. Reference to it can be made:

1. explicitly - through tense, aspect or adjunct;

2. implicitly - through context or shared knowledge.

2.5.1.1. Explicit Past Time Reference

In this case, the utterer explicitly mentions in the utterance that past time is being referred to. This can be done through:

1. tense - past simple, used to;
2. aspect - perfect and progressive;
3. adjuncts - adverb or adverbial phrase.

It is as well to mention immediately that, given the level of proficiency and consequent language production of the learners in our corpus, together with the contents of the syllabus which they had covered, discussion of the first two will be limited to the past simple.

Adjuncts obviously include such expressions as 'yesterday', 'last week', 'in 1988', etc.. These have been labelled elsewhere 'calendrical expressions'(Véronique, 1987). Moreover, it should also be clear that adjuncts contain, semantically, elements of tense and

aspect. Hence, for example, *ago* is tense-related since it is associated with remoteness from the present, definiteness of time and completion of both event and period. Similarly, *since* is semantically aspectual as it is associated with *incompleteness*.

2.5.2. AN ANALYTICAL FRAMEWORK FOR PAST TENSE

The working definition of past time reference outlined above is very basic, and a more in-depth analysis of what is involved in talking about the past is required before a meaningful data analysis on this basis can take place. This section will seek to provide such an analytical framework, although it makes no claims to being either exhaustive or universal.

Although Huddleston (1984) identifies only four meanings for the simple past in English (see also Comrie 1985), and argues that the present perfect only expresses *one* meaning (see also Comrie 1976):

The essential difference between the perfect and past tense is this: the perfect locates the situation within a period of time beginning in the past and reaching forward to include the present, whereas the past tense is used where the time of the situation is identified as wholly in the past, as a past that excludes the present. Wioth the perfect we have an 'inclusive' past, with the past tense an 'exclusive' past. (Huddleston op cit: 158).

However, this is not to say that languages encode 'reality' in the same way, and if we are to investigate language acquisition it may be worthwhile looking into these 'general' meanings in greater detail.

It is for this reason that we engaged in an introspective analysis
from a notional viewpoint which produced the following (not necessar-
ily exhaustive) list of possible meanings associated with the
expression of 'pastness':

    proximal vs remote
    complete vs incomplete
    duration vs non-duration (period vs point)
    chronological (simultaneous vs sequential)
    foreground vs background
    general vs particular (definite vs indefinite)
    unitary vs repeated
    state vs event
    experiential vs historical
    interrupted vs uninterrupted
    habitual vs non-habitual
    resultative vs non-resultative

It might be argued that this is an unnecessary complication. However,
its potential explanatory power derives from Huebner's (1979) and
Tarone and Parish's (1988) findings that a similar notional analysis
related to the use of the article system went a long way towards
explaining apparent random variation. In addition, we believe that
the results from our analysis (see section six) support this
assertion.

We shall now move on to a discussion of how French and then English
and French constrastively express these various meanings.

2.5.2.1. French

French has three main ways of expressing past time verbally: the
passé composé, the plus-que-parfait and the imparfait. In addition,
there are the passé simple, now restricted to written narrative (see
Flaeschman 1990 for a historical discussion of French narative
technique), and the présent historique, which is a stylistic device
used to increase hearer or reader involvement in the past events
being narrated:

L'historien use souvent de la possibilité offerte par le présent
de faire abstraction du cadre ou du décors décrits au passé. Il rend
ainsi le lecteur témoin direct de l'événement.... [Le] passé simple
[est] réservé à l'usage littéraire. (Chevalier et al, 1989: 338/340).

[The historian often makes use of the possibility offered by the
present to distance himself from frameworks or decors described in
the past. He can thus make the reader an eye witness of the event ...
[The] 'passé simple' [is] reserved for literary usage.]

Given the level of the learners in our corpus, we shall restrict
ourselves in the next section to a discussion of the imparfait and
passé composé. Before moving on, however, it is as well to mention
one formal constraint on the construction of the passé composé.
Normally speaking, it is made up of a conjugated *avoir* auxiliary
followed by the past participle of the relevant lexical verb, but
certain verbs (notably the reflexives and intransitive verbs of
motion) are preceded instead by the *être* auxiliary.

2.5.2.2.. French and English

In this section we shall take each of the distinctive features listed above and examine them in turn contrastively for English and French.

2.5.2.2.1. Proximal vs Remote

By this we mean whether the events in question were near to the present speech event or distant. It would appear, for example, that remoteness is the prime factor in the use of the past simple in English, although this 'remoteness' needs to be interpreted in psychological terms; ie whether the utterer considers the past event to be unrelated to, or in some way 'unhooked' from the present. Hence the use of the past as a marker of polite distance:

What was your name again?
I was wondering if you'd like to go out with me.

So, either the past simple itself or the past element of the past progressive indicate remoteness. On the other hand, the present perfect's aspectual link with the present prevents it from having this sense of remoteness or 'unhooking'.

French, on the other hand, does not make this distinction, except in written historical narrative, where the passé simple would be used to express remoteness. Otherwise, the passé composé would be the preferred means of expressing both remoteness and proximity:

Jules César a gagné la bataille de Gergovie.
Je l'ai vu hier.

The aspectual linking with the present, however, would be achieved through the présent:

Je vis à Paris depuis dix ans.

In addition, French emphasises the remote/proximal distinction through a change in adjunct:

Je vis à Paris depuis dix ans.
J'ai vécu à Paris pendant dix ans.

2.5.2.2.2. Complete vs Incomplete

ie whether an event is complete or not at the time of speaking. This is the case examined at the end of 2.5.2.2.1.:

I have lived in Paris.

is indeterminate but would be construed as a past event describing a state of affairs which is no longer true. Whereas:

I have lived in Paris for 10 years.

is clearly an incomplete state of affairs.

French follows English in the first, indeterminate case:

J'ai vécu à Paris.

but not in the second:

Je vis à Paris depuis 10 ans.

2.5.2.2.3. Duration vs Non-duration

English would appear to make no distinction between events with real - as opposed to relative - duration and those perceived as points in time:

Elizabeth 1st died in 1603.
She reigned for over 40 years.

French, on the other hand, can make such a distinction:

Louis XIV est mort en 1717.
Il regnait pendant plus de 50 ans/Il a regné pendant plus de 50 ans.

Both English and French can make a distinction between perceived *relative* duration:

I had lunch while she was working in the garden.
J'ai déjeuné pendant qu'elle travaillait au jardin.

However, this telescopes into the foreground/background distinction we shall be discussing in the next section.

2.5.2.2.4. Foreground vs Background

Backgrounding is a means of making one action stand out as more important than another, without necessarily emphasising their relative duration. English makes this distinction by foregrounding using the past simple and backgrounding with the past progressive:

He was hiding in his room while the burglars ransacked the house.

French does not make this distinction other than as a difference in relative duration:

>Il s'est caché dans sa chambre pendant que les cambrioleurs ont saccagé la maison.

2.5.2.2.5. Chronological

This is the sequencing of events to identify them as sequential or simultaneous. English makes use of the past simple for sequential events:

>I came, I saw, I conquered.

French uses the passé composé:

>Je suis venu, j'ai vu et j'ai conquis.

Simultaneity can be described using either the past simple or the past progressive, depending on whether one is seeking to emphasise relative duration:

>Adam reaped while Eve sowed.
>I was making the coffee while she was cutting the bread.

French operates a similar dichotomy with the passé composé and imparfait:

>Certains ont crié et d'autres hurlé.
>Je préparais le café pendant qu'elle coupait le pain.

French also uses the passé composé to express the anteriority of one event over another:

Aussitot que la nuit est tombée, les rats sortent.

English operates a similar meaning with the present perfect:

As soon as night has fallen, the rats come out.

2.5.2.2.6. General vs Particular

This is taken to relate to specific time reference, whether explicit or implicit. English would appear to make a distinction here which is absent in French. For the general (ie non-determined), English uses the present perfect:

I have visited Greece.

And French uses the passé composé:

J'ai (déjà) visité la Grèce.

However, with the particular , English uses the past simple (ie the time adjunct explicitly constrains the choice):

My uncle died last week.
I visited Wales last year.

Whereas French uses the passé composé:

Mon oncle est mort la semaine dernière.
J'ai visité le Pays de Galles l'année dernière.

2.5.2.2.7. Unitary vs Repeated

English would appear not to make this distinction:

> *I rode a bike only once: straight into a river.*
> *I rode my bike to school every day for 6 years.*

French, on the other hand, does:

> *Je n'ai fait du vélo qu'une fois: et je me suis retrouvé dans la rivière.*
> *Je prenais mon vélo tous les jours pour aller à l'école.*

2.5.2.2.8. State vs Event

English systematically differentiates between states and events (which may depend on whether a particular verb is expressing a state or event rather than simply that a given verb is a state or event verb). French does not make this distinction. Hence:

> *I felt something was wrong.*

But not

> * *I was feeling something was wrong.*

Whereas French permits the use of both passé composé and imparfait without any change in meaning:

> *J'ai senti que ça n'allait pas.*
> *Je sentais que ça n'allait pas.*

2.5.2.2.9. Experiential vs Historical

This is
~~is~~ altering the way one refers to past time according to whether one is referring to historical events or whether one is narrating from actual experience. Certain discourse styles involve the narrator directly in a narration, leading to a changing aspectual position (ie placement of the utterer in relation to the events recounted). Benveniste (1966) argues that this is the real difference between the passé simple and the passé composé in French. Similarly, there is the stylistic use of the present in narrative:

> *Well, in he runs and throws himself at the king's feet ...*
> *Il arrive en courant et se jette aux pieds du roi ...*

This would not appear to be other than a stylistic variant for either English or French, although it would seem to be somewhat more common in the latter.

2.5.2.2.10. Interrupted vs Uninterrupted

Both English and French mark interrupted past actions morphologically:

> *I was watching the match on tv when the aerial fell off the roof.*
> *Je regardais le match à la télé lorsque l'antenne est tombée.*

Interruption should not, therefore, be an area of difficulty for French learners.

2.5.2.2.11. Habitual vs Non-habitual

English does not systematically differentiate between habitual and non-habitual past events, although it has the means of doing so. French, on the other hand, consistently makes the distinction:

> *We swam in the river every weekend during the summer when I was a child.*
> *We used to swim in the river every weekend during the summer.*
> *We would swim in the river every weekend during the summer.*
> *Quand j'étais enfant, nous nagions dans la rivière tous les week-ends pendant l'été.*

But not:

* *Quand j'ai été enfant* ....

since the use of the passé composé implies *non*-habitual action.

2.5.2.2.12. Resultative vs Non-resultative

English expresses the results of past events through the present perfect:

> *I've cut my finger.*

French uses the passé composé:

> *Je me suis coupé le doigt.*

2.5.2.2.13. Summary

It may be worthwhile at this stage summarising the preceding analysis graphically (see following pages).
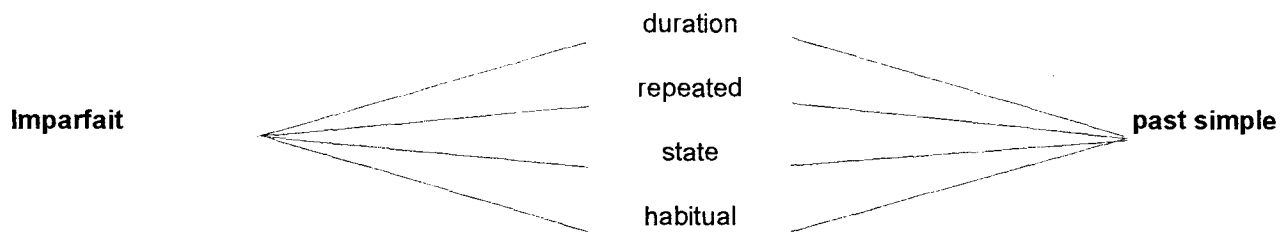
Figure 2.1 - Notions Common to both Imparfait and Past Simple
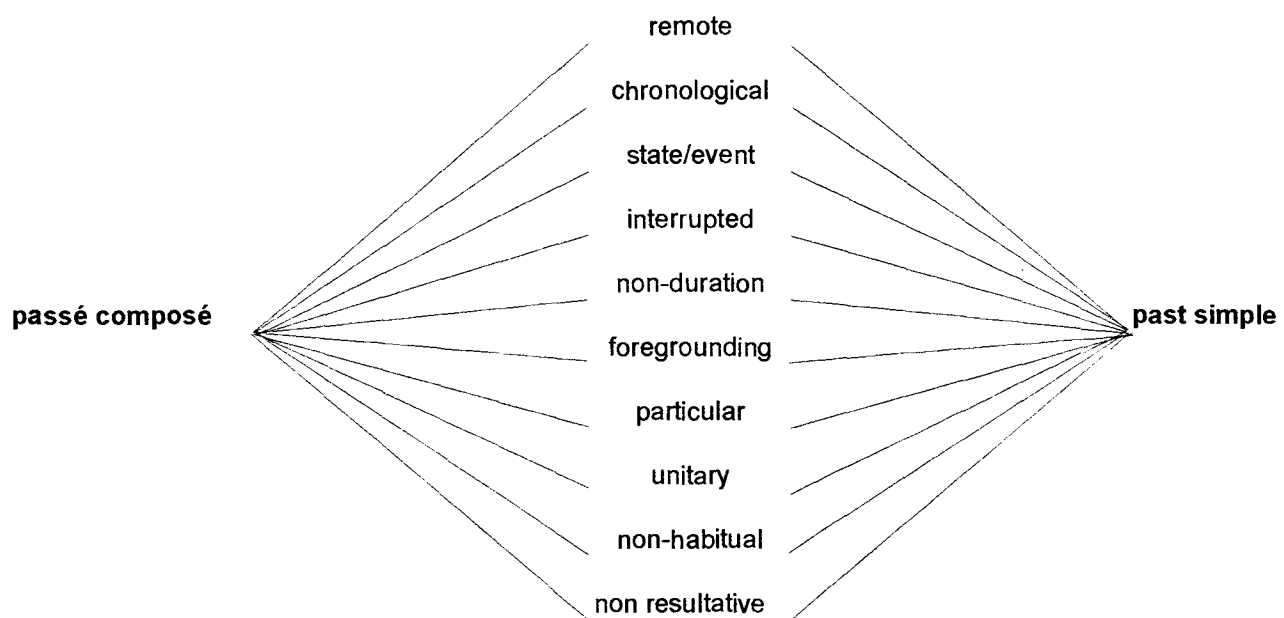
Figure 2.2 - Notions Common to both Passé Composé and Past Simple

imparfait _____ chronological _____ past progressive

Figure 2.3 - Notions Common to both Imparfait and Past Progressive

```
                              complete
)assé composé  _____      general      _____  present perfect
                              result
```
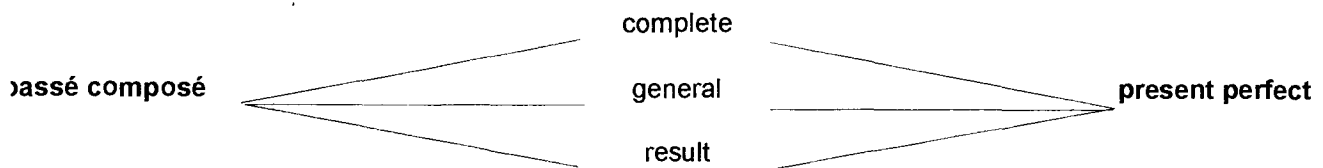
Figure 2.4 - Notions Common to both Passé Composé and Present Perfect

```
                         proximal
présent  _____                  _____  present perfect
                         incomplete
```
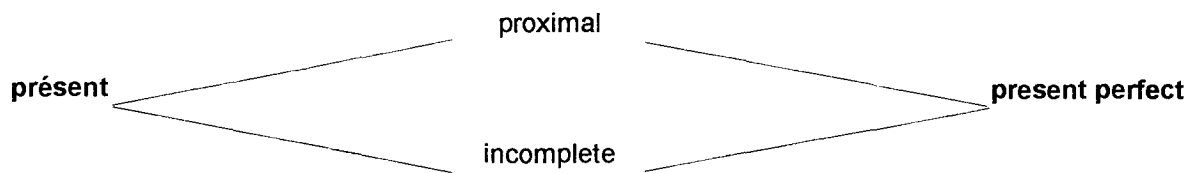
Figure 2.5 - Notions Common to both Présent and Present Perfect

Passé Composé

Past Simple

Imparfait

Remote
Chronological
Event
Interrupted
Non-duration
Foregrounding
Particular
Unitary
Non-habitual
Non-resultative

Duration
Repeated
State
Habitual
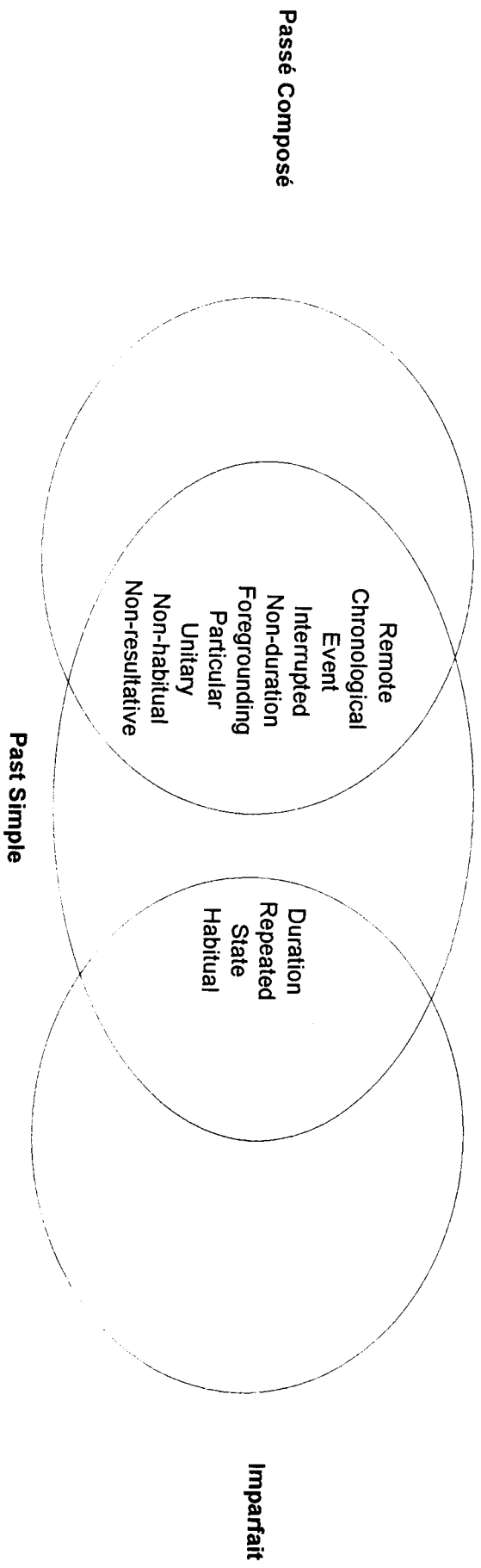
Figure 2.6 - Underlying Passé Composé and Imparfait Notions Expressed by the Past Simple

2.5.3. PREDICTIONS

Predictions of ease or difficulty of acquisition of the past for French learners of English can be both formally and notionally based, although, of course, for a particular learner, difficulty may derive from both form and meaning. We shall briefly examine form and notion as poles of attraction likely to encourage or discourage transfer from one language to the next. Before doing so, however, it is as well to recall that strategies of dealing with different forms and notions may well vary both between individual learners and at different stages of language proficiency. The following predictions should therefore not be interpreted as implying a single strategy used by all learners to establish form-notion relationships.

2.5.3.1. Form as a Pole of Attraction

The passé composé resembles the present perfect. The French learner is thus attracted to this form as a means of expressing the notions covered by the passé composé. However, since there are relatively few occasions where the forms and notions coincide (see figures 2.1. - 2.5.), one would not expect this confusion to be maintained.

We shall discuss these predictions below in the light of our results.

2.5.3.2. Notion as a Pole of Attraction

1. In the majority of cases the notions expressed by the passé composé are encompassed by the past simple. It should not therefore be too difficult to establish an initial form-notion correspondance between the passé composé and the past simple.

2. This is reinforced by the relatively few occasions on which the imparfait corresponds to the past simple. It is thus unlikely that a French learner will be attracted towards using the past simple to express imparfait notions.

3. Yet the passé composé only notionally corresponds to the present perfect on three occasions. There is thus little notional encouragement for an initial form-notion matching.

4. Moreover, the imparfait shares few notions with the past progressive. There is thus little encouragement for an initial form-notion matching.

These predictions will be examined at length in sections 5.2.7. and 5.2.8..

There remains, of course, the possibility that the L1 has *no* impact on the acquisition of the L2 - at least as far as past tense is concerned. This should become clear if the predictions related to form-notion matching are not upheld.

Before going on to an examination of these predictions, however, several possible sources of disturbance need to be discussed.

2.6. INTERLANGUAGE DEVELOPMENT AS THE APPLICATION OF FORM TO NOTION

We have identified 12 possible notions of past time reference. What remains to be discovered is whether the development of past time reference follows a particular path among them.

Although, on the face of it, this would appear to be a relatively straightforward task, there are a certain number of factors which cloud the issue:

(1) There is no certain way of knowing that the notions identified correspond to a psychological reality for the learners.

(2) We are dealing with classroom learners whose perception of how to express past tense may have been moulded by the way in which 'the past' was presented to them. The European Science Foundation Project (Perdue, op cit), for example, found that among their six source languages only Turkish speakers followed a different developmental path in the acquisition of past time reference. Significantly, they alone had received instruction in the target language (German).

(3) It should be obvious that a particular occurrence of past time reference may actually involve *several* of these notions. Without access to the learner's mind at the

time of utterance to identify his or her intent (and post-production questioning is no guarantee that this will be discovered), one cannot know for certain which of one or several notions was actually intended.

These are problems of data collection and processing which have wider significance than the material under investigation here, and two, at least, will be a perpetual problem fo all psychological work. There are no easy solutions; one must simply attempt to be as transparent and as rigorous as possible in one's choices.

2.7. A NOTIONAL APPROACH TO PAST TENSE : FINDINGS FROM THE PRESENT STUDY

In chapter four we shall argue that underlying much of the observed variation in learner production is an attempt to maintain an L1 *macro*-notional distinction between imparfait and passé composé. In this chapter, however, it has been suggested that a much finer framework for past time reference could be developed. While such an analysis is obviously more a linguistic explanation than necessarily a reflection of psychological reality, it will certainly be worth-while to investigate the relationship between fundamental past distinctions and surface representations.

2.7.1. METHOD

2.7.1.1. Data Collection Technique 4

Subjects were invited to correspond with their teacher on a weekly basis on a subject of their choice.

2.7.1.2. Subjects

Group One

Subjects: 11 adult (age range 26-44) university students following compulsory English lessons (four hours a week over a period of 20 weeks spread over seven and a half months because of holidays) as part of their diploma course.

Native language: French.

Proficiency in English at start of course: all students in this group tested in at the beginners' level on the university placement test, although five were actually *false* beginners in so far as they had already completed two years of English classes at school, albeit between 10 and 26 years previously. At the beginning of the course, they were unable to spontaneously produce anything in English, either in writing or orally. It is for this reason that data collection started only after 4 weeks of courses. However, some subjects felt unable to contribute until even later.

Group Two

Subjects: 13 adult (age range 22-51) university students following compulsory English lessons (four hours a week over a period of 20 weeks spread over seven and a half months because of holidays) as part of their diploma course.

Native language: French.

Proficiency in English at start of course: all students in this group tested in at the beginners' level on the university placement test, although four were actually *false* beginners in so far as they had already completed two years of English classes at school, albeit many years previously. At the beginning of the course, they were unable to spontaneously produce anything in English, either in writing or orally. It is for this reason that data collection started only after 4 weeks of courses. However, some subjects felt unable to contribute until later.

Group Three

Subjects : eight adults (ages 23-52) studying English on a voluntary basis at a language teaching institution in three 2-hour classes per week over a 15-week period. Four subjects continued their learning of English by joining another class for a further period of 15 weeks.

Only these four students produced data for the third collection period. As a group, presumably because of the purely voluntary nature of their English, group 3 produced less data than the other two.

Native language : French.

Proficiency at beginning of course : the students tested in at beginner level on the institute's placement test. However, two (one for all three periods) were in actual fact false beginners with up to two years school English behind them (from five to 17 years previously). Nonetheless, at the beginning of the course, they were unable to spontaneously produce anything in English, either in writing or orally. It is for this reason that data collection started only after 4 weeks of courses.

Figure 2.7 (a) - Percentages of Past Forms Used to Express Different Past Notions by Group One in Period One

Figure 2.7 (b) - Percentages of Past Forms Used to Express Different Past Notions by Group Two in Period One

Figure 2.7 (c) - Percentages of Past Forms Used to Express Different Past Notions by Group Three in Period One

Figure 2.7 (d) - Percentages of Past Forms Used to Express Different Past Notions by Group One in Period Two

Figure 2.7 (e) - Percentages of Past Forms Used to Express Different Past Notions by Group Two in Period Two

Figure 2.7 (f) - Percentages of Past Forms Used to Express Different Past Notions by Group Three in Period Two

Group One

Figure 2.7 (g) - Percentages of Past Forms Used to Express
Different Past Notions by Group One in Period Three

Group Two

Figure 2.7 (h) - Percentages of Past Forms Used to Express
Different Past Notions by Group Two in Period Three

Group Three

Figure 2.7 (i) - Percentages of Past Forms Used to Express Different
Past Notions by Group Three in Period Three

Group One

	Prototype
	Target
	Mediated
	Pres Perf

Particular 46,4 21,4 25 7,2
State/Event 40 60
Remote 100

| Particular | Chronological | State/Event | Remote |
| 82,4% | 0 % | 14,6 % | 3 % |

Figure 2.8 (a) - Percentages of Past Forms Used to Express Different Past Notions by Group One in Period One

Group Two

	Prototype
	Target
	Mediated
	Pres Perf

Particular 25 39,2 7,1 28,5
Chronological 11,8 11,8 17,7
State/Event 21 79
Remote 50 12,5 12,5 25

| Particular | Chronological | State/Event | Remote |
| 54,9% | 16,7 % | 18,6 % | 7,8 % |

Figure 2.8 (b) - Percentages of Past Forms Used to Express Different Past Notions by Group One in Period Two

Group Three

	Prototype
	Target
	Mediated
	Pres Perf

Particular 24,4 58 5 12,2
Chronological 20,5 59 9,6 10,8
State/Event 7,4 91,3 1,2
Remote 3,4 93,2 3,4

| Particular | Chronological | State/Event | Remote |
| 31,9 % | 38,1 % | 18,6 % | 6,7 % |

Figure 2.8 (c) - Percentages of Past Forms Used to Express Different Past Notions by Group One in Period Three

Group Two

Particular
33,3%

Chronological
33,3 %

State/Event
24,4 %

Remote
0 %

**Figure 2.8 (d) - Percentages of Past Forms Used to Express
Different Past Notions by Group Two in Period One**

Group Two

Particular
44,0 %

Chronological
20,0 %

State/Event
36,0 %

Remote
0 %
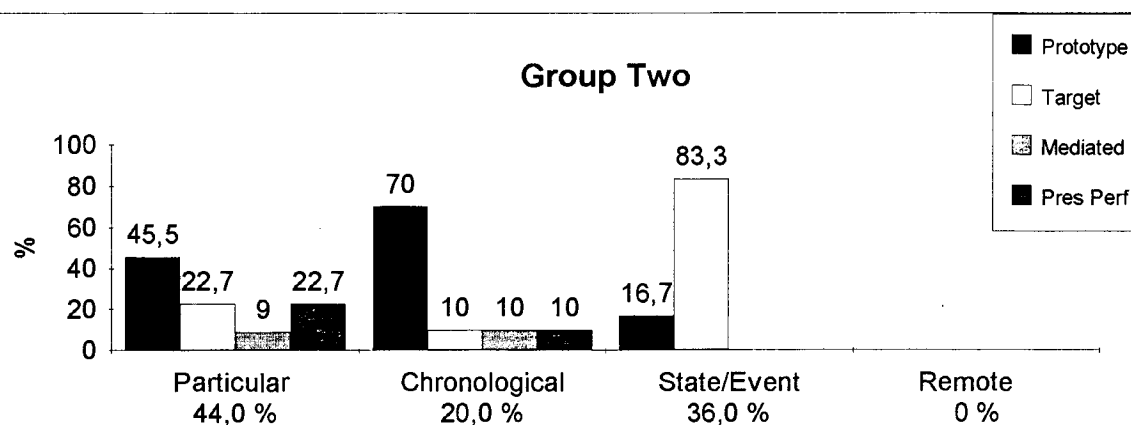
**Figure 2.8 (e) - Percentages of Past Forms Used to Express
Different Past Notions by Group Two in Period Two**

Group Two

Particular
34,6%

Chronological
38,5 %

State/Event
23,1%

Remote
0 %
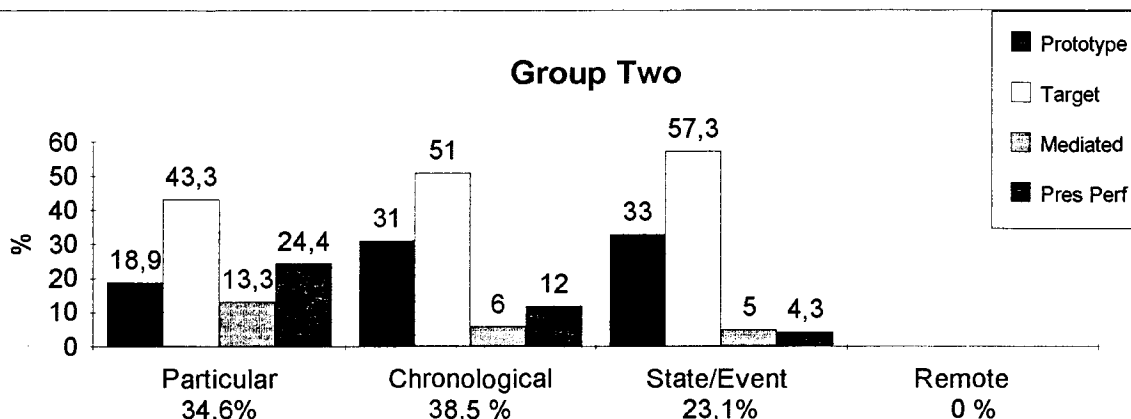
**Figure 2.8 (f) - Percentages of Past Forms Used to Express Different
Past Notions by Group Two in Period Three**

Figure 2.8 (g) - Percentages of Past Forms Used to Express Different Past Notions by Group Three in Period One

Figure 2.8 (h) - Percentages of Past Forms Used to Express Different Past Notions by Group Three in Period Two

Figure 2.8 (i) - Percentages of Past Forms Used to Express Different Past Notions by Group Three in Period Three
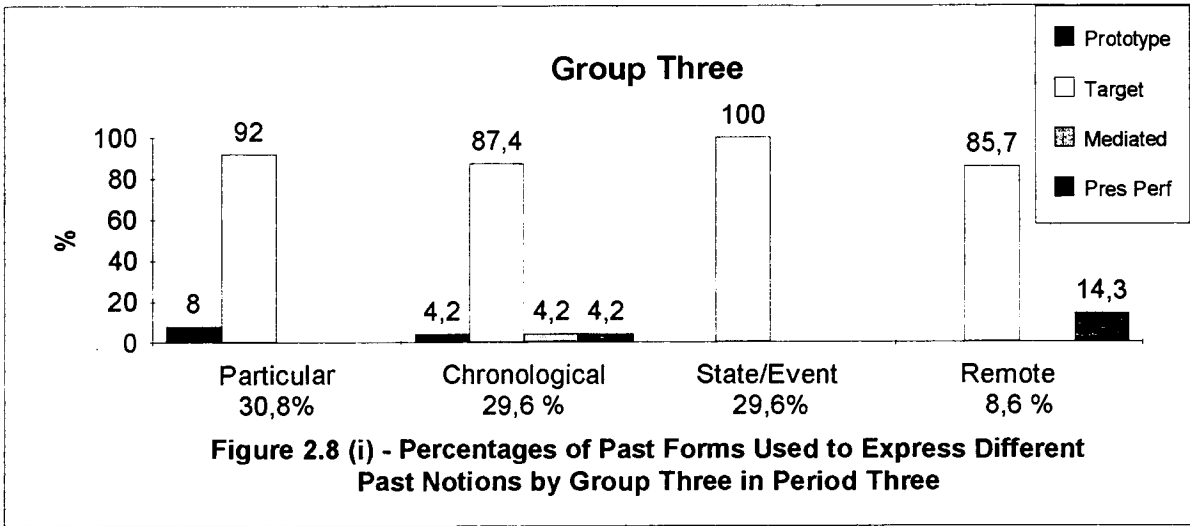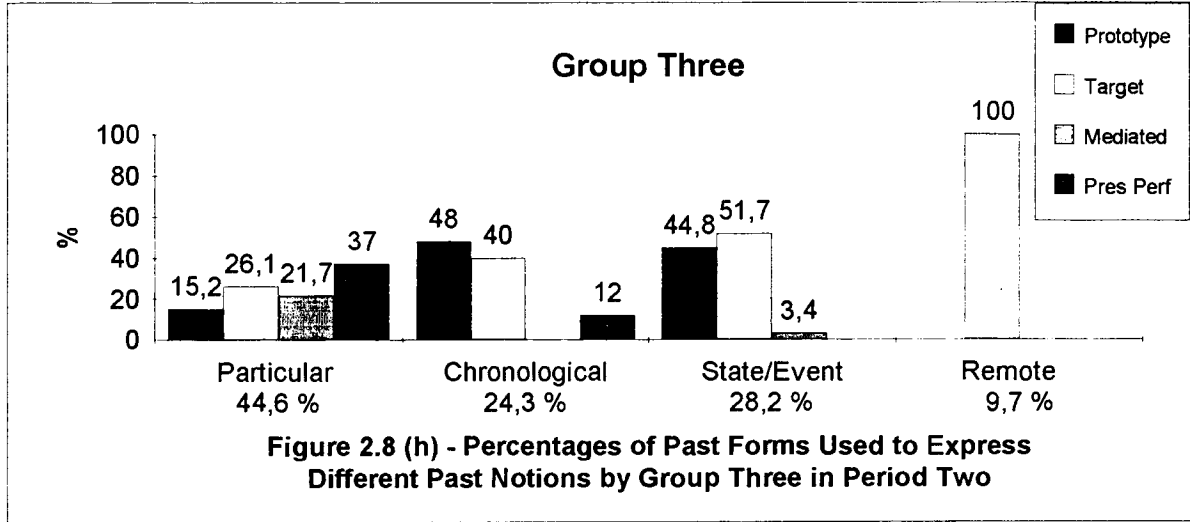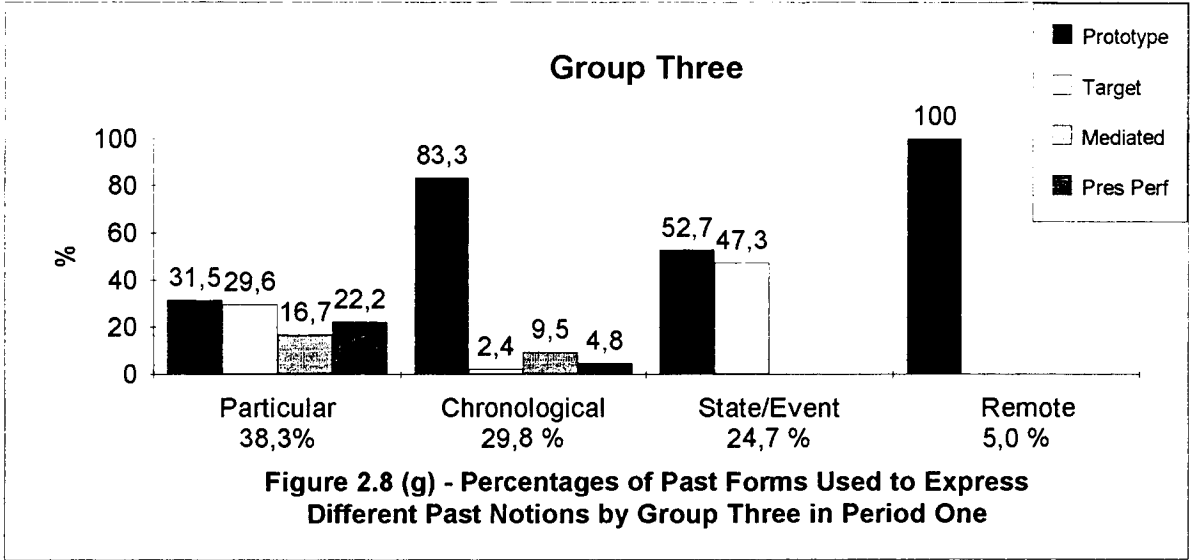
2.7.1. RESULTS AND DISCUSSION

Figures 2.7. and 2.8. provide a count of the different meanings expressed during each period and for each group.

One fact that leaps immediately to the eye is the limited number of past notions expressed; no group in our sample produces more than 3% of occurrences for more than four notions: particular, chronological, state/event, and, to a much more limited extent, remote. This is not really surprising if we remember that we are dealing in our corpus with beginners, and that these four notions are relatively concrete. Moreover, the three major categories represented are those which are more likely to appear in narratives which refer to the subject's immediate experience, which, as a glance at the narrative samples in this chapter will show, is largely the case here.

Presumably, the other notions appear later, in more complex discourse types1. A study of more advanced learners is necessary to investigate this possibility.

We shall now examine the development of each of the four early notions in turn.

2.7.1.1. The Particular

Figure 2.7. shows the continuing use of all four common surface forms by all three groups throughout the three periods - except for group three in period three. There is nonetheless a shift in the proportions represented by each form, use of the prototypical base

form, present perfect and mediated present perfect all generally declining at the expense of the target norm. While this is to be expected, it is significant that all four surface forms continue to be used even into period three.

This may indicate that the particular is a difficult notion to control, although its collocation-like relationship with explicitly stated past time would suggest not. Alternatively, this very relationship may encourage the use of prototypical base form, morphological marking being redundant. However, the large proportions of mediated and unmediated present perfect surface forms would seem to belie these possibilities: (1) because subjects are clearly attempting morphological marking from early on, and (2) because their presence appears to strengthen the argument we shall advance elsewhere that the main determining factor is in fact relexification. Indeed, the collocation between passé composé and explicit past time marking in French seems to attract the use of passé composé-type forms in the target language, although these may be mediated.

2.7.1.2. The Chronological

As shown in figure 2.7., the chronological notion shows an essentially similar pattern to the particular: although all four surface forms are not always present, they are there most of the time, which would again seem to suggest that the chronological is also a difficult notion to control. On the other hand, the proportions are quite different to those for the particular, with mediated and

unmediated forms being much less common (with exceptions for group two in periods one and three). Here, use is overwhelmingly prototypical or target-like.

This would seem to point to the use of a strategy other than relexification for this notion. Again, this should come as no surprise, since chronological ordering is essentially a discourse function. In the early stages, therefore, the subjects here largely follow the strategic competence dictum of chronological ordering + prototypical base form, gradually replacing this over time by the target form.

Yet, as with the particular notion, the source language would have required passé composé in these cases; so why has relexification not taken place? We have already mentioned the strength here of discourse, but there is also the lack of a tight collocational relationship. Again, this would seem to indicate that relexification *is* a general strategy, but that certain factors promote or constrain it. Among the former is the strong relationship that may exist between one form and another (in a sense, collocational, an explicit reference to time, for example, attracting a given morphological marking), while among the latter are discourse and strategic factors.

2.7.1.3. The State/Event Distinction

Although all four common surface forms do appear here, as figure 2.7. shows there is an overwhelming tendency to use prototypical base form

or the target norm, with the latter already frequent in period one and attaining majority status by period two. Given what will be said in chapter four about the importance of underlying imparfait, this is not surprising, since it is in this category that the vast majority of imparfait cases fall. We are not, therefore, in a position to state with any greater confidence whether the relexification argument advanced earlier is primordial, or whether the it is the expression of the state/event distinction which encourages target norm usage. However, given the results and interpretations in chapter four, the balance would appear to be tipped in favour of the relexification argument.

2.7.1.4. The Remote

The remote notion is relatively rare in our corpus, appearing in only six out of a possible nine occasions, and never exceeding 10% of occurrences. However, although all four common surface representations do appear, target norm is the most frequent. This would seem to indicate that attaching the past simple to the expression of remoteness is comparatively simple.

Why this should be so is less obvious, since French uses the passé composé to express remoteness, and elsewhere we have argued that an underlying passé composé will attract a mediated or unmediated present perfect due to a process of relexification, unless constrained in some way. Two possible constraints in this case are: (1) the lack of a collocational relationship; (2) the attachment of the passé

simple to the notion of remoteness. Although this distinction is only
made in modern French in a formal written style, native French
speakers are aware of it, and this awareness may enable tham to fix
the target norm more easily via a successful (and hence invisible)
mediation process.

2.7.2. CONCLUSIONS

An examination of the past notions expressed by the subjects in this
study supports a general argument suggesting that the fundamental
underlying process at work is one of *transformation*; ie a relexifica-
tion strategy - possibly mediated by L2 knowledge - from the L1 to
the L2.

This was indicated in all four notions, although the causes of this
transformation differed in each case. For the particular, for
example, it was felt that the strong collocational relationship
existing between explicit timeframing and morphological marking in
the L1 strongly attracted the appearance of passé composé, which was
then directly relexified as mediated or unmediated present perfect.
In addition, as we shall argue in chapter four, this process may be
encouraged by the additional processing strain required for the
suppression of the auxiliary. With the state notion, however, neither
the collocational relation nor the processing constraint are present,
enabling a more successful (in terms of producing the target norm)
relexification strategy. One would then expect processing difficulty

to lead to considerable production of mediated and unmediated present perfect to express the remote notion. Yet this does not happen to any great extent. This may be an artefact of the relatively small number of occurrences of this notion - reflecting the few subjects who used it - or it may represent another underlying L1 distinction - as reflected in the potential use of the passé simple - which enables French learners to readily associate the notion of remoteness with a particular L2 form.

Moreover, the closer examination of past tense use through notions also enables us to identify potential constraints on relexification. The chronological notion, for example, relies heavily on prototypical base form. This may reflect the discourse nature of chronological ordering, which renders morphological marking redundant, and be thus a surface manifestation of a processing capacity-saving strategy.

2.7.2.1. Form as a Pole of Attraction

As we shall see in chapter four, form does indeed appear to be a pole of attraction, but only under certain conditions:

(1) at a stage in development where the learner is essentially employing a strategy of relexification;

(2) where a strong 'collocational' relationship exists between two forms (in this case between explicit timeframing and the French passé composé), the presence of one tends to attract the presence of the other;

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(3) where 'mediating' the relexified L1 string through L2

knowledge involves the use of non-available processing

capacity - eg underlying passé composé tends to appear on

the surface, at least in the earlier stages, as mediated

or unmediated present perfect, whereas underlying

imparfait, which requires no suppression of the

auxiliary, very quickly leads to target norm surface

representations.

On the other hand, other factors - notably discourse-related - may encourage the use of prototypical base form.

Nevertheless, for all three notions where underlying passé composé is present, it is clear that the lack of correspondence between form and notion is leading to a decline in L1-originated use, while target norm production is inceasing.

2.7.2.2. Notion as a Pole of Attraction

Our corpus, drawn from beginners, only permits an analysis of predictions (1) and (2).

Prediction (1) is only partly borne out, at least within the time scale of our investigation, although there is a general tendency to move towards a closer form-notion relationship. As chapter four shows, however, this kind of general form-notion prediction is probably inadequate in terms of identifying development paths according to notion. The remote notion, for example, appears to be

associated quite rapidly with the past simple, leading to target norm production, despite underlying passé composé. The particular notion, however, provides the learners with much greater difficulties, leading to continued use of all four common surface representations (prototypical base form, mediated and unmediated present perfect, and target norm). Clearly, therefore, factors other than form-notion matching come into play and may interfere with the success or speed with which this matching takes place.

Prediction (2) turns out to be quite false. The majority of underlying imparfait produced by the learners in our corpus are realised as target norm past simple. However, this finding needs to be tempered: (1) because almost all the underlying imparfaits produced do correspond to past simple - ie there are almost no examples of past progressive in our corpus; and (2) because the verbs thus expressed are almost exclusively *etre* and *avoir*. Nonetheless, it would appear that learners readily establish an imparfait/past simple link which is reinforced by the processing simplicity involved in transposing one simple (imparfait) form into another (past simple) without the extra difficulty represented by the presence of the auxiliary.

2.8. THE NOTIONAL EVIDENCE FOR TRANSFER

Culioli (1979: 206) neatly - if indirectly - states the notional approach to contrastive analysis:

What does vary from one language to another, is the overall layout of
sets of options, the way they are linked, and the constraints on the
rules and the way these rules are combined.

The learner's problem is then to learn (1) semantically, to map new

forms onto old meanings - ie to develop new structural matrices to

express existing options; (2) formally, to learn the constraints

which the L2 imposes on the choice and application of these new

options.

In this section we shall outline the findings relating to the

influence of notions on the transfer of form. We shall begin by

outlining the findings from our research (see chapter four for a more

detailed discussion), then provide evidence from other research,

before concluding with an assessment of the role of notion and

transfer in interlanguage development as a whole.

2.8.1. EVIDENCE FROM THE PRESENT RESEARCH

We have argued above that both notion and form act as poles of

attraction for transfer, and indeed that these interact both with

each other and with other factors, such as available processing

capacity. The evidence for this is particularly clear in examples of

what we call in chapter four *mediated transfer*: ie where an L1 string

under process of relexification is transformed by available L2

knowledge into a hybrid L1/L2 form, or into a 'correct' L2 form used

to express an inappropriate notion. Some examples will serve to make this clearer:

We <u>had eat</u> enormously and we <u>had drink</u> enormously too!

Nicholas Fouquet <u>had arranged</u> the creation of "vaux-le-Vicomte".

At Christmas, for 1st January 87, I'<u>m going</u> with my boyfriend at friend's house.

For my Christmas Hollidays I <u>am going</u> to ski in Grindelwald.

As was clear from the context (ie the shared knowledge between language producer and language receiver), all of the underlined verb forms were intended to express *past* events, yet only the first two - *had eat, had drink* - are 'incorrect'. However, if one considers that the learner's priority is to express meaning and that s/he attempts to do this by converting L1 strings into L2 production, the process becomes clearer. In all five cases, in fact, an underlying French passé composé has been *mediated* by L2 knowledge. In the first three cases, the learner has realised that English does not use the present perfect to express the notions in question, and L2 knowledge has therefore been applied to prevent its surface appearance. However, what the learner has mistakenly done in the process is to transform the underlying auxiliary - *avoir* = have - thus producing a surface *had*, but without suppressing the corresponding participle. In the other two cases, the underlying passé composé was made from the *etre* auxiliary - *je suis allé*. During relexification, the learner has realised that English does not permit the use of *be* as a past

auxiliary and has therefore transformed the rest of the string into an English surface form where *be* is acceptable as an auxiliary - ie the present progressive.

There is thus every indication from the evidence in this study that notional transfer is very much a contributory factor in the creation of learner interlanguages, at least at the early stages of acquisition and for classroom learners. We shall now move on to a review of supporting evidence from other studies.

2.8.2. EVIDENCE FROM OTHER RESEARCH

There seems to have been little research within a Notional framework that has sought directly to investigate the influence of the L1. However, within a Notional Approach, where the assembly mechanism is the learner's search for a form-notion correspondence - ie the search for the expression of meaning - transfer can be seen as a possible constraint on the creation of hypotheses about how a meaning is expressed in the L2. Huebner's (op cit) example of the Hmong speaker beginning by assuming English to be a topic prominent language, like his L1, is a case in point.

The best known study is indeed probably Huebner's (ibid) investigation of a Hmong speaker's acquisition of articles in English in which he found that the subject's apparent free variation and lack of development could be put down to his initially following an L1-derived hypothesis that English was a topic-prominent language, which

was gradually changed into use determined by subject-prominence.

Similarly, Bartelt (1983) has shown that Navajo and Western Apache speakers transfer discourse structure from the L1 into English L2.

Montredon (1979), in a grammaticality judgement study of Japanese learners of French claimed that their errors in judging the correctness of sentences containing imparfait or passé composé could be partially traced to an underlying concept of time imposed by the L1. This clearly lends support to our own findings concerning the maintenance of the underlying imparfait/passé composé distinction.

Word order studies working with a typological distinction between more and less flexible word order languages (Granfors & Palmberg 1976, Trévise 1986) have noted the likelihood that learners from a relatively flexible word order language (eg Finnish) are likely to transfer this flexible word order into less flexible languages (eg English), but that learners from less flexible word order L1s (eg Swedish) are less likely to do so.

Sentence typology studies also indicate that transfer is taking place. Bickerton and Givon (1976), for example, found that speakers of various VSO Philippine languages produced a large number of VSO sentences in pidgin English (SVO), whereas speakers of Japanese, an SOV language, produced a large number of SOV sentences. Similarly Jansen, Lalleman and Muysken (1981) found that Arabic-speaking Moroccan immigrants in Holland tended to identify the basic word order of Dutch as SVO (like Arabic), whereas Turkish-speaking immigrants

tended to identify Dutch as SOV (like Turkish). Dutch, in fact, permits both types according to clause type (main or subordinate).

There would therefore appear to be sufficient evidence to uphold the hypothesis that the L1 acts as a constraint in learners' hypothesis formation about their L2. Within this thesis, therefore, what remains to be developed is a testable contrastive framework for past time reference. It is to this that we now turn.

2.8.3. INTERLANGUAGE DEVELOPMENT, CONTRASTIVE ANALYSIS AND A NOTIONAL APPROACH TO TRANSFER

We have identified the following areas of potential difficulty for French learners of English (and vice versa) insofar as there are differences in the way in which the two languages encode these notions:

    differentiating between remoteness and proximity
    expressing completed events
    expressing past duration
    expressing the particular (= defined)
    expressing repeated events
    expressing states
    expressing habitual events
    expressing the resultative function

This may be felt to be too similar to the initial contrastive analysis hypothesis:

Those structures that are similar will be easy to learn because they will be transferred and may function satisfactorily in the foreign language. Those structures that are different will be difficult because when transferred they will not function satisfactorily in the foreign language and therefore will have to be changed. (Lado, 1957: 25).

How close does a similarity have to be to be similar, and how different to be different? Clearly, the *structures* involved here (at least the present perfect and passé composé) are sufficiently alike to be considered similar, although, rather than any absolute measure, this may depend on the individual learner's personal perception of similarity.

Kellerman (1983) makes similar claims. He argues that the facilitation of transfer between languages depends on two criteria, which he calls *psychotypology* and *transferability*. The former relates, not to the real typological relationship between the languages in contact, but rather to the learner's perception of this relationship. In other words, whether the learner considers the languages to be relatively close or distant. Evidence for this comes from Kellerman's (1977) and Jordens' (1977) investigations of Dutch learners of English and German respectively. Here learners apparently perceived German as relatively more similar to Dutch than is English, as measured by their willingness to accept the semantic transparency of idiomatic expressions. Similarly, Sjoholm (1976) found that Finnish L1 speakers made few errors in English which were attributable to their L1, but a number which were attributable to their L2, Swedish. Swedish L1 speakers, on the other hand, made relatively many errors attributable

to their L1, but very few attributable to their L2, Finnish. Transferability is "the probability with which [a] structure will be transferred relative to other structures in the L1." (Kellerman, 1983: 117). Kellerman thus attempts to explain why some structures are transferred, but not others. Basically, transferability is then related to markedness via whether a structure is considered language-specific (= marked) or language-neutral (= unmarked).

In addition, Kellerman (1983: 117) claims that learners will obey the 'reasonable entity principle'; ie that learners will

treat the L2 as if it were a reasonable entity (unless you have evidence to the contrary). That is, in the absence of specific knowledge about the L2, learners will strive to maximalize the systematic, the explicit, and the 'logical' in their IL. 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.

Clearly, since we are dealing here with *perceived* rather than absolute relationships, one opens up the possibility of individual differences in the use of transfer as a learning strategy, since perceptions may differ. This would appear to be a neglected area of potential variation in interlanguage development, even though mentioned as long ago as 1976 by Wode (p.114):

The preceding section was focused on the commonalities among the four children. This should not blind one to the fact that not all children proceed in exactly the same way. That is to say that though there are developmental sequences which seem to set the major stages of development, these developmental sequences do also allow for some degree of individual variation. And, consequently, any theory of L2 acquisition will not only have to handle the commonalities, but also the individual differences.

Moreover, perceptions are also capable of changing over time. One way in which this can be seen to occur is outlined by Zobl (1980) who noted that L1 influence could hold learners longer on a developmental stage. Specifically, Zobl argued that the preverbal negation of Spanish-speakers could lead them to remain longer on (or fossilize at) that interlanguage developmental stage in the acquisition of negation in English. Similarly, Hammarberg (1979) showed that Serbo-Croatian-speakers learning Swedish began with a pre-verbal negation stage in Swedish (a post-verbal negation language), whereas English L1 learners of Swedish showed no evidence of a pre-verbal stage, but began with post-verbal negation.

However, what is at stake is not similarity of surface structure, but confusion between form and notion due to the differential encoding by English and French of similar notions. As we shall see in chapter four, this clearly leads to a considerable amount of confusion *for some notions*. The particular notion, for example, is expressed using all four common surface representations (prototypical base form, mediated and unmediated transfer, and target norm) throughout the three periods studied (although the proportions varied), whereas the chronological tended to be expressed in the majority of cases using protoypical base form or target norm, and the remote was quickly assimilated to target norm forms.

Clearly, therefore, the concept of psychotypology as formulated by Kellerman (1983) is inadequate as a basis for perceptions relating to grammatical form, since the underlying notions expressed by that form

would seem to influence the likelihood and/or durability of transfer. On the other hand, the reasonable entity principle, assuming that it is logical to seek equivalent means of expressing Ll distinctions in the L2, is upheld insofar as learners tend to produce target norm surface realisations of underlying imparfait well before they can do so for underlying passé composé, the inference being that they are mapping simple past onto underlying imparfait because of the formal similarity (ie absence of the auxiliary), whereas the combination of the auxiliary + past participle form of the passé composé and the desire to maintain an Ll distinction (imparfait vs passé composé) leads to a greater likelihood of transfer.

Moreover, as should be clear from our examples of mediated transfer, even when transfer does occur, it may not be a simple process. Similar findings have been reported by Laroche (1983) and Merio (1978). Laroche, for example, claimed that interlanguage development resulted partly from what he calls *restructuring* - ie Ll-originated patterns - and partly from what he calls *recreation* - ie L2-originated. As our research shows, there is also an intermediary position where both processes may be operating. Merio's "psycholinguistic analysis" similarly differentiates between *direct* transfer, which is "the use of a structure, meaning and/or model in the target language which is traceable to the direct influence of the source language" (ibid: 29); and *indirect* transfer, which is "internal confusion in the target language alone [due to] the non-systematic nature of translational equivalents" (ibid: 30).

That said, we are dealing here with commonalities. As Wode (op cit) notes, however, there is considerable potential here for individual variation, if indeed perceptions are involved.

2.9. CONCLUSIONS

We began the chapter with the premise that the appropriate model of language for second language acquisition research was one that considered language as activity - ie in use. This led us to adopt a Hallidayan perspective of language as meaning potential. We then moved on to a view of second language acquisition which, although not directly derived from Halliday's work, nonetheless considers the second language acquisition process as one of learning to map form onto underlying meaning.

This led to a more detailed description of the meaning under investigation in this study - the expression of pastness, opening with a review of research into the acquisition of past tense from a notional perspective, and following with a cross-linguistic comparison between the form-notion relations for past tense as perceived and expressed in English and French. 12 possible notions of past tense were identified, although only four - the particular, chronological, state/event and remote - were to any extent used by the beginner learners in our study.

The framework thus developed for relating past notions to past tense was then used to make predictions concerning both the notional and

formal influence on transfer. Form was indeed identified as a pole of attraction - but only under certain conditions:

(1) that learners were operating an underlying strategy of relexification - which may be developmentally- or context- (ie learning environment - in this case, the classroom) related;

(2) that a strong collocational relation exists between the past form and another feature of the utterance - eg explicit timeframing;

(3) that processing capacity is limited - again, this may be developmentally- or context- (ie situation of utterance) related.

On the other hand, notion as a pole of attraction was found to be of only minor importance, except as expressed in general terms as maintaining a macro-notional distinction between imparfait and passé composé (see chapter four for a detailed discussion).

Further evidence for a notional influence on transfer was then cited from other research. Again, the evidence here would appear to support the maintainance of *macro*-notional distinctions.

An attempt was then made to include a notional perspective in a more general model of transfer. Reference was made to hypotheses which regard transfer as dependent on perceived similarities between source

and target languages. These were rejected as relying too heavily on formal features, whereas the findings of this study suggest that form and notion interact to produce transfer. However, the potential for individual variation due to different perceptions was noted

In chapter five, transfer will be considered as one possible constraint on hypothesis formation and testing within a general model of second language acquisition. Before then, however, we shall move on to a more detailed analysis of the data collected for this study.

In chapter three we shall begin by critically examining traditional data processing techniques in second language acquisition research - especially the calculation of morpheme 'acquisition' orders. In particular, these will be shown to be incapable of *explaining* the acquisition of a second language. In chapter four, therefore, we shall return to our main concern from chapter two - the development of the capacity to map meaning on to L2 forms. However, given the only tentative evidence for finely-tuned micro-notion-related influence found in this chapter, in chapter four we shall investigate the data without a previous hypothesis in mind in an attempt to identify regularities.

Notes

1 ie the actual, or modulated meaning of an utterance, as opposed to *signification*, which is the intrinsic, or potential meaning of a sentence, and can therefore be ambiguous in Chomskyan terms. Hence, Alice found the Jabberwocky "seems to fill my head with ideas": despite its nonsense content, Jabberwoky's syntactic structure allows us to derive, like Alice, an inkling of its signification. The terms *value* and *signification* are borrowed from Widdowson (1978).

2 Where *sentence* is viewed as a hypothetical construct obeying syntactic rules of well-formedness, existing out of situation and possessing a signification. It is opposed to *utterance*, which is an example of genuine language use, produced in a given situation, modulated accordingly and possessing a value.

3 It is, of course, possible that the teaching methodology used may influence the type of language production. A brief account of this is given in chapter three. However, it is worth mentioning immediately that translation was wholly absent as a teaching strategy.

4 Where 'pole of attraction' means a factor which will tend to induce translation from the L1 or another language known to the learner.

5 See pages 145ff for a fuller explanation.

6 By 'collocation-like relationship' we mean that the presence of a time adjunct within a clause will tend to attract the use of a particular tense form.

7 For definitions of prototypical base form and mediated present perfect, refer to pp 262 and 264.

8 For definitions of these terms, please refer back to pp 77-81.

9 For a definition of relexification, see p 263.

CHAPTER THREE

ON MORPHEME ACQUISITION ORDERS : MYTH OR REALITY

THE ACQUISITION OF 11 GRAMMATICAL MORPHEMES BY THREE GROUPS OF ADULT

FRENCH LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE

... the whole story of words is a mystery, and the attempt to reduce
the process of words to a science has always seemed to me ridiculous
enough

Hilaire Belloc

3.1. INTRODUCTION

This chapter looks at the so-called morpheme acquisition (or accur-

acy) orders. It begins with a brief description of the historical

background to such studies and then lists some of them, drawing

attention to the variation in orders which exists. It then goes on to

look at studies which have found statistically significant differen-

ces in orders. Following Andersen (1977), it is then suggested that

one of the reasons for the consistency of good fit is the statistical

methods used.

The strengths and weaknesses of several different methods of data analysis are then discussed. It is concluded that different methods may indeed produce different orders, and moreover that most methods actually obscure variations which are both systematic and of considerably more interest to researchers than the acquisition orders traditionally identified.

We then analyse the longitudinal acquisition order for 11 grammatical morphemes in three groups of adult French classroom learners of English as a foreign language. Orders are obtained and compared using different quantitative methods. Conclusions about the reliability of statements about a 'fixed' acquisition order are then discussed. From this longitudinal study, it is concluded that (1) acquisition orders are unreliable indicators of a 'natural' order; (2) variation is a widespread feature of second language acquisition; (3) this variation is commonly obscured by the quantitative methods used; and (4) this variation can be revealed by modifying the presentation of quantitative data, and possibly explained through a process of triangulation incorporating a case study approach.

3.2. THE HISTORICAL BACKGROUND

3.2.1. EARLY STUDIES : THE ORDER AS PROVEN

Morpheme acquisition orders began in first language acquisition research with a a longitudinal study by Brown (1973) of three children acquiring English. Brown devised a system whereby a morpheme

was said to be acquired when it was used with at least 90% accuracy on three successive occasions (data collection points). He then computed the orders of accuracy of 14 morphemes for the three children. Following Brown's lead, de Villiers and de Villiers (1973) devised a cross-sectional study of the same 14 morphemes with 21 pre-school children. Two methods of computation were used, producing slightly different orders, both of which were slightly different to Brown's longitudinal order. Together, then, these two studies seemed to demonstrate the existence of a more or less fixed order of acquisition of grammatical morphemes in children acquiring their first language.

Dulay and Burt (1973) took up this idea and transferred it to second language acquisition research. They investigated three groups of Spanish speaking children acquiring English as a second language in the United States. Once again, the three orders, although slightly different both with each other and with the first language findings were "strikingly similar".

In another study Dulay and Burt (1974) compared the acquisition orders of 55 Chinese-speaking children. They calculated the morpheme order for 11 morphemes using three different methods. Once again, although there were differences between the three orders and between the two groups, these were not statistically significant.

Bailey, Madden and Krashen (1974) transferred the new technique to adults acquiring English as a second language with a study of eight

morphemes and two groups: one of 33 Spanish speakers, the other of 40 non-Spanish speakers from 11 language backgrounds. There was no significant difference between the orders computed for the two groups.

These and other similar results seemed to confirm the existence of an acquisition order of grammatical morphemes for English that was statistically reliable whether the learners under investigation were children or adults, acquiring a first or a second language and whatever the first language background of the L2 learners.

Much subsequent research tested whether the type of data could influence the morpheme order. Krashen et al (1977),for example, obtained a 'natural order' from samples of spontaneous speech. Houck et al (1978) computed orders for ESL students using both students' own speech and students' corrected transcriptions of their own speech. Once again, a 'natural order' appeared for both tasks. Krashen et al (1978) found no significant difference between orders computed for two different writing tasks: written descriptions of cartoons under a time restraint and writer-edited versions of these descriptions. Fuller (1978) administered both written and spoken versions of the SLOPE test and obtained essentially the same morpheme order for both. Similarly, Krashen and Seliger (1976) found no significant difference between orders computed for a group of 'learners' (i.e. whose main exposure to the L2 was in an instructional setting) and 'acquirers' (whose main exposure was in a natural setting).

```
L1: English                     Data type: longitudinal/oral
Subjects: 3 children            No. of morphemes: 14

                    present progressive
                          on/in
                         plural
                      past irregular
                      possessive s
                  uncontractable copula
                         article
                       past regular
                third person singular regular
               third person singular irregular
                  uncontractable auxiliary
                     contractable copula
                    contractable auxiliary
```

Table 3.1. Brown's (1973) Acquisition Order

```
L1: English                     Data type: cross-sectional
Subjects: 21 children           No. of morphemes: 14

          Method 1                          Method 2

   present prog/plural/on              in
   in                                  on
   past irregular                      plural
   articles                            present progressive
   possessive s                        past irregular
   TPS irregular/contractable cop      TPS irregular
   past regular/TPS regular            past regular
   uncontractable copula               articles
   contractable auxiliary              uncontractable copula
   uncontractable auxiliary            possessive s
                                       TPS regular
                                       contractable auxiliary
                                       uncontractable auxiliary
```

Table 3.2. de Villiers & de Villiers (1973) Acquisition Order

```
L1: Spanish                     Data type: cross-sectional/oral
Subjects: 151 children          No. of morphemes: 8

     Group 1                    Group 2                    Group 3
(Chicano bilinguals)    (Mexicans in US schools)    (Puerto  Ricans
                                                       in New York)


   plural s                  present prog              plural s
   present prog              contractable cop          present prog
   contractable cop          plural s                  contract cop/art
   contractable aux          article                   contract aux/TPS
   article                   contractable aux          past irregular
   past irregular            past irregular            possessive s
   third person singular     third person singular
   possessive s              possessive s
```

Table 3.3. Dulay & Burt's (1973) Acquisition Order

To summarise, then, a 'natural' morpheme order would appear to emerge
for learners of English, whatever their age and first language and
whatever the mode of data collection. However, this is not to say
that the natural order is not disputed, and it is to criticisms of it
that we shall now turn.

3.2.2. EARLY STUDIES : THE ORDER IN QUESTION

As the morpheme orders listed in tables 3.1. to 3.5. clearly show,
although individual studies report no statistically significant
differences, there *is* considerable variation both within and between
studies: the present progressive, for example, although first in
eight orders and second in six others, also appears joint third three
times and fourth twice; the articles vary between first and eleventh

places. In addition, one of the many problems involved in examining morpheme studies is that the morphemes investigated are frequently not the same. Even among the six studies cited here only *four* morphemes - the articles, the present progressive, the plural s and the past irregular - are present in all studies. If serious statements about 'fixed' or 'stable' 'acquisition' orders are to be made, this is clearly unsatisfactory. Moreover, a comparison of these four morphemes (see table 3.6.) is even more alarming, for, if the irregular past tends to come last of the four in most studies, the other three seem to be in almost free variation.

Krashen et al (1978) suggest that much of this variation can be accounted for if bound and free morphemes are separated. Bound morphemes, they argue, follow much the same order in L1 and L2 research, whereas free morphemes differ. From the studies presented here, however, (see table 3.7.) this claim would appear difficult to sustain.

A further problem to which researchers have turned their attention is the scores obtained for individual morphemes. The orders as listed so far make no allowance for the closeness of the scores: the present progressive may precede the plural, for example, by only two points, but the plural the copula by 10. A straightforward order cannot make this apparent proximity of acquisition obvious. As a result, Dulay Burt and Krashen (1982) have recommended using acquisition hierarchies, where morphemes with close scores are boxed together as being acquired more or less simultaneously, but nonetheless before those in

```
┌─────────────────────────────────────────────────────────────────────────┐
│ L1: Spanish and Chinese      Data type: cross-sectional/oral              │
│ Subjects: 60 Spanish         No of morphemes: 11                          │
│         + 55 Chinese                                                      │
│           children                                                        │
│                                                                           │
│ Method 1                Method 2                    Method 3              │
│ (Group score)           (Group means)               (Syntax acquis-      │
│                                                       ition index)        │
│                    :                                                      │
│                                                                           │
│ pronouns               pronouns                     pronouns             │
│ article                article                      copula               │
│ copula                 copula/present prog          art/pres prog        │
│ present prog           plural                       auxiliary            │
│ plural                 auxiliary                    plural               │
│ auxiliary              past regular                 past irreg/pos s     │
│ past   regular         past irreg/possessive s      past reg/long        │
│                                                     plural/TPS           │
│ past irregular         long plural                                       │
│ long plural            third person singular                             │
│ possessive s                                                             │
│ third person singular                                                    │
└─────────────────────────────────────────────────────────────────────────┘
```

Table 3.4. Dulay & Burt's (1974) Acquisition Orders

```
┌─────────────────────────────────────────────────────────────────────────┐
│ L1: 4 different           Data type: cross-sectional/written             │
│ Subjects: 70 adults       No. of morphemes: 7                            │
│                                                                           │
│                    present progressive                                   │
│                          article                                         │
│               plural s/contractable auxiliary                            │
│                    contractable copula                                   │
│                      irregular past                                      │
│                   third person singular                                  │
└─────────────────────────────────────────────────────────────────────────┘
```

Table 3.5. Krashen et al's (1978) Acquisition Order

Brown (1973)	de Villiers and de Villiers (1973)	
	1	2
pres prog	pres prog/plural	plural
plural	past irreg	pres prog
past irreg	article	past irreg
article		article

Dulay & Burt (1973)

1	2	3
plural	pres prog	plural
pres prog	plural	pres prog
article	article	article
past irreg	past irreg	past irreg

Dulay & Burt (1974)

1	2	3
article	article	art/pres prog
pres prog	pres prog	plural
plural	plural	past irreg
past irreg	past irreg	

Bailey et al (1974)		Krashen et al (1978)
Spanish L1	Others	
article	pres progressive	pres prog
pres prog/plural	past irreg	article
past irreg	plural	plural
	article	past irreg

Table 3.6. A Comparison of the Order of Four Morphemes

```
┌─────────────────────────────────────────────────────────────────────────┐
│ Dulay & Burt (1973)                                                        │
│         Group 1                              Group 2                        │
│ Bound              Free             Bound              Free                 │
│ plural    s        contract cop     prog ing           contract cop        │
│ prog ing           contract aux     plural s           article             │
│ past  irreg        article          past irreg         contract aux        │
│ TPS                                 TPS                                     │
│ poss s                              poss s                                  │
│                            Group 3                                         │
│                    Bound            Free                                    │
│                    plural s         contract cop/article                   │
│                    pres prog        aux                                     │
│                    TPS                                                      │
│                    past irreg                                              │
│                    possessive s                                            │
├─────────────────────────────────────────────────────────────────────────┤
│ Dulay & Burt (1974)                                                        │
│         Method 1                             Method 2                       │
│ Bound              Free             Bound              Free                 │
│ prog ing           pronoun          prog ing           pronoun             │
│ plural             article          plural             article             │
│ past reg           copula           past reg           copula              │
│ past irreg         auxiliary        poss s/            auxiliary           │
│                                     past irreg                            │
│ long plural                         long plural                           │
│ poss s                              TPS                                     │
│ TPS                                                                        │
├─────────────────────────────────────────────────────────────────────────┤
│ Bailey et al (1974)                                                        │
│      Spanish speakers                        Others                        │
│ Bound              Free             Bound              Free                 │
│ prog ing/plural    articles         prog ing           contract copula     │
│ past irreg         contract cop     past irreg         aux be              │
│ TPS/poss s         aux be           plural s           article             │
│                                     TPS                                     │
│                                     poss s                                  │
├─────────────────────────────────────────────────────────────────────────┤
│ Krashen et al (1978)                                                       │
│                    Bound            Free                                    │
│                    prog ing         article                                │
│                    plural s         contract aux                           │
│                    irreg past       contract cop                           │
│                    TPS                                                      │
└─────────────────────────────────────────────────────────────────────────┘
```

Table 3.7. Acquisition Orders for Bound and Free Morphemes

```
Krashen (1981)

        present progressive          plural copula

              auxiliary              article

              irregular past

    regular past           TPS              possessive s


Dulay & Burt (1975)

      copula s  auxiliary sing      aux plural      pres prog

    irreg past         poss s    TPS   conditional  aux    long plural

              perfect aux                past en
```

Table 3.8. A Comparison of Two Acquisition Hierarchies

the next box.

Yet even here the variation in morpheme orders is evident: Krashen (1981), for example, suggests the present progressive and copula are acquired at approximately the same time, whereas Dulay and Burt (1975) find the present progressive and copula precede the acquisition of the plural. Similarly, Krashen places the irregular past before possessive s and third person singular, but Dulay and Burt place them at the same time.

Larsen-Freeman (1976) suggests one possible explanation for the variation. Despite the apparent agreement within and between orders computed for written and spoken tasks, she found in a study of 24

subjects from four language backgrounds that oral and written tasks did *not* significantly correlate, although her oral tasks did correlate with Dulay and Burt's. It may therefore be inappropriate to compare orders derived from different types of task.

L1: 4 (Arabic, Japanese, Persian, Spanish) Subjects: 24 adults		Data type: cross-sectional/ longitudinal/oral/written N° of morphemes: 10	
First Series		Second Series	
speaking	*imitating*	*speaking*	*imitating*
pres prog	pres prog	copula	copula
copula	article	pres prog	pres prog
article	copula	auxiliary	article
auxiliary	irreg past	article	auxiliary
plural s	long plural	plural s	irreg past
reg past	reg past	possessive s	long plural
TPS	TPS	irreg past	TPS
irreg past	plural s	TPS	plural s
long plural	auxiliary	long plural	reg past
possessive s	possessive s	reg past	possessive s

Table 3.9. Larsen-Freeman's (1976) Acquisition Order

Moreover, from the point of view of cross-sectional research, Larsen-Freeman's study demonstrates the danger of overgeneralising between cross-sectional and longitudinal data, and hence raises the question of whether the former, which are necessarily statistical, are capable of genuinely capturing the *dynamic* nature of language change over time. She found, for example, that her morpheme orders changed between the first series of tests and the second, two months later.

This finding is well supported by the classic longitudinal study in morpheme orders, that of Hakuta (1974). While studying the acquisition of English by a five-year old Japanese girl who had moved to Massachusetts, Hakuta noted some striking differences in order. For instance, the auxiliary appeared in joint first place, rather than towards the middle, and the articles near the end rather than towards the beginning or middle.

```
L1: Japanese                    Data type: longitudinal/oral
Subjects: 1 5-year old girl     N° of morphemes: 14


              present progressive/copula/auxiliary
                             in/to
                   auxiliary past negative
                              on
                          possessive s
                         past irregular
                            plural s
                             article
                       third person singular
                          past regular
                            gonna
```

Table 3.10. Hakuta's (1974) Acquisition Order

Similarly, Rosansky (1976) found a different acquisition order for adolescents acquiring English as an L2, using both spontaneous speech samples and data collected using the Bilingual Syntax Measure (a data collection method using picture prompts developed by Dulay & Burt). Moreover, in a 10-month longitudinal study of one of the boys she

found his acquisition order failed at any point to correlate with the 'natural' order. Larsen-Freeman (op cit) also found that acquisition orders changed over time. She retested her 24 subjects after a two month period, producing different orders, auxiliary dropping from 3rd to 9th place, plural s from 5th to 7th, for example.

Such results clearly cast some doubt on the validity of using only cross-sectional methodology. However, longitudinal studies are few and far between and further evidence is required before a more definite stand can be taken.

3.2.3. MORPHEME ACQUISITION ORDERS IN THE CLASSROOM

3.2.3.1. Previous Studies

Few morpheme studies deal specifically with classroom language development, although several have used subjects from a mixed classroom/naturalistic environment.

Pica (1985) made a cross-sectional study of 18 Spanish-speaking adults who had learnt English in three different environments: six in a 'natural' setting; six in a mixed setting; and six in an instruction-only setting. However, there was no attempt to control for language proficiency and a fairly wide range was present in the population. Each subject was interviewed informally for approximately one hour and the recordings analysed.

She found that classroom instruction had a selective impact, increasing the accuracy of plural s and third person singular, but reducing that for progressive ing. The other morphemes were not affected.

In addition, Pica found that the *type* of interlanguage strategy used by the groups differed in a significant way: whereas the instruction-only group tended to *over*apply grammatical morphemes - both through overgeneralisation (e.g. regularising irregular forms); and through over-use of morphemes in non-obligatory contexts (e.g. "He lived in London now") - the other two groups tended to *under*apply (i.e. omit) them.

Andersen (op cit) investigated compositions written by 89 Puerto Rican university students after 12 years of compulsory English lessons. He does not give an order for all the morphemes he investigated, as his main concern was to demonstrate the inadequacy of existing statistical methodologies and the fruitlessness of studying morphemes in isolation from the contexts in which they occur. Nonetheless, he does provide a partial list whose order agrees in general with Pica's, although it is striking that the progressive auxiliary is acquired much earlier in Andersen's sample, as is the regular past.

Other classroom second language development studies into acquisition orders are those by Ellis (1984) and Lightbown (1983).

Ellis investigated the development of three 11-year-old immigrant children in special language classes in England. For two of them he

claims that English remained entirely a classroom experience, as they spent all non-school time in their native language community.

Ellis' order agrees with the other two except for the reversal in order of regular and irregular pasts. However, one needs to be cautious with this order, as the two subjects who had no out-of-class contact with English failed to reach even the 80% criterion level.

Lightbown conducted both longitudinal and cross-sectional research into the acquisition of English by secondary school children aged 11-17 in Montreal. In the cross-sectional study there were 175 children from grades 6, 8 and 10 in the first year of the investigation and 100 of the same children in grades 7, 9 and 11 in the second year. In addition 36 of the students were followed throughout grades 6 and 7. An oral corpus was created by recording picture description and communication game tasks.

What is striking here is the reversal of places between Pica's and Lightbown's studies, with auxiliary coming fourth in the former and second in the latter (as in Andersen's and Ellis' studies) and the progressive ING second in the former and fourth in the latter. Otherwise the orders are much the same.

Once again, however, further investigation by Lightbown revealed some specifically classroom-induced tendencies. Like Pica she noted a tendency to overapply morphemes, particularly the progressive ING and plural s. Also, thanks to her longitudinal research profile, she was able to identify diachronic changes in accuracy: for example, 6th

graders used the progressive ING more accurately than anyone else (56%), yet their accurate use of it had declined to less than half that in the 7th grade.

3.3. DATA ANALYSIS

Dulay and Burt (1974) developed three methods of analysis appropriate to cross-sectional studies: the group score method, the group means method and the syntax acquisition index. In addition, Andersen (op cit) suggests the use of group ranges.

3.3.1. THE GROUP SCORE METHOD

Here scoring is done for the sample population (or 'group') as a whole. it is calculated by computing a ratio for each morpheme studied, as follows:

$$\frac{\text{Group}}{\text{score}} = \frac{\text{sum of actual scores for each obligatory occasion}}{\text{sum of potential scores for all obligatory occasions}} \times 100\%$$

scoring is out of 2, hence:

    no morpheme = 0

    misformed morpheme = 1

    correct morpheme = 2

Morphemes are then ranked by descending score to give an acquisition order.

L1: Spanish	Data type: cross-sectional/oral	
Subjects: 16 adults	No. of morphemes: 9	
Instruction only	*Exposure only*	*Mixed instn/expos*
singular copula	singular copula	singular copula
plural s	progressive ing	the
the	the	progressive ing
a	a/plural s	plural s
progressive ing	progressive aux	a
past		

Table 3.11. Pica's (1985) Acquisition Order

| L1: Spanish | Data type: cross-sectional/written |
| Subjects: 89 adults | No. of morphemes: 8 |

copula
auxiliary
progressive ing
irregular past
regular past
auxiliary have
third person singular
past participle used in perfective constructions

Figure 3.12. Andersen's (1977) Acquisition Order

```
L1: Punjabi (2), Portugese (1)      Data Type: longitudinal/oral
Subjects: 3 children                No. of Morphemes : 4

                        copula
                     auxiliary be
                     regular past
                    irregular past
```

Table 3.13. Ellis' (1984) Classroom Acquisition Order

```
L1: French                 Data Type: cross-sectional/longitudinal/oral
Subjets: 175 adolescents   No. of morphemes: 6

                        copula
                       auxiliary
                       plural s
                    progressive ing
                  third person singular
                      possessive s
```

Table 3.14. Lightbown's (1983) Classroom Acquisition Order

The advantage of this method is that even a child who has just ~~some~~ one
obligatory occasion for a morpheme in his speech corpus is admittted
into 'the group'. The assumption made is that the error introduced in
using only one obligatory occasion from a child whose performance may
be variable will be minimized by the size of the sample. For example,
a child may have one occasion for a functor and miss it, but another
child might have only one occasion and provide it. In both cases, the
children might be in the process of acquiring the functor in
question, meaning that they sometimes supply it, and sometimes not.
However, their scores should tend to 'even out' when the sample is
large enough. (Dulay & Burt 1974:354)

3.3.2. THE GROUP MEANS METHOD

However, as variability *is* a factor in second language acquisition
the occurrence of one obligatory occasion from one learner may very
well not accurately reflect his or her degree of acquisition and the
'evening out' is thus at risk. As a result, Dulay and Burt (1974)
proposed the group means method, whereby three or more obligatory
occasions for a morpheme are considered necessary before a learner's
score would be accepted into the sample. Computation then follows as
above.

3.3.3. THE GROUP RANGE METHOD

One problem with both the group score and the group means methods is
this very 'evening out', which is necessarily insensitive to any
variability there may be between subjects. Andersen (op cit) there-
fore suggests an alternative method of determining a group accuracy
order: the group range method. This maintains the 90% accuracy

criterion, but also adds data at other criterion levels of accuracy; for instance at 80% and 70% levels. Thus, in addition to establishing a group accuracy order for the morphemes in question, the group range is able to reveal some individual variation via these different criterion levels.

The superiority of the group range method over the group means method for establishing a group accuracy order for the morphemes is that, in addition to establishing an accuracy order for the morphemes, the group range tells us something about individual performance on each morpheme. (For example, 99% of the subjects used the copula correctly 70 to 100% of the time, while only 16% used third-person singular correctly at that same criterion level. (Andersen ibid:52)

3.3.4. THE SYNTAX ACQUISITION INDEX

L1 scoring methods had made use of mean length of utterance as a way of calculating a child's level of development. However, this is inappropriate in SLA research with older children and adults because it is large from the start. Dulay & Burt (1974) therefore propose an alternative, the syntax acquisition index (SAI), which is calculated according to how much of a given utterance is well-formed. This requires the assigning of points to the 'correct' grammatical version of an utterance (via a system of weighted morphemes) and deducting points from this to obtain a value for the learner's real utterance. Hence,

```
Syntax              sum of all the values of all the
Acquisition =       utterances of the learner             x 100%
Index               sum of all the values of all the
                    'correct' versions of the utterance
```

The SAIs thus computed are then arbitrarily divided into five-point
ranges and the number of learners who have acquired (i.e. used
correctly on 90% of all obligatory occasions) that morpheme is
tallied. The lowest SAI range where at least one learner has acquired
a given morpheme is then determined. Sequences are then compared
using the Spearman correlation coefficient (see 3.3.7).

3.3.5. HIERARCHICAL ANALYSIS

Dulay Burt and Krashen (op cit) introduced the idea of hierarchical
anlysis to remedy the continuing weakness of rank orders to reveal
individual variability. It is a procedure for testing individual fit
to the group accuracy order established by one of the procedures
outlined above.

The hierarchical method permits one to identify groups of structures
which are acquired at roughly the same time and to determine the
order in which each group is acquired. The resulting order is an
acquisition hierarchy, as opposed to an acquisition sequence, which
is the result of rank order analysis. (ibid: 222)

The hierarchical method is binary. For each subject, therefore, a
value of 1 is assigned if the morpheme has been acquired and 0 if it
has not. The 90% correctness and minimum of three obligatory

occasions are maintained as criteria from earlier methods. A score of 1 thus requires at least 90% correctness.

Morphemes are then compared in pairs. For example, if we have morphemes A and B, there are four possible outcomes (expressed in binary terms):

(1,1) both A and B have been acquired

(1,0) A has been acquired, but not B

(0,1) B has been acquired, but not A

(0,0) neither A nor B has been acquired

The hierarchy is calculated by determining which pairs of morphemes consistently exhibit a (1,0) pattern across all subjects. One can then say that morpheme A is acquired before morpheme B.

When constructing the hierarchies, one structure is said to precede another if 5% or fewer disconfirming cases are found "although occasionally 6 or 7% may be accepted" (ibid:223)

Where there are more than 7% of disconfirming cases in *both* directions (i.e. A before B and B before A) the morphemes are considered to be acquired simultaneously. Similarly, where there is a greater than 7% difference in one direction and the difference in the other direction is not more than 14%, the morphemes are also considered to be simultaneously acquired.

The hierarchical method enables researchers to uncover relationships among groups of structures that had been observed by previous rank order methodology. To the extent that language is a process of acquiring groups of structures rather than one structure at a time, this method seems to be the most appropriate method of analysis for cross-sectional research. (ibid:224)

Unfortunately, the conversion into a binary system, especially where the 90% criterion for acquisition is maintained, runs the risk of distorting the data. Take, for instance, a subject who scores correctly on morpheme A 89% of the time and on morpheme B 91% of the time. When converted into binary terms this will produce a score of (0,1), confirming that morpheme B is acquired before morpheme A, whereas from the raw scores they are being used with virtually identical accuracy.

Andersen (op cit) compared results obtained using binary and raw scores and concluded that the differences in ordering observed "suggests that the different results for binary scores and raw scores ... are due to the way in which the binary scoring procedure converts different pairs of scores (in percentage) into identical pairs of binary scores" (ibid:37)

3.3.6. MODIFIED GROUP RANGE

The various methods discussed so far all claim to produce an acquisition (or, more modestly and correctly, an accuracy) order for the morphemes under investigation. However, for any given group of morphemes, A, B, C , for instance, this order is produced by testing

whether A is acquired before B, B before C, and A before C. What is *not* tested is whether A comes before B *and* C. Andersen using his data, demonstrates that what seems to be a clear order when pairs of morphemes are tested loses much of its reliability when individual fit is tested in this way. He found, for example, that 95% of his subjects fitted the hypothesis copula > auxiliary; 92% fitted copula > progressive ING; still 55% fitted auxiliary > progressive ING; but only 28% fitted copula > auxiliary > progressive ING. "Thus the high degree of fit of the individual subjects to the first two hypotheses in no way implies that the hypothesis copula > auxiliary > progressive ING will hold" (Andersen ibid:60). Such relationships cannot be assumed, but must be tested.

As a result of his own investigations, therefore, Andersen makes two suggestions modifying the application of group range methodology:

1) tests for individual fit must go beyond pairs of morphemes;

2) morphemes must not be treated as separate entities, but, following Krashen, Madden and Bailey (1975) should be dealt with as inter-related groups (e.g. auxiliary BE and progressive ING should be dealt with together because they are used together to form the present progressive).

To bring out how inter-related groups of morphemes (and the non-standard representations produced in learner utterances) interact, and possibly identify diachronic development patterns, Andersen

recommends using matrices, with vertical columns representing possible combinations of inter-related morphemes as identified from the corpus, and horizontal columns numbers of subjects at different criterion levels. Within-group variability thus stands out, as does any systematicity related to this variability. To add to the visual impact of the matrix representation, we also recommend plotting histogrammes (See, for example, figure 3.9).

3.3.7. COMPARING ORDERS

Morpheme orders are normally compared using either the Spearman rank order coefficient (to compare two orders) or the Kendall coefficient of concordance (to compare more than two orders). In both cases it is the *ranks* which are compared.

Unfortunately, both are particularly weak measures of rank order correlation in the context of acquisition studies because of (1) the very small number of morphemes involved in orders (up to 15; the present study investigated 11, but was unable to compare all of them because of lack of sufficient occasions), and in particular (2) the very few morphemes *common* to different studies. This means that calculations are highly sensitive to minimal differences in order. Consider, for example, the following two (imaginary) rank orders:

	order 1	order 2	1-2(d)	d2
morpheme a	1	9	-8	64
morpheme b	2	1	1	1
morpheme c	3	2	1	1
morpheme d	4	3	1	1
morpheme e	5	4	1	1
morpheme f	6	5	1	1
morpheme g	7	6	1	1
morpheme h	8	7	1	1
morpheme i	9	8	1	1

$$\text{rho} = 1 - \frac{6 \lceil d2}{N3 - N} = 1 - \frac{6 \times 72}{729 - 9} = 1 - \frac{432}{720} = 1 - 0.6 = 0.4$$

According to the statistics, therefore, there is a significant difference between the orders. Yet this is patently nonsense, since the orders are virtually identical save for one morpheme.

This kind of evidence should make us extremely wary of accepting correlation statements within the context of morpheme orders.

3.4. SUMMARY

Despite the frequently repeated claim that morpheme acquisition orders were "strikingly similar" or "not significantly different", the review of studies in this chapter reveals both clear differences between orders, and also methodological problems, related among other things to the use of 'weak' statistics for the comparison of orders, that together make comparisons a risky and at times possibly misleading business.

Differences in order arise not only between studies using different data collection and analysis techniques, but, more surprisingly, also between those using similar techniques. In addition, the wide variety of morphemes studied in individual research makes it extremely difficult to assert that a particular order is primary. Indeed, in six studies listed above, only four morphemes were common.

Moreover, longitudinal studies such as those by Larsen-Freeman, Lightbown or Hakuta have all demonstrated the unstable nature of acquisition orders over time. This is not surprising: second language acquisition is a diachronic process; but it should lead researchers to be a great deal more circumspect as to the implications of their work.

Other theorists have pointed to the fact that morpheme acquisition orders obscure more than they show. In an attempt to reveal more, researchers working within this framework have, to their credit, developed an increasingly sophisticated set of methods for presenting data. In particular Dulay and Burt's hierarchical analysis was an attempt to answer this criticism. However, as Andersen has shown, the tendency to test that morpheme A was acquired before morpheme B which was acquired before morpheme C, but not that morpheme A was acquired before B *and* C remained. His modified group range is an attempt to rectify this.

The few studies that have investigated classroom second language acquisition have found certain differences in quality between language behaviour by classroom learners and that by learners in a

'natural' setting. This deserves further attention.

Further work within an acquisition order framework, therefore, will need to:

(1) be longitudinal;

(2) analyse data from a variety of viewpoints (triangulation);

(3) use data analysis which tests that morpheme A appears before B *and* C;

(4) continue to investigate the possible influence of classrooms on second language acquisition.

In the next section, we shall apply these factors to a study of the acquisition of 11 grammatical morphemes.

3.5. THE ACQUISITION OF 11 GRAMMATICAL MORPHEMES BY THREE GROUPS OF ADULT FRENCH LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE

3.5.1. METHOD

3.5.1.1. Data Collection Technique

Subjects were invited to correspondl with their teacher on a weekly

basis on a subject of their choice. This method was chosen for a number of reasons:

1. Some 'errors' reported were felt to be possibly problems, not of grammatical knowledge, but of pronunciation. Lightbown (op cit), for example, wondered whether the poor scoring of French speakers in plural marking was not a pronunciation problem, since final *S* is systematically dropped in spoken French. This is clearly applicable to other bound *S* morphemes (third person singular and possessive *S*). There is also the possibility that difficult consonant clusters at the end of past tense forms (eg /w :kt/) may be the cause of apparent use of the base form. A written corpus was a means of controlling for this.

2. As a means of reducing, if not actually eliminating *observer's paradox* (Labov 1970); ie the fact that researchers seek to collect samples of the vernacular (where the subject is making least style variations), yet their very presence intrudes on the subject's consciousness in such a way as to cause such style shifts. In second language acquisition terms, one might expect subjects undergoing interviews with a researcher or writing under test conditions to be particularly accuracy-minded (monitoring heavily in Krashen's terms). By allowing subjects free choice of subject, and removing time constraints, and by informing them that the letters they were sending would *not* be either marked or cor-

rected (although they were answered) because the point in writing them was to have practice in producing English that would otherwise not be available, it was hoped to avoid this pitfall. That writing can reproduce a vernacular style is suggested by morpheme acquisition orders which are not significantly different between oral and written samples (Krashen et al 1978). Moreover, at this level of proficiency, one would not expect learners to be capable of much in the way of style (or accuracy) shifting.

It is perhaps as well at this point to mention the debate within linguistics (Coulmas 1989) concerning the status of written forms within the study of language. Coulmas argues strongly that modern linguistics, by subscribing to the concept of the primacy of the spoken form, turns its back on:

> (1) the interelatedness between speech and writing -
>
>> Writing systems are semiotic systems which have properties not found in speech. Yet there is no doubt that writing systems are systems for the materialization of language. (Coulmas ibid: 272)
>
> (2) the fact that linguists are themselves constrained by linguistic - and indeed literate human - traditions, and that therefore much of their methodology has origins in the written form -

> ... if the theoretical concepts and the methods that
> linguists apply in their work are derived from
> language as it manifests itself in writing - then
> the standard argument justifying the disregard of
> writing in linguistics, namely that speech is much
> older than writing and acquired earlier by the
> individual, is entirely beside the point. Linguists
> cannot afford to disregard writing ... (ibid: 269)

3. In purely practical terms, frequent data collection from a large number of extremely busy subjects over a long period of time would not have been possible orally.

Since participation in the project was purely voluntary, the number of texts provided by each subject varied from between six and twelve over the 20 week period. However, texts were dated and grouped within periods, so that a record was available of *when* texts were produced. This made it possible to group texts into three collection points at approximately four week intervals.

3.5.1.2. Morphemes Investigated

For purposes of comparison with other studies, it was felt to be important to investigate, in so far as possible, the morphemes investigated elsewhere. In addition, as this is also a *classroom* study, it was clearly useful to examine morphemes which had been taught in an attempt to chart their development over the time period in question. In practice, given the corpus available, this meant that it was possible to study the morphemes in figure 3.1..

3.5.1.3. Problems

1) The concept of the *obligatory occasion*, however necessary, means that the researcher must be able to identify them. In practice, this is not always easy. For example, in the following passage, where the subject tense shifts quite dramatically, which *time* is one justified in attributing to the writer's intention?

Counterpart the holidays of February. I am go to the cinema twice. I am not go to university. I take the bus every day. I occasionally go to the restaurant. I never go to the swimming pool because I prefer the sea Mediterrané. I clean my teeth with tooth-paste and tooth-brush every day and I clean my short dark hairs twice by week. I many work my English lesson.

A certain amount of shared knowledge allows us to place the February holidays as a past event, but the addition of frequency adverbs makes it unclear as to whether the subject is still talking about the previous week, or whether he has shifted into the realm of generalities. Hence the primordial importance at the early stages of precise timeframing (see chapter four).

(2) The question of *avoidance*. Schachter (1974) found that Persian and Arabic speakers produced about twice as many relative clauses as Japanese and Chinese-speaking learners of English, but that the latter two groups made half as many errors. The implication she made was that the Japanese and Chinese subjects were avoiding relative clauses. A study by Kleinman (1978) of Arabic-, Spanish- and Portuguese-speaking learners of English in the USA found evidence of the avoidance of infinitive compliments and direct object pronouns by

the Spanish and Portuguese speakers, and of the passive by Arabic speakers. Similarly, Véronique (1987) noted that low level Arabic - speaking learners of French tended to avoid reference to past time, except in response to a direct question.

This clearly has important implications for research into second language acquisition, for learners at certain stages may indeed prefer to avoid producing a structure rather than produce it erroneously. In the present study, for example, there was some evidence of avoidance of some morphemes in the early stages [see figures 3.7.(a) - 3.7.(f) and 3.9.(c), (d), (g) and (k)]. Figure 3.7., for instance, indicates how groups one and two initially tend to avoid reference to the past, since they have not yet come across it in class, but that over time there are an increasing number of past references.

A related concept is that of *onset* (Tarone, 1987); ie at what point can one consider that learners genuinely possesses target language knowledge enabling them to produce the target structure regularly (even if non-standardly), rather than *ad hoc*? This is of crucial importance in deciding both what data collection techniques are valid, and from at what point data should be considered as indicating a state of the learner's interlanguage.

In data collection, for instance, one traditional approach has been the use of grammaticality judgements. This has been particularly influential within a Chomskyan framework as a means of eliminating

the article
However, it was felt to be potentially useful to separate out *the* and *a*.

regular past
i.e. verbs with a regular ED ending in the past (e.g. asked, landed, climbed). Given the written nature of the corpus, it was felt to be inappropriate to differentiate between the three possible pronunciations (/t/, /d/ and /Id/).

irregular past
i.e. verbs other than those above (e.g. *kept, went*). It was felt to be potentially useful to separate out *past BE*.

progressive ING
i.e. the *ING* form of the verb used with the progressive auxiliary *BE* to form the present progressive (e.g. *going, living*).

progressive auxiliary
i.e. the conjugated form of *be* associated with the *ING* form of the verb to form the present progressive. It was felt useful to separate progressive ING from progressive auxiliary because of the number of studies which report either the absence of the progressive auxiliary (e.g. *I living in New York*) or its presence in association with a misformed ING form (e.g. *I am live in New York*). This, together with the progressive ING morpheme, were the only morphemes studied which had not been explicitly taught in all three classes.

present copula
i.e. the present tense form of *BE* when not used as an auxiliary (e.g. *I am cold, There are three people in the room*).

possessive S
i.e. the *'s'* genetive (e.g. *John's car, The woman's ring*).

plural S
Once again, because of the written nature of the corpus, it was felt inappropriate to differentiate between the possible pronunciations of the plural, possessive and third person S (i.e. */s/, /z/,* and */Iz/*.

third person S
As *BE* is dealt with elesewhere, it was felt inappropriate to include it here.

Figure 3.1. Description of Morphemes Investigated

the error attributable to performance: if one produces nothing, then

only one's competence is brought to bear. Similarly, researchers

operating within a variable competence framework have used grammati-

cality judgements as a reflection of the careful end of the continuum

(see chapter five for a further discussion). However, this immedia-

tely raises the problem of differentiating between production and

reception: one is able to recognise a great deal that one cannot

produce, even in one's L1.

At what stage, then, is one justified in claiming that an item exists

in a learner's interlanguage? From the moment they are able to

recognise it? At first appearance? Or at *onset*, when the form begins

to appear regularly? In a critique of Ellis' free variation model,

for example, Tarone (ibid:) claims the

isolated early occurrences of a structure should not be ignored; they
no doubt serve as indicators of what is to come. However, they should
not lead one into claiming onset has occurred before it actually has.
The question of onset needs to be considered further, but in the
meantime let us not attribute a variability to the learner that is
probably due to the analyst.

(3) What does one do with phrases that *seem* to be unanalysed wholes

[*routines* and *patterns* to borrow Krashen's (1981) terminology]? In

theory, large numbers and random samples should deal with this

problem for us, but the practice of second language acquisition

research does not and probably cannot adhere strictly to statistical

sampling requirements. I have adopted the easy expedient of ignoring

the problem, as it is not always obvious whether one is or is not

dealing with such wholes, and on the assumption that the large numbers ultimately involved in the corpus will reduce the problem.

However, given the growing importance attached by certain researchers (Hakuta 1976, Peters 1976, 1983, Wong-Fillmore 1976) to these *lexical phrases* (Nattinger and DeCarrico 1992), this is obviously an unsatisfactory solution. A case study approach, as used in chapter four, should nevertheless enable us to take this into consideration. Any further treatment of lexical phrases is therefore postponed until then.

3.5.1.4. Methodology

Orders were obtained using:

    1) the group score method;

    2) the group range method;

    3) the modified group range with matrix presentation.

The complete corpus for each student who had provided a relatively large sample over a long period was studied. The number of obligatory occasions for each morpheme under investigation was noted and whether it had been correctly or incorrectly used. Frequency counts were made for each morpheme.

Results were then grouped under three collection points, according to when the text was produced. There was approximately one month between each grouping of texts. As the syllabus followed by the three classes was strictly controlled, it was possible to identify which morphemes

had been taught prior to each collection point. This is shown in figure 3.2..

```
                        copula
                     possessive S
                        a/an
                 third person singular
                        plural

              first data collection point

                        the
                    regular past
                      past BE

              second data collection point

                    irregular past
         present progressive (group three only)

               third data collection point
```
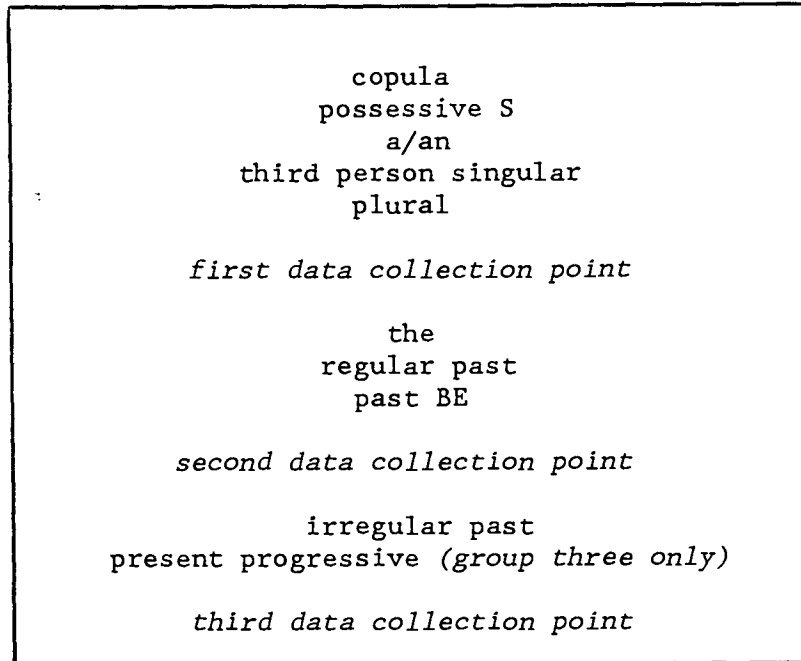
Figure 3.2. Order of Presentation of Morphemes

Data was obtained for 32 subjects from three different classes, and an order obtained for each class. In all, therefore, nine orders were calculated: three (one at each data collection point) for each group (ie, class), of which there were three.

Grouping data in these ways makes it possible to:

    (1) compare orders between groups, to see whether acquisition
        orders are stable or vary between different populations
        (even when each population had received approximately
        identical exposure to the target language);

(2) compare orders over time; ie to insert a longitudinal
    dimension into morpheme acquisition order studies - an
    element hitherto largely absent, but obviously essential
    if one is dealing with the diachronic nature of language
    development - thus enabling us to identify possible
    variation over time.

3.5.1.4.1. Calculation of the Group Score

Dulay, Burt and Krashen (op cit) recommend the following method of calculation:

$$\text{group score} = \frac{\text{raw score}}{\text{possible score}} \times 100\%$$

The possible score is therefore the number of obligatory occasions.

Given the striking difference in accuracies recorded for past uses of BE (was/were) as opposed to other irregular verbs, it was decided to separate these in the calculation.

Similarly, the two articles, *a* and *the*, were separated.

3.5.1.4.2. Calculation of the Group Range

As outlined above, the group range method maintains the 90% criterion level, but also adds 80% and 70% levels, which enables it to reveal some individual variation.

3.5.1.4.3. Calculation of the Modified Group Range with Matrix Presentation

Modified group range is a method of testing for fit that goes beyond the single *pair* as a means of computing acquisition orders. Instead of testing whether x is acquired before y, y before z, and x before z, modified group range also tests whether x comes before y *and z*. In addition, in modified group range morphemes are not treated as separate entities, but rather groups of morphemes with related characteristics are dealt with together.

This inter-relatedness of morphemes is shown in the vertical columns of a matrix whose horizontal rows represent numbers of subjects at *different* criterion levels (ie the single, traditional 90% criterion for acquisition is taken simply as one among many).

3.5.1.5. Learning Environment

Long (1983), in a pioneering article, described the classroom as a "black box" and recommended the investigation of the nature of this black box as a worthwhile field of research:

What goes on inside the black box has the same status as 'exposure' to the target language in studies of naturalistic second language acquisition. (ibid:27)

This recommendation was, and in many ways still is, a warning to take the classroom seriously as a complex social setting rather than to treat it as a monolithic invariable; a habit which has led to

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studies investigating 'instructional' versus 'natural' environments for language acquisition, without taking into account what differences - real or potential - there might be between the different instructional settings.

Elsewhere Long (1985), for example, suggests that instruction offers two 'options', which are open to variation: the way the linguistic input is manipulated (in terms of sequencing, the frequency and intensity of practice, and saliency); and the types of production which are possible.

Others have attempted to define what it is that differentiates classroom from 'natural' language learning. Trévise (1980), for example, contrasts classroom - or institutional, as she calls it - learning and natural learning situations. The latter are characterised by the fact that

...l'acquisition se fait à partir d'échantillons inorganisés de langage, à partir d'une profusion de phrases grammaticales et semi-grammaticales, sans programme défini à l'avance et sans sériation des difficultés. Les données sont constitutées de tout ce que le sujet peut entendre autour de lui dans de multiples situations discursives, aux exigences de repérage très diversifiées. (ibid:56)

[... acquisition takes place via unorganised samples of language, starting from a profusion of grammatical and semi-grammatical sentences, without a programme which is defined in advance and without grading of difficulties. The data is made up of everything the subject can hear in a large number of communicative situations with highly diversified demands on the relation between reality and the utterer's appreciation of this reality.]

On the other hand, classroom learning

se fait en situation non-discursive mais didactique. [L'apprenant] se voit présenter un 'programme' établi à l'avance et donc l'ordre dans lequel doit se faire l'apprentissage lui est imposé. (ibid:56)

[takes place in a non-communicative, didactic situation. (The learner) is presented with a pre-established 'programme'. The order in which learning is to take place is thus imposed on him/her.]

Clearly, these are two extremes, and 'natural' learners can add didactic elements to their contact with the target language, just as various classroom activities can introduce naturalistic elements into the experience of classroom learners. Klein (1986) emphasises this when he talks of a continuum from what he calls *guided* acquisition to what he calls *spontaneous* acquisition. Similarly, his definition of guided learning as *"open to* systematic and intentional influence" (p.18, my emphasis) is an open one which emphasises the main elements whilst allowing the possibility of variation in make-up and dosage.

Thus there is no intrinsic reason why classrooms should be monolithic. Indeed, Spada (1987) has shown that even classes which claim to be following a 'communicative' approach can differ significantly. She followed 60 hours of instruction in three such classes and noted considerable differences in treatment of form, possibly leading to significant differences in oral proficiency. On the other hand, Sorace (1985) found in an investigation of two classes of English-speaking adults learning Italian that even form-based lessons can lead to improvements in learners' communicative abilities. Similarly, Terrell, Gomez and Mariscal (1980) found that Spanish interrogative forms were 'acquired' in a class where they were never explicitly taught, but simply present in the teacher talk.

However, there are certain variables which can be used as dimensions along which 'instruction' may be distinguished from 'natural' environments (Chaudron, 1988):

(1) whether instruction takes place in a foreign language or in a second language situation;

(2) teacher talk;

(3) interaction patterns.

Although the research reported here in no way pretends to be a full classroom-oriented study, it will be useful to use these dimensions to briefly outline the learning environment involved.

3.5.1.5.1. The Foreign/Second Language Dimension

Obviously, there is again a continuum involved here between wholly foreign language situations in which the learners' only exposure to English is inside the classroom, and wholly second language situations in which the learner is totally immersed in the second language community. In the present study, the subjects as individuals were closer to the former situation than the latter in so far as English was simply one of many subjects of formal study for their diploma. However, two important caveats need to be attached to this statement:

(1) important individual differences in motivation, which led to, for example, greater willingness to buy and consult dictionaries;

(2) English has both high status and a high profile in France, so that it is virtually impossible to avoid contact outside the classroom. For example, although cable television was not yet available, English language films were (and are) showing in many Parisian cinemas; similarly, English words appear frequently in French advertisements and even in informal conversation (where "bye-bye" is becoming common, and "Miss" not infrequently applied to young girls). Not to mention the increasing number of English loan words in the language.

3.5.1.5.2. The Teacher Talk Dimension

Teacher talk was overwhelmingly in English, although French was occasionally used (1) to back up an explanation; (2) to translate a readily translatable word; (3) to use a joke to release tension built up through the concentration required of the learners.

All three classes were beginners, so clearly a certain amount of simplification was required. However, the teacher made every effort not to distort the language.

Considerable use was made of the board to clarify explanations, instructions and comprehension.

A possibly key variable in this area is *saliency*, which can help the learner especially in the tasks of analysis and synthesis (Klein op cit). The potential importance of this is emphasised by Schmidt in his (1991) diary study of his own learning of Portuguese. Here he claims, in particular, that certain features of the target language were only accessible to him once he had become aware of their existence; and that previous instruction in a particular feature was an effective means of bringing that feature to his attention in conversation.

The concept of saliency may also account for the research findings of Pica (op cit) and Lightbown (op cit). Pica found in her study of six 'natural', six classroom and six 'mixed' learners that, although all three groups had broadly the same acquisition orders, the classroom learners showed significantly better scores in certain highly salient features (e.g. plural S) and that, in general they tended to commit errors of overproduction rather than ommission. This would seem to suggest that the classroom was able to make salient certain features which remained unnoticed by the natural learners. Lightbown found a similar phenomenon, in particular for the progressive ING, but noted that this effect seemed to wear off with time.

In this study saliency was chiefly produced via the board, and the use of questions and concept checks.

3.5.1.5.3. The Interaction Patterns Dimension

Lessons typically followed a '3P' (presentation, practice and production) pattern, with the teacher presenting language to make the meaning clear, then checking learners' understanding of this meaning before moving on to a board demonstration of the forms involved. Then followed practice activities usually of the 'communicative' type (role plays, information gaps, mingles, personalisation, etc.). Drilling was virtually absent, although there was a certain amount of teacher-student questioning. The presentation stages were largely teacher-student oriented, whereas the practice activities were overwhelmingly in pairs and groups. Although translation of lexis was common among the students themselves, the teacher rarely used it; and translation as a teaching strategy was wholly absent.

In addition to the three variables mentioned by Chaudron, another is of direct relevance to classroom instruction: grading.

3.5.1.5.4. Grading

Also associated with classroom language acquisition is the concept of *grading* or *progression*. Bailly (1984:338, my emphasis) offers the classic reasoning in its favour:

> ... une progression assez stricte, établie d'avance, susceptible de fournir à l'apprenant des 'jalons' et des repères identifiables concernant les opérations en jeu derrière les constructions morpho-syntaxiques: *le but était d'aider cet apprenant à établir des systèmes après identification patiente de chaque élément concerné*, le moyen était de lui présenter à chaque étape une difficulté selectionnée, 'purifiée'.

[A fairly strict progression, set in advance, capable of providing the learner with identifiable 'route markers' and indicators concerning the operations behind the morpho-syntactic constructions: *the aim was to help the learner to establish systems after patient identification of each element concerned*, the means was to present him or her, at each step, with a difficulty which had been selected and 'purified'.]

Grading in our study was achieved essentially by following the course book (*The Cambridge English Course 1*), although units were not necessarily followed in order. As can be imagined from the outlines above, learners were presented with one structure or function at a time (normally two per lesson for the first two groups, one per lesson for the third).

3.5.1.5.5. Class Profiles

Three classes were involved in the project. Each was taught by the same teacher and followed the same course book (Cambridge English Course 1, student's book and workbook). Inevitably there were variations in approach, content and pace due to the differing natures of the classes.

3.5.1.6. Subjects

Group One

Subjects: 11 adult (age range 26-44) university students following compulsory English lessons (four hours a week over a period of 20 weeks spread over seven and a half months because of holidays) as

part of their diploma course.

Native language: French.

Proficiency in English at start of course: all students in this group tested in at the beginners' level on the university placement test, although five were actually *false* beginners in so far as they had already completed two years of English classes at school, albeit between 10 and 26 years previously. At the beginning of the course, they were unable to spontaneously produce anything in English, either in writing or orally. It is for this reason that data collection started only after 4 weeks of courses. However, some subjects felt unable to contribute until even later.

Group Two

Subjects: 13 adult (age range 22-51) university students following compulsory English lessons (four hours a week over a period of 20 weeks spread over seven and a half months because of holidays) as part of their diploma course.

Native language: French.

Proficiency in English at start of course: all students in this group tested in at the beginners' level on the university placement test, although four were actually *false* beginners in so far as they had already completed two years of English classes at school, albeit many years previously. At the beginning of the course, they were unable to spontaneously produce anything in English, either in writing or

orally. It is for this reason that data collection started only after 4 weeks of courses. However, some subjects felt unable to contribute until later.

Group Three

Subjects : eight adults (ages 23-52) studying English on a voluntary basis at a language teaching institution in three 2-hour classes per week over a 15-week period. Four subjects continued their learning of English by joining another class for a further period of 15 weeks. Only these four students produced data for the third collection period. As a group, presumably because of the purely voluntary nature of their English, group 3 produced less data than the other two.

Native language : French.

Proficiency at beginning of course : the students tested in at beginner level on the institute's placement test. However, two (one for all three periods) were in actual fact false beginners with up to two years school English behind them (from five to 17 years previously). Nonetheless, at the beginning of the course, they were unable to spontaneously produce anything in English, either in writing or orally. It is for this reason that data collection started only after 4 weeks of courses.

3.5.2. RESULTS

3.5.2.1. Calculation

Acquisition orders using the group score method were computed between periods for each group and between groups for each period. For two-order comparisons, the Spearman rank-order coefficient (known as *rho*) was calculated; for three-order comparisons, the Kendall coefficient of concordance (known as *w*) was calculated. The limits of the former, as discussed in 3.7., are also those of the latter. However, these two means of comparing rank orders remain the most frequently used. The resulting orders are listed in table 3.16..

Related morphemes were then clustered and the corresponding orders tested for individual fit. This was done by computing acquisition orders for clustered morphemes for each subject, and comparing these individual orders with the group order. This allows us to identify significant individual variation from the group order. In particular, it allows us to see beyond the averaging out process of frequency order statistics, by showing whether the group order - which reflects total scores and, with small samples, is subject to influence from subjects with high scores - is a true reflection of individual scores.

Group One

Morph: Regular Past / Irregular Past / Past BE

Sub.	Regular Past 1		2		3		Irregular Past 1		2		3		Past BE 1		2		3	
Franç	000	000	001	000	012	004	000	000	005	001	031	015	001	001	006	003	005	003
Cor	000	000	000	000	003	000	000	000	002	000	011	006	000	000	002	002	009	006
Mar	000	000	000	000	010	010	005	000	001	001	010	009	000	000	001	001	016	015
Jan	000	000	002	000	008	004	000	000	008	001	016	012	000	000	002	002	005	003
Rob	000	000	000	000	018	014	002	001	006	005	020	019	000	000	002	002	013	011
Ann	000	000	006	000	002	001	000	000	000	000	001	000	000	000	001	001	004	004
Jos	000	000	000	000	013	006	001	000	011	001	018	005	001	001	007	002	005	005
Cath	002	000	006	006	025	017	007	001	006	005	036	025	003	000	010	005	030	025
Brig	000	000	002	000	015	003	000	000	001	000	021	005	000	000	002	002	015	013
Nat	002	002	nd	nd	009	003	001	001	nd	nd	025	008	002	001	nd	nd	011	006
Marc	003	000	nd	nd	006	003	003	000	nd	nd	015	009	001	000	nd	nd	009	007
TOT	007	002	017	006	121	065	019	003	040	014	204	113	008	003	033	020	122	098

Morph: the / a

Subject	the 1		2		3		a 1		2		3	
Françoise	017	014	071	065	014	009	007	004	027	024	006	006
Corinne	012	009	033	025	021	015	020	019	002	001	005	003
Marianne	022	021	022	011	039	025	015	013	000	000	028	021
Janine	015	004	025	015	058	054	006	005	013	009	042	034
Robeline	011	007	017	015	048	031	015	015	009	009	030	025
Annie	028	023	006	002	054	036	008	004	009	004	012	006
Catherine	027	023	022	013	065	045	021	007	020	005	040	033
Brigitte	022	020	026	017	070	057	008	007	007	006	022	020
Nathalie	044	034	nd	nd	033	018	032	027	nd	nd	014	011
Marc	005	003	nd	nd	032	024	010	010	nd	nd	019	015
TOT	212	163	245	183	463	330	149	115	103	071	225	179

Morph: progressive ing / auxiliary BE / present copula

Sub.	progressive ing 1		2		3		auxiliary BE 1		2		3		present copula 1		2		3	
Fran	002	000	000	000	000	000	002	000	000	000	000	000	021	021	024	023	000	000
Cor	004	000	001	001	001	001	004	001	001	001	001	000	007	007	012	012	005	004
Mar	000	000	000	000	000	000	000	000	000	000	000	000	011	011	006	006	000	000
Jan	003	003	001	001	006	001	003	000	001	001	006	001	018	018	018	017	039	039
Rob	000	000	005	003	001	000	000	000	005	002	001	001	011	011	013	013	028	028
Ann	005	001	002	000	007	002	005	001	002	000	007	001	010	009	003	003	014	014
Jos	010	005	004	001	004	001	010	005	004	001	004	000	014	014	011	011	003	003
Cath	000	000	000	000	002	002	000	000	000	000	002	001	044	044	025	025	062	062
Brig	002	001	002	002	009	004	002	001	002	002	009	001	012	012	002	002	021	021
Nat	004	003	nd	nd	001	000	004	003	nd	nd	001	001	023	023	nd	nd	004	004
Marc	000	000	nd	nd	002	000	000	000	nd	nd	002	000	009	009	nd	nd	020	019
TOT	030	013	015	008	033	011	030	011	015	007	033	006	180	179	114	112	196	194

Morph: possessive s / third person s / plural s

Sub.	possessive s 1		2		3		third person s 1		2		3		plural s 1		2		3	
Fran	000	000	004	000	004	000	003	001	005	003	000	000	004	004	017	015	010	008
Cor	001	000	002	000	002	001	005	004	003	001	002	002	013	013	015	014	011	009
Mar	005	005	002	000	009	004	002	001	001	000	001	001	011	010	028	021	016	013
Jan	002	002	004	002	015	004	005	005	006	006	016	011	013	012	015	014	049	043
Rob	000	000	001	001	007	006	000	000	002	002	008	007	012	012	004	003	028	024
Ann	000	000	000	000	002	002	003	001	002	000	002	002	014	009	016	012	035	022
Jos	003	001	000	000	000	000	001	000	000	000	001	000	005	005	016	016	008	006
Cath	006	005	003	003	001	001	009	007	009	006	010	010	023	021	032	027	059	055
Brig	001	000	002	000	002	000	000	000	003	003	011	011	007	007	013'013		040	040
Nath	001	000	nd	nd	000	000	002	001	nd	nd	000	000	021	015	nd	nd	009	009
Marc	001	001	nd	nd	003	000	002	002	nd	nd	004	003	007	006	nd	nd	016	013
TOT	020	014	018	006	045	018	032	022	031	021	055	047	130	114	156	135	281	242

Left Column

Morph:	Regular Past			Irrregular Past			Past BE		
Per.	1	2	3	1	2	3	1	2	3

Sub.																		
Lion	000	000	003	000	019	000	000	000	007	000	030	002	000	000	001	000	008	001
Cath	000	000	004	000	008	006	000	000	005	000	016	014	000	000	009	000	004	004
Mar	002	000	001	000	011	004	000	000	005	000	017	010	000	000	001	001	009	007
Fred	001	001	000	000	000	000	001	000	003	003	002	002	000	000	005	005	000	000
Serg	000	000	001	001	008	004	000	000	001	000	016	004	000	000	000	000	007	001
Gis	000	000	000	000	001	001	002	002	000	000	004	004	000	000	000	000	002	002
Fran	000	000	001	001	001	001	000	000	001	000	002	001	003	003	000	000	001	001
JPI	000	000	000	000	003	003	002	001	000	000	009	008	002	002	001	000	007	005
Al	000	000	000	000	001	000	001	000	002	000	005	003	000	000	000	000	003	002
Pasc	000	000	001	000	009	009	002	000	001	001	016	012	000	000	000	000	003	002
JPII	005	001	000	000	000	000	002	000	000	000	004	002	000	000	000	000	008	007
Fran	001	001	000	000	009	001	001	000	000	000	017	006	003	003	001	001	007	003
Thib	003	000	001	000	001	000	012	000	002	000	009	000	003	001	000	000	007	002

| TOT | 012 | 003 | 012 | 002 | 071 | 029 | 023 | 003 | 027 | 004 | 147 | 068 | 011 | 009 | 018 | 007 | 066 | 037 |

Morph:		the			a		
Per.		1	2	3	1	2	3

Subject:											
Lionel	012	007	008	006	074	055	011	005	013	005	043	037
Catherine	010	007	019	014	057	050	010	010	005	004	017	013
María	012	008	003	003	033	023	009	005	005	005	018	016
Frédéric	006	005	015	014	017	016	010	010	007	006	003	003
Serge	008	006	010	009	012	010	005	001	005	005	001	001
Giséle	006	002	007	005	022	016	004	004	004	004	006	005
France	005	002	014	010	000	000	006	003	006	004	000	000
J-P I	007	005	007	006	000	000	011	004	005	005	000	000
Alain	005	001	007	006	012	008	005	003	003	012	012
Pascale	016	008	010	010	051	034	003	002	008	007	017	015
J-P II	003	002	017	010	021	020	004	004	004	004	009	008
Francis	014	009	005	004	034	028	008	006	012	005	021	014
Thibaud	017	013	005	004	022	016	007	005	013	011	013	009

| TOT | | 121 | 075 | 127 | 099 | 359 | 280 | 096 | 064 | 090 | 068 | 160 | 133 |

Morph:	progressive ing			auxiliary BE			present copula		
Per.	1	2	3	1	2	3	1	2	3

Sub:																		
Lion	000	000	002	002	001	000	000	000	002	002	001	000	014	012	009	008	015	014
Cath	002	001	001	000	000	000	002	001	001	000	000	000	017	017	013	012	018	017
Mar	001	000	001	000	002	001	001	000	001	000	002	001	031	030	013	012	006	006
Fred	002	001	001	001	002	002	002	001	001	001	002	002	016	016	006	006	013	013
Serg	000	000	001	001	001	000	000	000	001	001	001	000	011	010	005	005	002	002
Gis	002	001	004	000	000	000	002	001	004	000	000	000	008	008	009	009	013	013
Fran	001	001	000	000	000	000	001	001	000	000	000	000	019	016	004	002	000	000
JPI	002	001	000	000	000	000	002	001	000	000	000	000	019	019	004	004	000	000
Al	004	002	005	000	008	001	004	002	005	000	008	001	010	010	007	007	006	006
Pasc	000	000	001	000	003	001	000	000	001	000	003	001	014	014	003	003	014	014
JPII	000	000	000	000	003	000	000	000	000	000	003	000	005	005	009	009	003	003
Fran	000	000	001	000	002	001	000	000	001	000	002	001	011	010	011	009	014	014
Thib	000	000	003	002	007	005	000	000	003	002	007	005	007	006	021	020	005	003

| TOT | 014 | 007 | 020 | 006 | 029 | 011 | 014 | 007 | 020 | 006 | 029 | 011 | 182 | 173 | 114 | 106 | 109 | 105 |

Morph:	possessive s			third person s			plural s		
Per.	1	2	3	1	2	3	1	2	3

Sub:																		
Lion	000	000	001	000	001	000	001	000	002	001	020	017	008	007	014	014	038	034
Cath	001	000	002	001	001	001	001	000	001	000	002	002	005	005	012	010	044	043
Mar	001	001	001	001	003	001	009	004	006	002	001	000	009	009	005	005	010	008
Fred	001	001	002	002	000	000	001	001	002	002	001	001	008	008	011	011	004	003
Serg	000	000	002	002	000	000	000	000	001	001	000	000	004	001	007	006	005	005
Gis	000	000	000	000	002	001	000	000	000	000	004	004	007	007	008	007	013	012
Fran	000	000	002	000	000	000	002	002	003	001	000	000	004	004	012	000	000
JPI	000	000	001	000	000	000	002	000	000	000	000	000	012	010	004	004	000	000
Al	000	000	000	000	000	000	003	002	001	000	003	001	004	004	007	004	005	005
Pasc	000	000	001	000	000	000	002	002	000	000	000	000	012	007	008	003	022	017
JPII	000	000	000	000	002	000	005	005	003	002	001	001	005	005	012	011	015	012
Fran	000	000	000	000	002	001	001	001	002	000	001	000	004	004	003	000	008	006
Thib	002	000	001	000	004	002	001	000	005	003	005	003	007	007	004	003	011	006

| TOT | 006 | 002 | 013 | 006 | 015 | 006 | 028 | 017 | 026 | 012 | 038 | 029 | 089 | 078 | 109 | 090 | 175 | 151 |

Right Column

Morph:	Regular Past			Irrregular Past			Past BE		
Per.	1	2	3	1	2	3	1	2	3

Sub.																		
René	012	000	nd	nd	nd	nd	020	000	nd	nd	nd	nd	007	000	nd	nd	nd	nd
Od	006	000	006	000	002	002	011	000	005	001	007	005	009	004	008	005	006	006
Jud	001	001	001	000	nd	nd	003	003	003	000	nd	nd	003	003	001	000	nd	nd
Jos	002	000	001	000	nd	nd	007	000	000	000	nd	nd	003	000	004	000	nd	nd
Gér	003	000	001	000	007	007	003	000	002	000	006	002	005	004	006	004	005	005
Gen	005	004	007	005	005	003	008	006	017	010	011	010	008	004	009	009	009	009
Geor	001	000	005	002	nd	nd	003	000	004	003	nd	nd	000	000	003	001	nd	nd
Tou	002	000	006	003	003	002	009	002	012	002	006	006	001	001	001	001	000	000

| TOT | 032 | 005 | 027 | 010 | 017 | 014 | 064 | 011 | 043 | 016 | 030 | 023 | 036 | 016 | 032 | 020 | 020 | 020 |

Morph:		the			a		
Per.		1	2	3	1	2	3

Subject:											
René	043	028	nd	nd	nd	nd	035	024	nd	nd	nd	nd
Odette	015	013	033	029	029	022	008	007	012	012	005	005
Judith	013	013	016	013	nd	nd	017	015	005	003	nd	nd
Josette	012	009	004	003	nd	nd	004	002	002	000	nd	nd
Gérard	017	011	021	019	012	009	008	008	005	005	005	005
Geneviève	012	010	020	012	021	015	007	007	010	008	017	015
Georgette	014	006	004	002	nd	nd	012	004	002	002	nd	nd
Touré	016	012	014	008	011	007	004	004	010	008	005	004

| TOT | | 144 | 102 | 112 | 086 | 073 | 053 | 095 | 071 | 046 | 038 | 032 | 029 |

Morph:	progressive ing			auxiliary BE			present copula		
Per.	1	2	3	1	2	3	1	2	3

Sub.																		
René	003	000	nd	nd	nd	nd	003	000	nd	nd	nd	nd	040	018	nd	nd	nd	nd
Od	001	000	003	000	002	001	001	000	003	000	002	001	013	012	023	023	000	000
Jud	001	000	000	000	nd	nd	001	000	000	000	nd	nd	018	015	019	017	nd	nd
Jos	000	000	001	000	nd	nd	000	000	001	000	nd	nd	012	008	006	006	nd	nd
Gér	000	000	000	000	000	000	000	000	000	000	000	000	017	017	001	001	000	000
Gen	000	000	001	000	000	000	000	000	001	000	000	000	003	002	001	000	003	002
Geor	001	001	000	000	nd	nd	001	001	000	000	nd	nd	008	006	000	000	nd	nd
Tou	001	000	000	000	000	000	001	000	000	000	000	000	004	004	003	003	000	000

| TOT | 007 | 001 | 005 | 000 | 002 | 001 | 007 | 001 | 005 | 000 | 002 | 001 | 115 | 082 | 053 | 050 | 003 | 002 |

Morph:	possessive s			third person s			plural s		
Per.	1	2	3	1	2	3	1	2	3

Sub.																		
René	004	001	nd	nd	nd	nd	016	012	nd	nd	nd	nd	039	033	nd	nd	nd	nd
Od	000	000	000	001	000	000	015	014	000	000	004	003	019	019	004	004
Jud	002	002	000	000	nd	nd	004	003	000	000	nd	nd	021	016	006	005	nd	nd
Jos	000	000	000	000	nd	nd	002	002	000	000	nd	nd	012	010	005	005	nd	nd
Gér	000	000	000	000	000	000	000	000	001	001	000	000	011	009	006	015	014
Gen	000	000	001	001	003	002	000	000	001	000	002	002	013	013	019	015	007	005
Geor	001	001	001	001	nd	nd	004	000	000	000	nd	nd	007	003	005	002	nd	nd
Tou	000	000	000	000	001	001	002	002	002	000	001	001	008	002	007	004	001	001

| TOT | 007 | 004 | 002 | 002 | 005 | 003 | 028 | 019 | 019 | 015 | 003 | 003 | 115 | 091 | 070 | 056 | 027 | 024 |

<u>Table 3.15. Raw Scores for Subjects in All Groups by Related</u>

<u>Groups of Morphemes</u>

3.5.2.1.1. Morpheme Clustering

Morpheme clustering was done in two ways:

(1) separating bound from unbound morphemes. This has been done elsewhere (see above, 3.2.2.), with a suggestion (Krashen et al, 1978) that bound and free morphemes differ in their behaviour, the former showing comparatively little variation and the latter comparatively more.

(2) grouping morphemes which for linguistic reasons one could assume are related. Following Andersen (op cit), this produced clusters related to:

(a) past time (regular and irregular past simple, past BE and a combination of irregular and past BE);

(b) articles (*A* and *THE*);

(c) bound *S* (plural, possessive and third person singular);

(d) copula/progressive (present copula, auxiliary *BE* in association with the present progressive and the present participle in association with the present progressive). As the orders show, however, it would seem apparent that, although auxiliary *BE* and *ING* are related, copula is not related to successful use of auxiliary *BE*.

Period One	Period Two	Period Three
Group One		
copula	copula	copula
plural S	plural S	plural S
a	the	third person s
the	a	past BE
possessive S	third person S	a
third person S	past BE	the
present ING	present ING	all past irregs
past BE	auxiliary BE	irregular past
auxiliary BE	all past irregs	regular past
regular past	irreg past/reg past	possessive S
all past irregs	possessive S	present ING
irregular past		auxiliary BE
Group Two		
copula	copula	copula
plural S	plural S	plural S
past BE	the	a
a	a	the
the	irregular past	third person S
third person S	all past irregs	past BE
pres ING/aux BE	poss S/third pers S	all past irregs
all past irregs	past BE	irregular past
possessive S	pres ING/aux BE	regular past
regular past	regular past	possessive S
irregular past		pres ING/aux BE
Group Three		
plural S	possessive S	third pers S/past BE
a	copula	a
copula	a	all past irregs
the	plural S	plural S
third person S	third person S	regular past
possessive S	the	irregular past
past BE	past BE	the
all past irregs	all past irregs	copula
irregular past	irregular past	possessive S
regular past	regular past	pres ING/aux BE
pres ING/aux BE	pres ING/aux BE	

Table 3.16. Acquisition Order for Each Group at Each Period by the

Group Score Method

3.5.2.2. Within Group (Between Period) Comparisons

As can be seen from table 3.17., for group one there is no significant difference between the three periods (w = 0.808). This is borne out by the lack of significant difference between periods one and two (rho = 0.778), and between periods two and three (rho = 0.768); however, there is only a low correlation between periods one and three (rho = 0.579).

For group two, there is again no significant difference between the three periods (w = 0.809). However, this time, although there are no significant differences between periods two and three (rho = 0.845) and one and three (rho = 0.762), periods one and two correlate poorly (rho = 0.56).

Group One			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.778	rho = 0.768	rho = 0.579	w = 0.808
Group Two			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.56	rho = 0.845	rho = 0.762	w = 0.809
Group Three			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.86	rho = 0.25	rho = 0.428	w = 0.671

Table 3.17. Rank Order Comparisons For Each Period By Group

For group three, the results are again different, with only a relatively low correlation between all three periods (w = 0.671), and significant differences between periods two and three (rho = 0.25) and one and three (rho = 0.428), although there is no significant difference between periods one and two (rho = 0.86). This would appear to indicate that period three is in some way distinct.

The results of tests for individual fit are shown in table 3.18.. They demonstrate quite clearly that there is zero correspondence between individual orders and the group order for all morphemes, and that even for grouped morphemes there is relatively little correlation. For example, group one attains 36% correspondence for the past cluster only in period three, after two periods of zero correspondence; group two attains 23% correspondence in period three, after two periods of zero correspondence; and group three does only slightly better, attaining 13% correspondence in period one, 14% in period two, and 25% in period three. The copula/progressive cluster fares little better with greater than zero correspondences only occurring for group one in periods two (11%) and three (36%); for group two in periods one (38%) and three (31%); and not at all for group three. However, individual fit improves slightly if only present auxiliary *BE* and *ING* are compared, with group one attaining 9% correspondence in period one and 45% in period three; group two 38% in period one, 31% in period three but only 8% in period two. Scores are somewhat better for the *S* morpheme cluster, with group one scoring 18%, 22% and 9% in successive periods; group two 15%, 0% and 15% respectively; and group three 13%, 29% and 25%. None of these

correspondence scores indicates a high degree of individual fit to the group order. Indeed, only the article cluster produces consistently high scores: 54%, 44% and 73% for group one in periods one, two and three respectively; 62%, 31% and 54% for group two in the same periods; and 62%, 71% and 100% respectively for group three.

3.5.2.3. Within Period (Between Group) Comparisons

As can be seen from table 3.19., there is no significant difference between the three groups at period one ($w = 0.795$), with inter-group comparisons yielding consistently similar results ($rho = 0.801, 0.748$ and 0.836). During period two, however, differences do begin to emerge ($w = 0.549$), with rhos of only 0.666 and 0.68 for comparisons between group two and groups one and three, and a very low correlation of only 0.395 for groups one and three). The implication would appear to be that groups one and three differ significantly.

A similar pattern can be seen in period three, albeit in a less dramatic form. Here, once again, there is a lack of significant difference between the three groups ($w = 0.79$) and even a very close similarity between groups one and two ($rho = 0.942$). On the other hand, the relationship between groups one and three ($rho = 0.619$) and two and three (0.509) is much more tenuous. Given the similarity between the scores for groups one and two, the implication here is that group three is in some way different. In all three periods, therefore, group three would appear to behave differently.

Period One

All   0

Past Cluster   Article Cluster

PBE   18   a   the   54
PBE   Reg   18
PBE   Reg   All   00   Cop/Aux/Ing Cluster
Reg   All   09
                                        cop   100
PBE   All   18   cop   ing   91
Reg   Irr   00   cop   aux   100
All   Irr   09   ING   aux   09
PBE   Irr   18   cop   ING   aux   00
PBE   Reg   All Irr   00

S Morpheme Cluster

pl   73
pl   poss   55
poss   TPS   27
pl   TPS   82
Pl   poss   TPS   18

Period Two

All   0

Past Cluster   Article Cluster

PBE   78
PBE   All   67   The   A   44
PBE   Irr/Reg   00
All   Irr/Reg   00   Cop/Aux/Ing Cluster
PBE   All   Irr/Reg   00
                                        Cop   100
                                        Cop   ING   56
S Morpheme Cluster   Cop   Aux   78

Pl   67   ING   Aux   00
Pl   TPS   67   Cop   ING   Aux   11
Pl   Po   78
TPS   Po   44
Pl   TPS   Po   22

Period Three

All   0

Past Cluster   Article Cluster

PBE   73   A   The   73
PBE   All   64
PBE   Irr   73   Cop/Ing/Aux Cluster
All   Irr   82
                                        Cop   73
PBE   All   Irr   45   Cop   ING   73
PBE   Reg   91   ING   Aux   45
All   Reg   82   Cop   ING   Aux   36
Irr   Reg   64
PBE   All Irr Reg   36

S Morpheme Cluster

Pl   55
Pl   TPS   45
Pl   Po   73
TPS   Po   36
Pl   TPS   Po   09

Group Two

All   0

Past Cluster

PBE	31
PBE All	23
PBE Reg	18
All Reg	31
PBE Irr	31
All Irr	31
Reg Irr	23
PBE All Reg Irr	00

Article Cluster

A The	62

Cop/Aux/ING Cluster

Cop	92
Cop ING/Aux	38

S Morpheme Cluster

Pl	92
Pl TPS	62
Pl Po	77
TPS Po	38
Pl TPS Po	15

Period Two

All   0

Past Cluster

Irr	08
Irr All	00
Irr PBE	08
All PBE	08
Irr All PBE	00
Irr Reg	08
All Reg	31
PBE Reg	23
Irr All PBE Reg	00

Article Cluster

The A	31

Cop/Aux/ING Cluster

Cop	92
Cop ING/Aux	08

S Morpheme Cluster

Pl	85
Pl Po/TPS	00

Period Three

All   0

Past Cluster

PBE	54
PBE All	54
PBE Irr	54
All Irr	62
PBE All Irr	54
PBE Reg	54
All Reg	69
Irr Reg	54
PBE All Irr Reg	23

Article Cluster

A The	54

Cop/Aux/ING Cluster

Cop	69
Cop ING/Aux	31

S Morpheme Cluster

Pl	46
Pl TPS	46
Pl Po	77
TPS Po	46
Pl TPS Po	15

Group Three

Period One

All   0

Past Cluster

PBE	50
PBE All	38
PBE Irr	38
All Irr	38
PBE All Irr	38
PBE Reg	38
All Reg	38
Irr Reg	00
PBE All Irr Reg	13

Article Cluster

A The	62

Cop/Aux/ING Cluster

Cop	88
Cop ING/Aux	00

S Morpheme Cluster

Pl	50
Pl TPS	75
Pl Po	75
TPS Po	38
Pl TPS Po	13

Period Two

All   0

Past Cluster

PBE	57
PBE All	57
PBE Irr	57
All Irr	57
PBE All Irr	57
PBE Reg	57
All Reg	57
Irr Reg	29
PBE All Irr Reg	14

Article Cluster

A The	71

Cop/Aux/ING Cluster

Cop	71
Cop ING/Aux	00

S Morpheme Cluster

Po	43
Po Pl	29
Po TPS	29
Pl TPS	86
Po Pl TPS	29

Period Three

All   0

Past Cluster

PBE	75
PBE All	75
PBE Irr	75
All Irr	75
PBE All Irr	75
PBE Reg	25
All Reg	50
Irr Reg	50
PBE All Irr Reg	25

Article Cluster

A The	100

Cop/Aux/ING Cluster

Cop	50
Cop ING/Aux	00

S Morpheme Cluster

TPS	50
TPS Pl	25
TPS Po	25
Pl Po	75
TPS Pl Po	25

Table 3.18. Tests for Individual Fit (Percentages of Subjects Whose Individual Clustered Orders Fit the Group Order)

Period One			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 0.801	rho = 0.748	rho = 0.836	w = 0.795
Period Two			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 0.666	rho = 0.680	rho = 0.395	w = 0.549
Period Three			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 0.942	rho = 0.509	rho = 0.619	w = 0.79

Table 3.19. Rank Order Comparisons For Each Group by Period

3.5.2.4. Bound and Unbound Morphemes

Tables 3.20. and 3.22. give correlations between periods for each group for bound and unbound morphemes respectively. Table 3.21. gives acquisition orders for bound and unbound morphemes for each group at each period, and tables 3.23. and 3.24. give correlations between groups for each period for bound and unbound morphemes respectively.

Within group comparisons reveal very low correlations between periods for bound morphemes. Whereas there is a fair correlation between all three periods for group three (w = 0.731), this decreases for group one (w = 0.652) and is a low 0.488 for group two. Similarly, for paired period comparisons rho only exceeds 0.7 on two occasions (0.959 between periods two and three for group one, and 0.929 between

periods one and two for group three), whereas it is less than 0.5 on three occasions.

Unbound morphemes fare better, with no significant difference between periods one and two, one and three, and two and three for all three groups (indeed perfect correlation - ie identical orders for periods one and three, group one and group two). However, the small population size - four items - makes comparisons statistically sensitive.

It would nonetheless appear that unbound morphemes maintain their orders much better than do bound morphemes. In addition, the

Group One			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.435	rho = 0.959	rho = 0.667	w = 0.652
Group Two			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.161	rho = 0.565	rho = 0.643	w = 0.488
Group Three			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.929	rho = 0.327	rho = 0.53	w = 0.731

Table 3.20. Rank Order Comparisons for Bound Morphemes for Each Group by Period

```
                               Group One


        Period One                                    Period Two


Bound Morphemes      Unbound Morphemes        Bound Morphemes      Unbound Morphemes

plural S             copula                   plural S             copula
possessive S         a                        third person S       the
third person S       the                      past BE              a
present ING          auxiliary BE             present ING          auxiliary BE
past BE                                       all past irregs
regular past                                  irreg/reg past
all past irregs                               possessive S
iregular past



                               Period Three


                     Bound Morphemes          Unbound Morphemes

                     plural S                 copula
                     third person S           a
                     past BE                  the
                     all past irregs          axiliary BE
                     irregular past
                     regular past
                     possessive s
                     present ING
```

```
┌─────────────────────────────────────────────────────────────────────┐
│                            Group Two                                  │
│                                                                       │
│        Period One                              Period Two             │
│                                                                       │
│ Bound Morphemes    Unbound Morphemes    Bound Morphemes    Unbound Morphemes │
│                                                                       │
│ plural S           copula               plural S           copula     │
│ past BE            a                    irregular past     the        │
│ third person S     the                  all past irregs    a          │
│ present ING        auxiliary BE         poss S/TPS         auxiliary BE│
│ all past irregs                         past BE                       │
│ possessive S                            present ING                   │
│ regular past                            regular past                  │
│ irregular past                                                        │
│                                                                       │
│                          Period Three                                 │
│                                                                       │
│              Bound Morphemes       Unbound Morphemes                   │
│                                                                       │
│              plural S              copula                              │
│              third person S        a                                  │
│              past BE               the                                │
│              all past irregs       auxiliary BE                       │
│              irregular past                                           │
│              regular past                                             │
│              possessive S                                             │
│              present ING                                              │
└─────────────────────────────────────────────────────────────────────┘
```

```
┌─────────────────────────────────────────────────────────────────────┐
│                           Group Three                                 │
│                                                                       │
│        Period One                              Period Two             │
│                                                                       │
│ Bound Morphemes    Unbound Morphemes    Bound Morphemes    Unbound Morphemes │
│                                                                       │
│ plural S           a                    possessive S       copula     │
│ third person S     copula               plural S           a          │
│ possessive S       the                  third person S     the        │
│ past BE            auxiliary BE         past BE            auxiliary BE│
│ all past iregs                          all past irregs              │
│ irregular past                          irregular past               │
│ regular past                            regular past                  │
│ present ING                             present ING                   │
│                                                                       │
│                          Period Three                                 │
│                                                                       │
│              Bound Morphemes       Unbound Morphemes                   │
│                                                                       │
│              TPS/past BE           a                                  │
│              all past irregs       the                                │
│              plural S              copula                              │
│              regular past          auxiliary BE                       │
│              irregular past                                           │
│              possessive S                                             │
│              present ING                                              │
└─────────────────────────────────────────────────────────────────────┘
```

Table 3.21. Acquisition Orders For Bound and Unbound Morphemes for
Each Group

Group One			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.976	rho = 0.976	rho = 1	w = 0.911

Group Two			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.976	rho = 0.976	rho = 1	w = 0.911

Group Three			
P1 vs P2	P2 vs P3	P1 vs P3	P1 vs P2 vs P3
rho = 0.976	rho = 0.929	rho = 0.976	w = 0.733

Table 3.22. Rank Order Comparisons for Unbound Morphemes for Each Group by Period

Period One			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 0.643	rho = 0.595	rho = 0.667	w = 0.762

Period Two			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 0.25	rho = 0.645	rho = 0.185	w = 0.487

Period Three			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 0.643	rho = 0.827	rho = 0.827	w = 0.925

Table 3.23. Rank Order Comparisons for Bound Morphemes for Each Period by Group

Period One			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 1	rho = 0.976	rho = 0.976	w = 0.911

Period Two			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 1	rho = 0.976	rho = 0.976	w = 0.911

Period Three			
G1 vs G2	G2 vs G3	G1 vs G3	G1 vs G2 vs G3
rho = 1	rho = 0.929	rho = 0.929	w = 0.733

Table 3.24. Rank Order Comparisons for Unbound Morphemes for Each Period by Group

situation is essentially the same for within period comparisons between groups (see tables 3.22. and 3.24.).

3.5.3. DISCUSSION

Given the status of acquisition orders in the second language acquisition literature ["An L2 acquisition order has been discovered which is characteristic of both children and adults, and which, for as yet unknown reasons, holds for both oral and written modes, provided natural communication tasks are used to elicit the language data." (Dulay, Burt & Krashen, 1982: 229); "... the morpheme studies provided strong evidence of a 'natural' sequence of development in

SLA. Irrespective of learner differences, L2 learners appear to progress along the interlanguage continuum in a very similar way." (Ellis, 1985: 58)], and the fact that this status is largely derived from cross-sectional studies, the first question one needs to address is whether the results oulined above are consistent with a generalised - and generalisable - order of acquisition, or whether the averaging out implicit in the calculation of orders does not distort real variation.

3.5.3.1. Acquisition Orders and Diachronic Variation

Diachronic variation is something which has not generally appeared in morpheme research due to the cross-sectional nature of the majority of studies. The implication, therefore, of statistically similar orders between studies is that there is *an* acquisition order. However, whenever longitudinal studies have considered acquisition orders (Hakuta 1974, Larsen- Freeman 1976, Rosansky 1976, see above 3.2.2.) diachronic variation has been demonstrated.

This is confirmed in the present study. Although groups one and two correlate significantly over the three periods, there is low correlation between pairs of periods (rho = 0.579 for group one, periods one and three; rho = 0.56 for group two, periods one and two). In addition, correlations for group three over all three periods are not high (w = 0.617), largely because of period three, which correlates poorly with both period one (rho = 0.428) and period two (rho = 0.25). There are similar results for within period comparisons, with

no significant differences between all three groups for periods one and three, but with only a low correlation (w = 0.549) for period two. Once again, also, these figures hide low correlations between groups one and three during period two (rho = 0.395) and between group three and both groups one and two in period three.

These results suggest that it is much too strong a position to answer the question "Is there an acquisition order for certain English structures which is characteristic of L2 learners?" by "... nearly every soundly designed study has answered this question in the affirmative." (Dulay, Burt and Krashen ibid: 229). This is hardly surprising: Dulay, Burt and Krashen base their claim overwhelmingly on cross-sectional data, which by its very nature is unable to identify variation over time.

Moreover, as we have argued above (3.3.7), the statistics used in morpheme order research are sensitive to small population sizes (in this case 11 morphemes) and significant correlations can be maintained between orders despite considerable differences.

This is not to argue that there should be no similarities over time. One might expect, for example, the order to change very little over time, except that each morpheme would register greater accuracy of use at each period. Within periods, one would expect this to be reflected in relatively constant orders between groups within each period. However, neither of these possibilities have been identified here, although as we shall see below (3.5.3.3.), there is some evidence for rising accuracy of individual morphemes over time.

Alternatively, one might expect to see broadly similar acquisition orders for each period - after all, the time lag between periods is relatively short - but with differences between related morphemes reflecting their gradual assimilation. Tables 3.25 and 3.26. help reveal this.

Table 3.25. is the group range, showing the number of subjects using a particular morpheme correctly at four different criterion levels (100% accuracy, between 90 and 100% accuracy, between 80 and 100% accuracy, and between 70 and 100% accuracy). Table 3.26. is the modified group range, showing the number of subjects using morphemes at levels of accuracy by 10% intervals.

The group range reveals some interesting changes over time2. These are shown graphically in figures 3.3. to 3.5..

The only trends common to all three groups are those for the copula and the third person singular. The former shows a steady decline, whereas the latter shows a decline in period two followed by an improvement in period three. Among the 27 curves, the decline-improvement occurs ten times, whilst the steady decline occurs on five occasions. Improvement-decline occurs seven times, while steady improvement appears five times. Nor are the patterns group specific. Again, this emphasises the hazardous nature of suggesting that there is *an* acquisition order followed by even a large minority of

learners.

The key question, of course, is why such different variation patterns should occur. This is dealt with in greater detail in sections 3.5.3.2. and 3.5.3.3..

The modified group range has the added potential advantage of displaying the shifting accuracy of subjects from lower to higher levels over time, and of revealing the number of subjects not providing occasions for a particular morpheme, or for whom we have no data during a particular period.

With the *past* cluster, for example, it can be seen at a glance, for groups one and two, how early avoidance of past reference gradually shifts to both increasing use and increasing accuracy. For group one, for instance, there are 19 occurrences in the no occasions column for period one, declining to five in period two (plus six with no data) and zero in period three. At the same time, although the number of occurrences in the 0 to 49% range remains fairly constant at seven, 10 and nine, the number in the 50 to 100% range increases from seven to 12 to 24 occurrences. A similar breakdown is visible in group two, but not in group three, where the learners were more prepared to make reference to the past from the beginning, and where accuracy hardly improves over time. Moreover, within these 50% ranges, it can be seen how overall accuracy is increasing over time, with more and more subjects moving from the 0% level into the 50 and 60% ranges.

GROUP ONE (n = 11)

	Period One				*Period Two* (n=9)				*Period Three*			
	100	90-100	80-100	70-100	100	90-100	80-100	70-100	100	90-100	80-100	70-100
RP	1	1	1	1	1	1	1	1	1	1	1	2
IP	1	1	1	1	1	1	4	4	0	2	2	3
PB	2	2	2	2	6	6	6	6	2	3	6	7
Th	0	2	5	7	0	1	3	4	0	1	2	4
A	2	3	7	7	1	1	4	4	1	2	5	9
In	1	1	1	2	3	3	3	3	2	2	2	2
AB	0	0	0	1	3	3	3	3	2	2	2	2
Co	10	11	11	11	7	9	9	9	7	8	9	9
Pl	5	8	9	10	2	4	6	9	2	3	9	10
Po	3	3	4	4	2	2	2	2	2	3	3	3
TP	2	2	3	4	3	3	3	3	5	5	6	7

GROUP TWO (n = 13)

	Period One				*Period Two*				*Period Three*			
	100	90-100	80-100	70-100	100	90-100	80-100	70-100	100	90-100	80-100	70-100
RP	2	2	2	2	2	2	2	2	4	4	4	4
IP	1	1	1	1	2	2	2	2	2	2	4	5
PB	3	3	3	3	3	3	3	3	3	3	4	6
Th	0	0	1	6	2	4	7	11	0	2	5	9
A	4	0	0	6	6	6	10	10	3	3	8	9
In	1	1	1	1	3	3	3	3	1	1	1	2
AB	1	1	1	1	3	3	3	3	1	1	1	2
Co	7	10	13	13	7	10	12	12	8	10	10	10
Pl	9	9	11	11	4	5	9	10	2	4	7	10
Po	2	2	2	2	3	3	3	3	1	1	1	1
TP	5	5	5	5	2	2	2	2	4	4	5	5

GROUP THREE

	Period One (n=8)				*Period Two* (n=7)				*Period Three* (n=4)			
	100	90-100	80-100	70-100	100	90-100	80-100	70-100	100	90-100	80-100	70-100
RP	1	1	2	2	0	0	0	1	2	2	2	2
IP	1	1	1	2	0	0	0	1	1	2	2	3
PB	2	2	3	3	2	2	2	2	3	3	3	3
Th	1	1	3	5	0	1	3	4	0	0	0	3
A	3	3	5	5	3	3	5	5	2	2	4	4
In	1	1	1	1	0	0	0	0	0	0	0	0
AB	1	1	1	1	0	0	0	0	0	0	0	0
Co	2	3	4	6	4	4	5	5	0	0	0	0
Pl	2	2	4	6	2	2	3	4	2	2	2	3
Po	2	2	2	2	2	2	2	2	1	1	1	1
TP	2	2	2	3	1	2	2	2	2	3	3	3

Table 3.25. Group Range (Number of Subjects Using Clustered Morphemes Correctly at Different Criterion Levels of Accuracy) at Each Period for All Groups

However, a quite different pattern is observable in the *bound S* cluster, with scores remaining fairly constant in each category for all three periods. Yet another pattern emerges for the *ING/aux/copula* cluster, with an increasing number of no occasions (no doubt the counterpart of the increasing use of the past) accompanied by a declining accuracy. *THE* and *A* reveal no common pattern.

Once again, therefore, when one tries to fit individual scores to the overall order, the lack of steady development becomes clear. In other words, over time there is a great deal of variation both in how individual morphemes and clusters of morphemes are acquired, and in how different learners acquire them. We shall turn to an examination of these factors in the next sections.

There is, however, one potential influence on diachronic variation of particular relevance to this study which we have not yet dealt with: the order of presentation. It is to this that we shall turn first.

3.5.3.1.1. Order of Presentation and Order of Acquisition

The morphemes were presented in class in the same order for all three groups: copula, possessive S, a/an, third person singular, plural, *[first data collection point]* the, regular past (+ told of existence of irregular forms), past be, *[second data collection point]* irregular past, present progressive (group three only), *[third data collection point]*.

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd3
rpast	1	0	0	0	0	0	0	0	0	0	0	1	9	0
irr	2	0	0	0	0	1	0	0	0	1	0	3	4	0
pa BE	2	0	0	0	0	1	0	0	0	0	0	2	6	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpast	1	0	0	0	0	0	0	0	0	0	0	4	4	2
irr	1	0	2	0	0	0	0	0	1	1	1	2	1	2
pa BE	6	0	0	0	0	2	0	0	1	0	0	0	0	2

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpast	1	0	0	1	2	3	1	1	1	0	0	1	0	0
irr	0	2	0	1	2	1	1	1	2	0	0	1	0	0
pa BE	2	1	3	1	3	1	0	0	0	0	0	0	0	0

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	2	3	2	2	1	0	0	1	0	0	0	0	0
a	2	1	4	0	0	3	0	1	0	0	0	0	0	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	1	2	1	2	2	0	1	0	0	0	0	0	2
a	1	0	3	0	1	1	1	0	1	0	0	1	0	2

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	1	1	2	5	2	0	0	0	0	0	0	0	0
a	1	1	3	4	1	1	0	0	0	0	0	0	0	0

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Ing	1	0	0	1	0	2	0	0	1	0	0	2	4	0
BE	0	0	0	1	0	2	0	0	2	0	0	2	4	0
Cop	10	1	0	0	0	0	0	0	0	0	0	0	0	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Ing	3	0	0	0	1	0	0	0	1	0	0	1	3	2
BE	3	0	0	0	0	0	1	0	1	0	0	1	3	2
Cop	7	2	0	0	0	0	0	0	0	0	0	0	0	2

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Ing	2	0	0	0	0	0	1	0	2	1	0	3	2	0
BE	2	0	0	0	0	1	0	0	3	0	0	3	2	0
Cop	7	1	1	0	0	0	0	0	0	0	0	0	2	0

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	5	3	1	1	1	0	0	0	0	0	0	0	0	0
Po	3	0	1	0	0	0	0	1	0	0	0	3	3	0
TP	2	0	1	1	0	2	0	2	0	0	0	1	2	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	2	2	2	3	0	0	0	0	0	0	0	0	0	2
Po	2	0	0	0	0	1	0	0	0	0	0	4	2	2
TP	3	0	0	0	2	0	0	1	0	0	0	2	1	2

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	2	1	6	1	1	0	0	0	0	0	0	0	0	0
Po	2	0	1	0	0	1	1	0	1	0	0	3	2	0
TP	5	0	1	1	1	0	0	0	0	0	0	1	2	0

Group Two (n = 13)

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpast	2	0	0	0	0	0	0	0	1	0	0	2	8	0
irreg	1	0	0	0	0	1	0	0	0	0	0	6	5	0
p BE	3	0	0	0	0	0	0	1	0	0	0	0	9	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpast	2	0	0	0	0	0	0	0	0	0	0	5	6	0
irreg	2	0	0	0	0	0	0	0	0	0	0	7	4	0
p BE	3	0	0	0	0	0	0	0	0	0	0	3	7	0

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpast	4	0	0	0	0	1	0	2	0	1	0	3	2	0
irreg	2	0	2	1	1	3	0	1	1	0	1	1	0	0
p BE	3	0	1	2	2	0	0	1	2	1	0	0	1	0

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	0	1	5	2	2	1	1	1	0	0	0	0	0
a	4	0	0	2	2	2	1	1	1	0	0	0	0	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	2	2	3	4	0	1	1	0	0	0	0	0	0	0
a	6	0	4	0	1	0	1	1	0	0	0	0	0	0

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	2	3	4	2	0	0	0	0	0	0	0	2	0
a	3	0	5	1	2	0	0	0	0	0	0	0	2	0

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
PIng	1	0	0	0	0	5	0	0	0	0	0	1	6	0
A BE	1	0	0	0	0	5	0	0	0	0	0	1	6	0
Cop	5	3	3	0	0	0	0	0	0	0	0	0	0	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
PIng	3	0	0	0	1	0	0	0	0	0	0	6	3	0
A BE	3	0	0	0	1	0	0	0	0	0	0	6	3	0
Cop	7	3	2	0	0	1	0	0	0	0	0	0	0	0

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
PIng	1	0	0	1	0	2	0	1	0	1	0	3	4	0
A BE	1	0	0	1	0	2	0	1	0	1	0	3	4	0
Cop	8	2	0	0	1	0	0	0	0	0	0	0	2	0

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	9	0	2	0	0	1	0	0	1	0	0	0	0	0
Po	2	0	0	0	0	0	0	0	0	0	0	3	8	0
TP	5	0	0	0	1	0	1	0	0	0	0	4	2	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	4	1	4	1	0	1	0	1	0	0	0	1	0	0
Po	3	0	0	0	0	1	0	0	0	0	0	5	4	0
TP	2	0	0	0	2	1	0	2	0	0	0	3	3	0

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	2	2	3	3	0	1	0	0	0	0	0	0	2	0
Po	1	0	0	1	0	3	0	1	0	0	0	3	4	0
TP	4	0	1	0	1	0	0	1	0	0	0	2	4	0

Group Three (n = 8)

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpas	1	0	1	0	0	0	0	0	0	0	0	6	0	0
irr	1	0	0	1	0	0	0	0	1	0	0	5	0	0
pBE	2	0	1	0	0	1	1	0	0	0	0	2	1	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpas	0	0	0	1	0	1	1	0	0	0	0	4	0	1
irr	0	0	0	1	0	1	0	0	1	1	0	2	1	1
pBE	2	0	0	2	0	0	1	0	0	0	0	2	0	1

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
rpas	2	0	0	0	2	0	0	0	0	0	0	0	0	4
irr	1	1	0	1	0	0	0	1	0	0	0	0	0	4
pBE	3	0	0	0	0	0	0	0	0	0	0	0	1	3

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	1	0	2	2	2	0	1	0	0	0	0	0	0	0
a	3	0	2	0	1	1	0	0	1	0	0	0	0	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	1	2	1	1	2	0	0	0	0	0	0	0	1
a	3	0	2	0	1	0	0	0	0	0	0	1	0	1

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
the	0	0	0	3	1	0	0	0	0	0	0	0	0	4
a	2	0	2	0	0	0	0	0	0	0	0	0	0	4

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
PIng	1	0	0	0	0	0	0	0	0	0	0	4	1	0
A BE	1	0	0	0	0	0	0	0	0	0	0	4	1	0
Cop	2	1	1	2	1	0	1	0	0	0	0	0	0	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
PIng	0	0	0	0	0	0	0	0	0	0	0	3	4	1
A BE	0	0	0	0	0	0	0	0	0	0	0	3	4	1
Cop	4	0	1	0	0	0	0	0	0	0	0	1	1	1

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
PIng	0	0	0	0	0	1	0	0	0	0	0	0	3	4
A BE	0	0	0	0	0	1	0	0	0	0	0	0	3	4
Cop	0	0	0	0	1	0	0	0	0	0	0	0	3	4

P1:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	2	0	2	2	0	0	1	0	1	0	0	0	0	0
Po	2	0	0	0	0	0	0	0	1	0	0	0	5	0
TP	2	0	0	1	1	0	0	0	0	0	0	1	3	0

P2:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	2	0	1	1	1	1	1	0	0	0	0	0	0	1
Po	2	0	0	0	0	0	0	0	0	0	0	0	5	1
TP	1	1	0	0	0	0	0	0	0	0	0	2	3	1

P3:

	100%	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	1-9%	0%	no	nd
Pl	2	0	0	1	0	0	0	0	0	0	0	0	1	4
Po	1	0	0	0	1	0	0	0	0	0	0	1	1	4
TP	2	0	0	0	0	0	0	0	0	0	0	0	2	4

Table 3.26. Modified Group Range (Number of Subjects Using Clustered Morphemes Correctly at 10% Intervals) at Each Period for All Groups

An examination of figures 3.3. to 3.5. allows one to see if overt presentation of a given morpheme had any effect (short or long term) on accuracy of use.

The early presentation of the copula and plural may account for their highly accurate use from the beginning. Indeed, although scores decline over time, both curves look almost like 'spontaneous acquisition'. However, this argument is much more difficult to sustain with the third person singular and possessive S.
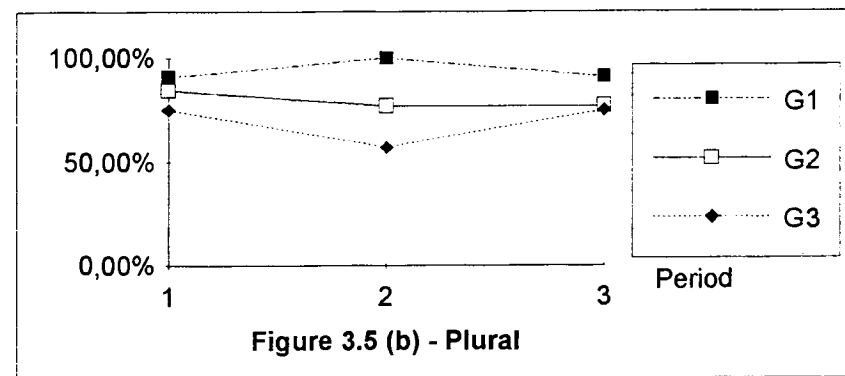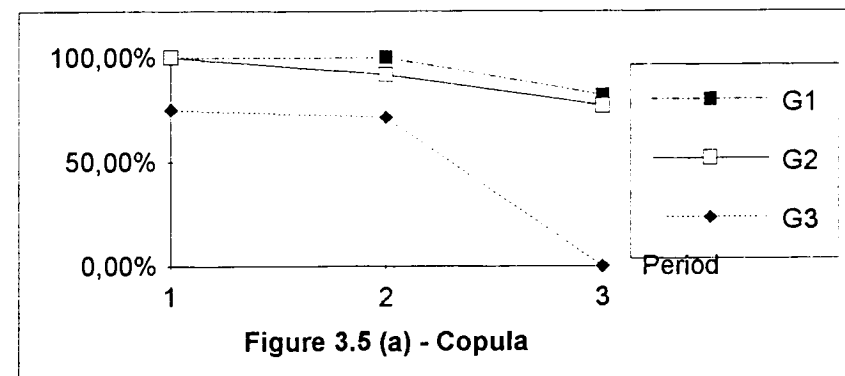
Similarly, accurate use of past BE increases in two groups after presentation (although it actually falls in group one!). Accurate use of the regular past also increases for all three groups after presentation. On the other hand, accurate use of *THE* decreases for two groups out of three!

The impact of presentation on the irregular past is quite consistent among the three groups (see figures 3.9.beh). In all three cases there is a sharp decline in both avoidance and low accuracy and a corresponding rise in greater than 50% correct use. The situation with the present progressive (table 3.26.) is less clear, however, due to the small number of subjects (four) in group three during period three and the move towards greater use of the past (thus reducing possible occasions for the present progressive).

Presentation and, of course, practice of language items would therefore appear on balance to lead to improved use of a morpheme, although this may decline over time and there is some conflicting

Figure 3.3 (a) - Regular Past

Figure 3.3 (b) - Irregular Past

Figure 3.3 (c) - Past BE
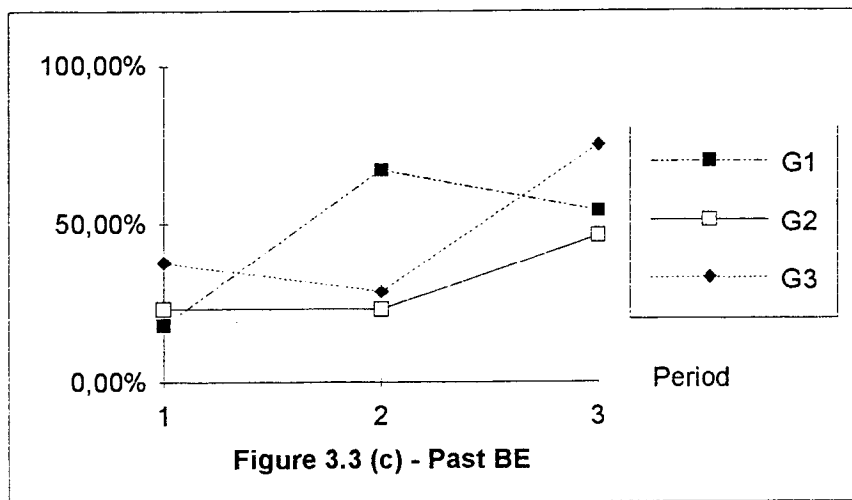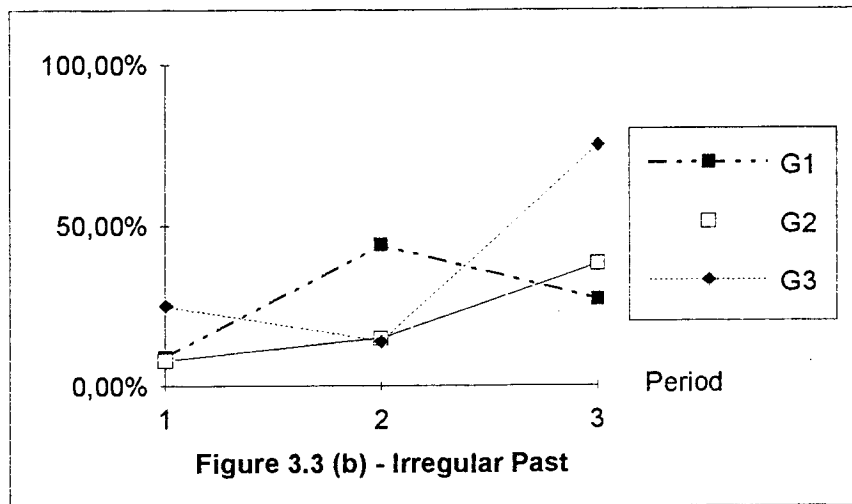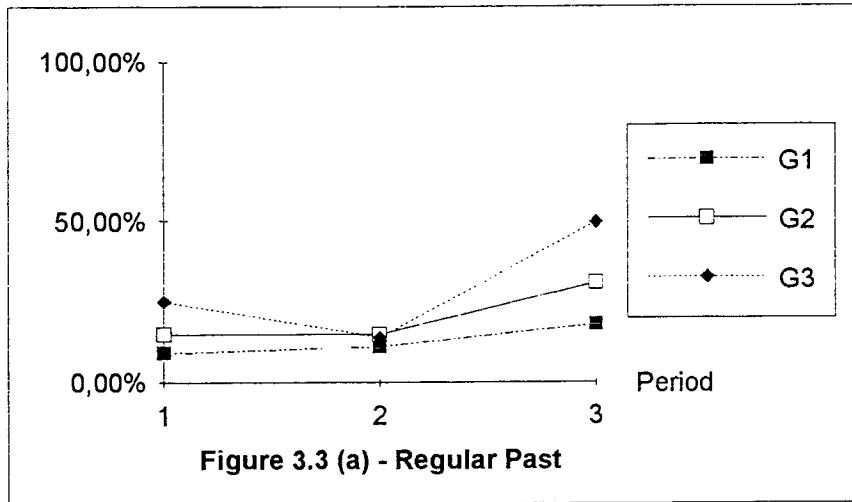
Acquisition Curves For All Three Groups Over All Three Periods

Figure 3.4 (a) - The

Figure 3.4 (b) - A

Figure 3.5 (a) - Copula

Figure 3.5 (b) - Plural

Figure 3.5 (c) - Possessive S

Figure 3.5 (d) - Third Person S
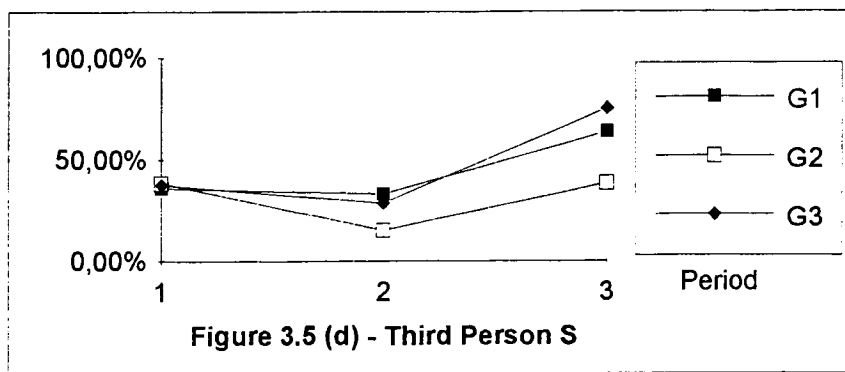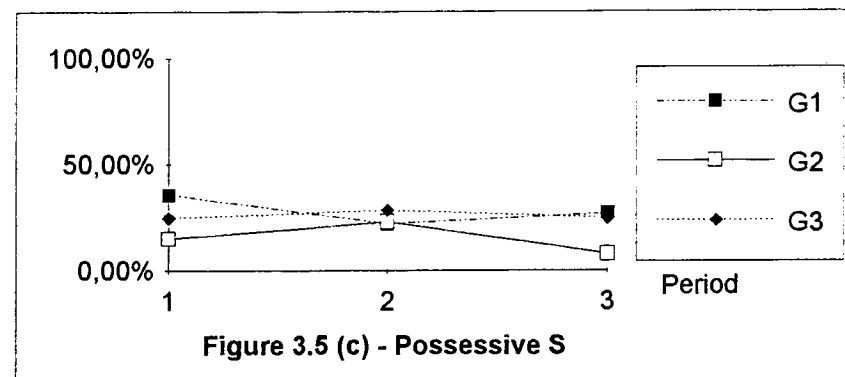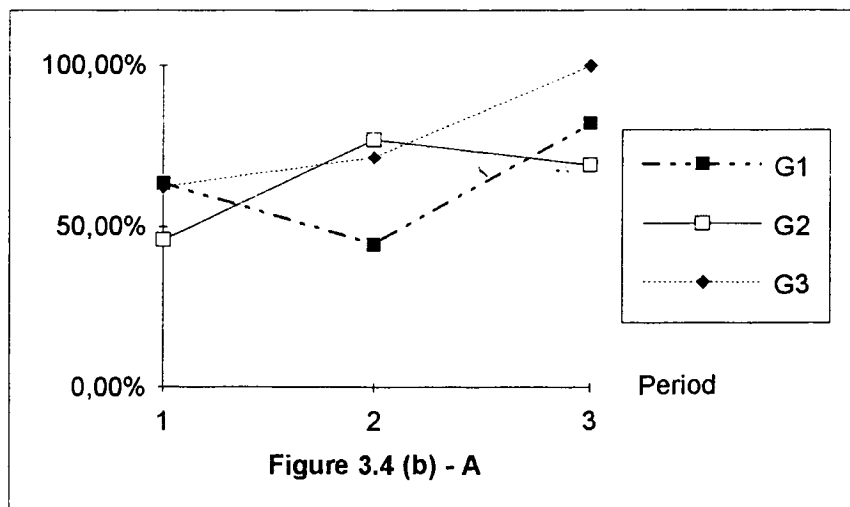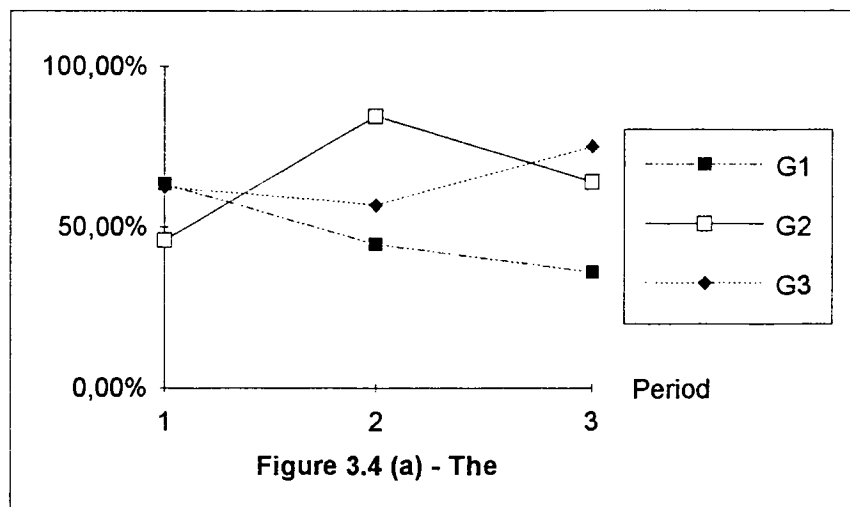
evidence.

Lightbown (1983), in her study of Canadian schoolchildren, found a similar pattern of better performance, associated with overuse, followed by declining accuracy. However, our results reflect a different classroom reality. In her research Lightbown noted massed practice of particular structures over long periods of time, whereas the classes in our study never extended direct concentration on one morpheme beyond one week (four hours for groups one and two, six for group three) plus one set of homework for the following week. This is not to say that language once presented and practised did not recur, but rather that it was no longer focused on.

This leads one to consider the function and effect of focusing on language items. Shifting the ambiant language from input to intake - ie making it available to the learner for processing for language development and not just comprehension - is a question of increasing saliency so that the particular language item gets noticed (consciously or subconsciously; no dichotomy is intended here), and one advantage which the classroom has over 'natural' learning environments is its ability to provide opportunities for increasing saliency, or making learners consciously aware (Sharwood-Smith 1981, Schmidt 1991) of the existence, meaning, form and use of a given item of language.

Schmidt (ibid) claims that awareness, in this sense, requires (1) perception, (2) noticing and (3) understanding. For learning to take place, however, perception must become noticing: "The existing data

are compatible with a very strong hypothesis: you can't learn a foreign language (or anything else for that matter) through subliminal perception." (ibid: 142). There is nothing controversial about this: such a position is compatible with both cognitive and universal grammar conceptions of language acquisition. But what is it that renders an item sufficiently salient to move beyond the confines of subliminal perception to become noticeable? Schmidt himself suggests that

> ... innate universals and expectancies based on both the native and target languages may all act as unconscious textual constraints on what is noticed. *It also seems plausible that instruction may have a priming effect*, increasing the likelihood of noticing features in input through the establishment of expectancies. (ibid: 143, my italics)

The results of this study are compatible with this position. However, while, on balance, the results suggest that presenting language items does indeed increase their potential noticeability, it is also true that (1) this is not sufficient for learning to take place, and (2) that what is salient for one learner may not become so for another (Allwright 1988).

The first of these caveats is manifestly true in that many learners in our study do not achieve high criterion levels of control of particular morphemes, and also because in some cases accuracy actually declines over time. Both of these factors need to be accounted for in a general learning theory.

The second caveat may be linked to Pienemann's teachability hypothesis (Pienemann, 1987), which argues that "... a given linguistic structure cannot be added through instruction to the learner's interlanguage at any desired point in his/her acquisitional career." (ibid: 154). This is because certain structures are acquired before others because of their lower demands on processing capacity. His analysis is based on transitional structures rather than individual morphemes. We shall nevertheless examine this hypothesis in greater detail below and in chapter four.

3.5.3.2. Acquisition Orders and Individual Variation

In fairness, morpheme order researchers have accepted the existence of a degree of individual variation in acquisition orders:

While it has been shown that L2 development is characterized by the orderly acquisition of structures, variability is also a factor in the L2 process.... individual learners will show idiosyncratic behaviour in certain aspects of language acquisition as in all other behaviour. However, pseudo variability, brought on by shortcomings in researchers' methods, is a more common phenomenon in the literature than real variability. (Dulay, Burt and Krashen, op cit: 229)

It is our contention that such "idiosyncratic behaviour" is, on the contrary, a widespread feature of second language acquisition, and that a major shortcoming in research methods is the obscuring of this variability by the statistical techniques commonly employed.

The tests for individual fit show this quite clearly. However, any developmental aspects in this variation can only be dealt with

adequately using a case study approach, in particular to account for the learners' attempts to express meaning in the target language. This is examined in detail, for the case of the acquisition of past tense in chapter four. Any further discussion is therefore postponed until then.

3.5.3.3. Acquisition Orders and Group Variation

In 3.5.3.2. we were concerned with the learner as an individual. However, within our classroom context it may also be worthwhile investigating the learner as a member of a group, since the input for any one particular group was virtually identical. An examination of figures 3.3 to 3.5. will give us an idea of any similarities and differences within and between groups.

In figure 3.3., for example, there are clear directional similarities in the acquisition of all three past tense forms for each group. However, although groups two and three have not dissimilar V-shaped curves, group one produces inverted V-shapes (A-shaped learning). In figure 3.4., showing the acquisition of the articles, there are once again strong directional similarities - at least within groups one and three - but the third group - group two - offers an inverted version of this direction. Group one also differs, with *THE* and *A* diverging after period two.

It is with the *bound S* morphemes that between group similarities are greatest. In all three groups copula and plural S are produced at

Figure 3.6 (a) - Group One : Past

Figure 3.6 (b) - Group Two : Past

Figure 3.6 (c) - Group Three : Past
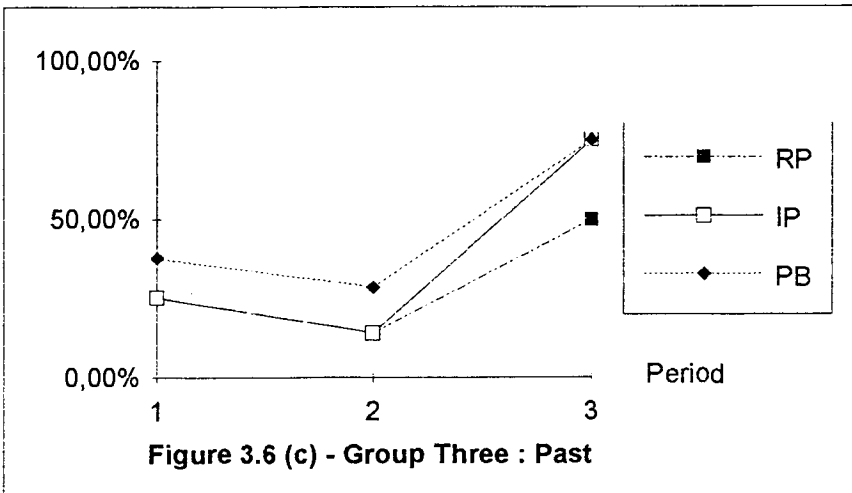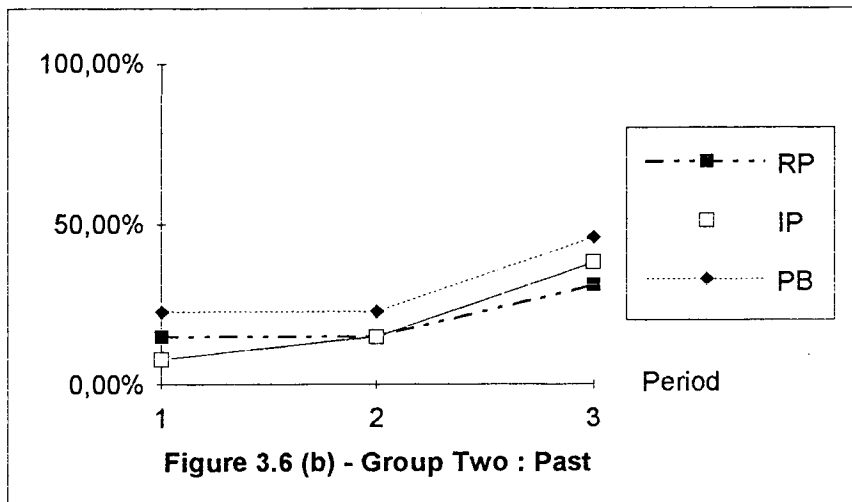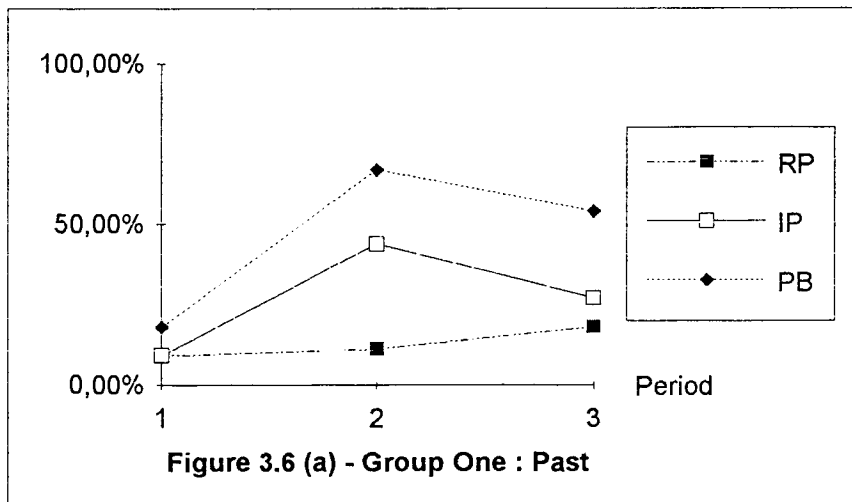
Acquisition Curves For Clustered Morphemes For Each Group For Each Period

Figure 3.7 (a) - Group One : Articles

Figure 3.8 (a) - Group One : S

Figure 3.7 (b) - Group Two : Articles

Figure 3.8 (b) - Group Two : S

Figure 3.7 (c) - Group Three : Articles

Figure 3.8 (c) - Group Three : S
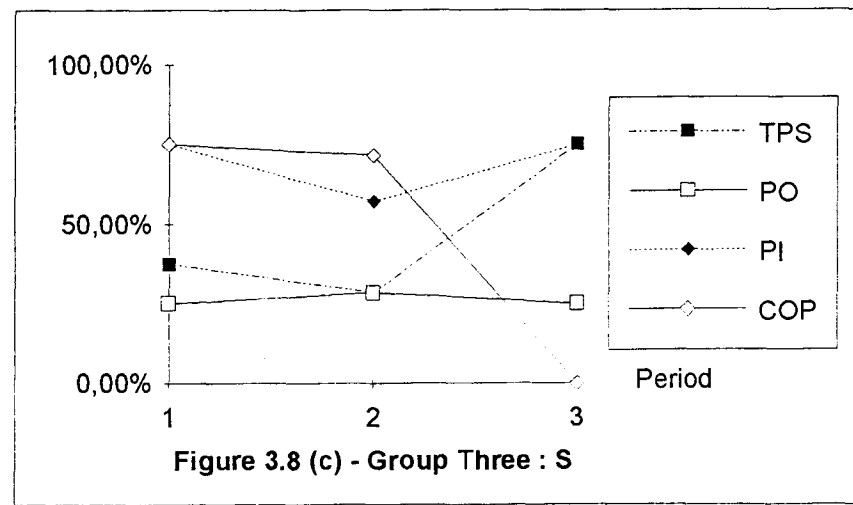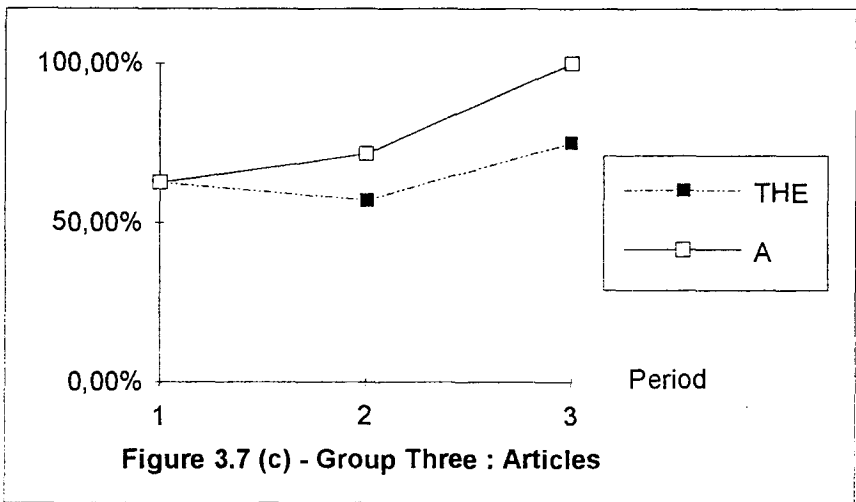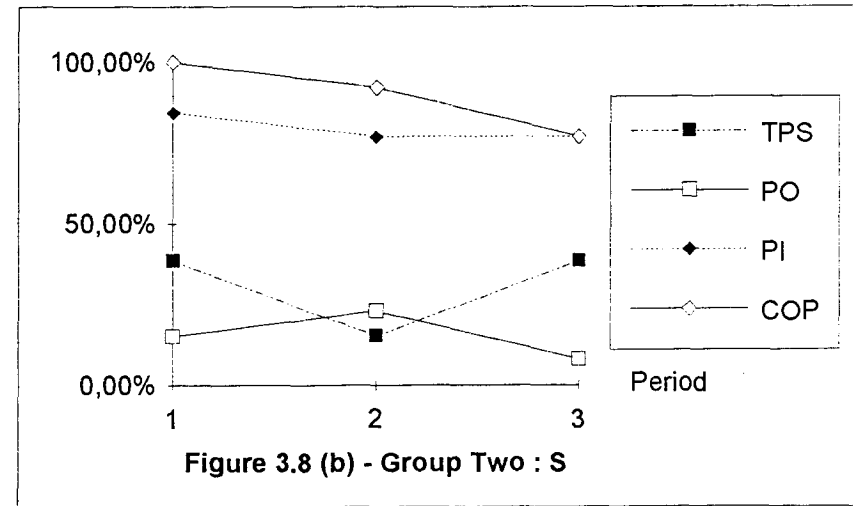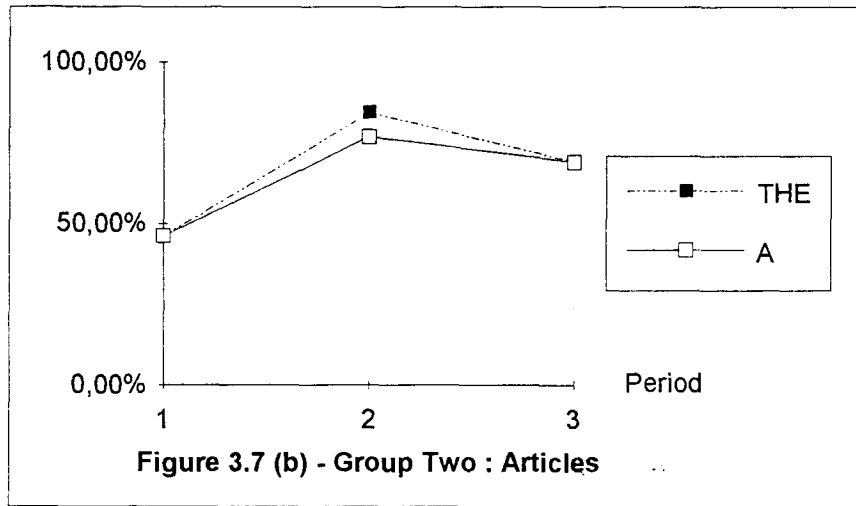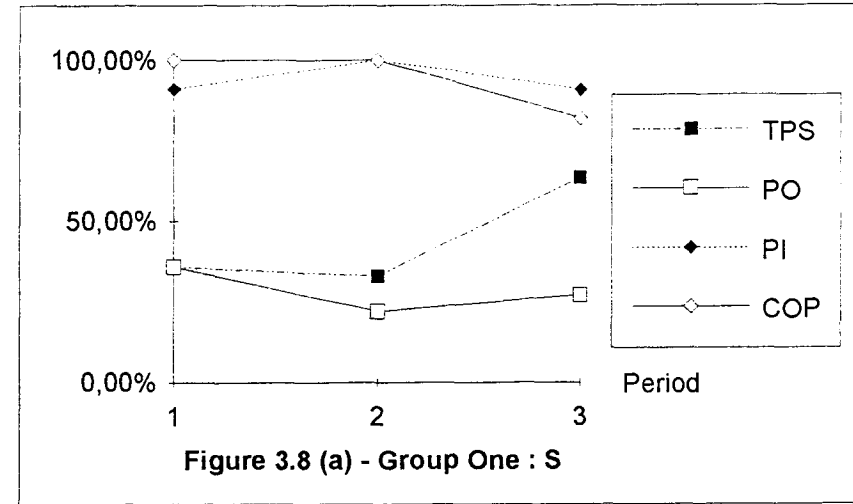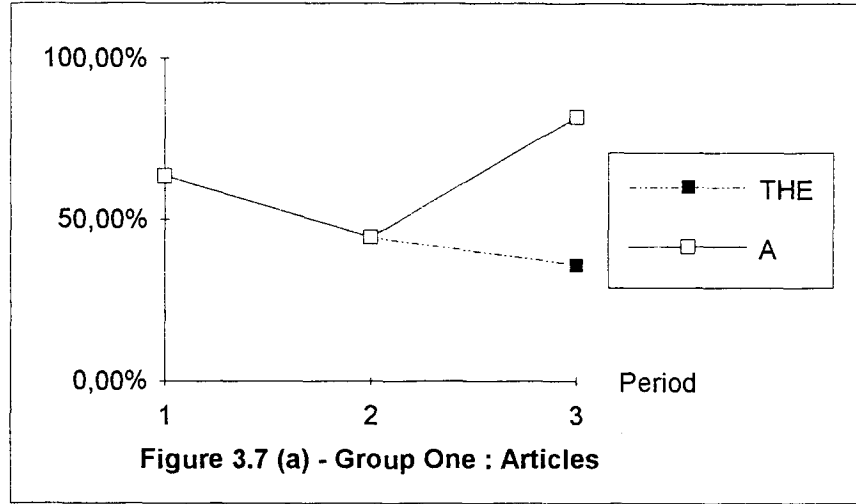
much higher levels of accuracy. Similarly, all three groups show similar directionality for the acquisition of the copula and third person singular; while groups two and three also show identical directionality for the possessive *S*. The acquisition path for the plural *S* differs in all three cases.

The implications for these trends are interesting, although detailed analysis is beyond the scope of this thesis, requiring, as it does, careful control and investigation of the learning environment. Nonetheless, it would appear that:

> (1) for certain morphemes, at least, the nature of the learning environment may have little effect (although one must bear in mind that every attempt was made in this study to control classroom input, so that similarities in acquisitional direction may equally reflect the common input). In this respect it is interesting to note that of the morphemes in question - copula and third person singular - third person singular is one where Pica (1985) noted a difference between classroom and 'natural' learners.

> (2) for other morphemes, the learning environment seems to have an influence, insofar as similar, if not identical, acquisition directions are observable *within* but not necessarily *between* groups. On the other hand, once again similarities between two of the three groups are

frequently observable, which may indicate either that where input is similar learning outcomes will also be similar, or that, indeed, learner-internal factors override environmental factors, unless the input is 'perverted' in some way. Clearly, further research seeking to control input and to map learning outcomes onto this input is necessary to elucidate this.

3.5.3.4. Acquisition Orders and Individual Morphemes

Once again, morpheme order researchers have noted that certain morphemes - especially the articles - show a greater degree of variation between individuals: "... certain structures in English are particularly susceptible to variation across subjects." (Dulay, Burt & Krashen, op cit: 229). In particular, differences between bound and unbound morphemes have been observed. We shall therefore begin by examining the bound/unbound distinction before moving on to a discussion of individual morphemes.

3.5.3.4.1. Bound and Unbound Morphemes

As we have already mentioned, Krashen et al (1978) suggest that much of the variation between morpheme orders can be accounted for if bound and free morphemes are separated out, the former remaining relatively unchanged, while the latter show more variation. As shown in table 3.7., which compares bound and free orders in four studies, there is a certain amount of evidence for this (w = 0.889 for bound

morphemes), although there is nonetheless variation between bound orders.

However, this is not the case in the present study, where the *same* free morphemes (ie grouping *A* and *THE* to produce a single *article* category) show remarkable stability both over time and between groups (only group three in periods one and three does not show perfect agreement). Even with the articles separated, moreover, there is significant correlation both between groups in the same period and between periods within the same group.

Similarly, although there is a significant correlation between all three periods for bound morphemes for group three (w = 0.731), the correlations are much weaker for groups one (w = 0.652) and two (w = 0.488), which further supports our claim that acquisition orders are not stable over time. On the other hand, within each time period there is, with the exception of period two (w = 0.487), significant correlation between groups.

In short, this study finds the opposite to what was expected from previous cross-sectional research: orders for free morphemes remain relatively stable both over time and between groups, whereas bound morphemes show rather more variation. To what can this be attributed? To a large extent, this question requires detailed case study research before an answer can be given. However, it may also be instructive to look at the acquisition of some of the individual morphemes, and it is to this that we turn in the next section.

<u>3.5.3.4.2. Morpheme Clusters</u>

3.5.3.4.2.1. The Past.

A glance at the bar charts in figure 3.9. reveals a similar general trend for all three past morphemes; ie

> (a) a reduction in the number of *no occasions*, reflecting a decrease in avoidance;
> (b) a shift to the left, showing that more subjects are using the morphemes with increasing accuracy.

Yet overall accuracy remains relatively low. It seems unlikely that this be for formal reasons: the rules for creating regular pasts are quite simple and the irregular forms a matter of learning the appropriate form; and the acquisition orders indicate that the irregulars are acquired before or practically at the same time as the regular forms. It would seem more appropriate therefore to seek the causes of poor accuracy scores either in any inherent cognitive difficulties related to expressing pastness, or in (possibly associated) processing difficulties. Further discussion of this is postponed until chapter four.

3.5.3.4.2.2. The Articles.

The bar charts in figure 3.10.. show that the two articles, although varying in overall accuracy, share an essentially similar trend: basic stability over the three periods (ie subjects are to be found in the majority on the left of the bar charts), but with falls in the
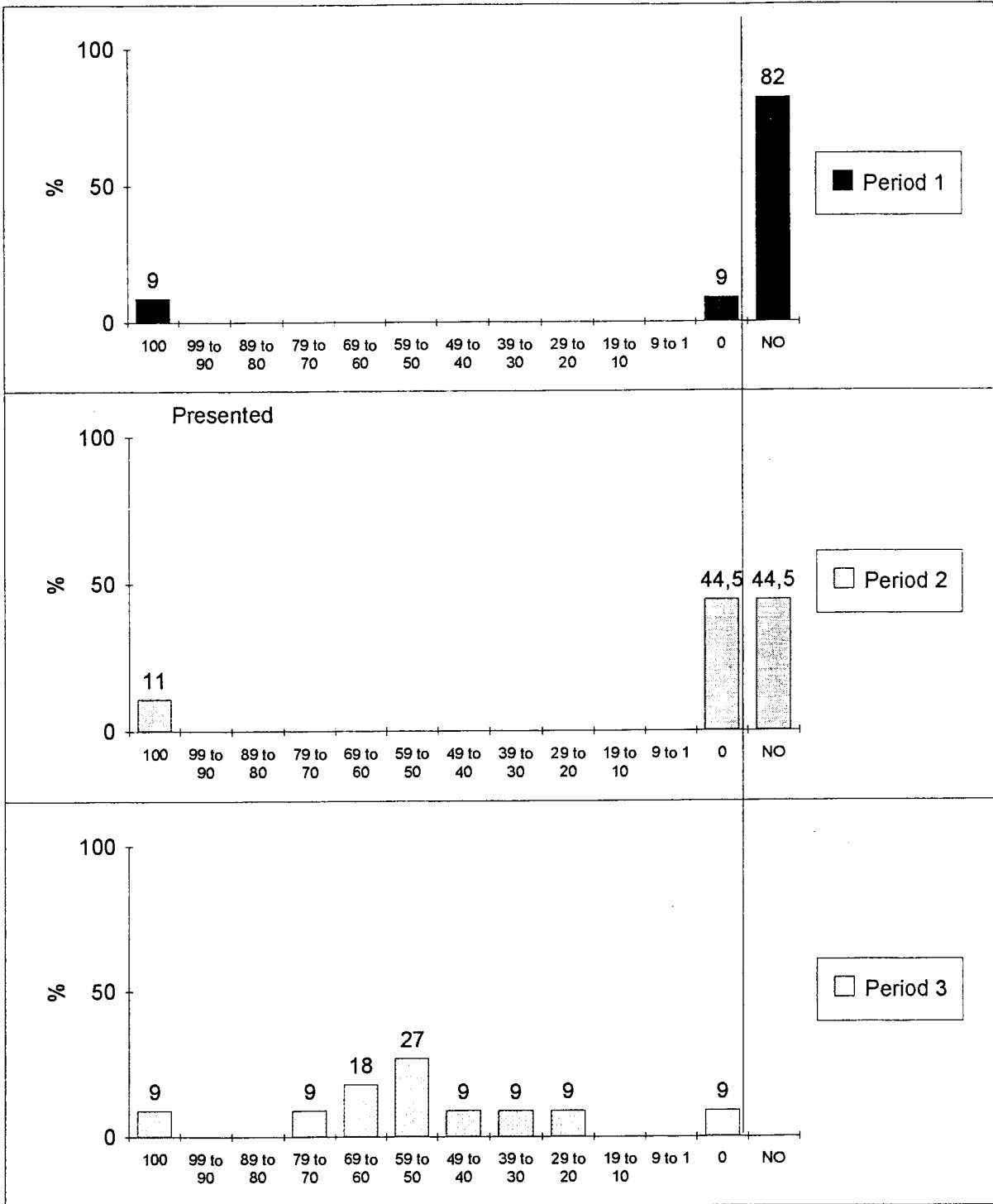
Figure 3.9 (a) - Group One : Regular Past

Graphic Representation of The Modified Group Range (Past Cluster)
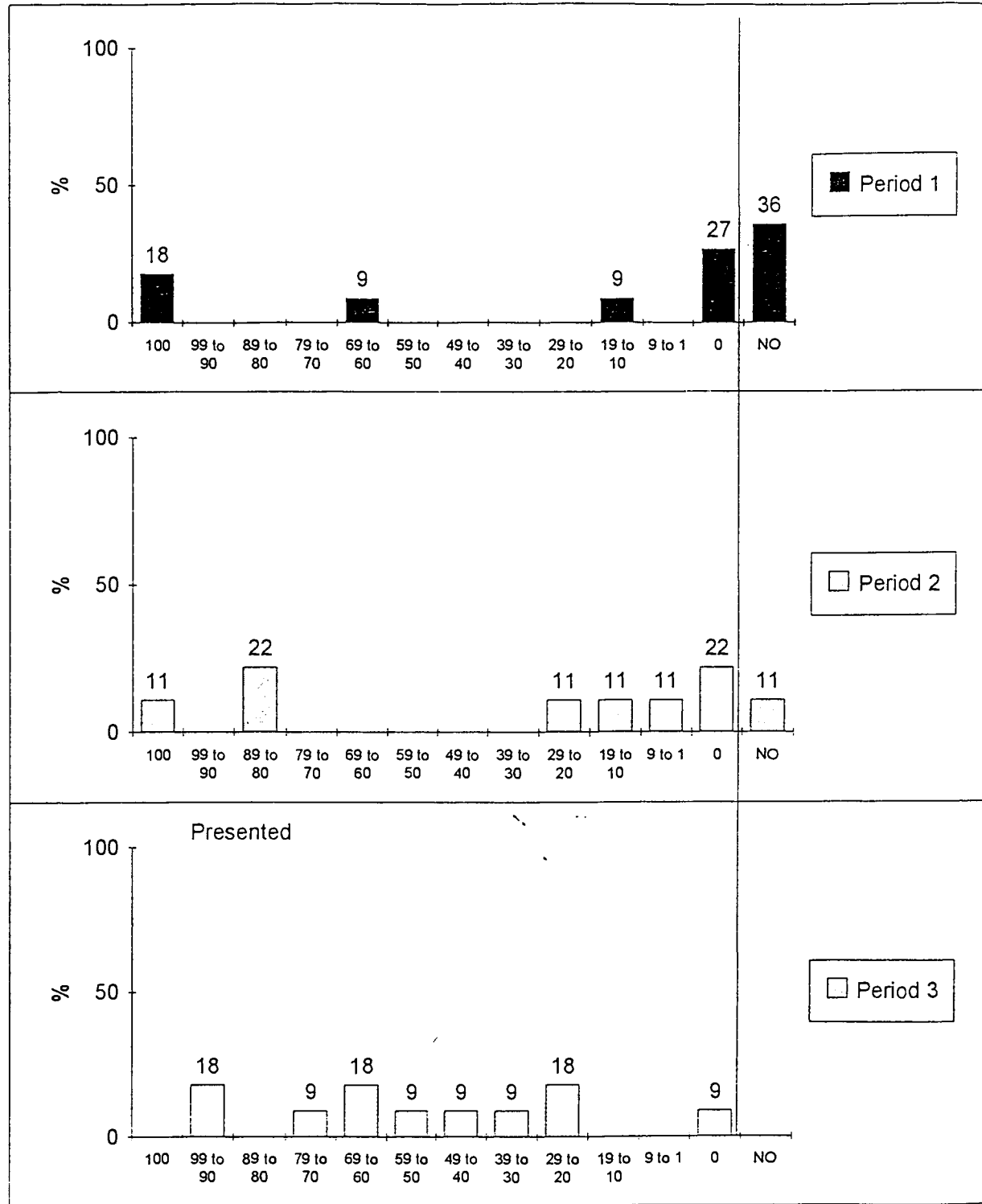
Figure 3.9 (b) - Group One : Irregular Past
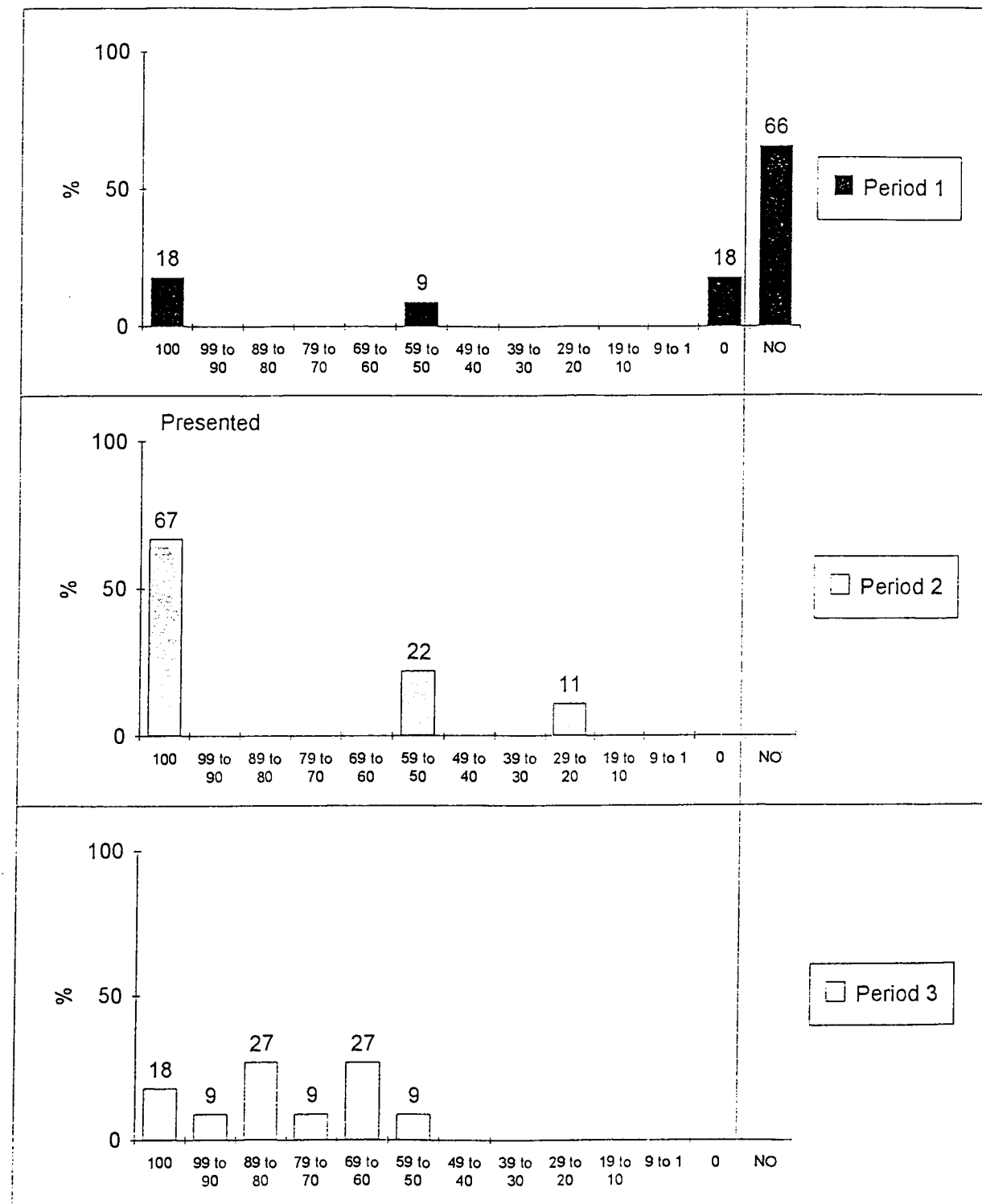
Figure 3.9 (c) - Group One : Past BE
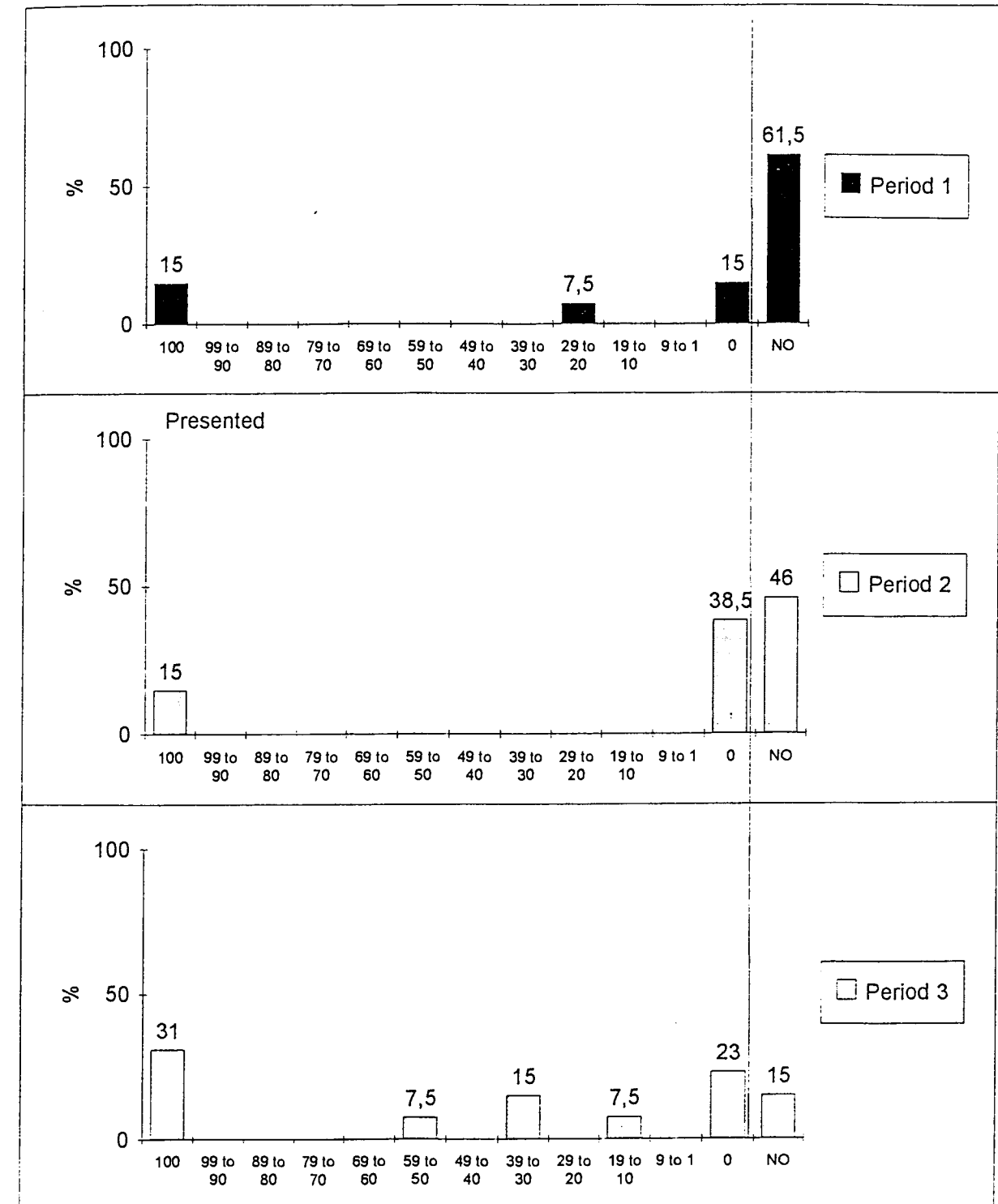
Figure 3.9 (d) - Group Two : Regular Past
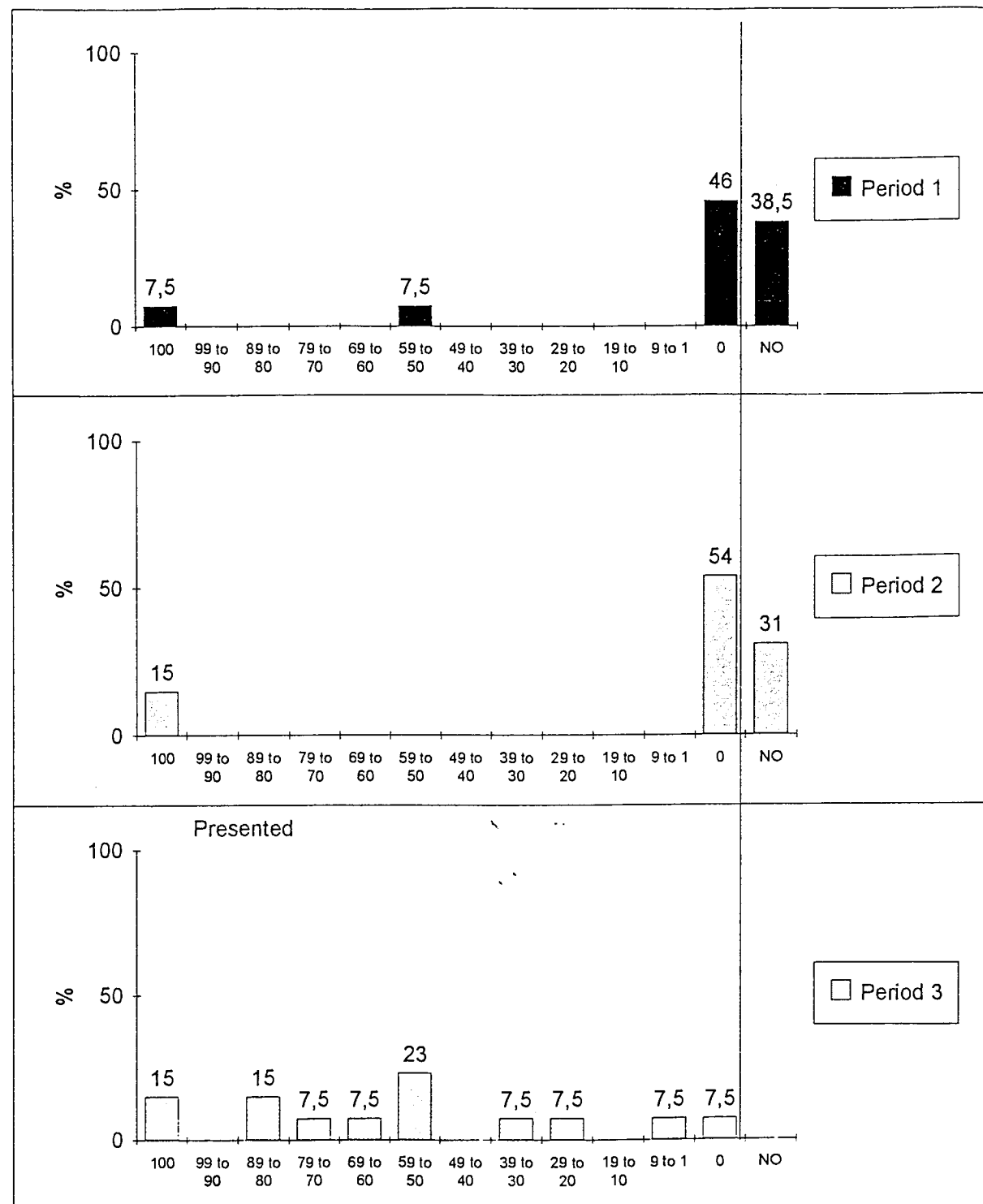
Figure 3.9 (e) - Group Two : Irregular Past
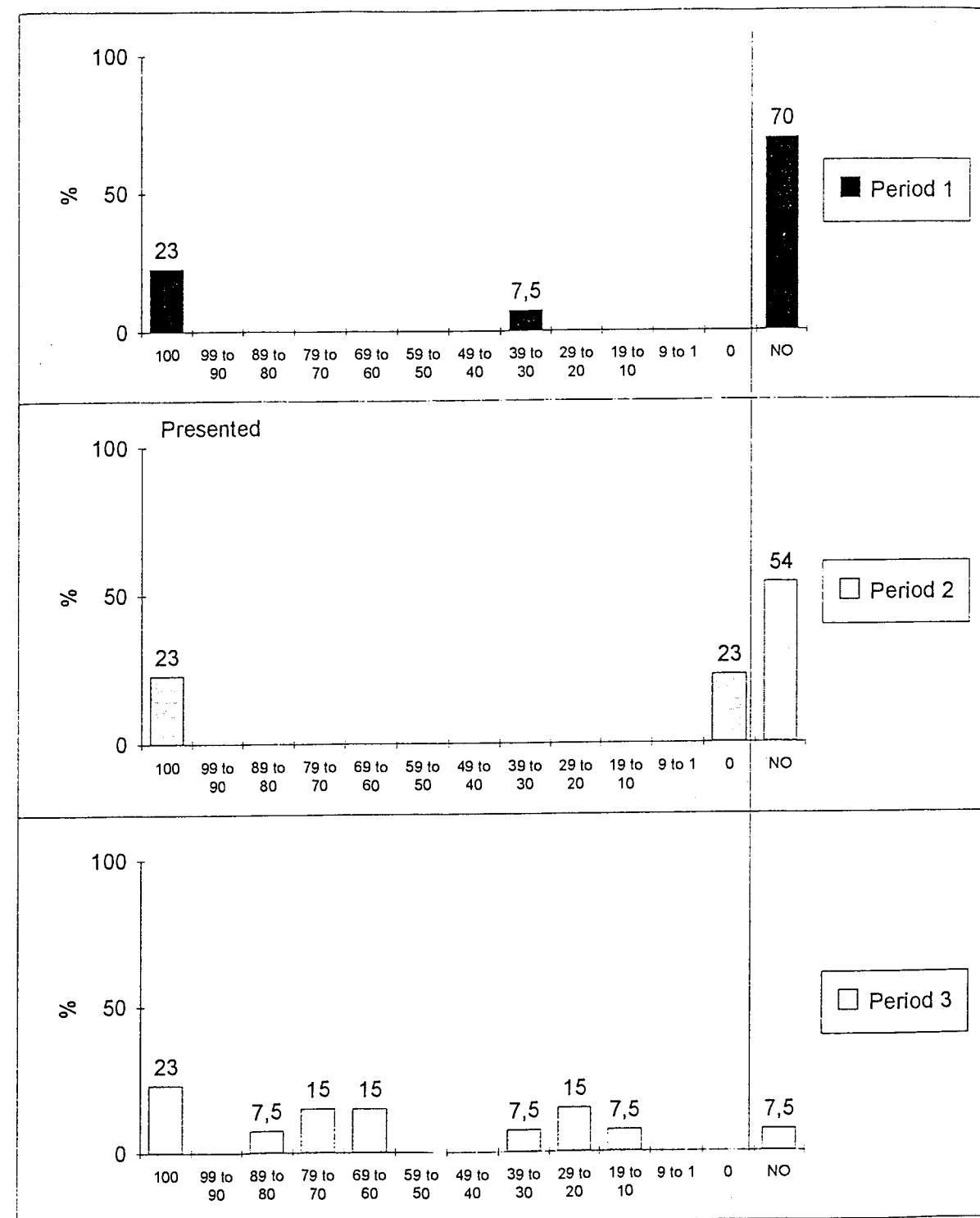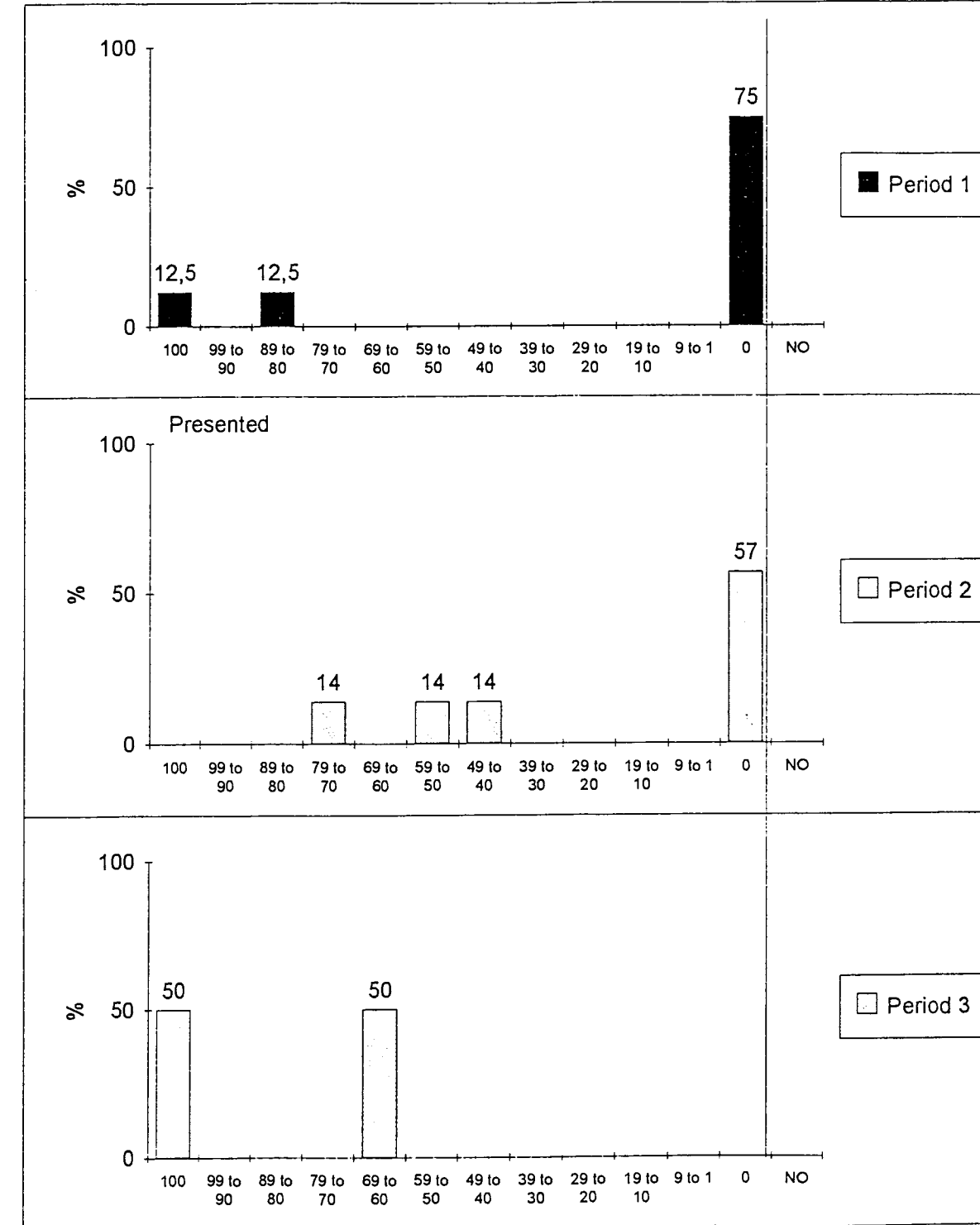
Figure 3.9 (g) - Group Three : Regular Past
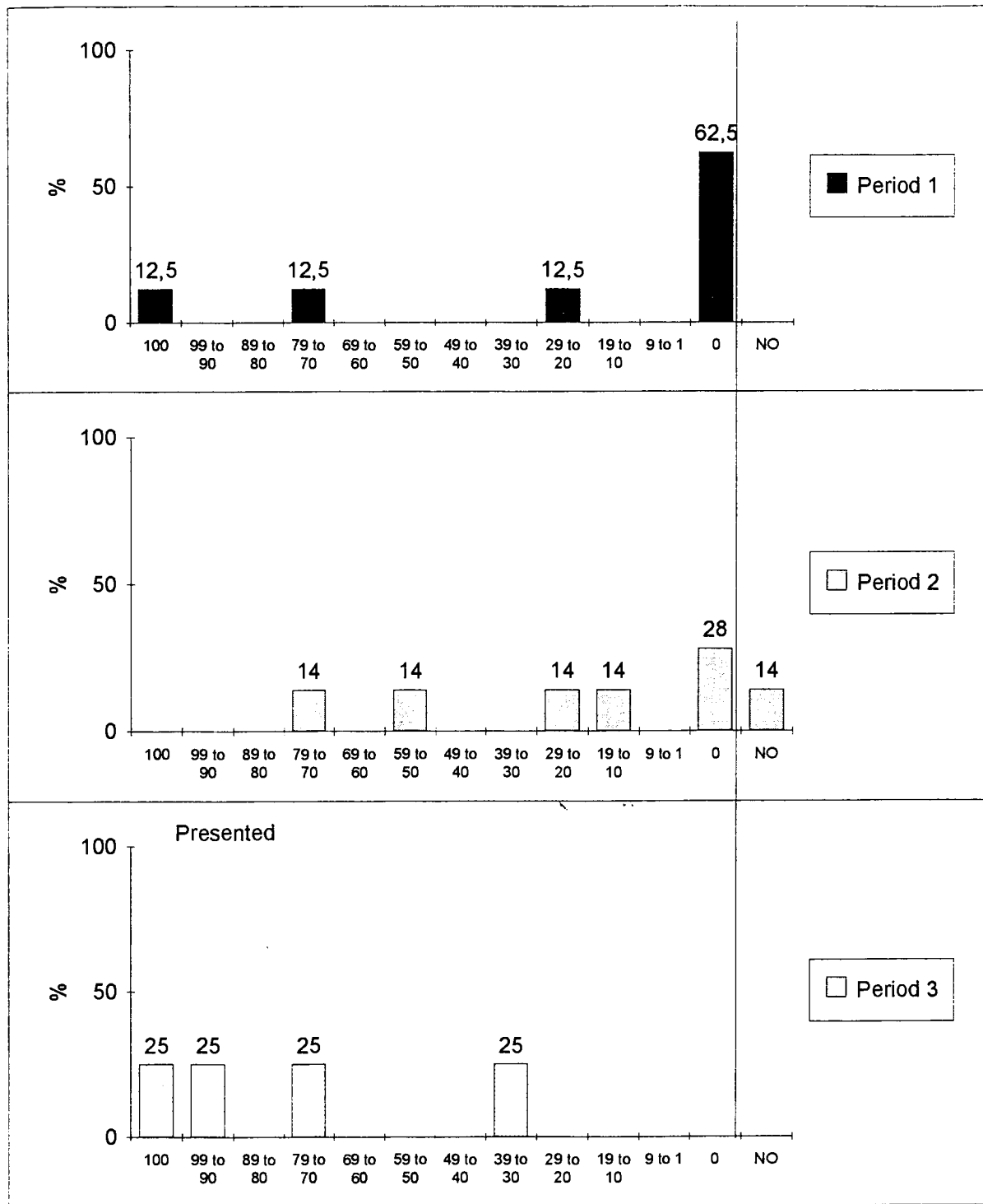
Figure 3.9 (h) - Group Three : Irregular Past
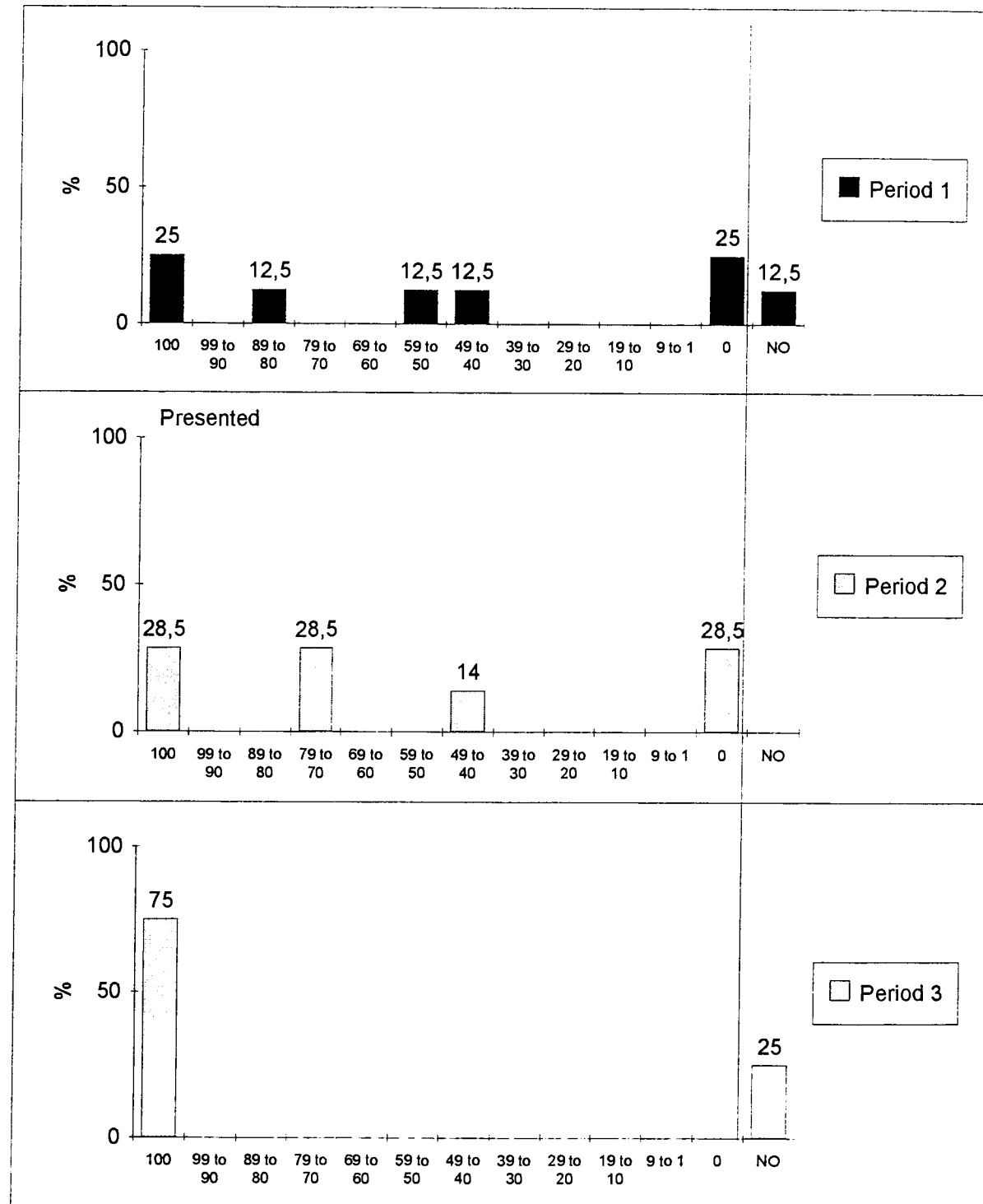
Figure 3.9 (i) - Group Three : Past BE

highest, particularly 100%, accuracy categories, and variation.

As with the past cluster, it seems improbable that this can be imputed to formal difficulties. A more detailed analysis taking into account the meanings expressed by *A* and *THE* would therefore appear to be necessary, although it is beyond the scope of this thesis.

3.5.3.4.2.3. Bound *S*.

As can be seen in figure 3.11., the three bound *S* morphemes do not behave in generally similar ways. Indeed, there is sufficient variation between them to suggest that it may be inappropriate to group language items on purely morphological grounds.

The plural, for example, remains fairly stable, in terms of numbers of subjects using it with a 'reasonable' degree of accuracy, to the left of the charts. On the other hand, there is considerable *instability* in terms of accuracy. It seems unlikely that this be related to either formal difficulty, since plural formation is relatively straightforward, or cognitive difficulty, insofar as the meaning is transparent. It therefore appears more probable that it reveals evidence of unsureness among the subjects, or the impact of further learning on what is already acquired.

The third person singular *S* shows a similar general trend - ie shift to the left - as the past cluster; with two exceptions: (a) an increasing or stable number of *no occasions*, paralleling the increased use of the past; and (b) greater accuracy overall. This greater
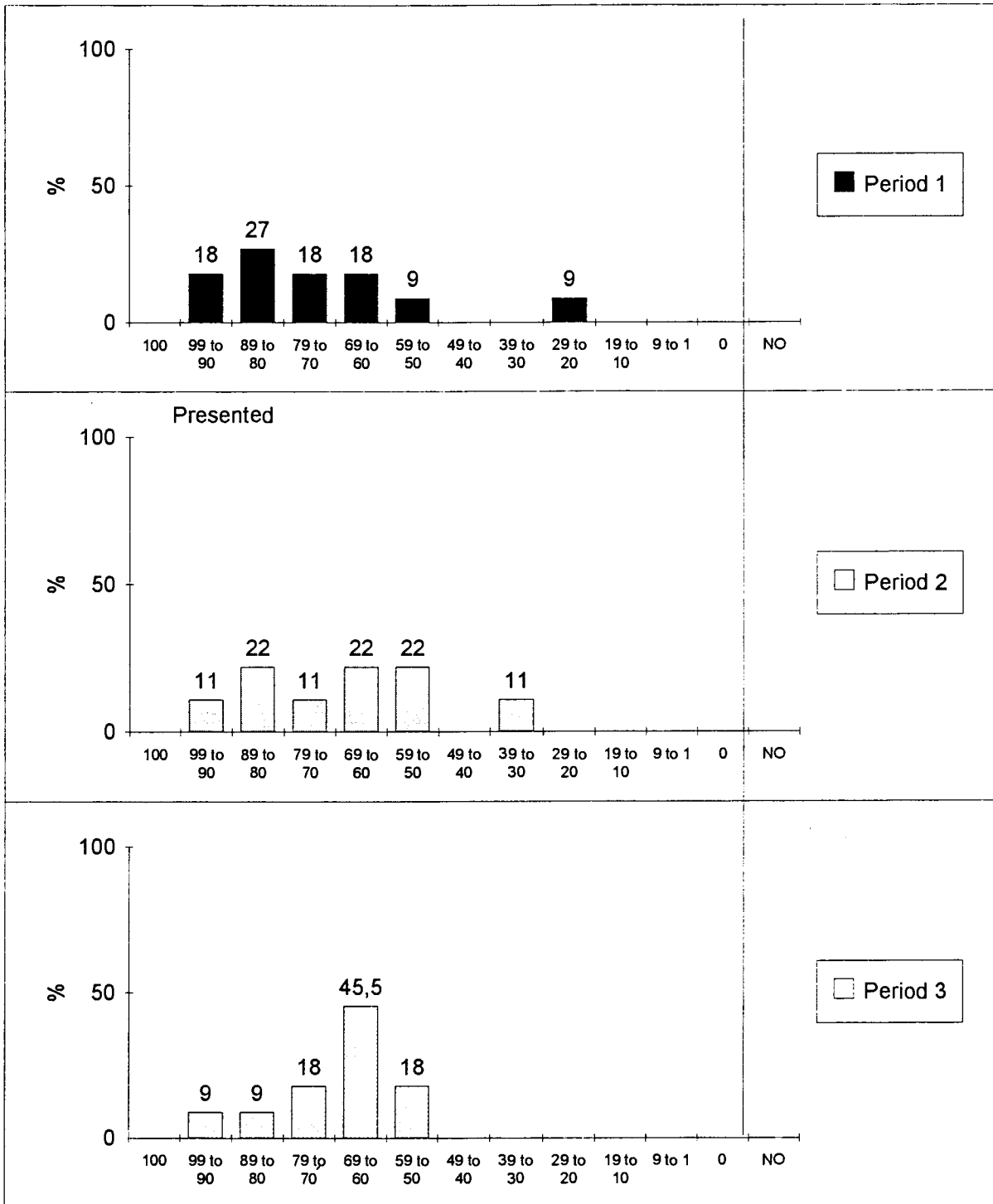
Figure 3.10 (a) - Group One : The

Graphic Representation of the Motified Group Range (Article Cluster)
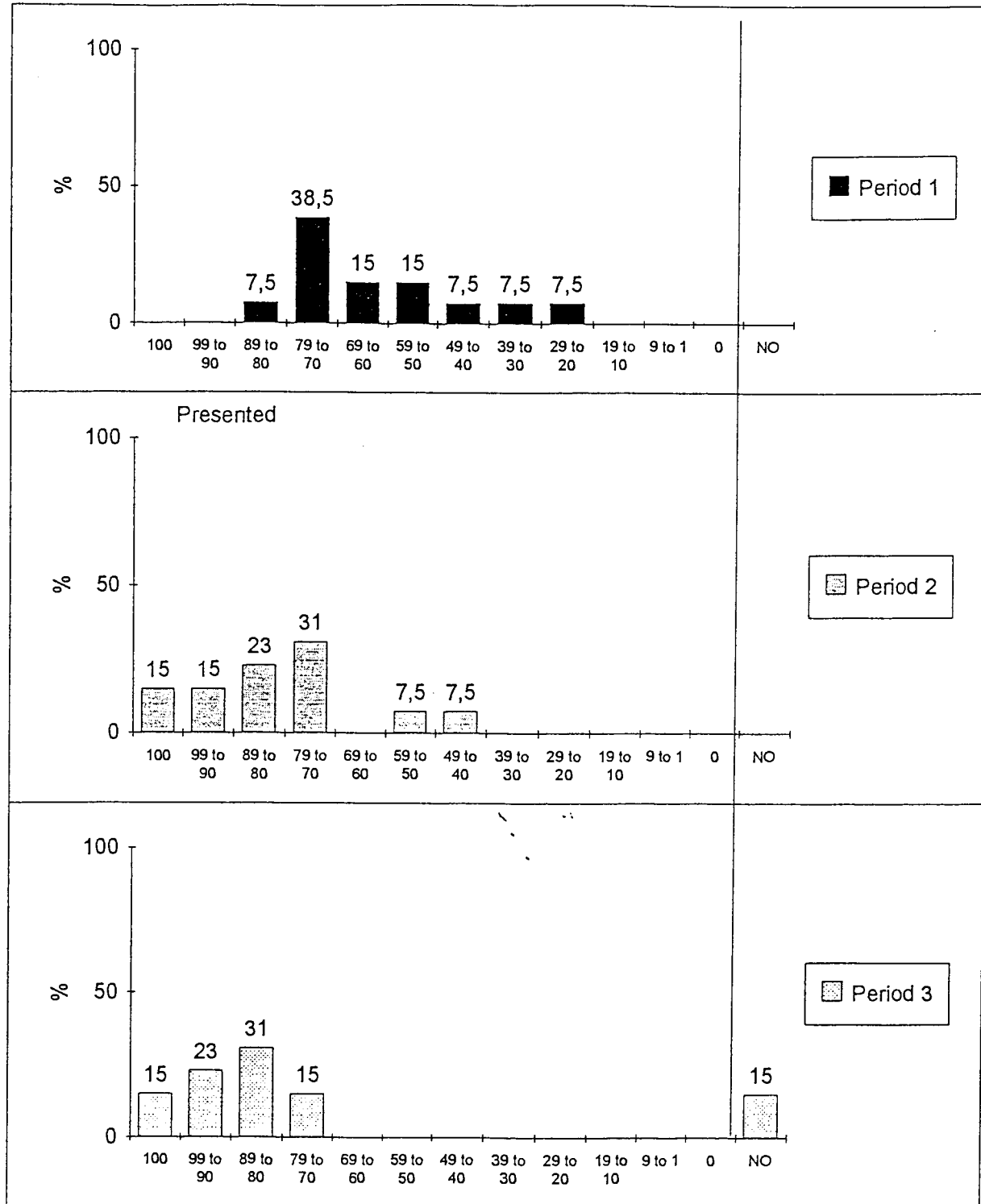
Figure 3.10 (b) - Group Two : The
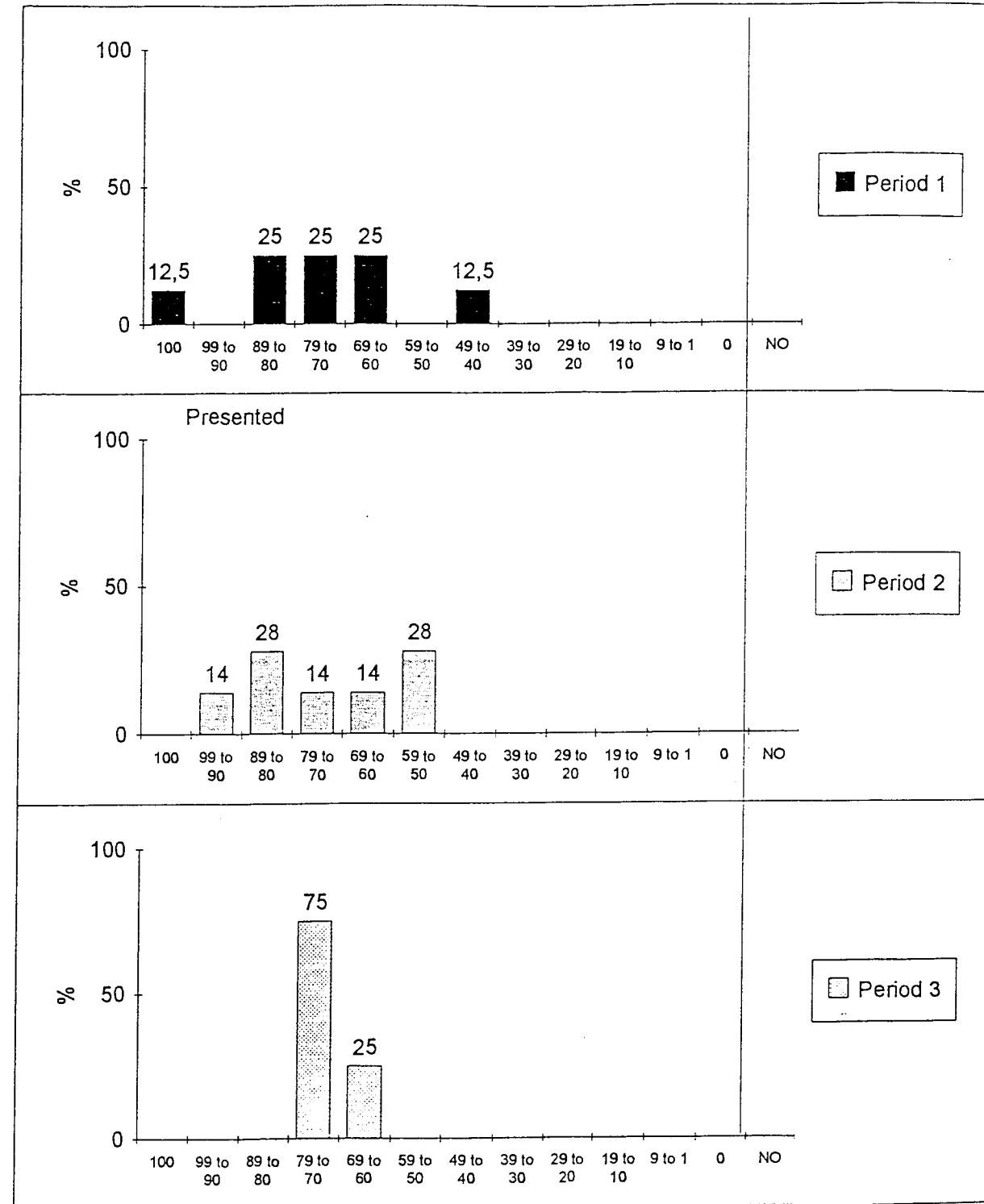
Figure 3.10 (c) - Group Three : The
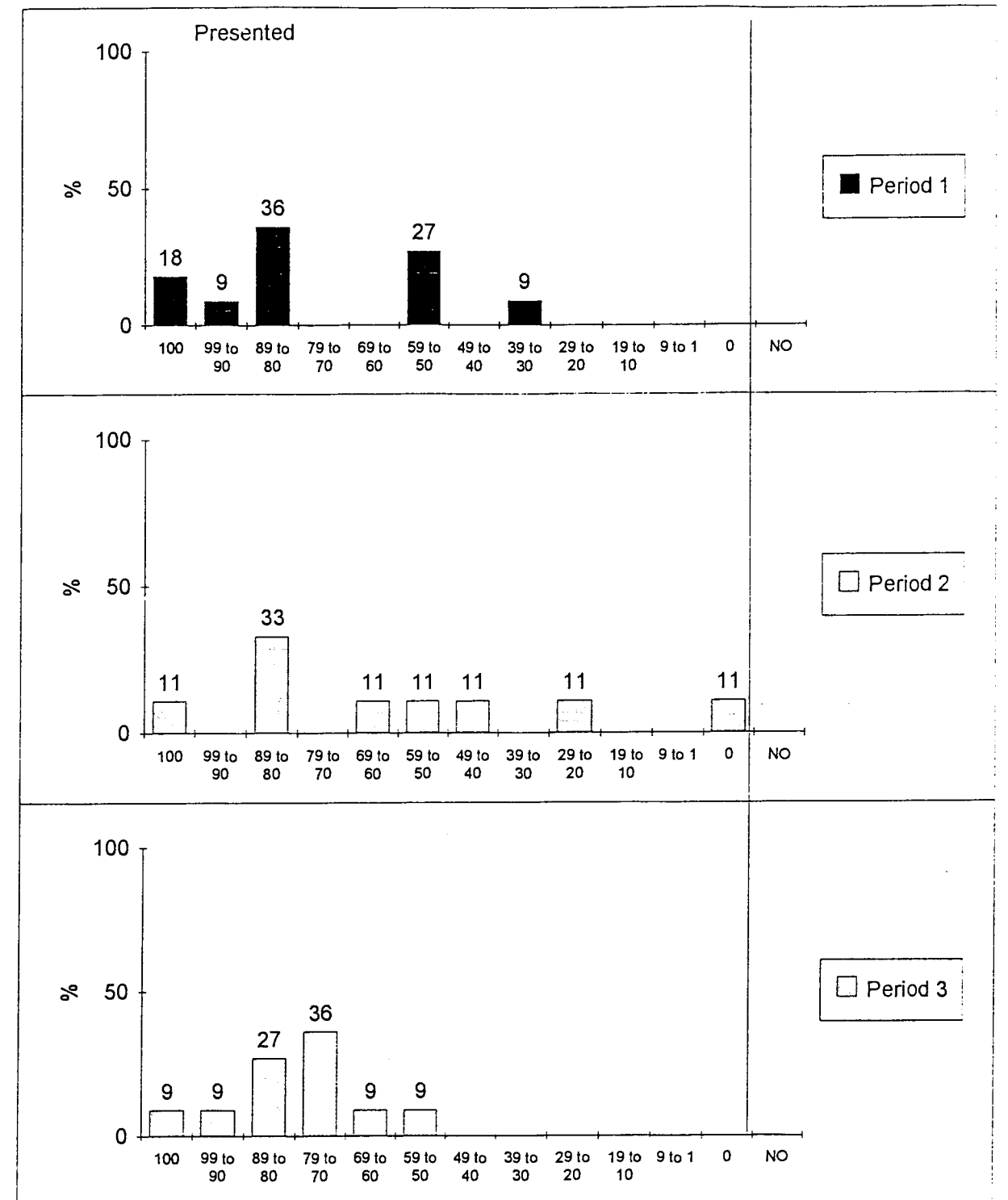
Figure 3.10 (d) - Group One : A
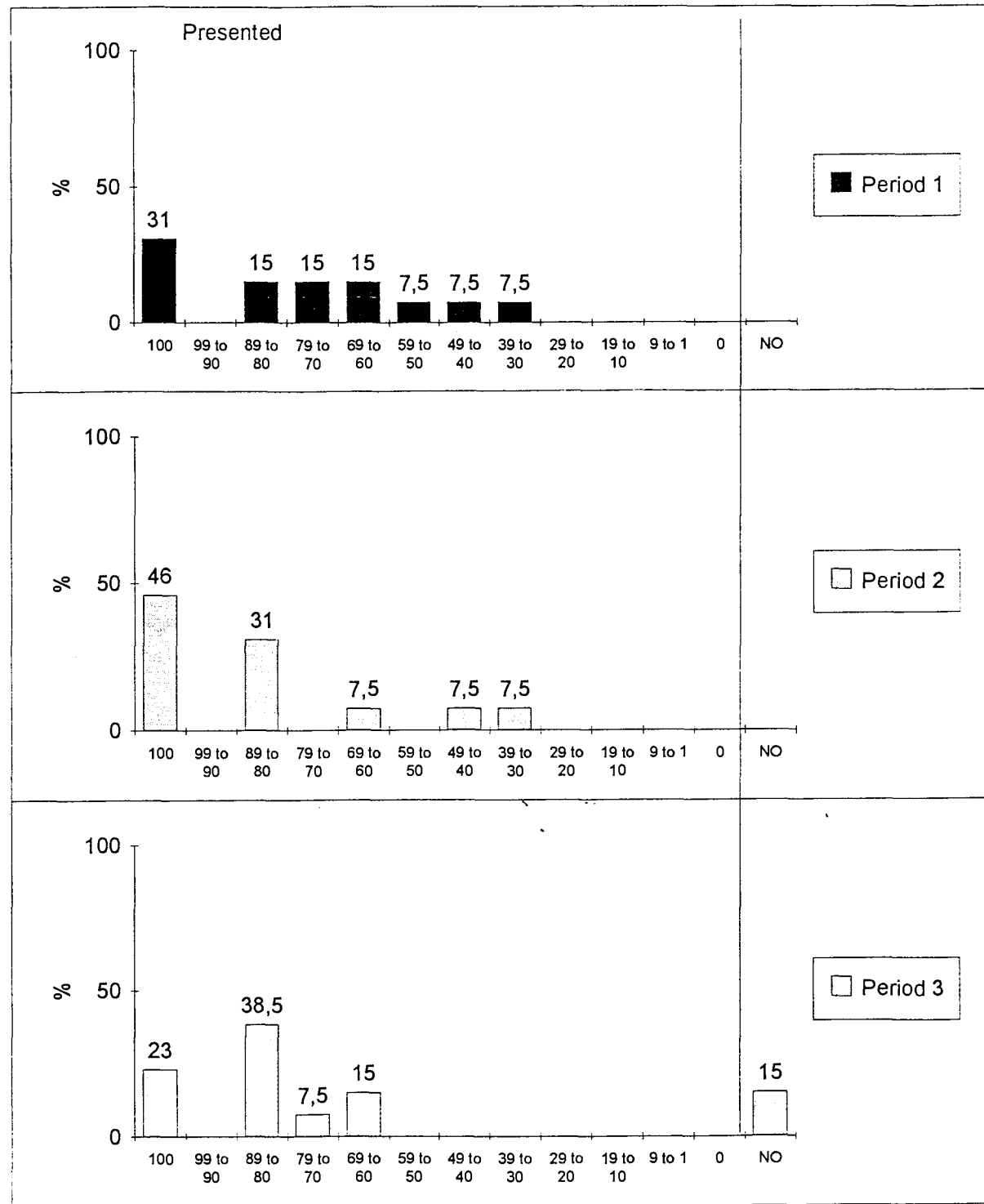
Figure 3.10 (e) - Group Two : A
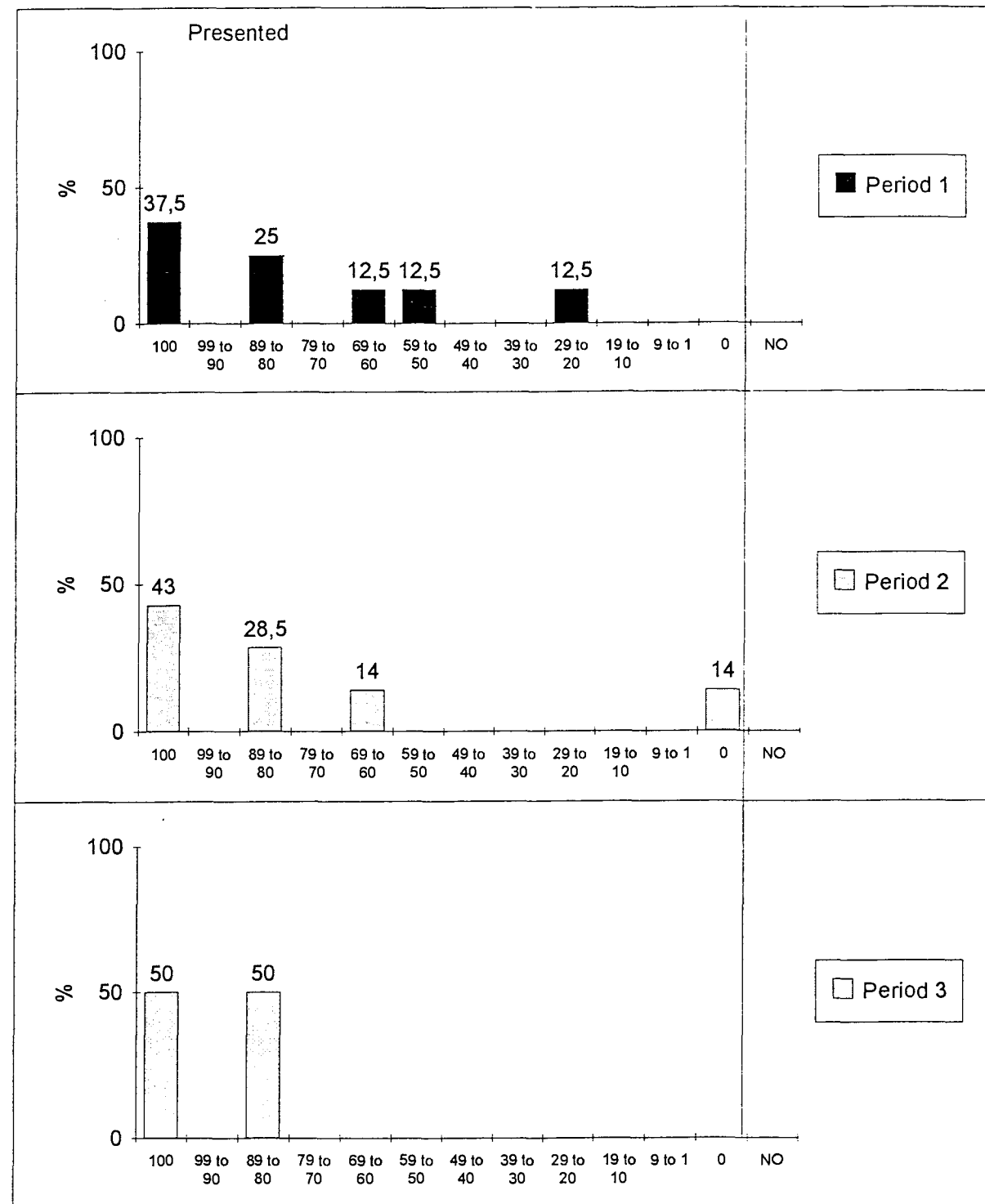
Figure 3.10 (f) - Group Three : A
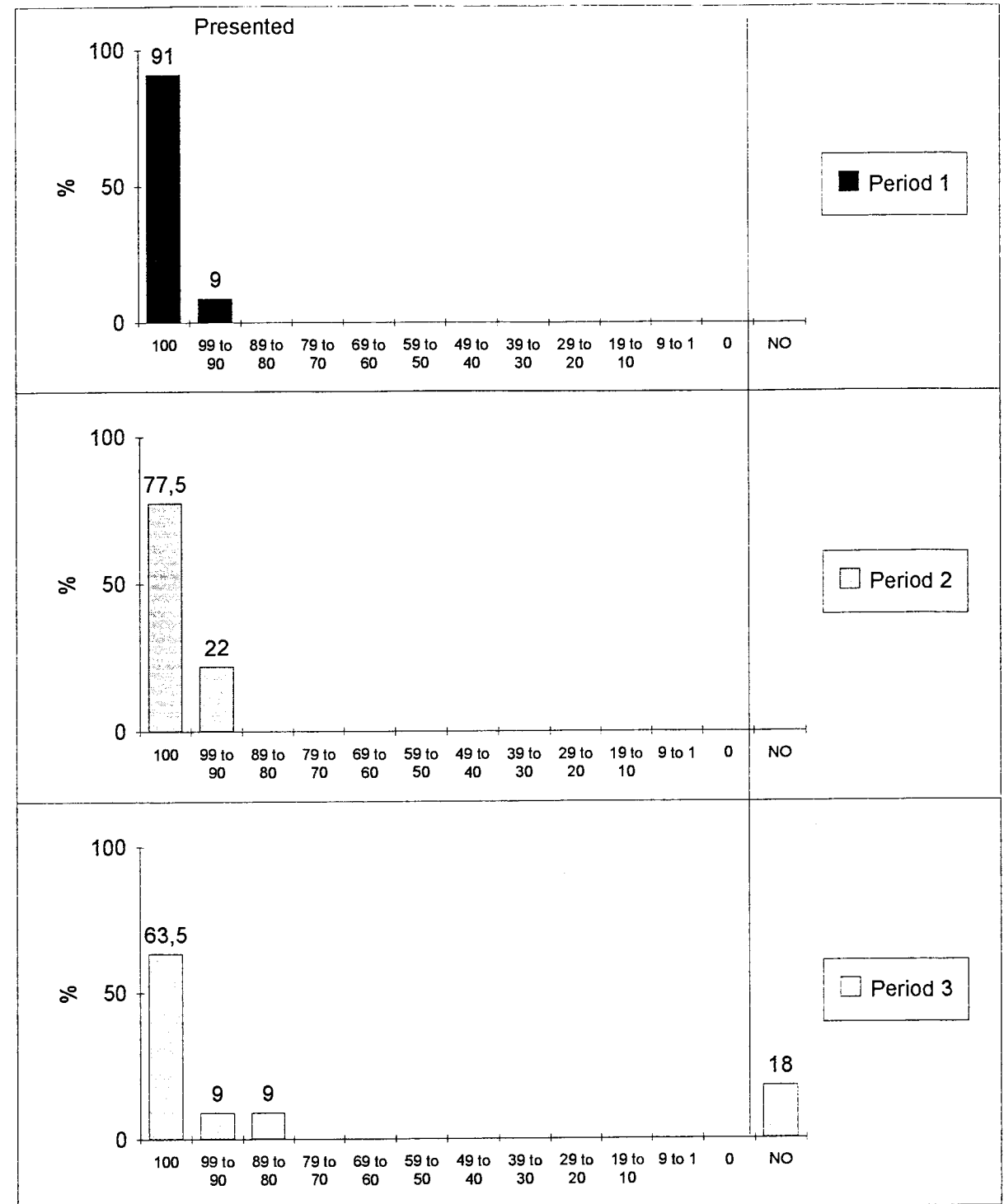
Figure 3.11 (a) - Group One : Copula

Graphic Representation of the Modified Group Range (S Cluster)
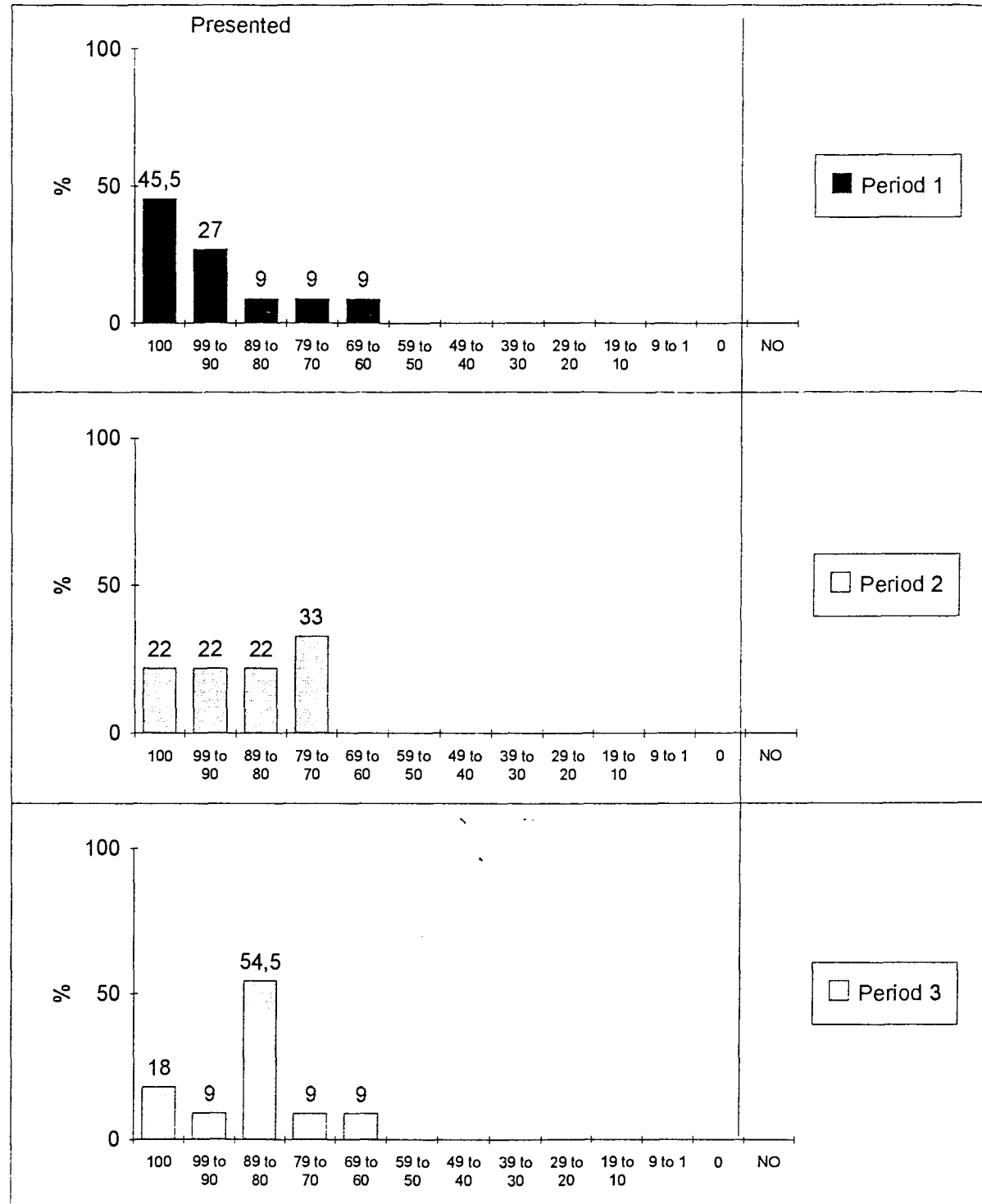
Figure 3.11 (b) - Group One : Plural S

Period 1

Period 2

Period 3

45,5 27 9 9 9

22 22 22 33

54,5 18 9 9 9
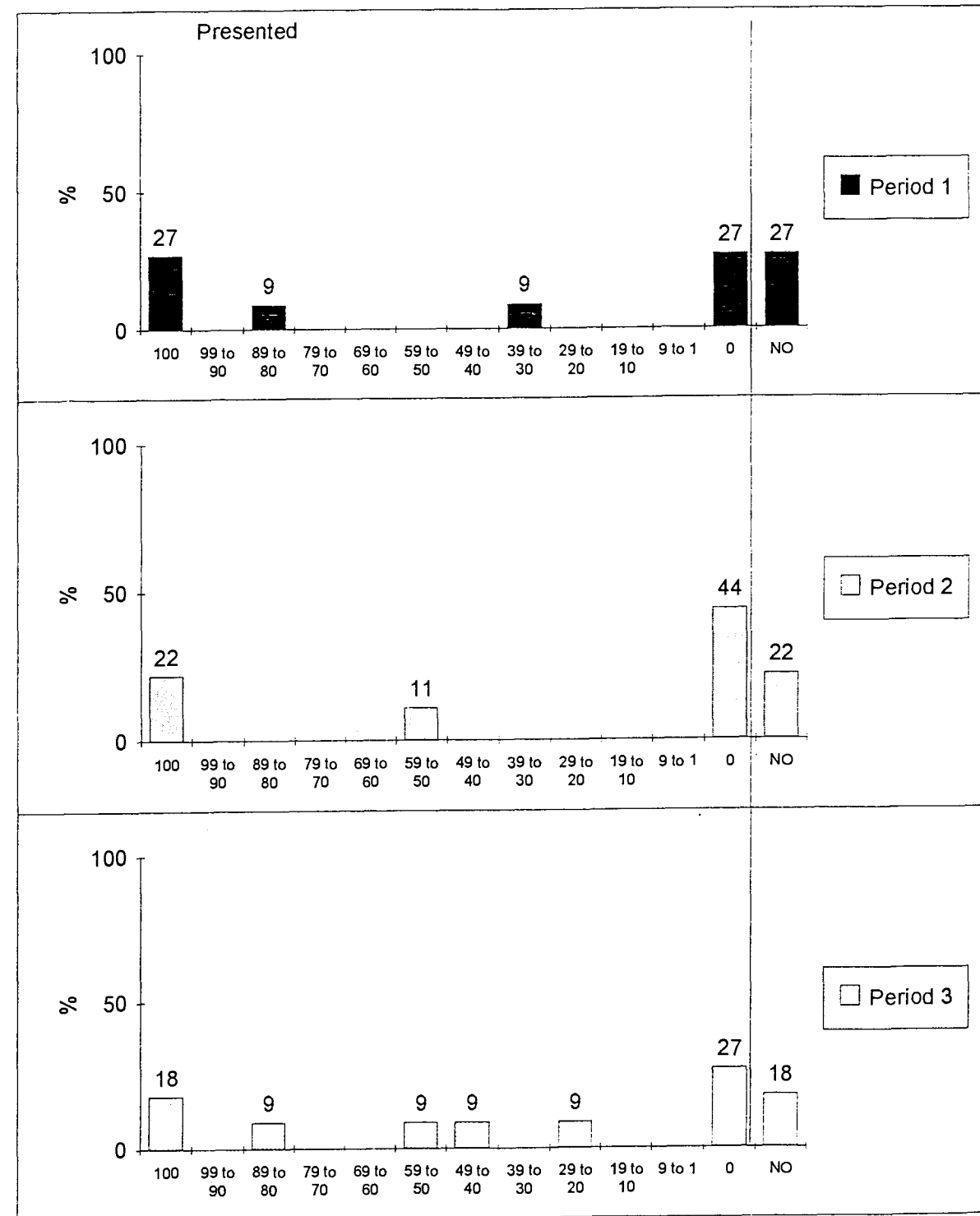
Figure 3.11 (c) - Group One : Possessive S

Period 1

Period 2

Period 3

27 9 9 27 27

22 11 44 22

18 9 9 9 9 27 18
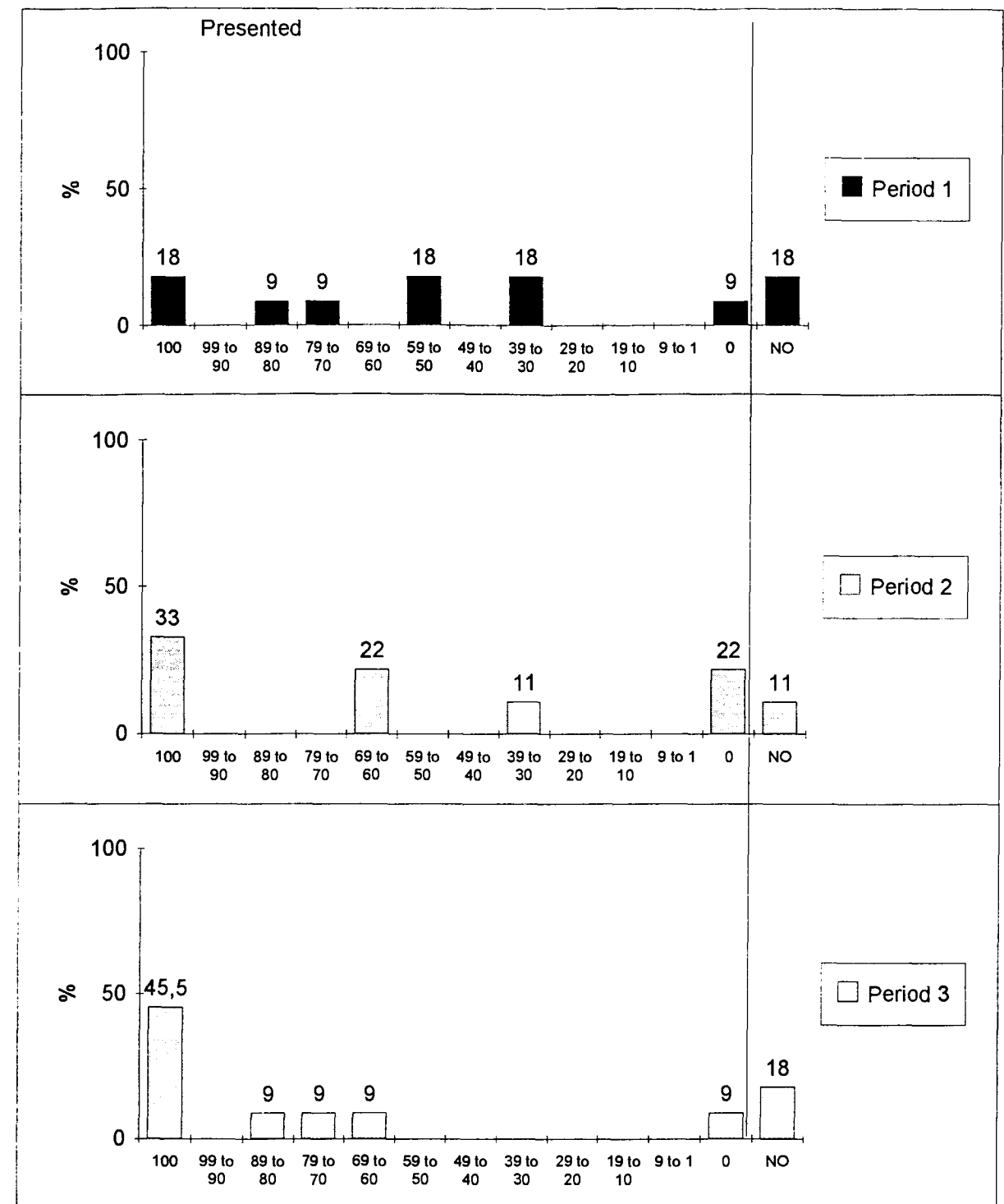
Figure 3.11 (d) - Group One : Third Person Singular
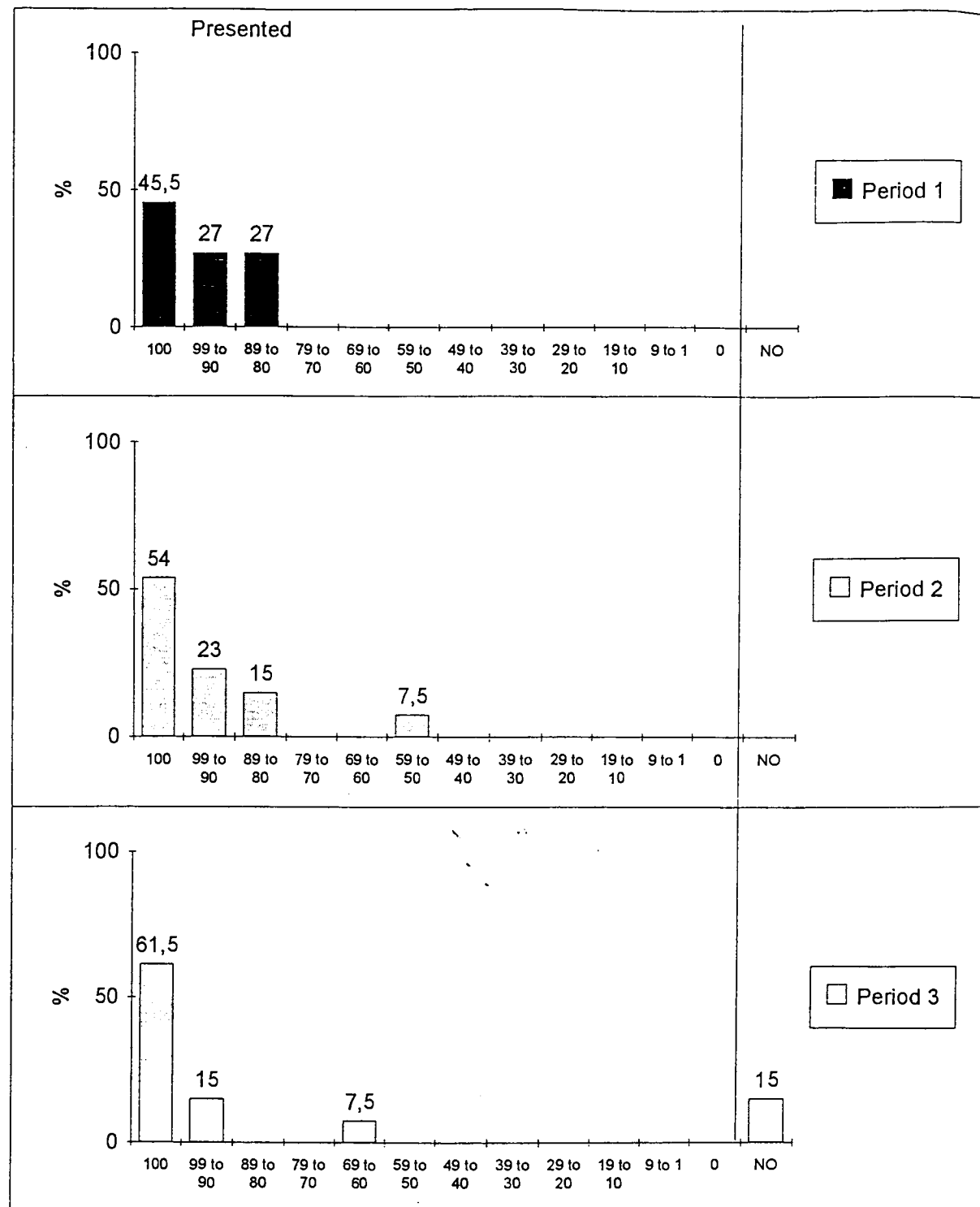
Figure 3.11 (e) - Group Two : Copula
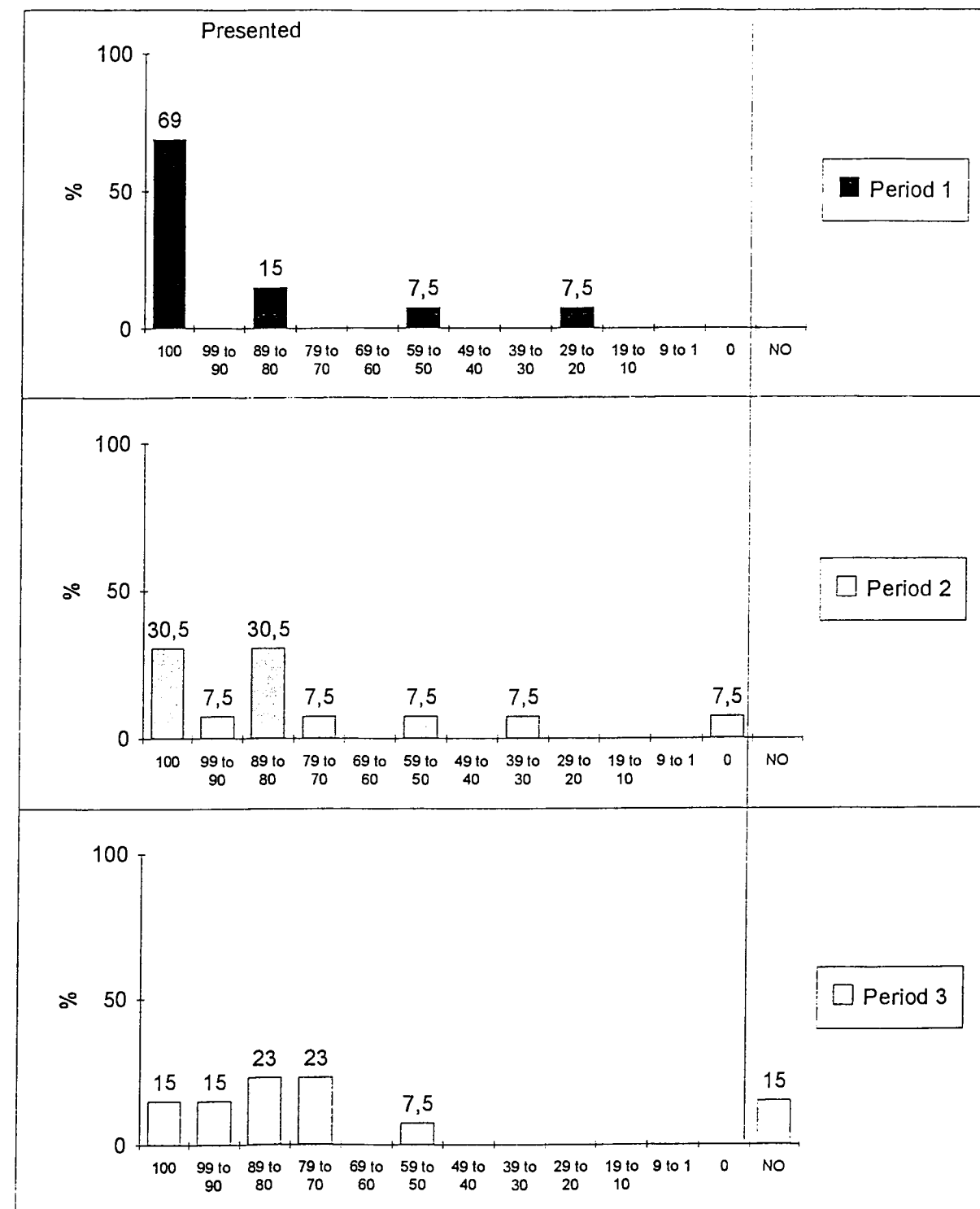
Figure 3.11 (f) - Group Two : Plural S
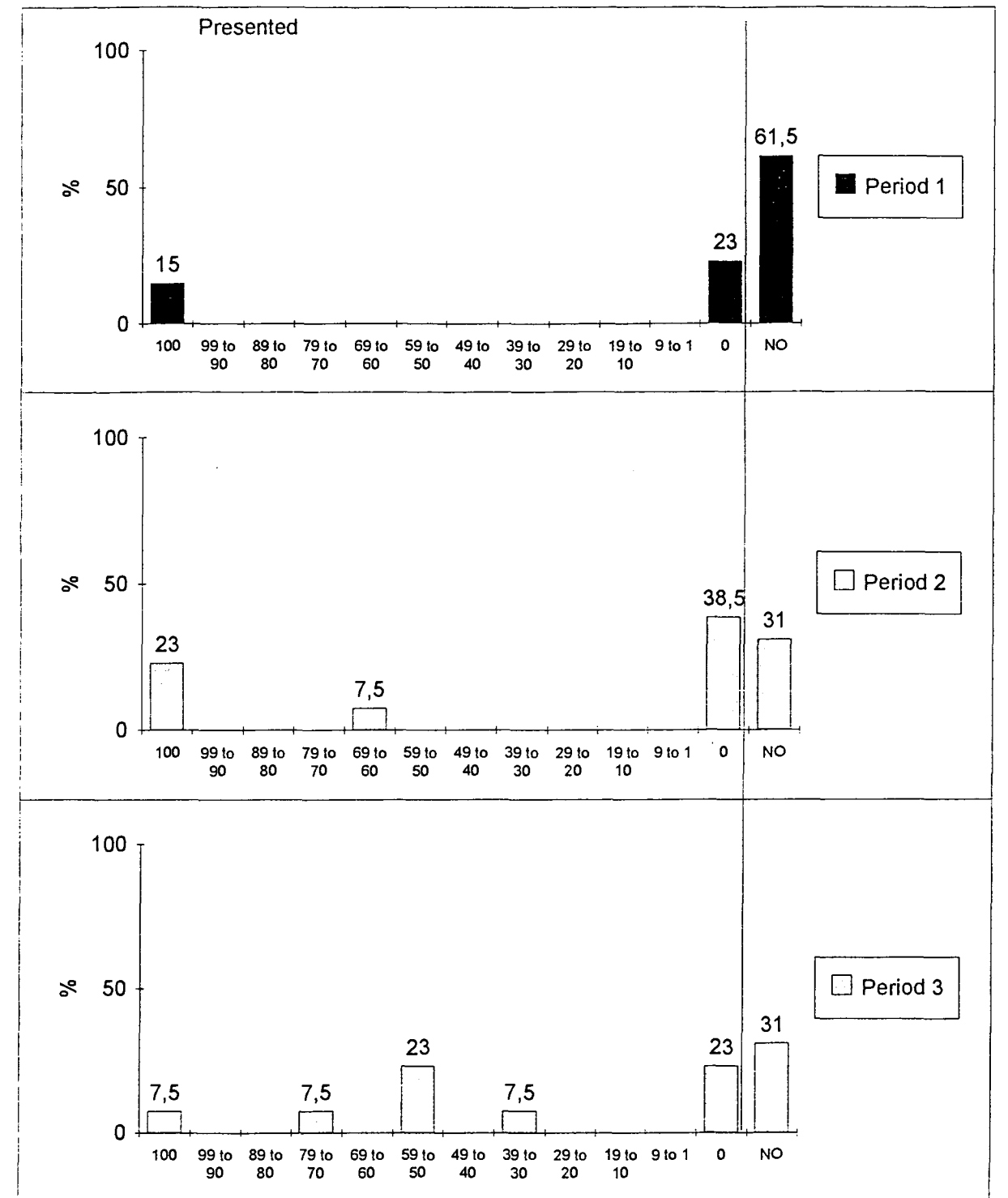
Figure 3.11 (g) - Group Two : Possessive S
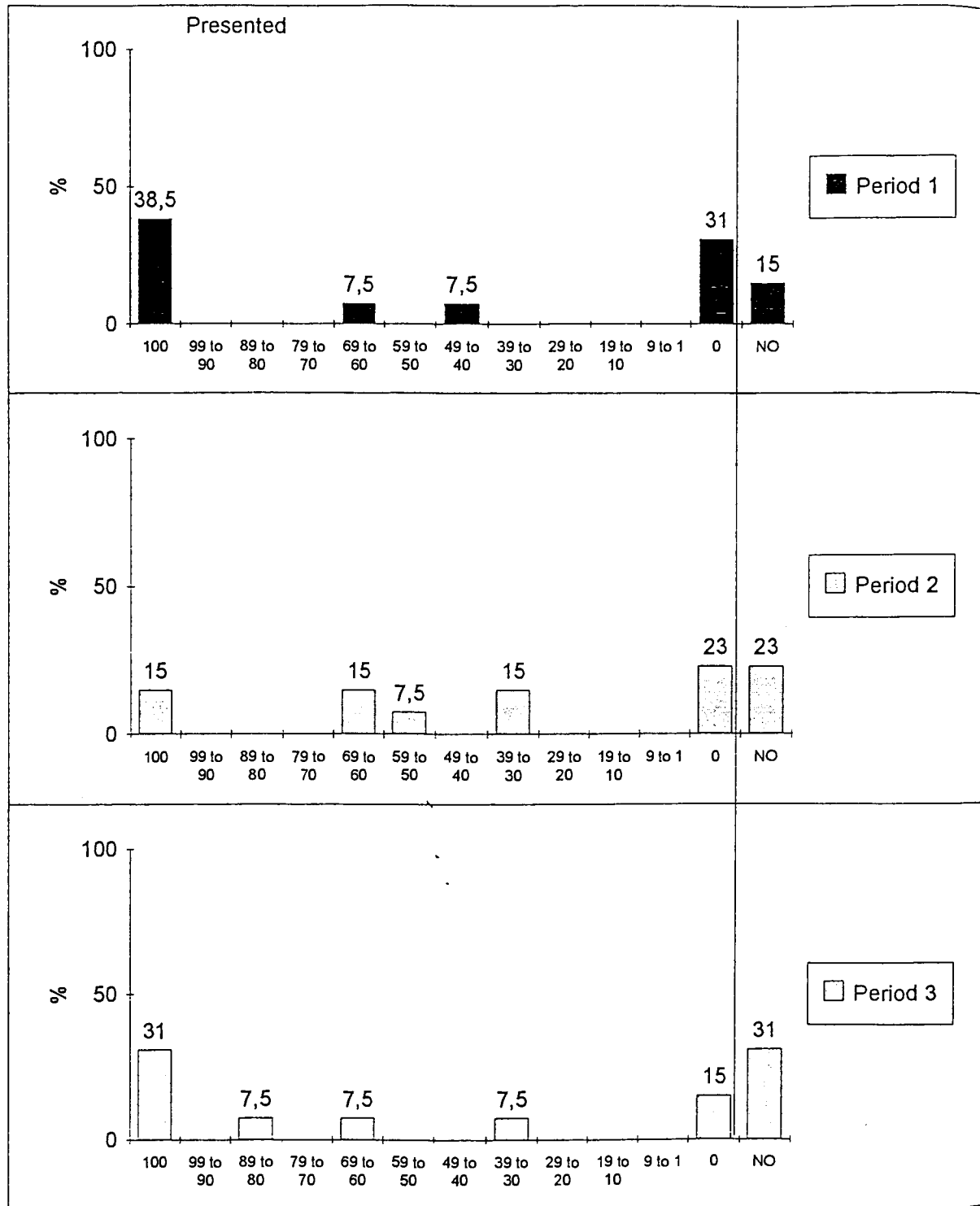
Figure 3.11 (h) - Group Two : Third Person Singular
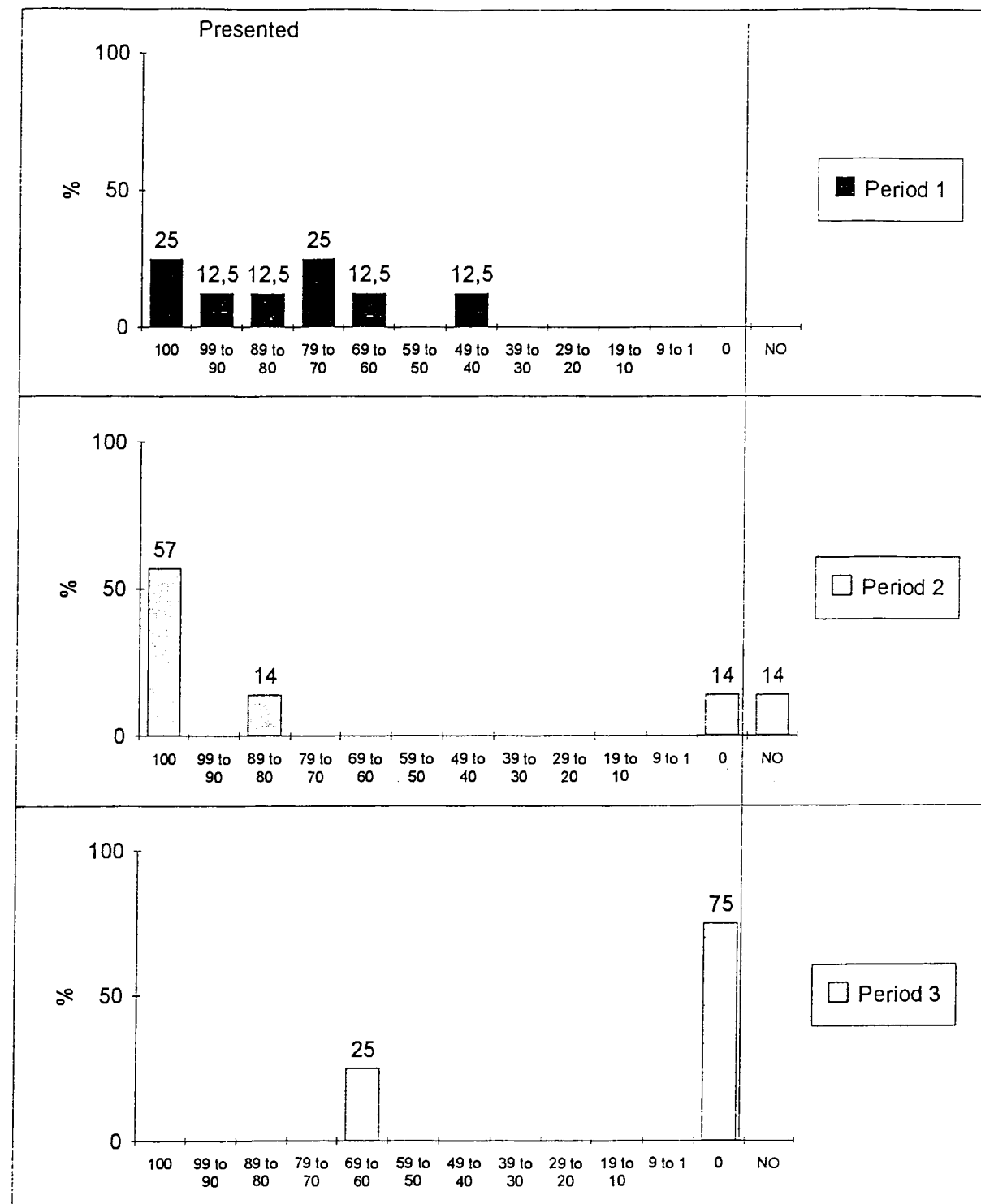
Figure 3.11 (i) - Group Three : Copula
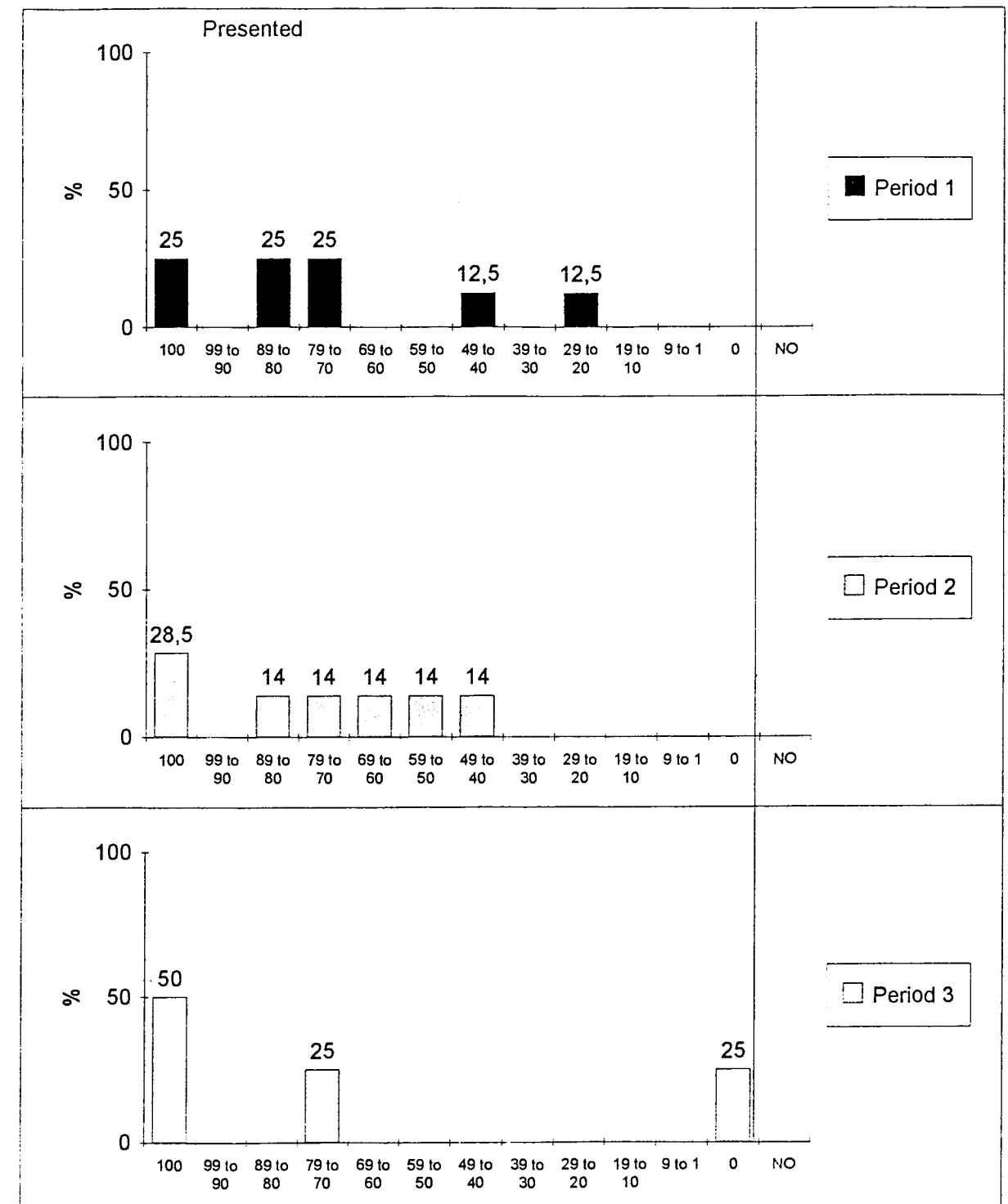
Figure 3.11 (j) - Group Three : Plural S
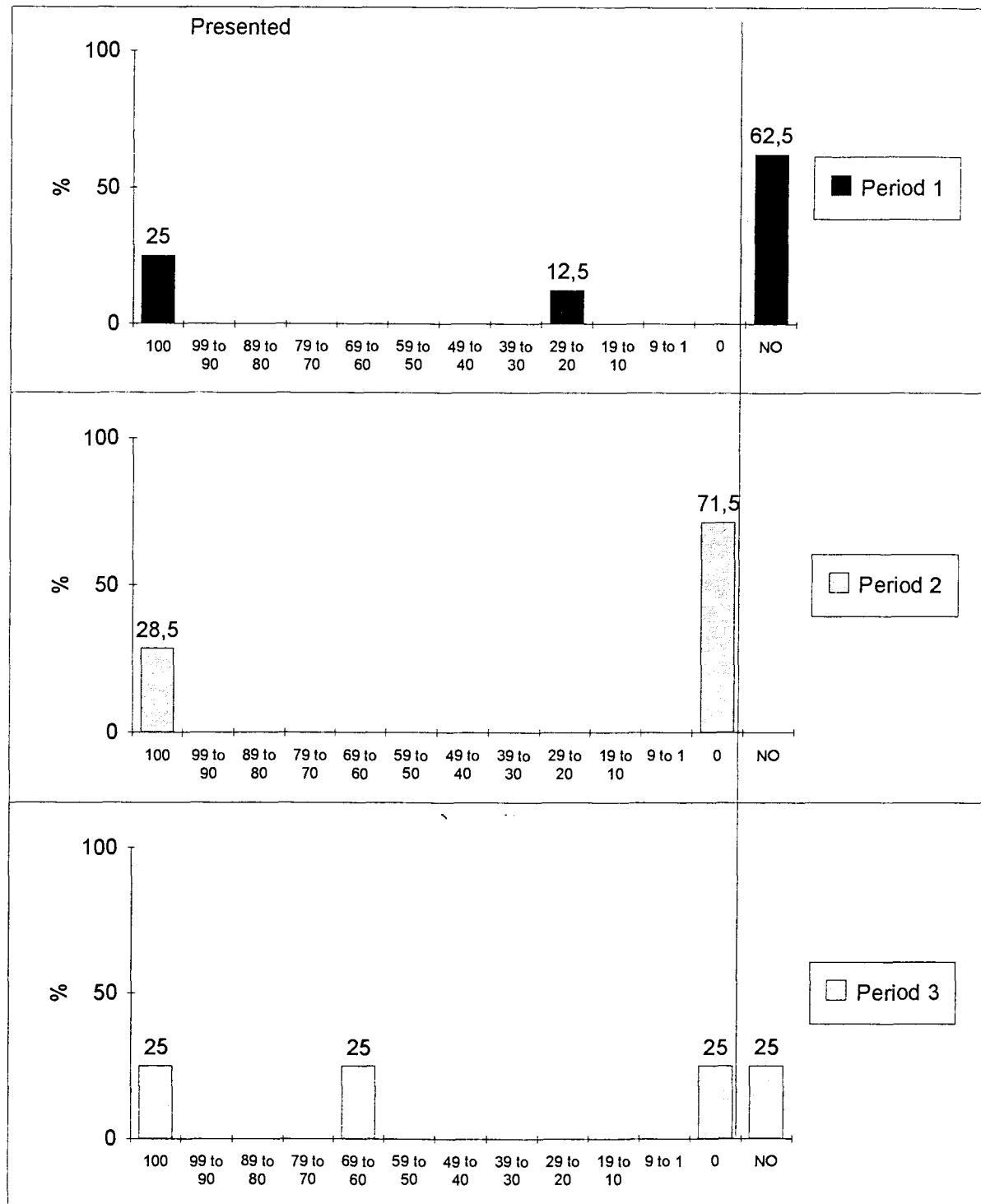
Figure 3.11 (k) - Group Three : Possessive S
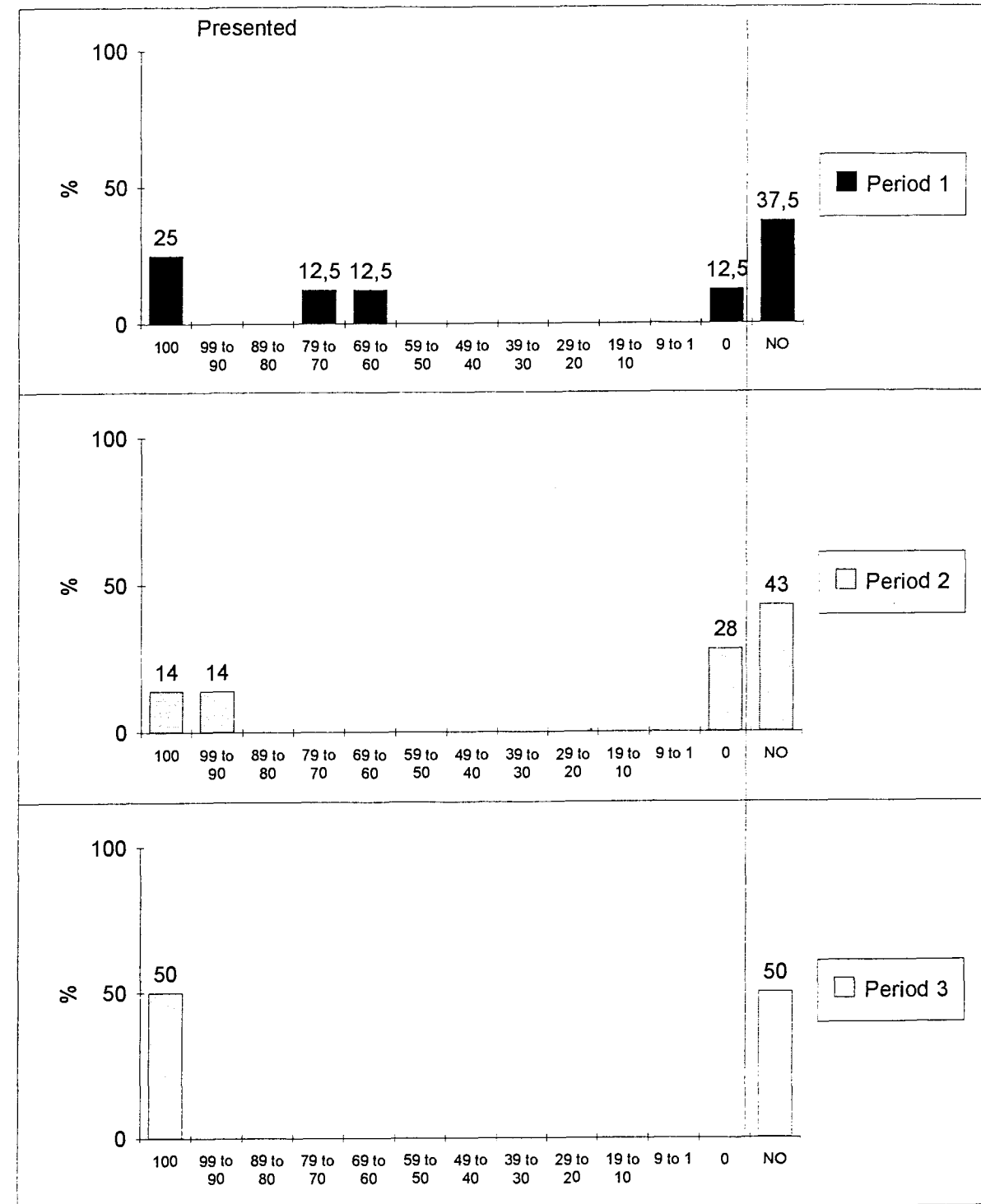
Figure 3.11 (l) - Group Three : Third Person S

accuracy may reflect the lower cognitive complexity of the third person *S* morpheme, whose meaning is restricted to number marking. Yet total accuracy is not high, suggesting that other factors come into play. Lightbown (1983), for example, suggested that the lower position for third person *S* in her groups' acquisition orders might be a consequence of the non-pronunciation of final s in spoken French. But here we are dealing with a written sample where the influence of the L1 should encourage production of the s. It could also be argued that the absence of inflections elsewhere in the present simple of the English verb might encourage overgeneralisation to the third person, especially due to the resulting reduced salience in input. However, in this, classroom, situation the language item in question has been made salient by explicit presentation. In addition, with overgeneralisation, one could legitimately expect low overall scores, whereas this is not the case. It would therefore seem more likely again that the learners are dealing with processing difficulties, this time related to the limited processing capacity available for language production (even written, at least for beginners), encouraging the non-marking of non-essential information (in communicative terms).

The possessive *S* also shows a slight trend to the left in all three groups. However, it is significant that (a) the number of *no occasions* is maintained in groups one and two, and reappears in group three during period three; and (b) a large number of zero accuracies is likewise maintained. In addition, accuracy is highly variable.

These factors suggest that the possessive *S* poses greater learning difficulties than the other morphemes in this cluster. A look at some examples of learner production may be revealing here.

The lack of diachronic improvement in performance after period two is immediately clear (See table 3.27.). The only consistently correct forms in period three are those taught in the first lessons, or directly deriveable from them - *the children's room, my husband's niece, his brother's house, a friend's girls, my brother's son*, etc.. However, even among these forms errors occur - *the house's sister (my sister's house), the Jean-Louis father (Jean-Louis' father), the first name of my nephew*. It is nonetheless striking that direct transfer from the L1 is almost wholly absent. Whereas, from a contrastive analysis one might have expected many cases of NOUN of NOUN structures, this in fact occurs in only six instances - *the novels of Radcliffe, C is the first name of my nephew, the house of my family, the house of her parents, the newspaper of the president, the present of D's, the time of the film, a record of Dire Straits4.* The essential problem seems rather to be one of limiting the use of the possessive *S* to its correct environments. There is a tendency to apply it to all environments where a NOUN of NOUN structure would have been appropriate in French - *the SNCF park's high wall (le haut mur du parc de la SNCF), the math's lesson (la leçon de math), the entrance's door (la porte d'entrée), my university's companions (mes companions d'université), Commonwealth's House (la Maison du Commonwealth)*, etc.. However, although this tendency may be reinforced by expectations created by the L1, combined with a desire to find one to

one correspondences, it is just as clearly a natural process of applying a rule learnt in one context to other apparently similar contexts. Nevertheless, given Andersen's (1977) findings that his Spanish L1 university level learners still produced NOUN of NOUN constructions on 14% of occasions (6.8 % in our study - see table 3.28.) and NOUN s NOUN on only 35% of occasions (83% in our study), it is surprising how little L1 influence there is with our subjects.

Another difficulty which may also be traceable to the L1 is syntactic; ie placing the wrong noun first or adding the *S* inflection to the wrong noun - *my roof's flat (my flat's roof - le toit de mon appartement), a doll house's (a doll's house - une maison de poupée, the house's sister (my sister's house - la maison de ma soeur), mustard's rabbit (mustard rabbit - lapin à la moutarde).*

In short, once again the determining factor in difficulty seems to be the level of cognitive complexity as derived from (1) the meaning of the unit in question, (2) identifying the contextual limits to this meaning in use, and (3) matching these meanings to those expressed (and the means of expression) in the L1. Indeed it is striking that the accuracy scores for possessive *S* would have been substantially lower if there had not been so many instances identical to the forms presented and practised in class (44% for all three periods).

Period One	Period Two	Period Three
roof's flat	SNCF park's high wall	mother's house
psychology's course	my sister's Sylvie	mathematic's lesson
brother's name	one holiday's week	house's sister
sister's name	holiday's centre	chocolate's eggs ✴
niece's name	George Pompidou's reading room	children's room
granny's home	town's reading room	doll house
grannys name	sister's car	entrance's door
son's day	doll house's	university's companions
teacher's name	books for children	Commonwealth's House
wife's job	novels of Radcliffe	Mrs Tussaud's Museum
Paris' suburbs	family's four people	a Harlow's family
St Michel's station	computer science's class	Rhone-Poulenc's factory
sister's name	village's square	the training's section
family's friend	English's exercises	husband's niece
friend's house	English's course	husband's family
Alassam house	A record of Dire Straits	brother's friend
mother's house	the music of rock and roll	husband's cousins
mother's house	Belleville's part	friend's Chris
University's student	office's organisation	Paul's friend
brother's home	film's title	brother's house
English's homework	third year's studies	father's birthday
jeweller's shop	baker's shop	Jean-Louis father
student's book	friend's name	Jean-Louis' mother
mychild her name is	David's friend	my brother's
the present of D's	Frédéric's breakfast	mustard's rabbit
wife's name	my mother's	friend's girls
British's porridge	children's holiday	school's name
British's porridge	organismes names	classroom's boys
beginner's lessons	King's day	Kinderdijk's mills
husband's grandmother	husband's uncle	the name of my nephew
children's bookshop	house of my family	the Tripoli's events
Parisian's routine	butcher's shop	newspaper of the president
grandparents' house	E's house	a moment's notice
		the house of her parents
33 (15)	33 (14)	the children's noise
		wife's name
		manager's secretary
		the reunion parents
		the reunion parents
		father's brother
		friend's father of my son
		son's bike
		women's dress
		computer's lesson
		computering's lesson
		the police's control
		the time of the film
		baker's shop
		the house was Lucille
		children's room

```
                                        the doll pram
                                        the mother's house
                                        cousins' baptism
                                        child's name
                                        English's schooling
                                        English's hours
                                        my mother's
                                        sister's friend
                                        husband's mother
                                        daughter's room
                                        family's friend
                                        family's house
                                        son's present
                                        student's book

                                          65 (27)
```

Table 3.27. Instances of Possessive *S* and Noun of Noun

Constructions for All Three Groups and All Three Periods

	NOUN of NOUN	NOUN s NOUN	NOUN NOUN	OTHER
P1	3%	91%	0	6%
P2	12%	79%	0	9%
P3	8%	83%	8%	1%

Table 3.28. Percentages of Noun of Noun, Noun *s* Noun and Noun Noun Constructions Used to Express Possessive s by Periods

3.6. CONCLUSIONS

3.6.1. 'NATURAL' ACQUISITION ORDERS ARE A STATISTICAL FICTION

It should be clear from the above discussion that it is highly misleading to suggest that morpheme research has demonstrated a fixed, stable, and in particular 'natural' acquisition route for individual morphemes. Both the lack of individual fit between subjects and the group order, even at the level of related clusters, and the diachronic variation observed show quite clearly, despite the fact that statistically significant correlations can be produced, that 'natural' orders are above all the consequence of applying weak statistics to cross-sectional data and then failing to investigate in detail how individual morphemes are acquired.

3.6.2. VARIATION IS THE NORM

To claim that 'natural' acquisition orders are a statistical fiction is not to claim that statistics cannot be revealing and helpful to the second language acquisition researcher. On the contrary, even traditional acquisition order methodology can be used to generate data, and in particular means of presenting this data, which can be highly revealing. This was demonstrated in table 3.26., and figures 3.1. to 3.11. which indicate that variation is widespread both diachronically, related to the development of proficiency in the second language, and synchronically between groups and individuals.

3.6.3. TRIANGULATION IS A NECESSARY COMPONENT OF RESEARCH INTO SECOND LANGUAGE ACQUISITION

However, although these quantification techniques *reveal* variation, they lack the attention to detail necessary to *explain* it. Hence the need for a triangulated research methodology - ie one taking into consideration data obtained and/or processed in different ways. It is for this reason that the following chapter is devoted to a case study approach to selected morphemes chosen for their potential interest in revealing learner paths in second language acquisition.

3.6.4. COGNITIVE COMPLEXITY5 IS A KEY ELEMENT IN SECOND LANGUAGE ACQUISITION

Nonetheless, a brief investigation into the acquisition of the bound *S* morphemes was enough to indicate some important elements which may be related to the acquisition of language items as a whole. In particular:

(1) formal complexity is of little consequence. This can be seen both in the acquisition orders (table 3.20.) and in the investigation of morpheme clusters (3.5.3.4.), especially bound *S*.

(2) acquisition is neither straight-line nor lock-step (ie each subsequent language item only being acquired when the previous item has been mastered).Learners do not necessarily progress in a linear fashion (although they may do so for some morphemes). On the contrary, accurate use of morphemes apparently acquired can fall dramatically (figures 3.3. to 3.5.).This would appear to suggest that new learning impacts on old (see chapter four). It may also reflect an ongoing attempt by the learner to reconcile form and notion (see chapter two).

(3) the learners' first language predisposes them to expect a particular relation between form and notion. Part of language acquisition may then be devoted to remapping - and

(4) the language classroom is able to increase the salience of

language items, thus augmenting the likelihood of their

shifting from comprehension-linked *input* to learning-related

intake.

These suggestions represent first hypotheses which can be examined in

greater detail using a large-scale case study approach. It is to this

that we now turn, with a detailed investigation of the acquisition of

past tense forms.

Notes

1. We shall continue to use the term 'acquisition order' simply because of its widespread use. It should be emphasised at once, however, that we consider 'accuracy order' to be a more appropriate name, especially given the vexed question of establishing whether a morpheme has genuinely been 'acquired'.

2. See Appendix for some examples of learner correspondence.

3. Only criterion levels with over 50% of subjects are included in the analysis.

4. Where no = no occasions, and nd = no data for subjects.

5. Where 'formal difficulty' (or complexity) means the ease or difficulty of manipulating the *form* of an utterance; in this case, adding an *S* to produce a plural noun.

6. Of course, these are not, strictly speaking, incorrect forms, except within the context of their production; ie learners had only been taught the N's N structure.

7. We define cognitive complexity within J.B. Carroll's (1993: 10) terms: "... cognitive tasks [are] those that centrally involve mental functions not only in the understanding of the intended end results but also in the performance of the task, most particularly in the *processing of mental information*. That is, a cognitive task is one in which suitable processing of mental information is the major determinant of whether the task is successfully performed." (Italics in original). Cognitive complexity is thus the degree of difficulty related to this mental processing, particularly in terms of mapping meaning onto (possibly competing) form.

CHAPTER FOUR

ON THE ACQUISITION OF TENSE

A LONGITUDINAL STUDY OF THE ACQUISITION OF PAST TENSE BY THREE GROUPS

OF ADULT FRENCH LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE

There is nothing single in the language, every one of its elements
announces itself only as part of a whole.

Wilhelm von Humboldt

4.1. INTRODUCTION

Historically, second language acquisition research has been primarily

interested in the acquisition of form. However, as we saw in chapter

two, acquiring a second language is perhaps better viewed as a

process of mapping new forms on to meanings which exist in the first

language and were developed during the acquisition of language

itself. If language is meaning potential, then it obviously makes

sense to look at how learners learn to express this potential in

another language. The possible constraints thus become not only

formal but also semantic. We therefore decided to undertake a study of second language acquisition which was semantically driven: the acquisition of past time reference. Longitudinal data was therefore collected from 32 individuals over a period of eight months.

This chapter begins with a review of previous research into the acquisition of past time reference before going on to discuss the findings of this study. In particular, four factors are identified as having a major impact on the acquisition of past tense forms by adult French learners of English as a foreign language:

> (1) macro-notional (as opposed to the micro-notional distinctions discussed in chapter two) - ie the attempt to find a form-meaning relation to maintain the imparfait/passé composé distinction;

> (2) transfer (both direct and mediated);

> (3) relexification;

> (4) ease of processing (which is directly related to the cognitive complexity mentioned in chapter three).

The chapter ends with an outline of Extrapolation Theory, which seeks to suggest how learners are able to produce previously unseen forms in their output. This will be taken up again in greater detail in chapter five.

4.2. A REVIEW OF RESEARCH

Von Stutterheim and Klein (1987) examined the 'natural' (ie non-instructed) acquisition of past tense in German by Turkish, Italian and Spanish immigrant workers in Germany. They noted that their subjects used basically two ways of expressing temporal reference:

(1) explicit - via lexical (essentially adjuncts) and grammatic-al (ie morphology) means;

(2) implicit - ie what they call "pragmatic" (but closer to the use of what we call strategic competence - see chapter five) employing (a) implicit reference to shared knowledge or the utterance situation, and (b) discourse organisation princip-les (eg the principle of chronological ordering - ie events are mentioned in the order in which they occurred - and the bracketing principle for temporal embeddings).

They also note the importance of:

(1) the lexical meaning of verbs - for example, present perfect morphology is only used with verbs with perfectivity as part of their inherent meaning (ie whose lexical meaning signals a completed event), such as *find* or *get*;

(2) the background/foreground distinction - for example, some learners use present perfect morphology with the L2 func-tion, except where backgrounded information is given in relation to a foregrounded event;

(3) the role of language-independent conceptual categories - ie
    strategic competence - for example, the absence of temporal
    marking when the intended time can be conveyed implicitly;

(4) the hypothesis-constraining role of the L1 - for example,
    Turkish learners develop a means of differentiating between
    remote and proximal past to reflect their L1, which makes
    such a distinction, whereas Italian and Spanish learners do
    not; in addition, Spanish and Italian learners develop
    temporal conjunctions much earlier than Turkish learners,
    since Turkish has none.

Meisel (1987) suggests a "developmental sequence" for the acquisition
of German past time reference by Italian, Spanish and Portugese
immigrant workers in Germany:

> 'pragmatic' - ie the use of strategic competence
>   adverbials
>   connectives
>   present perfect
>   past BE
>   past HAVE
>   past MODAL

Moreover, he notes that until verb inflections appear, verbs are used
in an invariant form, although there is individual variation as to
which invariant form is selected (ie it may not be prototypical base
form).

Meisel (1987: 217) also provides some evidence of restructuring (see
chapter five):

As soon as verb inflection appears, it results in great
confusion. In fact, almost all inflected verbs now violate the
target norm, even those which were invariantly used before ...
Thus, as a consequence of the beginning accuracy of verb
inflection, there is considerable variation instead of the
previous invariance ...

Trévise (1987) examined the acquisition of French past tense by a

Spanish learner. Like Meisel, she noted the use of an invariant form,

but this time one which did not reflect a real target language form.

She also noted the occasional use of the passé composé in apparent

free variation with the invariant form. However, there was also some

suggestion that once a past form is mastered, it is used systemati-

cally, even if the other verbs are in the present.

Interestingly, Trévise also mentions that her subject made

metalinguistic comments in Spanish which suggested that he knew he

was using the present to represent the past. This may be an example,

therefore, of the conscious use of strategic competence.

Véronique (1987) investigated the acquisition of French past time

reference by North African Arabic speakers. He examined how they

manipulated past time reference at three levels of proficiency - low,

intermediate and advanced - and noted similarities and differences

between subjects.

Low level learners were found to:

> (1) avoid reference to past time, unless in response to a direct
>
> question;

(2) rely heavily on anaphoric adverbials and calendrical expressions, and to a much lesser extent on verb morphology;

(3) contrast background (use of adverbials) and foreground (use of verb stem);

(4) follow calendric expressions by inflected verbs.

There was also some evidence of the expression of duration, both morphologically and lexically.

Intermediate level learners tended to:

(1) establish a time frame, then continue with uninflected verbs;

(2) contrast foreground (*après* + *verb stem*) and background (*avant* + *verb* + /e/l); however, there was evidence of the beginning of the V + e form in the foreground position; in addition, the stronger subjects were able to switch between foreground and background - ie they were less tied to chronology;

(3) use the principle of chronological ordering;

(4) be sensitive to linguistic context - for example, the verb stem form tended to follow *alors, alors après* and *ensuite*, and the verb + e form to come after *aprés*.

Advanced level learners:

(1) were free from the principle of chronological ordering;

(2) differentiated between passé composé and imparfait;

(3) were increasingly able to use prepositions to signal duration;

(4) continued the shifting of the verb + e form into the foreground.

The similarities were thus identified as: the application of strategic competence as expressed through calendric expressions, adjuncts, deixis and shared knowledge; the importance of the principle of chronological ordering; and the foreground/background contrast conveyed through the verb stem/verb + e distinction.

Differences included: the distribution of verb stem and verb + e to convey this foreground/background contrast; the ability to express duration and modality in the past; whether the principle of chronological ordering could be violated; and the intricacy of the narratives (ie the development of increasingly complex discourse).

4.2.1. SUMMARY

In sum, then, previous research leads one to expect:

(1) that in the early stages learners rely heavily on strategic competence. This is hardly controversial: where meaning is to be conveyed and either the spare processing capacity is missing and/or the knowledge necessary is lacking, learners have no choice but to fall back on general cognitive abilities which enable them to express the meaning without the forms.

(2) heavy reliance on discourse principles to express the chronology of events and to contrast background and foreground information.

(3) the gradual appearance of inflectional morphology.

Other factors have been identified, but not consistently. This may be due to researchers' presuppositions (see chapter one) or particular research interests, or may actually reflect less frequently used learner strategies. These include:

(1) the L1 as a hypothesis-forming constraint;

(2) the importance of lexis as a means of expressing duration and perfectivity, and of the lexical meaning of the verb as a stepping stone into perfect morphology;

(3) some free variation.

We turn now to our own study.

4.3. METHOD

4.3.1. DATA COLLECTION

This has been discussed in detail in chapter three. As a result, only additional information relevant to the detailed case study dealt with in this chapter will be mentioned here.

Since participation in the project was purely voluntary, the number of texts provided by each subject varied from between six and twelve over the 20 week period. However, texts were dated and grouped according to periods, so that a record was available of *when* texts were produced. This made it possible to group them into three collection points at approximately four week intervals.

The end of the first period coincided with the teaching of the regular simple past; the end of the second period with the teaching of the irregular past (although *was* as in *I was born in* ... was taught near the beginning of period one, and the existence of irregular forms was pointed out when the regulars were taught). In this way, the appearance of the various forms could be traced over time.

4.3.2. SUBJECTS

Again, this has been discussed at length in chapter three and will not be repeated here.

4.3.3. DATA ANALYSIS

The letters written by the subjects were ordered and grouped into the three data collection periods. Extracts containing reference to past time - whether or not expressed in target language form - were examined in two ways:

(1) for each group for each period, permitting the identification of overall similarities and differences and the comparison between groups;

(2) for development over time for each subject, permitting the identification of both possible acquisition sequences and of individual variation.

4.4. RESULTS AND DISCUSSION

4.4.1. MORPHEME ACQUISITION ORDERS

Although, as seen in chapter three, cross-sectional morpheme acquisition orders reveal little of interest to anyone interested in the acquisition of past time reference (for example, in the 11 orders which are outlined there, irregular past occurs before regular eight times whereas regular occurs before irregular only three times), longitudinal orders can indeed reveal some interesting trends. It is to these that we turn first.

4.4.1.1. Past BE

The appearance of past BE as the first largely used correct L2 form comes out quite clearly in tables 4.1. and 4.2.. It is the most correctly used in all three periods, even though not overtly taught until the end of period two - although it makes an early appearance in period one as a lexical item in *I was born in + place/year*.

Three possible ~~solutions~~ explanations may account for this: (a) frequency; (b) because of an underlying semantic difference which the user wishes to mark on the surface (in this case the imparfait/passé composé distinction); and (c) because of processing simplicity. These last two are linked.

4.4.1.1.1. Frequency

From table 4.3. we can see that, for all group one, past BE represents 58% of all the target norm 'occurences', in period two 54% and in period three 34%. At the same time it represents only 27% (period one), 9% (period two) and 11% (period three) of the non-target norm occurrences. This single verb also accounts for 37%, 26% and 22% of the occurrences of *all* verbs. Similar frequency of occurrence is observable for groups two and three in all three periods, although the percentages of target norm use are lower in both cases. We are thus quite justified in arguing that it is the most frequently used past form of the verb, and that learners can be presumed therefore to be able to practise past BE more than the other verbs.

	Group One			Group Two			Group Three		
	P1	P2	P3	P1	P2	P3	P1	P2	P3
past BE	48	78	84	78	38	58	44	63	100
irregular	18	28	59	10	16	46	17	32	83
regular	25	16	60	25	17	41	16	37	82

Table 4.1. Percentage of Target Norm Past Tense Forms Correctly Supplied at Each Grouped Data Collection Period

Group One			Group Two			Group Three		
P1	P2	P3	P1	P2	P3	P1	P2	P3
BE	BE	BE	BE	BE	BE	BE	BE	BE
reg	irr	reg	reg	reg	irr	irr	reg	irr
irr	reg	irr	irr	irr	reg	reg	irr	reg

Table 4.2. Morpheme Acquisition Orders for Past BE, Irregular and Regular Past for Each Group and Each Grouped Data Collection Period

	Group One			Group Two			Group Three		
	T	NT*	Tot	T	NT	Tot	T	NT	Tot
P 1	58	27	37	17	5	40	14	18	32
P 2	54	09	26	10	17	27	19	12	31
P 3	34	11	22	14	11	25	30	0	30

[* T = target language norm; NT = non-target language norm; Tot = total]

Table 4.3. Past BE Occurrences as a Percentage of Total Occurrences

But are frequency and practice sufficient to account for the early

acquisition of past BE? Already in the first period, for example, it

alone accounts for more than half all the target norm occurences for

group one. Something else must be at work and it is to these *other influences* that we

shall now turn.

4.4.1.1.2. Notional: Imparfait/Passé Composé Distinction

	Group One			Group 2			Group 3		
	P1	P2	P3	P1	P2	P3	P1	P2	P3
Imp	96	84	98	100	100	100	100	100	100
P.C.	4	16	2	0	0	0	0	0	0

Table 4.4. Percentage of Target Norm Past BE as Realisations of

Underlying Imparfait and Passé Composé

Table 4.4. shows quite clearly that surface realisations of imparfait

tend to be overwhelmingly target language norm, whereas underlying

passé composé, although it is extemely rare (4% occurrences for group

one in period one, 16% in period two and 2% in period three), tends

to be realised as relexified passé composé. This is visible in the

following extract:

[G1.Françoise.P2.L3]2This is a old church with bell towers which have
                   along story. it was the subject of excavations.
                   Those have been profitable but I don't remember
                   that it has been find

The implication is that past BE is acquired early because it tends to have an underlying imparfait. If this distinction is indeed significant, then we should expect to find a similar pattern with other verbs.

	Group One			Group 2			Group 3		
	P1	P2	P3	P1	P2	P3	P1	P2	P3
Imp	79	70	54	67	77	56	63	57	66
P.C.	21	30	46	33	23	44	37	43	34

Table 4.5. Percentage of Target Norm Verbs as Realisations of Underlying Imparfait and Passé Composé

Table 4.5. indeed shows this to be the case: for all three groups the percentage of target norm forms supplied is consistently higher for underlying imparfait than for underlying passé composé. In addition, with the exception of group three, the supply of target norm passé composé increases by period three, suggesting that as proficiency increases learners are better able to deal with the more complex transformation required to relexify passé composé into a target norm simple past.

This is discussed in greater detail below (4.4.2.5.1.and 4.4.2.5.2.) but a few examples will nevertheless be useful at this stage:

[G1.Josette.P2.L3] The last week I have not can go to the IUT.
Excuse me, but in my enterprise there is many many
work and two collègues was sick. Also I had not
the time to write to you

[G1.Josette.P2.L5] I am sorry but last week it was impossible for
me to go to the IUT; because I had many, many work
at the bank and two colleagues are absent, one
taked holidays and the second was sick

Here we see that Josette's early correct forms are indeed surface

realisations of imparfait - *two collègues was sick (étaient malades)*,

I had not the time (je n'avais pas le temps), *it was not possible (ce*

n'était pas possible), *I had many, many work (j'avais)* and *one taked*

holidays (prenait des vacances) whereas the underlying passé composé

forms are relexified:

[G1.Josette.P2.L4] Good morning, have you take good holidays? I
learn the last lesson and I see it is an
explication to read a plan

Where we have realisations of *avez-vous pris de bonnes vacances, j'ai*

appris and (possibly) *j'ai vu*.

A similar distinction is visible in the following extract:

[G2.Jean-PierreII.P3.L3] today thursday I have meet Catherine and
nadia at the cafeteria, and we took a cup of
tea. Catherine was not very happy because it
was cold but nadia had not cold because she
wear a big coat. the cafeteria was full of
students. It was noisy

Underlying imparfait is reflected in the target norm *was* and *had*. One would also have expected it to be reflected in *wear*, but the problem here may relate to Jean-Pierre's not knowing the correct form, as the irregular had not been taught in class at this stage. This possibility gains credence in that it is the only example of prototypical base form in the extract. On the other hand, underlying passé composé is realised as *I have meet*, the only example of relexification, and a correct *we took*.

4.4.1.1.3. Ease of Processing

This is directly related to the above if the learner's basic strategy is seen to be one of relexification from the L1. We shall provide further evidence to suggest that this is indeed the case later (section 4.4.2.9.), and for the moment shall therefore simply demonstrate the process, using past BE as a model.

The process is very simple: the learner is hypothesised to be operating a kind of subconscious simultaneous translation (or rather, given his or her low level of competence, transformation). Language production is then seen as follows: (1) the learner has a meaning to express; (2) s/he has insufficient competence and processing capacity to express this meaning directly in the L2; and therefore makes use of strategic competence, one of whose strategies is relexification; (3) this means running an L1 language string through the mind and transforming it into comprehensible L2; (4) given the processing demands of production, little time is left to the learner to operate

major level transformations (ie operate big L1/L2 shifts - there is no relationship to transformational grammar intended). For example:

[G1.Janine.P2.L2] Last week I have not work...I am not go to
                 mountains

This is directly relexified from the L1: *La semaine dernière je n'ai pas travaillé ... je ne suis pas allée aux montagnes.* Thus the underlying presence of an auxiliary associated with the past form of the verb leads to the production of an auxiliary on the surface, because the language user lacks the processing capacity (and, at this stage, probably language competence) necessary to suppress it. On the other hand, look at the following extract from the same letter:

[G1.Janine.P2.L2] netherless the sky was grey and rainy and the
                 weather was cold

Here, on the other hand, the underlying form is the imparfait, which has no auxiliary attached - *néanmoins le ciel était gris et le temps était froid* - which makes the transformation onto the surface without an auxiliary that much easier. Hence, overall one would expect French L1 language users to produce target norm realisations of underlying imparfait before those of passé composé. Past BE then emerges first because of the relative frequency of the imparfait form as opposed to the passé composé in French.

4.4.2. GENERAL TENDENCIES

Here we shall examine the developmental similarities within and between groups at each grouped data collection period.

4.4.2.1. Learner Variety : Variation and Free Variation

4.4.2.1.1. Variation

Throughout the three grouped data periods learners are clearly operating a variety of strategies ~~both singly and as a group~~:

4.4.2.1.1.1. Prototypical Base Form

By ~~this~~ _prototypical base form_ we mean an invariable form which is either derived from an uninflected base form or an overgeneralised present simple (the restricted third person reference makes it difficult to tell). For example:

[G1.Marianne.P1.L1] This year with a garland and balls of paper we make a fir tree.

[G2.Jean-PierreII.P1.L1] Before, I live in Asnières, and I work at EDF...

[G1.Corinne.P1.L1] The sun shine since three days.

[G2.Francis.P1.L1] I live in Paris only since the first January.

[G1.Brigitte.P2.L3] From my holidays in Scottish I bring back a record of battlefield band

[G2.Catherine.P2.L1] The last week, I go to the theatre "Mogador"

[G3.Judith.P2.L2] My holidays are very exciting. I go to Sahara
                 desert

4.4.2.1.1.2. The Influence of the L1 - Relexification

By this we mean an L2 surface string which is a direct transfer from
an underlying L1 string. For example:

[G1.Josette.P1.L1] Excuse me, I havn't can go to IUT the last
                   week.

[G2.Jean-Pierre II.P1.L2] This evening I have eat a pizza.

[G2.Thibaud.P1.L1] The father Christmas is come to say good morning
                   at the childrens.

[G1.Josette.P2.L4] Good morning, have you take good holidays?

[G2.Lionel.P2.L2] Yesterday evening I have ask my girlfriend if
                  she want to go to the cinema

[G2.Alain.P2.L2] I'm not to go in Holidays for February Holidays

[G3.Odette.P2.L3] We have celebrate Christmas at home

In all four period two cases there is clear evidence of
relexification from the underlying L1 passé composé, even if the base
form is consistently preferred to the (untaught) past participle.

4.4.2.1.1.3. Mixed L1/L2 Influence - Mediated Transfer

By this we mean that an initial - Ll-originated - string is associated with a partly assimilated L2 rule, producing an incorrect surface form *in that context*. For example, *I'm going* in the first extract actually refers to a past event.

[G1.Catherine.P1.L2] At Christmas, for 1st January 87, I'm going with my boyfriend at friend's house.

[G2.Frédéric.P1.L2] For my Christmas Hollidays I am going to ski in Grindelwald.

[G2.Alain.P1.L1] My parents are from Mouton, they are coming for the Christmas and New Year holidays.

[G1.Marc.P1.L3] My brother and his girl friend gone to Holland six years ago.

[G1.Catherine.P1.L3) we had eat enormously and we had drink enormously too!

[G2.Jean-Pierre I.P1.L2] For the children it was sad because they hadn't skied.

[G2.Pascale.P1.L1] I have got written letter and I have got send with my 'CV'.

[G1.Annie.P2.L3] Nicholas Fouquet had arranged the creation of "vaux-le-Vicomte"

[G1.Françoise.P2.L2] I was in the bedroom with Claire Emilie when I had ear to cry her

[G2.France.P2.L3] past saturday I invited some friends to entertain my birthday. then we have singing this famous song "happy birthday"

4.4.2.1.1.4. Forms Corresponding to the Target Language Norm

ie those whose surface realisations are 'correct':

[G1.Brigitte.P1.L1] I have been holidaying in Paris.

[G1.Françoise.P1.L1] My job was chemist but now I'm unemployed.

[G1.Nathalie.P1.L1] During the Christmas holidays, I visited Paris
                     from museum to exhibition.

[G2.Frédéric.P1.L1] I'm a student at Villetaneuse...I started this
                     year.

[G2.Gisèle.P1.L1] Last summer, I went to Greece for three weeks.

[G2.France.P1.L1] I come from Paris where I was born.

[G2.Pascale.P2.L2] The day before yesterday i went to the cinema

[G2.Francis.P2.L2] I was in London there is one year

[G3.Geneviève.P2.L5] In the living room we decorated a Christmas
                      tree

4.4.2.1.1.5. Summary

Given the variety of forms produced here, it would seem absurd to use
quantitative analysis of cross-sectional data to try and fit all
learners into a single, monolithic model. Moreover, in the examples
from the corpus shown here, there are clear examples of what might at
first glance be identified as *free variation*. It is to this that we

now turn.

4.4.2.1.2. Free Variation

Some theorists (see chapter five) have argued that free - ie
initially random - variation plays an essential role as a power
mechanism in second language acquisition as learners strive to match
meaning to form. In this section we shall examine how much genuinely
free variation can be identified, how long it lasts and whether there
are not underlying factors which influence apparently random surface
variation.

[G1.Josette.P1.L1]   Excuse me, I hav'nt can go to IUT the last week,
                     because...it was "grève".

The target norm form *was* is clearly a surface representation of an
underlying imparfait *avait*. It is possible that the *hav'nt can go*
similarly reflects an underlying imparfait, but the surface
realisation makes it appear much more likely that there was an
underlying passé composé. As we have seen, the possibility that
underlying imparfait might emerge with correct target features before
underlying passé composé is not surprising for two reasons:

(1) because one might expect French learners to wish to
express the past time in the way that their own language experience
leads them to expect it to be divided, as reflected, among other
ways, in the passé composé/imparfait distinction. In seeking to

maintain this distinction, it is to be expected that learners will look for a surface means of realising it. (A similar suggestion was made by Montredon (1979) to account for errors made by Japanese speakers in French);

(2) the single form nature of the imparfait (ie the fact that it is not a composed, auxiliary + participle form) might then be conjectured to 'attract' the attachment of the simple past. One would hypothesise, then, that, at least in the early stages, French learners of English will seek to establish a form-meaning relation between the imparfait and the simple past.

[G1.Catherine.P1.L3) At Christmas there, at Paule and Alassan house, there is Philippe and his boy Léo...Jacques and Raquel too was there...we had eat enormously and we had drink enormously too! At midnight we say: "Happy New Year!" And the friends kiss. And we had dance up to seven o'clock. At eight o'clock we coming at our house, because we are tired. In my bed, I said to oneself, I speak of oneself..

Here in the same paragraph Catherine produces four different ways of expressing the past tense: protoypical base form, had + infinitive, verb + ing and target norm irregular forms. What can these be traced to?

Had + infinitive and verb + ing are dealt with in some detail below (4.4.2.5.2.) as examples of *mediated* transfer. What is interesting about them here, however, is why they appear where they do. The had + infinitive is closely tied to the underlying passé composé with *avoir* auxiliary. All such cases are realised as had + infinitive. The other

underlying passé composé forms are être auxiliary. These fall into two groups: (1) simple forms (ie straightforward être + past participle), which are both realised as present progressives; and (2) reflexive forms - *nous nous sommes dits, les amis se sont embrassés* - which are not relexified, but occur as prototypical base forms.

Be, which occurs variously as *is* (derived from *il y avait*), *was* (derived from *étaient*) and *is* (derived from *étions*) is, on each occasion, the surface realisation of an underlying imparfait. There would appear to be no clear reason why there should be such variation in *be*, at least those derived from *étaient* and *étions*. However, it could be argued that the instance derived from *avait* resulted in a base form because of the extra complexity of transforming lexis as well as tense marking. Processing complexity can similarly be claimed to account for the base form manifestations of the reflexives, although one is unable to explain why *said* is correctly produced from *je me suis dit*.

The prototypical base forms are closely tied to the adjuncts and calendrical expressions: *there is Philippe* follows *at Christmas*; *we say* comes immediately after *at midnight*; *we are tired* follows *at eight o'clock*. This is not a wholly satisfactory analysis, but may be significant given Hyltenstam's (1978) finding that linguistic context can affect production. Equally, it may be that the proximity of the adjuncts and calendrical expressions reinforces the redundancy of the morphological marking, and that strategic competence is applied to simplify the learner's production task.

The target norm forms - *was* and *said* - appear to be quite random selections, since both *is* and *say* appear elsewhere. The absence of a timeframing adjunct before *said* may explain the necessary morphological marking, compared to *say*, but there is no obvious reason why the *was* appears.

Within the variation, therefore, there would appear to be, as hypothesised from Josette's data, an attempt to maintain an imparfait/passé composé distinction. In practice, this leads to mediated passé composé forms (had + base form, be + ing) as surface realisations of underlying passé composé, and prototypical base forms to express underlying imparfait - except where additional processing constraints, and/or strategic factors like morphological redundancy when attached to timeframing force the learner to fall back on the base form.

[G2.Jean-Pierre II.Pl.L1] Before I live in Asnières and I work at EDF.

[G2.Jean-Pierre II.Pl.L2] This evening I have eat a pizza...I have drunk a glass of wine. Then I have smoked a cigarette. Then I studied my lesson.

Jean-Pierre II also seems to be contrasting underlying imparfait and passé composé. The two prototypical base forms are both surface realisations of imparfait, as is, possibly, the target norm *studied*, whereas the present perfect-like surface forms all reflect underlying passé composé.

[G2.Thibaud.P1.L1]   I am go a university. In the hall of university,
                      I have go up staircase. I am return of the room
                      Q207. In the room, a professor wait what the
                      studiants come. The course begin. This course is
                      a course English. I am see hours and I   am see
                      numbers. The professor and we we are see the
                      different country. I look show, It is one
                      o'clock. The day is stop. Before to leave, the
                      professor we are speaking the controle. We have
                      say goodbay the of professor. We are leave to
                      eat.

[G2.Thibaud.P1.L2]   tonight, I am go to seek Damien at the day
                      nursery... A   lot of parents was there...the
                      father Christmas is come to say good morning at
                      the childrens

Thibaud's first letter may reflect the French narrative discourse

convention of using the present to create a feeling of greater

involvement and immediacy (see below 4.4.2.5.3.), but I believe the

structure of *am go, have go*, etc rather reflects an attempt to use

past tense forms which are not yet in his repertoire. He therefore

resorts to a strategy of relexification from the L1. This quasi

morphology - combined with the knowledge that he shares with the

reader that he is describing a previous English lesson - seem to have

been enough for him to drop any attempt at timeframing.

However, the forms Thibaud uses to express past time show two factors

at work in free variation: relexification from a passé composé

pattern, and prototypical base form. This is further complicated by

his apparently random use of auxiliaries; if *am go, are leave* and *am

return* reflect the êtr̂e pattern in French (*suis allé, sommes partis,

suis revenu*), and *have say* reflects the *avoir* pattern (*avons dit*),

the same cannnot be said of *have go up* (*suis monté*), *am/are see* (*ai/avons vu*) and *are speaking* (*a parlés*).

It is appealing to see Thibaud's variation in relation to an underlying L1 semantic difference - the imparfait/passé composé distinction: passé composé tends to have a surface realisation which closely resembles its relexified L1 form, *(I change, I have go, I am return)* given that Thibaud does not, in fact, know irregular past participles, or how to generate regular forms, whereas imparfait tends to occur as prototypical base form (*a professor wait, this course is, it is one o'clock*; possibly *the course begin*).

However, prototypical base forms also appear elsewhere: *the studiants come* may reflect processing difficulty resulting from having to deal with an underlying subjunctive form, or result from the surface identity of form between *viennent* (subjunctive) and *viennent* (present) leading to a surface present due to relexification; *this course is, I look show* and *it is one o'clock* may again be transfers of an L1 discourse convention permitting the use of the present in past narrative; *are speaking* is difficult to account for, except as an attempt by Thibaud to sound more English by using the progressive (part of the French folklore of the English language), although one cannot see why it should occur there and not elsewhere; *the day is stop* may also be a transfer of discourse convention, but it may also be due to the processing difficulty associated with relexifying reflexives (*le jour s'arrête)*.

Particularly interesting in letter two is the appearance of a target norm *was* (ignoring the question of number agreement), which has not yet been taught, but may result from a generalisation from the taught *I was born*. In terms of both a relexification hypothesis and a notional approach, it is significant that imparfait être should occur 'correctly' early because (a) it derives from an underlying imparfait *étaient* and/or (b) if the learner is relexifying from the imparfait he or she has no auxiliary to worry about and can thus process the correct simple past form more easily.

[G1.Marc.P1.L3] My brother and his girl friend gone to Holland six years ago. she is dutch. They have a good idea, in Holland is not many pizzeria. They have got a bus and decide to make pizza and fast food ... But the dutch don't like the pizzas. So they have stoped their activity. Now my brother is a cooker and his girl friend doesn't work. Last week they are in Italy for holidays and they ski a lot.

There is less variation here: a near target norm (apart from the spelling) *have stoped*, prototypical base forms, a possible confusion with *have got* as *have had*, and a past participle. There is no obvious reason why *have stoped* is used or *have got* in one instance and *have* in another. However, one can conjecture that the *gone* appears as a surface reflection of an underlying passé composé distinction *(être vs avoir* auxiliary), since *go* is the only être verb present and is realised as what may be a mistaken simple past form. Nonetheless, it would appear that Marc's data show real evidence of free variation in a way that the other four do not.

It is clear, therefore, that, although all variation cannot be explained, learners are not essentially operating a system in which genuinely free variation has a significant role. Rather, variation essentially occurs because language users function under a number of constraints, in particular L1 and L2 knowledge, and processing, which they are only partly able to cope with through the application of strategic competence. In particular most learners much of the time would appear to be operating a strategy of relexification from the L1 which itself may well reflect a desire to distinguish between underlying passé composé and imparfait.

[G2.Pascale.P2.L2] The day before yesterday i went in the cinema. I see the film "the Bateau-phare"...Last night we have visit the very pretty exhibition of Vienne

In a very short stretch Pascale uses three forms - target language norm, prototypical base form and unmediated transfer - to express the simple past. In each case the underlying French form would have been passé composé, which would seem to suggest that Pascale is not operating a relexification strategy. On the other hand, it is not clear why she uses the forms she does. One could try and argue that she is seeking to differentiate between être (*went*) and *avoir* verbs, but the evidence for this is slight. Alternatively, the proximity of a timeframing adjunct may have led to the supply of target norm *went* (see chapter two), but why not after *Last night* in that case?

[G3.Geneviève.P2.L4] I have buy presents. I am go restaurant. I am go
                      picture. I am telephoned a lot wishes. I was
                      offered a book. I look at the tv...I am writting
                      letters and received letters

Geneviève's letter shows an uncertain and variable use of past tense

marking, although there is some evidence to its being context

sensitive - ie the tendency to supply the same form on successive

occasions: *am go, am telephoned; was offered, was look*. Moreover,

each occurence would seem to have an underlying passé composé.

[G1.Josette.P2.L2] Today I am very tired: I work half past nine. This
                    morning I am begin at eight o'clock and this even-
                    ing I am finish at quarter to seven; and friday
                    I begin again. But I have good luck: when i come
                    to my house (at quarter to eight) the dinner is
                    finished, my stepmother cooks. This evening we
                    have eat pottage, chicken, rice, cheese and I,
                    besides, i eat lumps of chocolate because I am
                    very gluttonous

[G1.Josette.P2.L3] The last week I have not can to go the IUT.
                    Excuse me, but in my enterprise there is many many
                    work and two collègues was sick. Also I had not
                    the time to write to you

[G1.Josette.P2.L4] Good morning, have you take good holidays? I learn
                    the last lesson and I see it is an explication to
                    read a plan

[G1.Josette.P2.L5] i am sorry but last week it was not possible for
                    me to go to the IUT; because I had many, many work
                    at the bank and two colleagues are absent, one
                    taked holidays and the second was sick

Josette's past tense forms are highly variable throughout this

period. *Was* is the first correct form to appear, in letter two,

quickly followed by *had*. It is possible that - for some learners - irregular forms will tend to appear first because of their lexical, as opposed to rule-governed nature, which helps users bypass the *avoir* and *être* auxiliaries, thus saving processing capacity. In addition, the examples of *was* and *had* are cases where the imparfait would have been used in French. There is thus some L1 semantic differentiation going on. It is, indeed, striking that the only examples of target norm use correspond with an underlying imparfait - except the possibly ambiguous *two colleagues are absent* (are they still?). There are other occasions when irregular forms would have been appropriate - *learn, take* - even after the first appearances of *was* and *had*, but Josette does not seem to know the corresponding forms, as evidenced by *taked* in letter three. This lends support to the semantic, as opposed to lexical origin, but the latter cannot be wholly dismissed.

The rest of the time, Josette seems to be operating systems originating from both the L1 and L2.: either with a passé composé source or a prototypical base form. Even the L1-origin forms, however, are often not straightforward relexifications. *I am begin* and *I am finish*, for example, substitute *am* for *avoir*, neither being *etre* verbs, whereas she prefers the base form with the *etre* verb *come*, and uses *have* elsewhere with *eat, can* and *take*.

Moreover, she even uses alternative forms with the same verb: *I am begin* and *I begin*, *we have eat* and *I eat*, *have you take* and *one taked*. As regards *begin*, it may be that the second occurrence

actually refers to the following day, since she has failed to establish a clear time frame. In the second case, the linguistic context, moving from past (*we have eat*) to a generality (*I am very gluttonous*) may have caused the second, middle, verb - *I eat* - to slide with it (a similar phenomenon can be seen at the beginning of letter one, when the initial present - *I am tired* - leads to the following *I work*). In the third case the extra cognitive complexity of the interrogative may have led to her opting for a relexification strategy, whereas the second, more cognitively straightforward occurrence enabled her to make use of her new knowledge of how the regular past is formed to overgeneralise to *taked*. This knowledge is clearly not readily available, however, since she is unable to use it consistently: *I am finish* but *the dinner is finished*, for example.

There would appear to be no obvious reason why one source should be preferred over another, although the above analysis does suggest that there may be little random about such apparently 'free' variation, except over a very short period of time. The apparently free variation exhibited by Geneviève in letter four, for example, has decreased radically by letter five and virtually disappeared by letter six:

[G3.Geneviève.P2.L4] I have buy presents. I am go restaurant. I am go picture. I am telephoned a lot wishes. I was offered a book. I look at the tv...I am writting letters and received letters

[G3.Geneviève.P2.L5] I hope that you have past a good holiday with your family. For Christmas my mother come in Herserange from Lorraine...we were pleased to be

together. in the living room we decorated a Christmas tree ... my sister could not come at home because it was strike of trains ... Finally we went to see her ... We gave presents to children. My son is stayed a few days ... Yesterday, it was sunday, we kept the King's day

[G3.Geneviève.P2.L6] During the holidays I guest at home my sister ... They came from Chalons to Paris in train. We went to meet them ... We were very happy to see them. The children would see the Eiffel Tower. We went up second floor. There was a merveillous view but the weather was cold. There was some snow. Another day,we went on Champs Elysées ... We went also to the picture ... T hen we visited Enghien ... At home my son lend to his cousins his computer. They enjoyed yourselves .. All people pleased for holidays

A similar short duration is visible with Touré:

[G3.Touré.P2.L4] I have to spend my holiday in Paris. I haven't celebrate noel...but I have well celebrate new year...We are organise an Eve the 31 and the first. I go to cinema, assited to rally Paris-Dakar sometime, then I am retirn at home. I have well to spend my holiday because I was very happy and I have had a present

[G3.Touré.P2.L5] I spent winter holiday in Paris. I required to go ski, but I don't skied ... I spend my time to ... look at tv. I don't go to cinema so to concert. I slept all the time and I learned some irregular verbs. I have had the visite of a friend ... we are going to restaurant together

[G3.Touré.P3.L6] i want recount all that I did during the 13th to march 21st. Every day after my english lesson, I retourned my home for listened music and did my exercices. I often went to visual room ... I had exceptionally this week to change my programme. I watched a film ... Then I slept and spent the time to read newspaper. On saturday and sunday I went to my girlfriend's ... I occasionally walk with her

Equally, Josette's letter five shows a dramatic decrease in variation.

It would seem clear that learners will prefer not to live in uncertainty where uncertainty can be avoided, and will therefore seek to identify a consistent system adequate to the articulation of the meanings they wish to express. It should come as no surprise, therefore, that free random variation is:

(1) only present in some learners (although it may represent a transitional stage due to initial structuring or subsequent restructuring [see chapter five]);

(2) a short-lived phenomenon.

In a fundamental sense, however, variation seems to be dependent on structural (ie context dependent) factors, cognitive factors (ie related to degrees of processing difficulty, linked to the amount of spare processing capacity available); and notional factors (see also chapter two).

4.4.2.2. Avoidance

One main early strategy seems to be avoidance (See also Schachter 1974 and Kleinman 1978 and the discussion in chapter three); ie simply refraining from referring to past time. Two subjects in group one and three in group two make no reference whatsoever to past time during the first time period, for example; five subjects from

group one, and four from group two do so in only one letter (10 obligatory occurrences for six subjects). This is important in terms of research protocols, since many studies place interviewed subjects in situations where they are forced to talk about past events. What may, therefore, emerge is the use of strategic competence to make up for the absence of linguistic competence, and what is being described is thus the result of operating procedures, rather than instances of the learner's knowledge. Interpretation of such results needs, therefore to be done most carefully.

4.4.2.3. Timeframing

When past time *is* referred to, subjects are careful to embed it in a context that is unambiguous to the interlocutor. This context is created both explicitly (using essentially adjuncts and calendric expressions) and/or implicitly (using shared knowledge):

[G1.Marianne.P1.L1] When it is Christmas time, I like to decorate the house and every year I make new decorations ... This year with a garland and balls of paper we make a fir tree. I make also a 'crèche' ...

Here Marianne is using both adjuncts and calendrical expressions - contrasting *When it is Christmas time* with *This year* - and shared knowledge - that this Christmas has actually already passed.

[G1.Josette.P1.L1] I hav'nt can go to IUT *the last week.*

Here *the last week* is explicitly marked.

[G2.Maria.P1.L2] This weekend I'm student the (Droit)

Where adverbial - *This weekend* - and shared knowledge - that she is referring to the previous weekend - means are both used.

[G2.France.P1.L2] I beg your pardon for my absence the December 11 nineteen eighty-five.

France timeframes explicitly by the use of a calendrical *December 11 1985*.

[G3.René.P1.L1] For these holidays I go to your village.

René makes use of the shared knowledge that the reader knows that he is referring to the holidays which have just finished.

In real time conversations one might expect processing constraints to force the learner to rely on readily available time or place adverbials and shared knowledge. Where real time processing constraints are removed (as with the data collected for this study), longer discourse can be developed (learners certainly had access to and used their course book, notes, dictionaries and other people with a greater - but not necessarily correct - knowledge of English). Yet even here learners have recourse to these elements of strategic competence to express meaning for which they have insufficient linguistic competence.

One might expect the importance of timeframing to decline beyond period one, although a brief survey of native speaker past time reference reveals continuing use. Not surprisingly, therefore, subjects continued to timeframe their utterances into periods two and three:

[G2.Odette.P2.L4] Friday the 20th at 10h30: I run to rejoin my family

However, during these periods two important changes begin to occur: (a) timeframing ceases to be associated only with relexified or prototypical base forms, and (b) narrative becomes more structured through increasing use of sequencing markers, and the addition of comment to the bare narrative. We shall deal with (b) below in the following section.

[G1.Marianne.P2.L4] On saturday morning I tidied my bedroom

[G2.Serge.P2.L1] Yesterday I watched the match on television.

[G2.France.P2.L3] past saturday I invited some friends to entertain my birthday.

[G3.Odette.P3.L5] During the last weekend, we went to Lyon

This tying of the simple past to an explicit past time marker is perhaps to be expected given (a) the meaning of the simple past as situating events remote from the moment of utterance, and (b) the way

in which it was presented in class, as tightly tied to a known time in the past (in contrast with the less definite present perfect). The possible influence of this collocational relation with the emergence of target norm patterns has been discussed at length in chapter two, and will therefore not be dealt with any further here.

4.4.2.4. The Development of Discourse

[G1.Robeline.P2.L4] I'm sorry I couldn't write to you last week. my timetable was full. This year the Social Security has restricted its repay, the Society where I work was obliged to revise its contract

[G1.Robeline.P3.L10] We received bad news last week...On wednesday, a telegram told us the death of one of my husband's neice 27 years old. The next day, thursday, the phone awoke me at six o'clock to announce the death of my brother 38 years old. A mass was provided for on saturday at 11 o'clock ... A lunch was given after the mass. Of course, I prepared all the cooking the day before.

Here we can see that even a proficient speaker (in terms of past tense use) like Robeline depends heavily at first on the principle of chronological ordering and lacks the lexical means of structuring relationships within her discourse. Hence the use of strategic competence to maintain a chronological ordering.

By letter 10, however, things have improved considerably. Although she still ties herself to the principle of chronological ordering, she is nonetheless now able to bring greater cohesion to her narrative: (a) through the use of more complex sentences; (b) because

she is now able to reverse the order of occurrence - *A mass was provided for on saturday at 11 o'clock ... A lunch was given after the mass. Of course, I prepared all the cooking the day before*; and (c) because she is now able to add a commentary to the bare facts by simple adverbial means like *of course*.

[G1.Marianne.P2.L4] On saturday morning i tidied my bedroom. In the afternoon I watched a rugby match on television. Towards six o'clock I went to see a friend who works in the children's bookshop.

[G1.Marianne.P2.L6] On a beautiful morning Lucile and Jeanne went for a walk in the doll pram. There was no-one in the children's room and everything was silent. A few moments later one could hear hurried steps and scratchings sound in a corner near the fireplace

Marianne shows the same early reliance on chronological ordering, reinforced by repeated extra timeframing to create sequencing. By letter six, however, she too, although still maintaining chronological ordering, has made great strides in improving discourse cohesion: (a) by an even greater willingness to go beyond the simple narration of events to create a genuine feeling of story telling through extra descriptive features - *On a beautiful morning, hurried steps and scratchings sound*; (b) via the absence of repeated timeframing as sequencing markers and a movement towards adverbial means - *A few moments later*.

[G1.Marc.P1.L3] My brother and his girl friend gone to Holland six years ago. she is dutch. They have a good idea, in

Holland is not many pizzeria. They have got a bus and decide to make pizza and fast food

[G1.Marc.P3.L6] last weekend I get up at nine o'clock. I had my breakfast one hour later. I went to see my parents and I ate with us. After lunch I spoke with my brother Eric what about his new job ... After this it was three o'clock and we decided to watch the rugby match at the tv. we adored this match. french win and achieved the "Grand Chlem". It's very important for us. later I went to the supermarket

As with Robeline and Marianne, Marc depends heavily on the principle of chronological ordering in both early and later texts, but like them he is also able by letter six to go beyond the simple listing of consecutive events to begin to create a genuine feel of cohesion, principally this time through comment - *we decided*, *it's very important for us* - but note also the use of sequencing markers in letter six - *later, after (lunch), after (this)*.

[G2.Pascale.P1.L1] Now, i look for a 'stage' in a firm for the month July. I have got written letter and i have got send with my 'CV'

[G2.Pascale.P3.L5] Last Saturday I went to 'Bon Marché' in order to choose some items among the presents offered for my mariage. I took a large colour tv ... This morning was very sunny and warm. After two hours spent in the store, my husband became very impatient. so we went outside

Pascale provides further evidence for the features already noted: (a) the reliance on chronological ordering; and (b) the developing ability to add commentary to the bare listing of events. She also demonstrates a greater ability to maintain cohesion through markers

of cause and effect - *in order to*, *so*.

[G3.Odette.P1.L1] Today we go to Place des Vosges ... Place de la
                   Bastille there is a traffic jam, a fire car is
                   stopped. we take the first street, then we go
                   straight on. we arrive directly ... Unlucky all is
                   finished. we come back at home

[G3.Odette.P3.L5] During the last weekend we went to Lyon to visit
                   our friends. We stayed three days. we were happy to
                   be together. Together we went to visit a little
                   village...The weather was nice. The sun shined. it
                   was wonderful

In two similar narratives Odette shows strikingly how, despite the
maintainance of chronological ordering, learners are able to lend
coherence to their narratives by the addition of a commentary on the
events, and extra descriptive details.

4.4.2.5. Transfer

There is clear evidence of Ll transfer, although this is far from
always being a simple borrowing of the Ll form into English.

4.4.2.5.1. Relexification

[G1.Josette.P1.L1] Excuse me, I havn't can go to IUT the last
                    week.

Josette is apologising for her absence from the previous week's
course due to a transport strike. She uses a calendrical expression -
the last week - to provide a subsidiary time frame to an event

already placed in the past by (a) the shared knowledge of her absence, and (b) her morphological marking of the verb, resulting in the complex, although non-target norm, surface form *I hav'nt can go*. This demonstrates both a certain amount of L2 sophistication and a reliance on the L1:

(1) she has internalised the *can + infinitive* structure taught functionally in class to express ability (I can cook, swim, play the piano, etc);

(2) either overgeneralisation of the negation (students had been taught *has/haven't got*) or transfer from *j(e n'ai) pas pu*;

(3) indeed the whole structure clearly exhibits reliance on the L1 - *j(e n')ai pas pu aller*. Yet at this stage in her learning, it would seem unreasonable to attribute this either to faulty linguistic competence or faulty performance. More ~~likley~~ likely explanations are (a) straightforward borrowing (Corder 1983) - ie knowing from her L1 that the past needs to be inflected, but lacking the knowledge necessary to do this in the L2, she has simply borrowed the L1 structure; (b) alternatively, the L1 may actively be constraining her hypotheses on the marking of past tense by providing a model which she will assume to be correct until proved wrong. If this is the case, then one would expect many French learners of English to pass through a stage where they assimilate the present perfect to the passé composé because of its

formal similarity and partial semantic equivalence (see chapter two). Only when (and if) they become aware that there is another form - the simple past - appearing freq- uently where they would expect a present perfect - will they move on.

4.4.2.5.2. Mediated Transfer

A similar argument can be made here for the Ll as a resource available either to borrow from or as a constraint on the kinds of hypothesis about the L2 the learner may be able to make. That the latter is possibly more likely is suggested by the following extracts:

[G1.Catherine.P1.L2] At Christmas, for 1st January 87, I'm going with my boyfriend at friend's house.

[G1.Catherine.P1.L3) At Christmas there, at Paule and Alassan house, there is Philippe and his boy Léo...Jacques and Raquel too was there...we had eat enormously and we had drink enormously too! At midnight we say: "Happy New Year!" And the friends kiss. And we had dance up to seven o'clock. At eight o'clock, we coming at our house, because we are tired.

Here we have two examples of *mediated* transfer; ie of Ll structural transfer mediated through L2 knowledge to produce an interlanguage hybrid -

    (1) *I'm going with my boyfiend*

       We coming at our house.

Go and *come* are the only verbs used by Catherine whose L1 equivalents require the être auxiliary with the passé composé. It would appear conceivable that she is operating a transformation strategy from a French source into English, so that *je suis* and *nous sommes* are recognised as *I am* and *we are* and the verbs then transformed into present progressives by the mediation of her latent L2 knowledge along the lines of "English only has a *be* auxiliary with the present progressive, I have a *be* auxiliary here, so I need to produce a present progressive".

(2) *We had eat*

We had drink

We had dance

Similar mediation is shown in these three examples. Again, it is conceivable that Catherine is *transforming* from the L1 to the L2 rather than simply borrowing or transferring, so that *nous avons énormément mangé/bu/dansé* reflect a relexification step leading to *we have*, which her knowledge of English past tense formation (Catherine is a false beginner) transforms to *we had*, leaving a past participle to account for which she expresses as a base form because her linguistic competence is unable to produce English past participles.

It might be thought that such mediation, resulting from a relexification strategy, is particular to Catherine. However, other subjects provide further examples:

[G2.Frédéric.P1.L2] For my Christmas Hollidays I am going to ski in
               Grindelwald

[G2.Jean-Pierre I.P1.L2] I went to mountain eight days There wasn't
               snow. For the children it was sad because
               they hadn't skied

[G3.René.P1.L2] This weekend...The end the afternoon I'm going by car

[G1.Annie.P2.L3] Nicholas Fouquet had arranged the creation of "vaux-
               le-Vicomte"

[G1.Françoise.P2.L2] I was in the bedroom with Claire Emilie when I
               had ear to cry her

Here we have relexified *a arrangé* and *ai entendu* leading to *has
arranged* and *have heard*, which the learner's L2 knowledge then
mediates by transformation into a simple past, erroneously applying
the transformation to the auxiliary instead of the lexical verb.

[G2.France.P2.L3] past saturday I invited some friends to entertain
               my birthday. then we have singing this famous song
               "happy birthday"

Here we have an interesting - but not unique (see [G2.Serge.P3.L4]) -
have singing, which seems to follow a similar path to the *had + verb*
forms above, but with a different turning. I would suggest that what
has occurred here is along the lines: relexify *nous avons chanté* = *we
have sung* (or *sing*), but the English simple past has no auxiliary, so
this must be a progressive, so add *ing*.

Similar forms are present in period two (Gl.Annie.P2.L3],

[Gl.Françoise.P2.L2]), [G2.France.P2.L3], [G3.Touré.P2.L5] and period

three ([Gl.Josette.P3.L7], [Gl.Nathalie.P3.L6], [G2.Lionel.P3.L3],

[G2.Maria.P3.L4], [G2.Serge.P3.L5]. The implication seems to be that

their presence with Catherine and others in period one together with

their later appearance among others results from a particular

position in an acquisition sequence.

4.4.2.5.3. The Transfer of Discourse Conventions

In addition, as noted above there is some slight, but non-conclusive,

evidence of the transfer of French discourse conventions (allowing

use of the present in the past to increase dramatic effect) into

English leading to non-target-like forms3:

[G2.Odette.P2.L4] Friday the 20th at 10h30: I run to rejoin my family
at the metro station...We immediately start out
for ... Haute Savoie. We arrive...in the
evening ... The tomorrow morning the sun shines but
there is a lot of snow and it is very cold. We
start out...we arrive at 9.30am.

Odette correctly uses simple past tense forms before and after this

sample, which it is difficult to explain other than as an example of

transferred discourse convention.

[G3.Judith.P2.L2] My holidays are really exciting. I go to Sahara
desert...I take the boat to Alicante from
Casablanca ... I wait for Paris-Dakar rally. I do
the desert

This is a very interesting second letter from Judith insofar as she seems to have regressed from the near perfect competence in past morphology shown in letter one. Two solutions suggest themselves: (a) she is indeed transferring a discourse convention; (b) the increased knowledge of English she has gained in class (essentially a reactivation of her dormant knowledge) has put her previous 'stable' knowledge into temporary disarray while restructuring goes on. This would appear to be the more likely solution and will be discussed in greater detail in chapter five, but unfortunately we have no more data from Judith.

4.4.2.5.4. Summary

Transfer, then, can be seen as operating at two levels: the structural and the notional. The former is caused by attempts by the learner to relexify directly from the L1 and can lead to direct borrowings (in both grammar and discourse) or be mediated by the learner's L2 knowledge, leading to the production of hybrids. Functional transfer is caused by the learner's predisposition to seek L2 formal realisations of L1 underlying meanings.

4.4.2.6. Linguistic Context

As already noted above, there is slight evidence that linguistic context may influence the production of forms:

[G2.Lionel.P2.L2] Yesterday evening I have ask my girl friend if she
                 want to go to the cinema...she say "yes, i go with

you" My friend don't want to go if far...we don't
take a car. She say "What time is the next film"? I
say "the next film is twenty hour" and "how much
time for we go"? She say "we have a time" The film
begin a time and is good

The single relexified form is strikingly placed directly after the
only timeframing adverbial, whereas the prototypical base forms are
separate from any proximal timeframing. There is no other obvious
explanation. A similar reasoning may account for the variation in
the following data, although the surface forms are different:

[G2.Serge.P2.L1] Yesterday I watched the match on television. NANTES-
Spartac of Moscou. FRANCES and RUSSIAN have made
match one and one.

4.4.2.7. The Propensity to Seek Morphological Marking

The morphological marking of verbs relating to past time takes place
with many learners from the beginning, and increases over the three
periods.

This is clear from table 4.6, where the percentage of morphologically
marked verbs can be seen to exceed 50% for all groups in all periods
except groups one (still 48%) and two (43%) in period two.

It would appear, therefore, that learners who have already acquired
another language which marks past time morphologically will be
predisposed to attach morphology to verb forms very early, unless (a)
processing constraints make it easier to supply prototypical base
form (see below 4.4.2.9.), or (b) the morphologically marked form is

	Period One				Period Two				Period Three			
	% Mark		%Un	Tot	% Mark		%Un	Tot	% Mark		%Un	Tot
	T	NT*			T	NT*			T	NT*		
G1	30	32	38	100	38	10	52	100	66	11	33	100
G2	29	58	13	100	22	23	55	100	51	23	26	100
G3	29	25	46	100	43	18	39	100	88	8	4	100

[* T = target norm marking; NT = non-target norm marking]

Table 4.6 Percentage of Morphologically Marked Past Verb Forms for Each Group at Each Period

being contrasted with the base form to express an underlying notional distinction (although there are also learners who make this contrast via two morphological forms):

[G1.Brigitte.P3.L10] Saturday my brother is come to see me with his woman and their daughter. She is two years old. She is born January the 18th...Snoopy "It's hers". It never leaves her...Hoping she never losts it...saturday afternoon I went shopping. There was many people. The sun shined. people weared summer clothes. Someones were with short breeches. I buy a clear dress

In this letter Brigitte seems to be maintaining the imparfait/passé composé distinction essentially through contrastive morphology. All her target norm forms, except went, reflect underlying imparfait, whereas the three underlying passé composé are produced variably - is come, went and buy.

Nonetheless, there would appear to be learners who operate what may be either an L2-based strategy or a means of minimising processing difficulties from the beginning and whose production is therefore characterised more by prototypical base form:

[G3.René.P1.L3] Yesterday my friends invite me for a party...A lot of people go to the party, there are about 50 persons

[G3.Josette.P1.L2] I've holiday's hanging four days...Parents and friends come here...Afternoon we come in forest

[G3.Josette.P2.L3] My brothers and daughters are all at home their children are also here

[G2.Lionel.P2.L5] Other day i drink a Irish coffee, it's good...Other day I go to a Greek restaurant...it was first time that I eat Greek food

There is also some evidence of the predisposition to mark past forms morphologically from children being raised as English-French bilinguals:

[Patrick: 4 years]4I did play tennis yesterday in the garden and we did lose the ball

When we did go in the plane we did sleep

[Hannah: 3 years] I was go see my friend Marie

I was wipe my bottom all by myself

Patrick and Hannah, whose dominant language is French, both clearly

feel the need to mark verbs relating to past time morphologically, and even though the chosen marker differs between them - *did* for Patrick and *was* for Hannah - the source of the marking is just as clearly French: French marks past time via auxiliaries, so both children have sought an auxiliary strategy for their English. The choice of auxiliary is in itself interesting for three reasons:

(1) because it does not correspond to the dominant *have* of French and the subjects in our three groups;

(2) because they have both developed L2 derived forms - Patrick doubtlessly by extrapolation from the negative and interrogative forms, Hannah from the only target norm form she controls;

(3) because they have arrived at different surface realisations from the same underlying need.

It would seem, both from the learners' corpus and the children, that such an Ll-based system is a temporary phenomenon. Hannah is now four years' old and still operating the same system, although target norm forms are appearing with increasing frequency; Patrick is now 11 and speaks English perfectly. Table 4.7. indicates also that the Ll-based relexification strategy declines quite dramatically over time.

[Sarah: 4 years] I see you at school when you come

I already tell him that

Sarah, on the other hand, like some of our subjects, appears not to have a propensity to mark morphologically and is clearly using the prototypical base form. This may be proficiency related, since she was the least able English speaker of the three bilingual children, and now at age seven she is still struggling with past tense morphology. However, she has at no time passed through a French inspired auxiliary stage.

The propensity to mark morphologically may therefore depend (a) on L2 proficiency, and (b) more interestingly, on learner-internal factors which require further research.

	Period One					Period Two					Period Three				
	Relex	Med	Over	TN	Other	Relex	Med	Over	TN	Other	Relex	Med	Over	TN	Other
G1	21	3	0	30	8	10	0	0	38	0	6	2	1	66	1
G2	36	12	0	29	10	15	5	0	22	3	14	5	2	51	2
G3	15	2	1	29	7	11	2	1	43	4	1	0	6	88	1

Table 4.7. Percentage of Morphologically Marked Past Verb Forms by Category

4.4.2.8. Overgeneralisation

As can be seen from table 4.7., overgeneralisation is a relatively rare phenomenon on our corpus. At no time does it go over 6% of occurrences, and for four periods is non-existent. What is perhaps more significant, however, is the pattern: 0%, 0%, 1% for group one;

0%, 0%, 2% for group two; and 1%, 1%, 6% for group three. In each case it is not until learners have achieved a certain amount of proficiency that overgeneralisation begins to occur, despite (a) the propensity to mark morphologically, and (b) the fact that the regular simple past is taught at the end of period one.

One possible explanation for this may be that learners are now restructuring from a lexical based system to a rule-governed one, and that the appearance of overgeneralised forms is a surface manifestation of this process (See, for example, Peters 1976, 1983). However, the acquisition orders for past tense forms (table 4.2.) indicate that the regular forms are acquired before the irregulars (apart from past BE) on five occasions out of nine. Of course, even regular forms may be acquired at first as lexemes. However, the propensity to mark morphologically (4.4.2.7.) would seem to indicate that this is not, in fact, the case.

4.4.2.9. Processing Constraints

There is some evidence from a number of learners that processing constraints affect their language production:

[G1.Marc.P3.L6]   last weekend I get up at nine o'clock. I had my breakfast one hour later. I went to see my parents and I ate with us. After lunch I spoke with my brother Eric what about his new job...After this it was three o'clock and we decided to watch the rugby match

Marc seems to be essentially controlling the simple past at this stage - the whole of letter six contains only two non-target forms out of 16 and letter seven only contains target norm forms. In the extract above the most likely cause of the appearance of a prototypical base form for *I get up* is that Marc was unable to cope with the processing difficulty associated with dealing with a reflexive verb (*se lever*) combined with movement into the simple past.

[G2.Catherine.P3.L5] Last Saturday, I went go shopping to Paris...I buy any clothes

[G2.Catherine.P3.L6] Tuesday evening, I went to the cinema in Montparnasse. I watched film "Les Longs Manteaux"...The history is happen in a little village in Bolivie

During period three Catherine produces 16 irregular forms, 14 of which follow the target norm, and eight regulars, six of which follow the target norm. Both non-target regular forms can be traced to processing difficulty - ie, as with Marc, dealing simultaneously with past tense and a reflexive verb (*se passer*). One of the irregulars can be similarly traced to processing difficulty; this time *buy* due to the difficulty of coping with *any* (and the associated notion of negation).

[G3.Touré.P2.L5] I spent winter holiday in Paris. I required to go ski, but I don't skied...I spend my time to...look at tv. I don't go to cinema so to concert. I slept all the time and I learned some irregular verbe.

It is interesting in this extract that Touré is essentially controlling the simple past - a fact emphasised in period three where she produces six target norm irregular forms on six occasions and two out of three target regular forms - except when associated with a negative, as in the extract above. Once again, this can be traced to extra processing difficulty resulting from having to deal simultaneously with two transformationally tricky areas.

This interpretation, of course, implies that learners are still, even at this stage, operating a basic production strategy of relexification, but that increasing control allows them to make the necessary transformations, except when the cognitive complexity taxes available processing capacity too greatly.

4.4.2.10. Overuse

There is some evidence of the overuse of past forms without past reference:

[G1.Janine.P3.L3] For many months, I have not much time to do pleasant activities . Between Office, University and my house with my children, it left a few time for spare time

[G1.Brigitte.P3.L10] Snoopy "It's hers. It never leaves her...Hoping she never losts it

[G2.Francis.P2.L3] temperature this winter is very cold, but then occasionally rain and I prefered this climate

[G3.Geneviève.P3.L8]   It was fine weather during the weekend and
                       friday we went to Lorraine for visited my
                       mother

As with overgeneralisation, it is interesting that overuse only seems
to begin to occur near the end of the study, when the learners have a
certain amount of proficiency with the simple past. Again, it may
well be that the inappropriate appearance of simple past forms is a
surface indication of restructuring (see chapter five).

4.5. A NOTIONAL APPROACH TO PAST TENSE

In the previous sections we have argued that underlying much of the
observed variation in learner production was an attempt to maintain
an L1 distinction between imparfait and passé composé. In chapter
two, however, it was suggested that a much finer framework for past
time reference could be developed. Yet this finer analysis - while
admittedly more a linguistic explanation than necessarily a reflec-
tion of psychological reality - failed to show an unambiguous
relationship between *micro*-notions and surface representations. The
implication is therefore - and this was borne out by research from
other sources - that learners, at least during the beginning stages,
are using a relexification strategy which is of necessity more
concerned with maintaining *macro*-notional distinctions.

4.6. EXTRAPOLATION THEORY

One of the main arguments given in favour of the existence of an innate guiding device for the development of a language is the appearance of structures never previously met by - or only rarely available in the input to - the learner. Our corpus offers some examples of how this may be accounted for without recourse to an innate position, via a theory of extrapolation.

[G1.Josette.P3.L9]   Last weekend I musted to write my memorandum for DUT but the sun was shining and it was fair weather; I prefered to work in my garden. It was a nice idea because after this weekend it was cold and this since Monday

Here there are two clear examples of L2-based extrapolation - *musted* and *was shining*. The former, of course, belongs to the well-attested phenomenon of overgeneralisation (see above, 4.4.2.8.), but this in itself is an example of how learners extrapolate creatively from the known to the unknown; ie a feature is noted (has become *salient* - see chapter three) in the target language - in this case the *ed* inflection for the marking of regular forms of the simple past - and applied to a verb for which one does not know any irregular form - *must* - leading to *musted*. The same argument can be applied to the other instances of overgeneralisation.

Somewhat more interesting is the appearance of *was shining*. The past progressive had not been taught and is a sufficiently advanced structure for Josette (in any case a real beginner) not to have come

across it in previous learning experience. Moreover, it does not appear in the course book, and can only have appeared relatively infrequently in teacher talk. On the other hand, past BE had been taught and the present progressive was available in the course book. The implication, therefore, is that Josette has been able to patch together these two elements to create a new form which corresponds to target language past progressive. In doing so, she was no doubt encouraged by the imparfait/passé composé distinction which underlies so much of French L1 learner production.

Nor is Josette alone in doing this:

[G1.Corinne.P3.L5]   Friday, I took the TGV at the railway station, from Paris to annecy. The TGV is faster than the other trains, and it took only three hours and a half. My husband and my children were at Crest Voland since one week. They were waiting for me

[G2.Francis.P3.L7]   the last week I was in the park. I was going to a ride. four children were playing football

Elsewhere, a similar phenomenon can be seen at work with the appearance of the past perfect (whose appearance in the input available to these learners is identical to that of the past progressive):

[G3.Genviève.P3.L7]   wednesday evening friend's father of my son came home with the son's bike that he had repaired because a pneumatic was bursted. he was very kind of him

Apart from overgeneralisation, only two clear examples of such a domino effect have been identified, but extrapolation theory would suggest that they must be much more widespread. The relatively few - if significant - instances noted here can be put down to: the fact that (a) we have only examined past tense forms, and (b) much extrapolation will necessarily remain invisible to the researcher because of its very success. Swan (1987) has argued that an acquisition theory based on free variation can only have a restricted coverage because much of the target language is acquired correctly from the beginning. Extrapolation theory offers an explanation of why this is the case.

In addition, we have so far discussed only extrapolation from the L2. It should be clear, however, from our discussion of transfer (4.4.2.5.), relexification (4.4.2.5.1.) and the propensity to mark morphology (4.4.2.7.) that there is also a strong propensity to extrapolate from the Ll, although this may chiefly represent the application of strategic competence.

[G1.Janine.P2.L2] Last week, I have not work: one holiday's week. I
                 am not go to mountains ...

[G2.Alain.P3.L4] I am going to see the final of football cup of
                 France to Parc des Princes. It is Bordeaux team who
                 has win.

This should come as no surprise: in both cases the learner is operating the quite natural strategy of applying what is known to new situations. Surely it is such behaviour that is at the root of human

intelligence. We shall return to this in more detail in chapter five, but before doing so it may be worthwhile applying extrapolation theory to the emergence of rule-governed behaviour.

4.6.1. THE EMERGENCE OF RULE-GOVERNED BEHAVIOUR

A particularly significant result from this study is that - despite the appearance of a large number of prototypical base forms - many learners strive to generate past tense forms from underlying rules from the very beginning. We have discussed the types of rule applied elsewhere in this chapter - chiefly transfer (mediated and unmediated) and L2-derived (target norm, overgeneralisation and overuse). However, what is important from the viewpoint of extrapolation theory is:

(1) that learners who have rule-derived, morphological means of marking tense in the L1 will be predisposed to seek the morphological means to do the same in the L2;

(2) that the hypotheses formulated - both formally and semantically - to construct these tense forms are extrapolations from learners' previous knowledge - in this case, both the L1 and the L2, which means that the learner can produce either 'pure' forms from one source or the other, or 'hybrid' (mediated) forms deriving from both sources. Table 4.8. and figures 4.2. and 4.4. show how use of these forms develops over time.
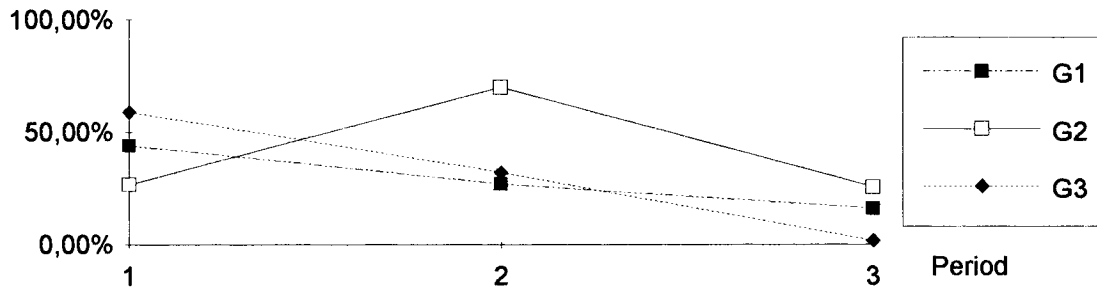
Figure 4.1 (a) - Prototypical Base Form as a Surface Representation of Past Tense (Percentage of the Whole) : Group Comparison
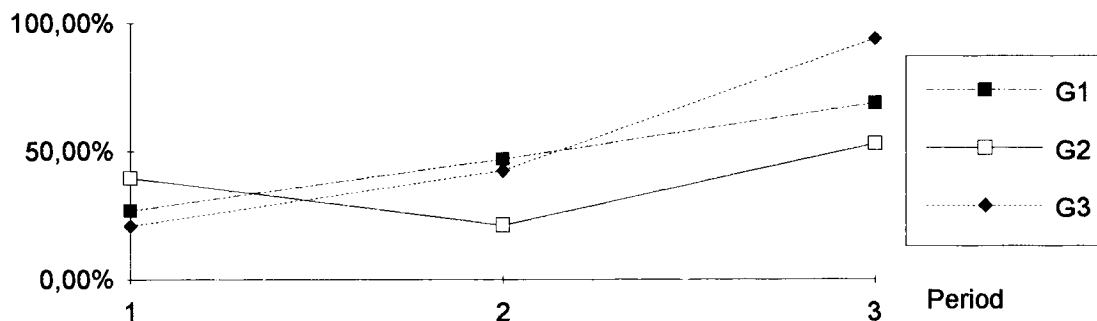
Figure 4.1 (b) - Target Language Norm as a Surface Representation of Past Tense (Percentage of the Whole) : Group Comparison
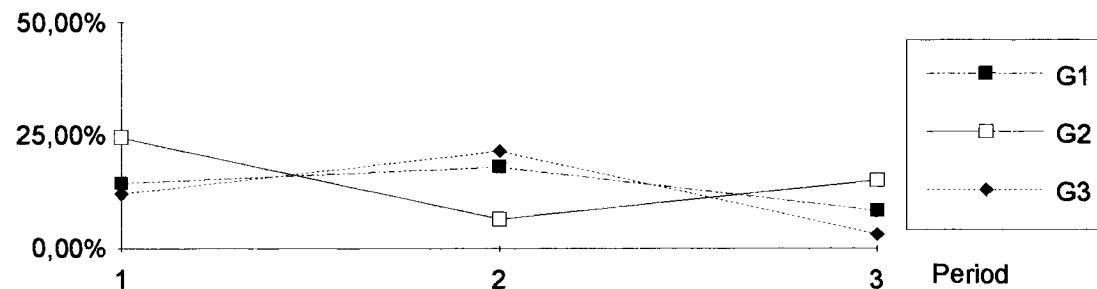
Figure 4.1 (c) - Present Perfect as a Surface Representation of Past Tense (Percentage of the Whole) : Group Comparison
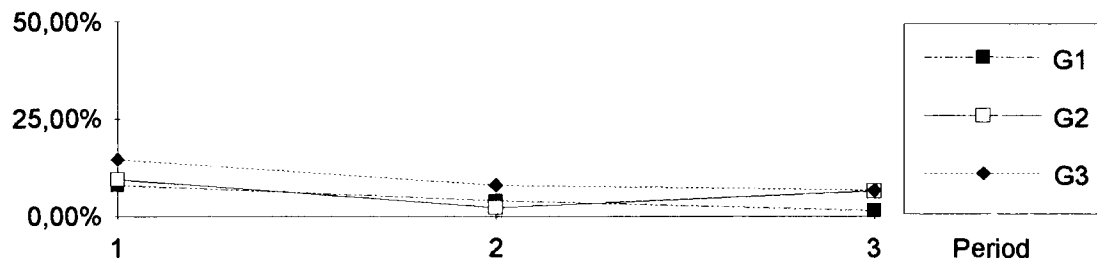
Figure 4.1 (d) - Mediated Present Perfect as a Surface Representation of Past Tense (Percentage of the Whole) : Group Comparison
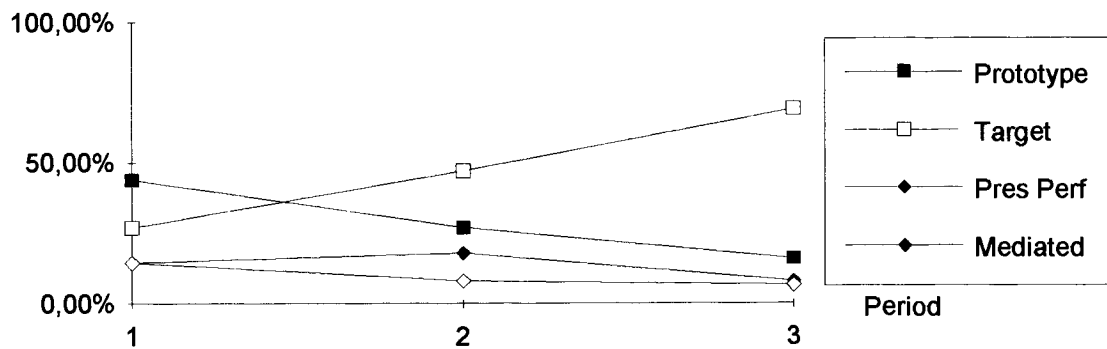
Figure 4.2 (a) - Surface Representation of Past Tense (as Percentage of Whole) : Group One
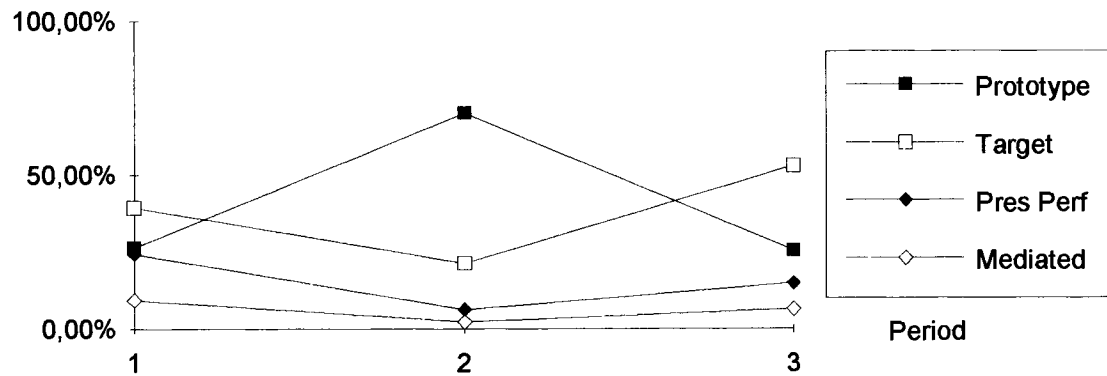
Figure 4.2 (b) - Surface Representations of Past Tense (as Percentage of the Whole) : Group Two
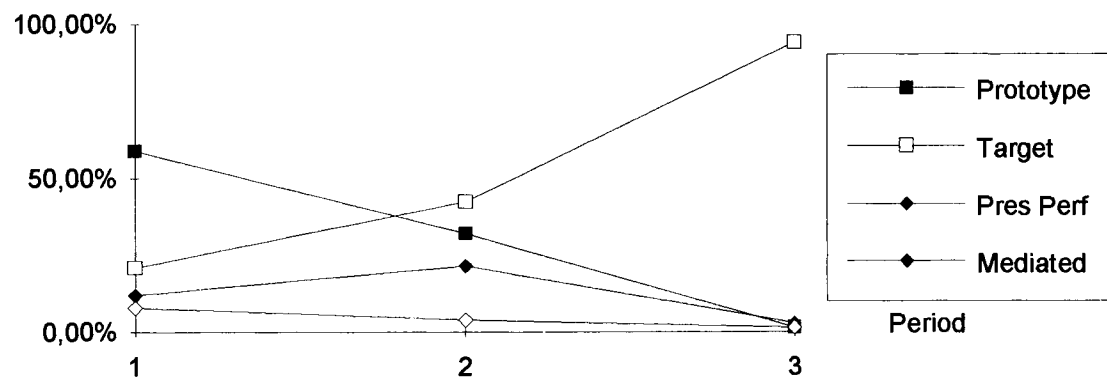
Figure 4.2 (c) - Surface Representations of Past Tense (as Percentage of The Whole) : Group Three

	Group 1				Group 2				Group 3			
	Prot	Tgt	PreP	Med	Prot	Tgt	PreP	Med	Prot	Tgt	PreP	Med
P1	44	27	14.5	14.5	26.5	39.5	24.5	9.5	59	21	12	8
P2	27	47	18	8	70	21.3	6.4	2.3	32	42.5	21.5	4
P3	16	69	8.3	6.7	25.5	53	15	6.5	15	94	3	1.5

Table 4.8. Percentages of Surface Representations of Past Tense at Each Period for Each Group

For all three groups, prototypical base form is the major initial surface representation of past tense. However, it is also significant that it moves throughout in inverse relation to the use of the target form. One possible implication is indeed that as soon as learners have the means of expressing past tense in the L2, they will do so. This contention is borne out by the presence among all three groups of a small, but significant percentage of L1- or mixed L1/L2-derived morphological surface representations of past tense. In part this expanding use of target forms clearly results from increasing knowledge of the L2 (both form and notion); but in part it may also reflect the availability of increasing amounts of processing capacity resulting from greater familiarity with the L2.

Of course, we are talking here of the basic underlying drive towards rule-governed behaviour. But other factors also affect learner production, notably ease of processing, which in turn is linked to cognitive difficulty and processing capacity. Any comprehensive second language acquisition theory must therefore attempt to take all of these factors into account. In chapter five, we shall thus seek to

incorporate extrapolation theory within a more general cognitive framework.

4.7. CONCLUSIONS

Throughout period one, most learners' production of past forms is characterised by variation, despite a clear preference for prototypical base form. There is indeed some apparently 'free' variation whose randomness cannot be accounted for. However, to a large extent variation seems to be motivated by an attempt to transfer L1 semantic distinctions to the L1, while lacking the linguistic competence to do so in a target-like way.

Furthermore, above and beyond the notional constraints of the L1 on hypothesis formation in the L2, there are also processing constraints which restrict the learner's ability to consistently produce surface realisations of the underlying notional distinctions, notably those relating to processing capacity.

In the early stages, learners seem to be operating two basic production strategies:

> (1) use of prototypical base form (ie derived from the L2);

> (2) relexification, which leads to *be* or *have* + verb base form, and can also lead to mediated forms (ie is essentially L1-determined).

There is evidence to suggest that these two basic forms are,

moreover, being used to express important underlying L1 distinctions.

Related to these *verb*-linked strategies is the application of *strategic competence*, in particular explicit timeframing through the use of adverbials and calendric expressions, and implicit through the use of shared knowledge. The lack of importance given to place expressions in this corpus, compared to that accorded to it in the studies reviewed above in section 2 is undoubtedly due to differences in data elicitation techniques. The French and German studies rely essentially on interviews with immigrant workers and seek to elicit past time reference by asking questions about the subject's past life. This inevitably leads immigrants to talk of their experience before arriving at their current place of residence, and the application of their strategic competence means they are aware that mentioning places which the hearer knows belong to the speaker's past is part of shared knowledge. This study, on the other hand, allowed subjects to choose their own topic of narration, which rarely leads to a heavy reliance on place because (a) the shared knowledge is lacking, and (b) the subjects tended to still live in or close to their place of origin. The use of place expressions would seem also, therefore, to derive from the application of strategic competence.

But even during the early stages, learners are often striving to construct rules that will produce distinct past tense surface forms to reflect underlying L1-derived semantic differences. We have argued, moreover, that formal and semantic factors interact to establish levels of cognitive difficulty related to processing

capacity.

Thus, one thing that is abundantly clear is that - given the amount of apparent variation and its semantically-related causes - the use of quantitative analysis in second language acquisition research needs (1) to be considerably more refined; (2) to be extensively supplemented by detailed longitudinal research of the case study type if it is to lead to a genuine understanding of how acquisition takes place.

Notes

1. Where /e/ corresponds to the French verb endings *er*, *é*, *ais*, *ait*, and *aient*. From an oral sample it is not possible to identify which verb form is being used.

2. Numbers and figures in square brackets refer to subjects in the study: G is the group number (G1 = group one); the name is the subject's name (or an abbreviation thereof); P is the data collection point number (P2 = period two); and L is the letter number (L3 = the third letter).

3. Of course, this is also an English discourse convention, although undoubtedly more common in French. The main point here, however, is that the learners are unaware of its existence in English.

4. The following extracts were noted from the speech of my own and friends' children. They do not form part of the corpus sampled in the Appendix.

5. Where overgeneralisation means the inappropriate application of a rule to contexts where it does not operate; eg the regularisation of irregular past tenses *(comed, goed, etc.)*.

CHAPTER FIVE

ON SECOND LANGUAGE ACQUISITION THEORIES

FROM THE FRAGMENTS TO THE WHOLE

... we see now through a glass darkly, and the truth, before it is
revealed to all, face to face, we see in fragments (alas, how
illegible) in the error of the world, so we must spell out its
faithful signals even when they seem obscure to us ...

Umberto Eco

5.1. INTRODUCTION

Rutherford (1982) writes

> We wish to know what it is that is acquired, how it is
> acquired and when it is acquired. But were we to have the
> answer even to these questions, we would still want to know
> why.

The "when" he refers to is presumably related to such factors as:

    1.   the *route* of language acquisition; ie which acquisition

        sequence or order, if any, is followed;

2. the *rate* of acquisition; ie how fast the second language is acquired.

The "what" refers to the *product* of second language acquisition; ie the interlanguage acquired by learners and, related to this, the ultimate attainment in that second language: their proficiency.

The "how" refers to the *process* of second language acquisition, what Ellis (1984) calls *assembly mechanisms*: the cognitive processes responsible for how language acquisition takes place.

The "why" refers to why second language acquisition takes place, the 'triggering devices', what Ellis (ibid) calls *power mechanisms*: the initiating factors which are responsible for second language acquisition taking place.

Any comprehensive second language acquisition theory must, of neccessity, account for all of these aspects. However, our intentions are less ambitious and more limited, and we shall therefore in what follows be confining ourselves in this chapter, as elsewhere, to assembly mechanisms.

We open with a reminder of aspects of second language acquisition which have been documented in the previous three chapters. Each of these 'fragments' is then discussed in turn before an attempt is made to combine them within a single viable framework. The best currently available, it is suggested, is a Cognitive model. Although there are indeed several competing theories within this framework, we consider

these to be essentially variants, and shall therefore draw on several models as a means of outlining a Cognitive perspective, rather than concentrating on any one particular theory.

The Cognitive model thus developed is based on the data processed in this thesis. Any viable theory, however, must not only be able to explain the observed, but also be capable of predicting the not yet observed. Testable propositions are therefore derived relating to three other morphemes examined briefly in chapter three: plural S, possessive S and the articles. Suggestions are also made concerning research protocols related to the testing of these hypotheses. The chapter concludes by applying to these hypotheses the criteria of criticism developed in chapter one.

5.2. THE FRAGMENTS

In this section we shall expand on the various elements relating to second language acquisition which have been identified in the earlier chapters. Any valid second language acquisition theory must be able to incorporate each and all of these. The most important are:

> (1) second language learners are attempting to express meaning with new forms;
>
> (2) variation is widespread, but generally explicable;
>
> (3) at least at the early stages, strategic competence plays a major role;
>
> (4) transfer is a widespread, but complex phenomenon.

We shall now examine each of these in turn.

5.2.1. A NOTIONAL APPROACH

As noted in chapter two:

1. A Notional Approach sees second language acquisition as the result of a learner's efforts to create meaning.

2. To create meaning, the learner must make use of all the resources at his or her disposal. These will include world knowledge and, in the case of learners who have already acquired a language system, linguistic knowledge - both in terms of knowledge of the meaning potential of language (ie what meanings language can express), and in terms of the means of expression of one (or possibly several) actual languages. In production situations, learners can also exploit their situational and contextual (schematic and pragmatic) knowledge. In addition, greater familiarity with and proficiency in the target language makes this an increasingly valuable source of information for the learner. What is being suggested here therefore is that the learner may very well have to perform communicative acts - create meaning - before having analysed the relevant parts of the target language, in which case he or she will have to fall back on 'primary' knowledge or lexical reformulation and the L1. This was demonstrated quite clearly in chapters two and four.

3. The search for meaning drives the learner to search for ways of expressing these meanings. Analysis of the target language provides knowledge of forms which are then appropriated to the meanings which the learner needs to express. However, it should not be automatically assumed that learners will necessarily succeed in matching form to meaning in ways which are common in the target language, at least at first. As a result, some variation is to be expected in the learner's interlanguage, both because no suitable form has yet been detected to deal with a particular notion, and because the form being used is not being used in a target-like way. Once again, considerable evidence of such variation was provided in chapters two and four - often, though not always, influenced by underlying notional, formal and processing constraints.

A Notional Approach thus makes explicit statements about assembly mechanisms, which are driven by the learner's desire to express meaning and to find forms which will allow him or her to do so.

On the other hand, a Notional Approach suffers from the vexed question of the *extent* of variation in interlanguage. If variability is indeed a *minority* phenomenon, does it make sense to investigate why it takes place and argue, as does Ellis (1985), that it is at the heart of the language acquisition process? On the other hand, perhaps even *non*-variable forms reflect form-meaning relationships. In which case one is left wondering why some forms are readily assimilated and others not. Nonetheless, it is quite clear from the research reported

in both chapters two and four that learners are indeed seeking to express meaning in the L2 by maintaining or establishing formal links to both micro- and macro-notional distinctions. Any viable second language acquisition theory must therefore deal with language as a *semiotic* system whose role is to assure communication, rather than as an *abstract* system, whether or not such an abstract system is stored in the mind.

Given the clear case for the existence of variation within a Notional framework, we shall move on in the next section to a discussion of what has been called the Variable Competence Model (Ellis 1985).

5.2.2. VARIATION

In chapter three the existence of 'fixed', or, at best, stable acquisition orders was brought into question. Indeed, the introduction of tests for fit between different orders showed variation both over time, and between groups. The implication is that variation - synchronic, between learners, and diachronic - is a normal state of events. This possibility was reinforced in chapter two, where variation in form-meaning matching preferences between learners was demonstrated.

In this section, therefore, we shall discuss the nature of variation as expressed in second language acquisition models which adhere to a general framework that has been called the Variable Competence Model

(Ellis 1985), and relate it to our own findings.

5.2.2.1. Synchronic Variability

Synchronic variability, it is claimed, is characterised by both *systematic* and *non-systematic* (or *free*) variation. The former, as its name suggests, is used to describe variation in interlanguage performance which is systematically tied to particular factors. To this extent, it clearly covers notion-driven pairings. The latter is used to describe the apparent random variation in the use of a given feature or features. As we saw in chapter four, this was an apparently minor factor in our corpus, accountable in general to factors such as cognitive complexity and related processing constraints.

Several factors have been identified as producing systematic variation, notably:

(1) communicative function;

(2) linguistic context;

(3) social context.

5.2.2.1.1. Communicative Function

This has already been dealt with above, in section 5.2.1..

5.2.2.1.2. Linguistic Context

Systematic variation has, on a number of occasions, been found to be a function of linguistic context, or environment. In other words, the proximity of one feature influences the appearance, non-appearance or form of another. Hyltenstam (1977,1978), for example, found that learners of Swedish as a foreign language tended to use the negative particle *inte* in post-verbal position - its main clause position - in all positions, whereas it shifts to pre-verbal position in relative clauses; acquisition of Swedish negation was found to follow a sequence whereby *inte* was gradually placed correctly in some contexts then others. Similarly, Wolfram (1985) found that the correct production of past tense forms by 16 Vietnamese learners of English was systematically related to the linguistic environment. Véronique (1987) also found that the marking of perfective or imperfective was related to the presence or absence of a calendrical expression to the right or left.

In our corpus, on the other hand, no *systematic* linguistic context factors were identified, although some examples of such *occasional* variation were found, usually related to the application of strategic competence. Where a strong contextual relation did appear, however, was in the emergence of target norm forms linked collocationally to calendrical expressions and time adjuncts.

5.2.2.1.3. Social Context

This aspect of variation was not directly dealt with in this study, but it is worth discussing in some detail for two reasons:

> (1) it is an essential tenet of the Variability Hypothesis;
>
> (2) on closer investigation it reveals much which is of relevance to our argument about the influence of processing capacity.

The idea that interlanguage production might vary according to social context derives from the socio-linguistic work of Labov (1970) who found that native speakers varied their pronunciation according to how much attention they paid to the task. To account for this, he proposed a continuum of styles moving from a careful style, where a great deal of attention is paid to one's production, to a 'vernacular' style, which is characterised by a lack of attention. In addition, of potential relevance to our study is Littlewood's (1981) claim that, in the case of language learners, the general social context in which they find themselves could render them subject not only to social norms - ie a desire to manifest social proximity or distance with one's interlocutor (Schumann 1978, Giles et al 1980) - but also *pedagogic* norms - ie the desire to produce correct language in pedagogic situations. Presumably, some, at least, of our subjects may have been thus influenced.

5.2.2.1.3.1. Social Context as Power Mechanism

Tarone (1979,1982,1983) developed her *capability continuum* as an application of Labovian ideas to second language acquistion. Essentially, she proposes that learners share with native speakers the ability to vary performance according to the situation, and that these different styles reflect the amount of attention paid by the learner to the correctness of the utterance:

Attention causes the learner to produce a style which is close to his formal norm; this norm may contain more target-like forms, but may also contain elements from the learner's native language formal norm. As less attention is paid to language form, more 'vernacular' interlanguage forms will be produced; these forms are more systematic, in the sense that they are more consistent with the interlanguage norm and less influenced by target language and native language norms. (Tarone 1988: 40)

Ellis (1984), adopts this position in a slightly modified form derived from Ochs (1979). He differentiates between *planned* discourse (roughly equivalent to the careful end of Tarone's continuum) and *unplanned* discourse (equivalent to the vernacular). Planned discourse is thought out and organised prior to production; unplanned discourse lacks forethought and preparation. Similarly, some situations allow for planning (presumably those which are fairly predictable because clear schemata exist - see, for example, Schank & Abelson 1977); others are unplannable.

The evidence for variation due to social context comes from a number of studies which have shown learner control of certain structures to vary according to the task undertaken. Schmidt (1980), for example,

found considerable evidence, in the use of second verb ellipsis by learners of English, of variation according to task. Larsen-Freeman (1975) found variations in morpheme rank orders between five different tasks. Wode (1980) found differences between elicited and spontaneous data. Hulstijn and Hulstijn (1984) found that 32 adult learners of Dutch increased their grammatical accuracy in story retelling tasks when they focused on form. Ellis (1987) found that different past tense forms (past BE, regular and irregular) were not produced with the same accuracy according to the amount of attention required by a narrative task carried out by a group of learners.

It seems clear, therefore, that variation according to task exists and is widespread. However, two problems remain for the Variable Competence Model to deal with:

> (1) whether such variation can be legitimately equated with style shifting in Labov's sense;

> (2) even if it can be shown that the same processes are at work, in what way does more or less attention drive the process of second language acquisition?

5.2.2.1.4. Style Shifting and Task Variation

Swan (1987), in a much neglected critique of the Variable Competence Model, argues strongly that style cannot be equated with task variation, since style is a unitary concept in which bundles of features vary systematically at the same time; it is therefore

inappropriate to talk of the variation of unrelated features as a
style shift:

If the notion of style seems inappropriate here and Tarone's model a
misleading metaphor rather than a useful conceptualisation, this is
because the data being discussed simply do not add up to anything we
can reasonably call a style. A style, if we are to use the word in
something approaching its normal sense, is a bundle of features which
are found together and which have a certain coherence. One variable
feature alone doesn't make a style. Nor indeed do whole catalogues of
variable features, as long as they are investigated independently and
cannot be shown to co-vary systematically in groups. To justify the
assertion that interlanguage variability involves style-shifting, it
would be necessary at least to demonstrate that, in a particular
interlanguage, a significant number of features all varied together
purposefully according to the degree of attention paid to language
form. (ibid: 62)

Moreover, style shifting is willed, whether consciously or no. That

this does in fact exist among second language learners has been

demonstrated by researchers working within a speech accommodation

theory framework, for example to demonstrate through speech one's

solidarity with or distance from one's interlocutor, using such

features as more pronounced foreign accent (Giles & StClair 1979,

Gass & Madden 1985, Perdue 1993). However, this would appear to be

different in kind to the type of style shifting Tarone is talking

about, where only the fact of paying more attention even allows the

learner to produce the language at all. Variable performance in such

circumstances is not willed: learners have no choice because the rule

in their interlanguage is not sufficiently controlled. It is

recognition of this fact that led Ellis (1985) to claim that

interlanguage was composed of a series of variable systems; ie that

there is no single underlying interlanguage competence, but rather a number of competences according to the amount of attention paid. This is reflected in the production of planned and unplanned discourse:

At any single stage in his development ... the learner has access to a series of alternative rules. Which rule he uses in any given context will be the result of the type of discourse he is being asked to take part in. Some rules will only be available in modelled speech, when he has the opportunity to focus on form and to plan utterances before they are uttered. Other rules will be characteristic of communicative speech, when he is focused on meaning and is required to plan and produce utterances more or less concurrently. (ibid: 170)

This application from sociolinguistics to second language acquisition of a theory of variable rules is unfortunate for two reasons:

(1) sociolinguistics is abandoning the idea that language knowledge can be made up - even partially - of variable rules (Gregg 1990, Lavandera 1978).

(2) such variability can be accounted for equally well by arguing (see below, section 5.3) that task variation is the result of differential processing capacity due to the unequal demands made on the learner's productive capacity by the different tasks. In other words, evidence from this area of research can be used to reinforce our contention that learner production is at least partially dependent on the processing demands of the task - which themselves depend on both the learners' overall proficiency and their degree of familiarity with (control of) the particular language. Tarone (1990: 393) argues that "this view of things certainly makes the task of the

linguist/researcher easier, but it sweeps too much under the rug of the retrieval system". However, the evidence from this study shows quite clearly that much of the observed variation can indeed be *usefully* ascribed to "retrieval" (ie, in this case, production) strategies.

In addition, the ability to plan discourse can be readily associated with the concept of strategic competence (see below, section 5.2.3). What is more, the existence of the opportunity to plan or pay attention in a particular situation does not of itself help explain why second language acquisition takes place. They are therefore perhaps better viewed as components in the productive apparatus of language in use, rather than as elements in the knowledge component.

5.2.2.2. Diachronic Variation : Variable Competence as Assembly Mechanism

Tarone (1979, 1982, 1983) argues that target language structures become incorporated into the learner's interlanguage over time by shifting them along the continuum of styles from the careful to the vernacular. In this she follows Hyltenstam (1977: 6)) who claimed:

We can expect a new rule ... to appear first in data with a high degree of formality where the learner has an opportunity to monitor his performance. In time, the adjustment can be expected to spread to less formal types of performance, and in the last instance, it will show up in informal oral production.

Thus interlanguage development is seen as the gradual extension of regularities from formal to progressively informal styles over time. But this argument would appear to be on much less solid ground given the need to account for the considerable amount of variation observed even within similar task types, as observed in chapters two and four.

The triggering device for diachronic variation, according to Littlewood (op cit: 156)), is the learner's seeking to match a social norm.

This striving towards a norm will pull the learner's whole repertoire in the direction of the range of variation similar to that found in the native speaker's use of language. In this way it will provide the dynamism for the learning process.

This is a simplified version of pidginisation and acculturation theories (Schumann op cit, Andersen 1983), yet it tells us little about the assembly mechanisms at work: the *how* of language acquisition. It may, nonetheless - insofar as the dominant social norm of the classroom is the pedagogic norm imposed by the teacher on the learning environment - be of relevance to studies like this one where some learners seem to use less 'simplified' (ie prototypical) language.

Moreover, the Variable Competence Model suffers from a basic weakness of error analysis in general: by focusing on those areas in which a learner's production diverges from the target language norm, it is missing those areas where there is little or no divergence. In other words, it may well be that large quantities of a learner's production

show little or no evidence of variation, contextual or other, and
that therefore to claim that variation is a major force in second
language acquisition may be a little exaggerated. As Swan (op cit: 65)
puts it:

> ... I think investigation will show that at any one time most
> features of any interlanguage are invariably right or wrong; that
> variable features are the exception rather than the rule; that
> synchronic variability is not in fact a characteristic feature of
> most learners' language; and that variability cannot plausibly be
> regarded as the major mechanism in language change. Many structures,
> surely, are learnt correctly from the beginning; some are learnt
> wrongly from the beginning and stay wrong.

It is indeed possible that paying greater or lesser attention will
explain some of the variability that has been noticed, and that, as
is claimed, developmentally the movement along the capability contin-
uum from careful to vernacular 'styles' is indeed the path, or at
least one of the paths, to second language acquisition. But what is
it that moves a learner along that continuum? Possibly a desire to
conform to 'social' norms. However (see below, section 5.3), we
believe that Cognitive models - which propose a dichotomy between
language knowledge and language processing - may offer a more useful
solution.

5.2.2.3. Summary

It should be obvious from chapters two, three and four that variation
is common - if not necessarily widespread (note the amount of
language which does not change). However, on balance, we would argue

that much of this variation can be accounted for through (1) form-meaning matching, and (2) processing constraints.

It is indeed significant that researchers working within a variable competence model have increasingly accepted the form-meaning relation as accounting for variation (Tarone 1988, 1990, Ellis 1985, 1990):

Now the essence of a variabilist account of second language acquisition is that the competence of the learner is much more variable than that of a native speaker, for the simple reason that interlanguage systems are more permeable to new forms than fully-formed natural languages. Often a learner's knowledge is anomalous in the sense that she may not be sure whether form x or y is required in a given linguistic context. As a result, she sometimes uses one and sometimes the other. In time, given motivation, she will sort out which one to use. (Ellis 1990: 386/7)

Less attention, however, has been paid to the impact of processing constraints, and it is to these that we shall now turn our attention.

5.2.3. STRATEGIC COMPETENCE

In chapter four, we talked extensively of the effect of processing constraints, which we related to the idea of cognitive complexity. Although these are obviously related to Cognitive views of language acquisition (see below, section 5.3), here we shall be limiting ourselves to developing these to include an extended concept of *strategic competence*.

The term 'strategic competence' was developed by Canale and Swain

(1980) as basically a cover term for the various communication strategies identified by Tarone (1981) and others (see, for example, Faerch & Kasper 1984), and further developed by Faerch and Kasper (1983) in a psycholinguistic model, as part of an overall system of strategies which are put into operation whenever language is put to communicative use. Strategic competence consists of

... verbal and non-verbal communication strategies that may be called into action to compensate for breakdowns in communication due to preformance variables or to insufficient competence. (Canale & Swain 1980: 30)

Essentially, then, it interacts with the other (linguistic) competences in performance situations. It is cognitive (but non-linguistic) behaviour which enables the knowledge sources to be applied to a particular communicative situation. Bachman (1990) has integrated this into an overall system to describe language in use. For him, therefore, strategic competence, although non-linguistic, is nevertheless an integral part of language as activity.

Strategic competence, in Bachman's formulation, consists of three components:

    (1) assessment;

    (2) planning;

    (3) execution.

5.2.3.1. Assessment

Assessment operates to:

> (1) identify the information needed to realise a particular communicative goal;

> (2) determine the language competences at the user's disposal to achieve this goal;

> (3) assess the language abilities possessed by the interlocutor, and hence any modifications which might be required;

> (4) monitor the success of the communication during the event and evaluate its success afterwards.

As we shall see below (section 5.3), the first three of these aspects of assessment correspond to elements of Anderson's (1985) first stage of language production: *construction*. Strategic competence would thus appear to be available even for L1 production. Where it takes on a more fundamental importance in L2 production situations is in the type of decision that needs to be made. Ellis (1986) has a similar three stage model to Anderson's, but applied directly to second language acquisition. His first stage is *planning*, during which the learner applies strategies of simplification (semantic - ie to convey meaning, including the use of paralinguistic features; and syntactic - ie the simplification or omission of morpho-syntactic marking).

Obviously, such decisions will be related to the learners' assessment of whether they have sufficient knowledge and/or processing capacity available to express the intended meaning. In addition, it should be clear that assessment is necessarily an ongoing process (as indicated by Bachman's fourth element, monitoring) since the development of interaction (or text, in a written mode) will lead the speaker to reassess the success of the communication.

Also, from the discussion in chapter four it should be clear that "simplification" is an altogether more complex process than the omission or simplification of elements, since learners have at their disposal the strategy of relexification, which bypasses L2 declarative knowledge by making use of the L1 store, and saves on processing capacity by calling on the already automatised L1 procedures. Of course, such a process requires transformation of the L1 string, which in turn uses up processing capacity and can lead to further simplification where a transformation is particularly complex (eg from passé composé to past simple, or reflexives). As O'Malley and Chamot (1990: 52) express it:

Because controlled processing places an extra burden on attentional processes, the learner might easily be inclined to reduce the cognitive load by not performing the strategy or by using a more familiar ... strategy (my emphasis)

In chapter four, we argued strongly that it was the extra burden on processing capacity which led to target norm manifestations (ie simple past) of underlying imparfait, since the strategy of relexifi-

cation - working through an L1 string to produce an L2 utterance - simply involved the relexifying of a single token imparfait to another single token simple past. With underlying passé composé, on the other hand, relexification involves transforming a double token - auxiliary + past participle - to a single token, leading to (1) processing 'errors' ('simplification' - ie falling back on the prototypical base form; straightforward relexification - ie the production of present perfect-like surface forms) and (2) hypothesis 'errors' (eg mediated transfer).

There is further evidence - discussed in chapter four section 4.4.2.9. - that processing constraints affect language production when one examines errors due to the relexifiying of reflexive verbs, or when the learner is faced with complex transformational areas like the negative or the distinction between *some* and *any*.

5.2.3.2. Planning

It is the role of planning to retrieve the relevant grammatical, textual, illocutionary, etc. items from the language competences to achieve the communicative goal. For second language learners,

the items may be retrieved from the native language, from the learner's interlanguage rule system or from the second or foreign language (Bachman op cit: 101/2).

This corresponds to Anderson's (1985) *transformation* stage.

Obviously, stages one and two are recursive, insofar as the ongoing

nature of the interaction will move the speaker between assessment and planning, as indicated in our discussion above of the use of the L1.

Again, evidence from the production of items due to mediated transfer shows how learners' current hypotheses may affect successful retrieval.

5.2.3.3. Execution

This makes use of the relevant psychological, psycho-motor and physiological mechanisms to put the earlier components into operation.

In other words:

It is the function of strategic competence to match the new information to be processed with relevant information that is available (including presuppositional and real world knowledge) and map this onto the maximally efficient use of existing language abilities (Bachman op cit: 102).

Once again, this corresponds to Anderson's (1985) third stage: *execution*.

What makes it so likely that some kind of strategic competence is in fact necessary not only as a repair mechanism, but in all communicative situations is the need for communication to take place in real time.

The real-time constraints of naturally-occurring conversations prove to be among the most serious problems facing the foreign learner. Within the confines of the conversation he has to select appropriate items from an inadequate and restricted knowledge of the target language and construct appropriate utterances. This complex process has to take place within the normal time scale of conversation (Cunningsworth and Horner 1985: 216).

Language users may therefore very well need to bypass rule-governed, linguistic processing to acceed to rapid processing (Skehan 1992). At least in the early stages of language learning, this may imply the appplication of two strategies whose origins are in strategic competence: use of the prototypical base form and relexification. In addition, the need to process rapidly may force the learner to abandon any attempt to use less developed L2 circuitry, and to rely instead on well-traced L1 paths.

5.2.3.4. Summary

Strategic competence is a cover term for a number of strategies that are put into operation whenever language is put to communicative use. It is thus available to and operated by both first and second language users and learners. As far as learners at the early stages of language learning are concerned, this means making up both for shortfalls in L2 knowledge and in sufficiently rapid access to this knowledge.

In particular, learners use strategic competence to: (1) identify the language needed to fulfill a particular linguistic goal; (2) assess their own abilities to achieve this goal; (3) monitor their success

in achieving the goal; and (4) retrieve the language necessary to success.

The research reported in this thesis has identified two especially important strategies employed by learners at the early stages: relexification and falling back on prototypical base forms. Both, we have argued, are the result of shortfalls in processing capacity.

In addition, we have indicated how such a conception of strategic competence is compatible with Cognitive models of second language acquisition.

It should be clear that relexification, at least, must be related to transfer. It is therefore to a discussion of this aspect of second language acquisition that we now turn.

5.2.4. TRANSFER

In chapters two and four, it was argued that there was considerable evidence suggesting the influence of the L1. In this section we shall therefore attempt to place this influence within a general learning framework in which transfer is viewed as, above all, a constraint on hypothesis formation and testing, and, to a lesser degree, as the result of the application of strategic competence.

5.2.4.1. Formal Constraints and Transfer

In chapter two we identified three occasions on which form might act as a pole of attraction for transfer: (1) during relexification (see below 5.2.4.4.); (2) where a strong collocational relation exists between one form and another (in our findings between explicit timeframing and the passé composé, leading to the production of present perfect-like surface forms to represent the particular notion); and (3) where L1 macro-notions (which are form related) are maintained in the L2.

5.2.4.2. A Notional Approach and Transfer

Chapter two presented evidence both from the present research and elsewhere to support the contention that transfer is inevitable while learners are seeking to map L2 forms onto L1 notions. However, it is equally clear that, as far as micro-notions are concerned, not all notions are equally likely to attract transfer.

Why this should be so is no doubt only partly related to the meaning of the notions themselves. What comes out clearly in any account of transfer at this level is the inter-relatedness and interaction of a whole series of factors which encourage or discourage its occurrence: collocational relations, processing capacity, undoubtedly (perceived) structural similarity. As Slobin (in Perdue 1993: 245) expresses it:

> ... each natural language has trained its speakers to pay different kinds of attention to events and experiences when talking about them. This training is carried out in childhood and is exceptionally

resistant to restructuring.

5.2.4.3. The Variable Competence Model and Transfer

We shall not spend much time in discussing the Variable Competence Model and transfer for three reasons:

> (1) it is not at all clear what the model - in its original formulation - has to say about transfer;

> (2) in its more recent formulations (Tarone 1988, Ellis 1990) it clearly espouses a Notional approach to second language acquisition; an approach whose view of transfer we have already dealt with;

> (3) as we argued above (5.2.2), much of the variation identified within the Variable Competence Model can be ascribed to factors other than style shifting.

5.2.4.4. Strategic Competence and Transfer

As we saw in 5.2.3., one of the commonly applied strategies from strategic competence is relexification - ie the transformation of an L1 string into an L2 surface form. This type of transfer, called *borrowing* by Corder (1983) is essentially a communication strategy whose role is to help learners cope with their lack of processing capacity when dealing with the L2. However, as Corder (ibid) argues, if this strategy leads to communicative success (ie the surface forms

produced are readily understood by the interlocutor, and no indication of error is available) it may lead the learner to incorrect hypotheses as to the nature of the relation between the target and source languages

5.2.4.5. Summary

It is clear from the above discussion that transfer is a widespread phenomenon with a variety of possible origins, each of which may interact with one or more of the others (eg in mediated transfer), thus rendering predictions hazardous. In a general sense, however, it would appear that the L1 influences both learning and learner performance: the former by constraining the hypotheses about the L2 which the learner is likely to make (eg in terms of seeking and maintaining form-meaning relations), the latter in terms of possible strategies available through the learner's strategic competence as a means of making up for shortfalls in processing capacity (eg relexification).

To sum up in the words of Corder (ibid: 95)):

It is not conceivable that in the acquisition of a second language the exisiting knowledge of a language or languages and the modes and purposes of their use should not play a part. All that we know about learning insists that previous knowledge and skills are intimately involved in the acquisition of new knowledge and skills.

5.2.5. HYPOTHESIS FORMATION

In our discussion of transfer, it was seen above all as a constraint on the learner's ability to construct hypotheses about the target language. Similarly, learners' attempts to maintain L1 macro-functional distinctions in the L2 (see chapter four) also demonstrate the influence of the L1 as a hypothesis-formulating constraint. It thus becomes clear that we need to investigate second language acquisition as part of a larger framework within which learning occurs through a process of hypothesis formation, refinement and development. Similar arguments were put forward in chapter four in our discussion of Extrapolation Theory - ie that, as O'Malley and Chamot (op cit: 33) express it:

Hypothesis formation and hypothesis testing are based on the learner's prior linguistic knowledge, that is, knowledge of language rules in the first or the second language or of some other language. The effective use of prior linguistic knowledge from the first or some other language results in interlingual transfer, while the application of knowledge from within the language results in intralingual transfer.

In this section we shall seek to expand and develop this concept.

5.2.5.1. The Learner's Task

The formation and testing of hypotheses would appear to involve the learner in the following tasks:

> (1) the identification and isolation of the constituent
>   elements of the target language;

(2) the creation of hypotheses about observed regularities in this raw data (influenced also by existing - L1 - knowledge);

(3) the testing of these hypotheses by a matching process between the hypothesis and further samples of the target language.

This three-stage learning pattern has been identified both theoretically and empirically in several Cognitive models of language learning, and will be discuused in greater detail below (sections 5.3.1.1.3., 5.3.1.1.4., 5.3.1.1.5. and 5.3.1.2.1).

5.2.6. SUMMARY

To recap briefly on what has been said in section two, the fragments to be accounted for in any second language acquisition theory are:

(1) learning is a process of identifying new means to express the meaning potential of language;

(2) for the learner this meaning potential may be limited, at least at the early stages, to the notions expressed in the L1; transfer is therefore to be expected;

(3) variation - reflecting both the search for form-meaning matching and processing constraints - is the norm, but would appear funda-

mentally *un*related to a concept of style shifting;

(4) processing constraints are compensated for by the application of strategic competence, notably in the early stages relexification and the use of prototypical base forms;

(5) language learning is a process of hypothesis formation and testing; the formation process is based on existing knowledge and will therefore necessarily make reference to the L1; thus, once again transfer is to be expected.

In the next section we shall attempt to incorporate these fragments into a single framework, and shall argue that this can best be done within a Cognitive perspective.

5.3. THE WHOLE : COGNITIVE MODELS OF SECOND LANGUAGE ACQUISITION

This section reviews Cognitive models of second language acquisition in an attempt to establish a theoretical framework with the potential to encompass the elements outlined in section two.

5.3.1. COGNITIVE MODELS

Cognitive models derive from the research of cognitive psychologists into learning in general. They thus have wider application than the acquisition of a second language, while possessing the merit of placing second language acquisition within a broader framework which

is capable of accounting for the fragments discussed above. That this

is possible is evidenced by factor-analytic studies in the psychology

of learning and intelligence. Carroll (1993: 193), for example, after

a monumental survey of such research concludes:

It has been apparent that the development of language skills is
substantially related to the development of more general cognitive
skills, in that measures of language skills tend to be substantially
correlated with measures of other cognitive skills ...

In this section we shall begin by outlining Anderson's (1983, 1985)

general cognitive model for language production and comprehension

before moving on to make parallels with McClaughlin's (1987,

1990) well-known cognitive application to second language acquisition

theory.

5.3.1.1. Anderson's Model

Anderson (1983, 1985) distinguishes between *declarative knowledge* and

procedural knowledge.

5.3.1.1.1. Declarative Knowledge

Declarative knowledge is stored in long-term memory as propositional

networks (ie systems of associated ideas or concepts). By a process

of "spreading activation", a stimulus to one point (called a node) in

the network will evoke other related concepts. One clear field in

which declarative knowledge is primordial is the lexicon. Similarly,

it would appear quite obvious that lexical phrases (Nattinger &

DeCarrico 1992) must be accounted for within declarative knowledge.

O'Malley and Chamot (op cit) propose that metalinguistic knowledge is also stored as declarative knowledge. Making use of Rumelhart and Norman's (1978) concept of *restructuring*, they suggest that

> ... an individual with domain-specific knowledge in two languages may begin to see the different ways in which the same concept can be expressed in the L1 and L2. The person then establishes a new schema that differentiates applications of each language to identical concepts (O'Malley & Chamot 1990: 71/2)

Rumelhart and Norman (op cit) identify two types of restructuring: *patterned generation* and *schema induction*.

5.3.1.1.1.1. Patterned Generation

Patterned generation is the the creation of new schemata from old ones by a process of modified copying. We would argue that this is indeed a powerful means of hypothesis formation open to second language learners, at least at the early stages, and offers at worst a partial explanation of transfer.

Consider, for example, the case of the acquisition of past tense discussed in chapter four, where the process of modified copying can be discerned in the learners' attempts to maintain the passé composé/imparfait distinction in the L2.

5.3.1.1.1.2. Schema Induction

Schema induction is inducing new schemata from regularities observed in contiguous old schemata. Although most learning is believed to occur through patterned generation, O'Malley and Chamot (ibid: 72) argue that it is, in fact, schema induction which is more important in second language acquisition:

... the individual sees similarities in the pattern by which two languages are comprehended or produced when the languages co-occur or are contiguous. Second language acquisition is more likely than most other forms of learning to result in the co-occurrence of schemata from the two languages because both schemata may be evoked whenever the meaning-based representation is stimulated

Clearly this has repercussions in terms of a Notional Approach since the contiguous schemata in question can be conceived of as meanings to be expressed. For example, in chapter two we argued that the particular notion, collocationally linked as it is with explicit timeframing, led to the appearance of present perfect-like surface forms in the L2, influenced by the L1 collocational linking to the passé composé. This can be viewed as a stimulation of two contiguous schemata leading to transfer.

However, there are a number of difficulties in terms of using declarative knowledge in spontaneous interaction (O'Malley & Chamot ibid: 215):

(1) retrieval of declarative knowledge is relatively slow;

(2) short-term memory is limited and rule-governed language production would make inordinate demands on it.

Language skills thus need to become proceduralised (automatic) through practice, thus reducing the burden on short-term memory. And, indeed, it could be argued that the examples given above from past tense acquisition can equally well be explained in terms of learners preferring to use well-established (proceduralised) - ie L1 - circuitry rather than making use of the as yet minimally proceduralised declarative knowledge store.

5.3.1.1.2. Procedural Knowledge

Procedural knowledge, on the other hand, is a "cognitive skill"; ie an ability to apply knowledge to the solving of problems, or rules to the generation of language. Rule-governed behaviour is thus conceived of as procedural knowledge, and fluency in language use as the automisation of procedures due to frequent repetition. How, though, is procedural knowledge stored in the mind? Anderson (1983) suggests that this occurs through a series of propositions in what he calls "production systems". Basically, the representation for a production system requires a condition (represented by IF) and an action (represented by THEN). Using some of our arguments concerning the production of past tense forms by our learners, for example:

IF there is an underlying imparfait THEN transform into surface past simple.

IF the event in question is remote from the utterance situation THEN produce a simple past surface form.

IF the event is collocationally linked to a calendrical expression, THEN produce a simple past surface form.

Faerch and Kasper (1985, 1987) have adopted this dichotomy to second language acquisition. For them, declarative knowledge corresponds to interlanguage rule knowledge, whereas procedural knowledge is an active means of transforming declarative knowledge into a readily accessible form. They identify five components in procedural knowledge:

(1) reception procedures (eg inferencing to guess meaning);

(2) production procedures (eg assessment - see above 5.2.3.1);

(3) conversation procedures (eg following discourse principles);

(4) communication strategies (eg repair);

(5) learning procedures (eg hypothesis formation and testing).

It should be obvious from this list that all but the last relate to what we have called strategic competence, since they involve the (more or less deliberate) application of strategies aimed at maximising communicative efficiency in 'difficult' circumstances - as when the learner's L2 knowledge is inadequate.

So far we have discussed the two kinds of knowledge as though they were static, although it has been suggested that successful language

acquisition requires the proceduralisation of declarative knowledge. How, then, does this occur? Anderson's (1985) model identifies three learning stages:

   (1) the cognitive stage;

   (2) the associative stage;

   (3) the autonomous stage.

5.3.1.1.3. The Cognitive Stage

It is at this stage that language, for example, becomes *salient*; ie that the learner becomes consciously aware of the existence of a piece of language to be learned. Input becomes intake.

Knowledge at this stage, it is claimed (Anderson 1983, 1985) is typically declarative and can normally be described verbally by the learner. However, the research concerning this stage comes essentially from tasks not related to language learning, where, I would suggest, this may not always be the case, particularly if a subconscious association between the L1 and L2 forms has been made.

Knowledge in this form enables the learner to communicate in the L2, but such knowledge is insufficient for fluent performance. In addition, knowledge at this stage is frequently error-ridden.

5.3.1.1.4. The Associative Stage

During the associative stage two major changes take place:

(1) errors in the original declarative representation are
gradually detected and eliminated;

(2) further practice in the use of the knowledge leads to
greater ease of use.

Declarative knowledge, in other words, becomes procedural. This is not to imply that the declarative form is necessarily lost. It may indeed remain available, allowing the learner to state a rule long after its use has become automatic. However, because knowledge is not yet wholly proceduralised, the amount of processing capacity available for noticing other elements in the language remains limited.

5.3.1.1.5. The Autonomous Stage

During the autonomous stage fine-tuning takes place, with performance becoming virtually automatic, independent of reference to the underlying rules. As a result, demands on processing capacity are greatly reduced.

5.3.1.1.6. Summary

Cognitive models hypothesise the existence of two (interrelated and interacting) knowledge stores: declarative and procedural. The former is considered to be an abstract and semantic network of associated nodes which are activated by a stimulus to one of them. Procedural knowledge develops through the use of declarative knowledge, fluent language use resulting from the automatisation of procedures through

constant practice. It is further claimed that *rules* are stored as procedural knowledge as IF - THEN propositions known as production systems.

The existence of such a dichotomy is further evidenced by experimental factor-analytic studies. Carroll (ibid), for example, identifies eight higher order factors of cognitive ability, six of which are related to intelligence and perception, and two to retrieval and speed. He suggests that each of these may in turn be sub-divisible, but this is unimportant for our argument: the essential point is that retrieval and speed have been found to be identifiable as separate entities from cognitive knowledge. Broad retrieval ability denotes

> a capacity to readily call up concepts, ideas and names from long-term memory. Such a capacity seems to be involved in ... certain abilities [eg oral production and writing] in the domain of language. (Carroll ibid: 612)

Declarative knowledge is proceduralised in three stages: (1) the cognitive, during which input becomes intake; (2) the associative, during which declarative knowledge is assimilated and begins to become proceduralised; and (3) the autonomous, during which proceduralisation is completed.

McLaughlin's
5.3.1.2. ~~McGlaughlin's~~ Information-Processing Model

The most developed second language acquisition theory within the type of framework outlined in section 5.3.1.1. is ~~McGlaughlin's~~ McLaughlin's informa-

tion-processing model (~~McGlaughlin~~ McLaughlin 1987, 1990; ~~McGlaughlin~~ McLaughlin et al 1983).

Within this framework, second language learning is viewed as the acquisition of a complex cognitive skill. To learn a second language is to learn a skill because various aspects of the task must be practised and integrated into fluent performance. This requires the automatization of component sub-skills. Learning is a cognitive process, because it is thought to involve internal representations that regulate and guide performance. In the case of language acquisition, these representations are based on the language system and include procedures for selecting appropriate vocabulary, grammatical rules, and pragmatic conventions governing language use. As performance improves, there is constant restructuring as learners simplify, unify, and gain increasing control over their internal representations (~~McGlaughlin~~ McLaughlin 1987: 133)

To use another, non-cognitive, analogy, sucessful serving in tennis

involves the isolation and practice of the sub-skills of throwing the

ball correctly into the air, moving the racket correctly, standing

and moving your feet correctly, etc.. This analogy is not as far-

fetched as it may appear at first sight. After a wide-ranging

longitudinal study involving six source languages and five target

languages, the researchers on the European Science Foundation Project

on Adult language Acquisition concluded that

... language acquisition resembles much more the slow mastering of a skill, such as piano playing, than an increase of knowledge, such as the learning of a mathematical formula (Klein, Dietrich & Noyau in Perdue 1993: 109)

A given skill which has been mastered when performed alone, however,

may be done less well when it occurs in conjunction with another

skill, until, through time and further practice of both together, it

is again mastered. This restructuring is further discussed below (5.3.1.2.1).

However, complex skills are characterised by a hierarchical structure: ie skills are made up of series of sub-skills each of which needs to be executed before a higher level goal can be realised. As these sub-skills become increasingly automatised, more can be executed at once. Thus human beings' limited processing capacity can be spread more widely. Of course, this assumes that language knowledge is similar to other kinds of knowledge. In this respect, Klein, Dietrich and Noyau's (ibid) statement is significant.

Skills become automatic through practice. For Shiffrin and Schneider (1977), memory is a collection of 'nodes' that become interassociated through learning. Most of the time these nodes are inactive, constituting long-term memory. However, when there is some kind of external stimulus, the nodes required to deal with this stimulus are activated, becoming short-term memory.

The rapidity of the reaction of nodes to this external stimulus is *automaticity*, which is built up through practice ("through the consistent mapping of the same input by the same pattern of activation over many trials"). Increased automaticity therefore also leads to fuller memorisation.

On the other hand, the temporary activation of nodes under conscious control requires considerable amounts of processing capacity, which will affect performance in other areas also. Thus, because less

processing capacity is available, performance errors may occur. Presumably, it is this which can account for variable language performance on different tasks making different demands on processing capacity, as discussed in section two and within the Variable Competence Model discussed above (section 5.2).

5.3.1.2.1. Restructuring

However,

> ... there is more to learning a complex cognitive skill than automatising sub-skills. The learner needs to impose organisation and to structure the information that has been acquired (McClaughlin 1987: 136).

How? Karmiloff-Smith (1986), argues that the restructuring process takes place in three stages. In stage one, which is data driven, the task components are mastered, but there is no attempt at overall organisation; in stage two, organisation is imposed via attempts to simplify, unify and control the internal representation; and in stage three, the other two stages are integrated. This framework - essentially Piagetan in nature - closely resembles the three-stages identified by Anderson (see above, sections 5.3.1.1.3. - 5.3.1.1.5).

In a similar vein, Skehan (op cit) also proposes that there are three stages involved in language learning: (1) lexicalisation, (2) syntac-ticisation, and (3) relexicalisation. Only the second of these is related to the generation of a rule-governed system (ie similar, if

not equivalent to Karmiloff-Smith's second stage), whereas the first and last would appear to be both parallel, lexis-based knowledge stores and accessing devices, since they are designed as means of processing language in real-time.

Karmiloff-Smith's formulation explains, for example, why less proficient language learners are less able than more proficient learners or native speakers to handle semantic level changes, but more able to handle syntactic level changes. It may also explain the 'good language learner' findings that multilinguals make better language learners. Also related is the identification by some researchers of "U-shaped development":

Even though there are acquisition sequences, acquisition is not simply linear or cumulative, and having practised a particular form or pattern does not mean that the form or pattern is permanently established. Learners appear to forget forms and structures which they had extensively practised. (Some researchers have referred to U-shaped development (Lightbown 1985: 177).

In other words, new knowledge impacts on old. ~~McGlaughlin~~ Mclaughlin (1990: 118), however, argues that restructuring is essentially the development of *procedural* knowledge:

... restructuring can be seen as a process in which the components of a task are co-ordinated, integrated, or reorganized into new units, thereby allowing the procedure involving old components to be replaced by a more efficient procedure involving new components

However, ~~McClaughlin~~ Mclaughlin (ibid) goes on to suggest that restructuring may result from developments in form-meaning matching. From our findings,

this would appear plausible. McClaughlin himself bases his argument on Kellerman's (1983) finding that Dutch EFL learners acquired modal passives in a U-shaped curve. Kellerman identified three stages: (1) L1 structure based; (2) variable target norm and non-target norm; and (3) target norm. He also refers to L1 acquisition of the simple past irregular in three stages: (1) target norm; (2) overgeneralised; and (3) target norm. Although our results do not corroborate this last finding (see chapter four tables 4.1., 4.2. and 4.3), they do suggest (see chapter three) a discernible three-stage pattern for *some* morphemes (see below for a further discussion).

Ellis (1985) proposed three stages within a Variability framework. They nonetheless appear assimilable to an information-processing Cognitive model:

(1) assimilation, during which hypotheses may or may not correspond to the target language rule; forms may therefore be in free variation;

(2) because of the economy principle, redundant forms are dropped; at this stage systematic variation develops;

(3) knowledge restructuring, during which the target matching occurs.

As noted above, the evidence from our own research only partially supports such a three-stage pattern, or at least supports it for only certain morphemes. In chapter three, for example, U-shaped

development was only clearly identified for one morpheme - third person S (see figures 3.3. - 3.5). On the other hand, U-shaped development for *some* morphemes by *some* groups was identified: group one (regular past, A), group three (regular past, THE, plural S). Unfortunately, A-shaped development1 is also discernible for certain morphemes: group one (irregular past, plural S), group two (THE, A, possessive S).

These fluctuations may be the result of the short time scale of our study (eight months) or the lack of language development over the period (only THE, A, copula and plural S have consistently high scores for all groups over all periods). This seems likely given the between group differences. On the other hand, they may reflect something in the nature of the particular morphemes, at least in contact with French-speaking learners of English.

Here again, however, the modified group range graphic presentation (chapter three, figures 3.9.- 3.11) may prove more revealing than simple acquisition sequences, since it more often reveals a 'trickle effect', with gradually increasing numbers of individuals within groups moving to the left (greater accuracy) of the graph. The only occasions where this tends not to happen (in some groups) is when initial accuracy was already high or evenly spread (group one and group three: THE).

This does not mean, of course, that restructuring is not taking place. On the contrary. But it does appear to lend support to Ellis'

(1985) view that this restructuring is notionally driven. Taking the
acquisition of past tense as an example, for instance, the restructu-
ring process discernible from the present research would seem to be
the following:

(1) Learners seek to express L1 (macro-)notions in the L2. To
do so they make use of all the means at their disposal, including
relexification, use of prototypical base form and borrowing. A wide
variety of forms may thus be produced to express a given meaning.
Over time (the length depending on circumstances and individuals),
however, learners move gradually and hesitatingly into a second
stage.

(2) In this second stage they begin to discern both L2
patterns and L2 notions. This hypothesis-formation and testing stage
may, of course, lead to false hypotheses and hybrid forms (eg
mediated transfer). Also, not all notions of the same form are
equally assimilable (see chapter two), so that to the outside
observer variation may be apparently random, whereas in fact this
variation simply reflects the learner's differential success in form-
meaning matching. Once again, with time - and possibly not for all
learners or for all notions - learners move on to stage three.

(3) Learner production approaches or reaches target
proficiency, although variation may continue owing to differential
proceduralisation of knowledge.

It is worth pointing out that such a model - especially when paired with a declarative/procedural knowledge dichotomy - can account for variable production without having to rely on underlying variable competences.

Moreover, it should be emphasised that the nature of interlanguage implied is one of considerable flux. Already in 1978, Selinker and Lamendella suggested that the cline is a more appropriate visualisation of interlanguage development than the continuum because

> ... a continuum presents a more or less regular gradient of change, while cline progressions manifest an irregular gradient marked by the existence of stable configurations possessing specifiable durations and periodicity (ibid: 173)

This cline itself represents "a dynamic evolving system, an IL diasystem" (ibid: 173) which

> ... may be restructured ... by the accumulation of new linguistic features, the deletion of old features, and various types of restructuring processes which change the character of the learner's IL.

In other words, at any given point of time, a learner's interlanguage is made up of a mix of the three stages we outlined above, depending on the feature involved, the notion it expresses (different notions being at different stages) and the degree of proceduralisation. In addition, because of the state of flux - the permeability (Adjemian 1976) - and the potentially cumulative impact of restructuring,

learners may be able to leap between stages *in either direction.*

5.3.1.2.2.. Summary

Anderson, McLaughlin, Karmiloff-Smith, Skehan and Ellis all identify three stages in the development of knowledge. This restructuring is typically U-shaped and may involve a lexical stage (ie the learning of the form, without assimilation of the rule); a rule-development stage (which may lead to overgeneralisation); and finally a third stage in which the first two combine to produce target knowledge and performance.

We have argued that this may be an oversimplification; that restructuring, like second language acquisition as a whole, is notionally driven, and that not all linguistic features (structures, morphemes, etc.) will necessarily show U-shaped development. Indeed, some may have the opposite, A-shaped development. In addition, it should be clear that the status of rules varies according to such factors as the extent of form-meaning assimilation and the degree of proceduralisation.

5.3.2. TRANSFER WITHIN A COGNITIVE MODEL

Within the framework of Cognitive models,

... the process of transfer is more appropriately viewed as evidence
of a constraint on the learner's hypothesis testing process
(Schachter 1983: 98)

Looked at in this light, transfer arises because the learner, when constructing hypotheses, has access to previous linguistic knowledge, both of the L2 and of the L1. What can happen under these circumstances is that either or both of these sources can come into play. Transfer thus ceases to be the simple crossover of a structure from one language to another, and becomes part of a more general hypothesis formation process.

However, the question remains of under what circumstances the L1 will predominate in hypothesis formation? Andersen (op cit: 200) suggests that:

... it should be clear that transfer and natural acquisitional processes are not independent forces, only one of which can operate at any given time, but rather that natural acquisitional processes which produce interlanguage independent of transfer are primary and transfer operates in conjunction with these processes

This begs the question of the nature of "natural acquisitional processes". In Andersen's formulation these are chiefly associated with Slobin's 'operating principles'. It also begs the question of under what circumstances transfer will occur. Here Andersen (ibid: 182) makes precise proposals:

A grammatical form or structure will occur consistently and to a significant extent in the interlanguage as a result of transfer if and only if (1) natural acquisitional principles are consistent with the L1 structure or (2) there already exists within the L2 input the potential for (mis)generalization from the input to produce the same form or structure

Apart from that resulting from the application of strategic

competence, this suggests that the real (and undoubtedly perceived) similarity between passé composé and present perfect, and between a single token imparfait and a single token past simple encourages transfer. While this is undoubtedly true, it should be clear from the above discussion that other "natural acquisition principles" (ie hypothesis formation) come into play.

Formulations within a Cognitive framework thus have the advantage both of bringing transfer within the confines of a general language acquisition theory, and also of providing a working definition of transfer which may allow researchers to predict, identify and explain occurrences.

Furthermore, the addition of the procedural dimension to language competence makes it possible to examine transfer in more interesting terms as a performance phenomenon, with limited processing capacity encouraging learners to use well-established circuitry to achieve real-time interaction.

Transfer thus impacts on both declarative and procedural knowledge.

5.3.3. SUMMARY AND CONCLUSIONS

Cognitive Models open the black box. As outlined and developed here, they are able to make explicit statements about how learners perceive, and make and test hypotheses about language. In addition, Cognitive models introduce the performance side to language use as an

essential ingredient in the development of language competence, as we argued was necessary in chapter one.

Learning takes place through the organisation and reorganisation of the knowledge store and via increasingly automatic access, which itself has repercussions on long-term memory. Organisation and reorganisation take place through a process of hypothesis testing and development called restructuring.

Access to this knowledge is more or less automatic. Automaticity of access increases through practice. Non-automatic processing is often called 'controlled' processing. This does not imply that processing under non-automatic conditions must be under conscious control:

The distinction between controlled and automatic processing is not based on conscious experience. Both controlled and automatic processes can in principle be either conscious or not. Since most automatic processes occur with great speed, their constituent elements are usually but not necessarily hidden from conscious perception. Some controlled processes also occur with great speed, so that they may not be available to conscious experience ... these controlled processes [are called] 'veiled'. Other controlled processes [are] referred to as 'accessible' [and] are easily perceived by the learner (McClaughlin, Rossman & McLeod 1983: 140)

This matrix framework allows Cognitive models to account for variation, as both the Variable Competence Model and the Notional Approach can, but in terms of deficient knowledge and/or insufficient automaticity of access (proceduralisation).

In addition, it is important to emphasise that Cognitive models can

encompass the Notional Approach's interest in form-meaning relations, since hypothesis formation and testing can be viewed as means of establishing such relationships.

Cognitive models are, moreover, of particular importance because they link second language acquisition research to psychological research into general learning, and research into *language* learning can only gain from being related to the theorising and research on general learning taking place in other disciplines.

Transfer is regarded both as one expression of the constraints of previous learning experience on hypothesis formation, and as the surface manifestation of processing constraints leading the learner to rely on better-established L1 processing circuitry.

Having thus established an a priori case in favour of Cognitive models as theories of second language acquisition, we shall turn now to the application of the criteria of criticism which we developed in chapter one.

5.4. THE CRITERIA OF CRITICISM : AN EXERCISE IN APPLIED PHILOSOPHY

In chapter one we outlined three main criteria - with three related corollaries - and one minor criterion to be applied to the scientific examination of any T2 level theory. To recapitulate, they were:

(1) a theory should be capable of explaining the exisfting data and of making valid predictions about other areas;

(2) a theory and its propositions should be falsifiable. This gives rise to three corollaries:

      (a) a hypothesis should be stated clearly and unambi-guously;

      (b) it should therefore be explicit, simple and economical;

      (c) data processing should be appropriate;

(3) a theory should generate a large number of useful, testable hypotheses;

(4) a theory may, but need not, have practical implications.

In this section we shall examine the Cognitive model discussed in section three in the light of these four principles.

5.4.1. THE COGNITIVE MODEL AS AN EXPLANATORY DEVICE

This has essentially been dealt with in section three above, where we argued forcefully that Cognitive models can indeed account for the data as presented in this thesis.

5.4.2. THE COGNITIVE MODEL AS A PREDICTIVE DEVICE

It is obviously unrealistic to make predictions about data which has
already been discussed and 'explained'. In this section, therefore,
we shall begin by seeking to establish general principles based on
the observed data reported here and then extrapolate from these to
areas of language not covered in such detail.

5.4.2.1. General Principles

As we saw above in section 5.3., a certain number of hypotheses can
be derived from the phenomona observed and reported in this research:

(1) second language acquisition is a process of form-meaning
matching;

(2) the second language acquisition process takes place in
stages which are not necessarily clearly defined. Using Anderson's
(1985) terms, we shall call these: (a) cognitive, which is a period
of flux during which learners are essentially seeking means to
express L1 notions; (b) associative, during which learners begin to
discern and approximate to L2 notions and form-meaning relations.
Variation is still characteristic, but due to different processes;
and (c) autonomous, during which stage *stable* target-like distinc-
tions appear. These stages together make up the process of *restructu-
ring*.

(3) language acquisition is a process of hypothesis formation
and testing;

(4) strategic competence is used to make up for both lack of knowledge and insufficient processing capacity;

(5) transfer is a widespread, but complex and often apparently invisible phenomenon.

We shall now go on to examine each of these in turn to establish clearly formulated micro-level hypotheses concerning other language areas, and which are capable of being tested.

5.4.2.2. From Principles to Predictions

In this section we shall develop hypotheses related to morphemes other than the past tense markers already discussed. In particular, we shall examine plural S, possessive S and the articles. However, it should be emphasised at once that, due to the interactive nature of both hypothesis formation and language production (eg L1 and L2 circuitry can be involved in both production in limited processing situations, and in the elaboration of hypotheses), and also due to the cline nature of interlanguage, that it is exceptionally difficult to wholly separate different hypotheses. In other words, what we are suggesting is that it is in the nature of human cognitive processing to call upon all of one's available capacities. As a result - however unsatisfactory for model building - it will inevitably be extremely difficult to identify individual causes.

This should immediately become apparent when examining the hypotheses which follow. The proposed delayed appearance of plural S, for example, can be ascribed to a number of factors. Any research protocol must therefore be able to take each and all of these into account. We shall discuss this further below in section 5.4.2.3..

5.4.2.2.1. Form-Meaning Matching

5.4.2.2.1.1. Plural S

Plural S has a simple one-to-one form-meaning relationship. One would therefore expect learners to identify this relationship relatively quickly and to begin to use it accurately quite fast - *other things being equal.*

Unfortunately, as we shall see below (sections 5.4.2.2.4. and 5.4.2.2.5) other things are *not* altogether equal.

5.4.2.2.1.2. Possessive S

Form-meaning matching is somewhat more complicated for possessive S, both within and between languages. As we saw in chapter three, English permits three possibilities: Noun's Noun (the man's chair), Noun Noun (the car door), and Noun of Noun (the Book of Job). From the input available, learners must identify the functions performed by each of these.

This difficulty, together with the transfer problem discussed below (section 5.4.2.5.1.2.) should combine to produce the kind of three-

stage learning profile outlined below in section 5.4.2.2.2.1..

5.4.2.2.1.3. The Articles

On the face of it, the acquisition of articles by adult French learners of English should present few difficulties: both languages possess definite and indefinite articles which can be readily identified and matched: un/une = a/an/one; le/la/les = the. This undoubtedly encourages saliency and may indeed account for the large number of articles produced by French learners from the very beginning. Unfortunately, although the formal matching seems straightforward, notional matching is far more complicated: English and French are both internally complex and contrastively different. Moreover, the very formal salience may well serve to mask this notional diversity. One can confidently expect, therefore, that the apparent surface confidence exhibited in the use of articles will only slowly and with difficulty over long periods of time correspond to target-like use.

5.4.2.2.2. Language Acquisition is a Three-Stage Restructuring Process

5.4.2.2.2.1. Possessive S

Stage 1 : Learners are confronted with input containing three L2 forms to express a macro-notion of possession, for which they have only one L1 form. Until sufficient input has been made available and/or the morphemes in question have become salient, one would

therefore expect a great deal of variation. Two forms would appear to be likely, both due to the application of strategic competence: transfer (due to the application of already proceduralised [ie Ll] knowledge, and prototypical base form [in this case a pragmatic NN form]). However, given the propensity to seek morphological marking noted in speakers whose Lls have morphological marking for the notion(s) in question, the latter is hypothesised to dominate.

Stage 2 : Learners begin to discern patterns in the L2 input and construct hypotheses based on this input. As some form-meaning relations are more transparent than others, the stable use of some notions as expressed in certain forms will appear. However, due to the complex nature of the form-meaning matching, others will remain highly variable. This stage may therefore seem, on the surface, indistinguishable from the first. Only an underlying Notional analysis will make it possible to identify the learner's stage of development.

Stage 3 : Stable form-meaning relationships emerge, although some variation may remain. Indeed, we would argue that the form-meaning matching for the possessive macro-notion is so complex that many EFL learners will never attain native proficiency in this area.

5.4.2.2.2.2. The Articles

Stage 1 : Learners are confronted with L2 input which appears to coincide with the Ll system. The Ll therefore constrains hypothesis formation and encourages the appearance of Ll-L2 form-*meaning* equiva-

lence.

Stage 2 : Individual notions (eg the lack of definite article in English when expressing generalities and abstractions - *Life is wonderful* - cases when French requires its use - *La vie est belle*) become salient - eg through instruction - and learners begin to sort out individual form-meaning differences between the two languages. As with the possessive S, however, it is quite likely that, from a purely formal examination, no development is occurring; once again, only an underlying notional analysis can reveal such progression.

Stage 3 : Stable form-meaning relations emerge, for some notions. it would appear not unlikely that the majority of learners never achieve target norm competence in all the notions expressed.

5.4.2.2.3. Language Acquisition as Hypothesis Formation

5.4.2.2.3.1. Possessive S

As we have already stated on numerous occasions, there are essentially two sources of hypotheses for the language learner: the L1 and the L2. In the case of the possessive S and adult French learners, the absence of the 'S form in French, together with the variety of L2 forms - including an L1-like equivalent N of N - available to express the range of notions carried by the single N of N L1 form, might be expected to encourage initial L1-based hypotheses. In natural settings, at least, therefore, the first morphologically marked forms one would expect to see appear are N of N. In

instructional settings, however, because of the salience of the 'S form, one might expect both ready adoption of this form and its rapid spread into other notional domains (ie to replace the N of N and NN forms). Overgeneralisation may therefore be widespread.

However, once again we can expect the picture to be clouded by processing difficulties, with - at least in the early stages - strategic competence factors leading to the production of pragmatic word order NN forms in unplanned situations.

5.4.2.2.3.2. The Articles

As we saw above in section 5.4.2.2.1.3, the salience of the L2 surface forms will result from the apparent similarity and equiva- lence of the L1 forms. From the beginning, therefore, learners can be expected to hypothesise notional identity between the L1 and L2. Moreover, given the highly complex nature of the L2 system and its partial overlap with that of the L1, one might expect to see only a very slow - and partial - development towards the target norm. Instruction may be able to affect this development by making certain notions more salient. However, it is to be expected that even here the strength of existing L1 circuitry and its resemblance to (and occasional identity with) the L2 circuitry will encourage the persistence of L1 form-meaning matching in the L2.

5.4.2.2.4. The Role of Strategic Competence

5.4.2.2.4.1. Plural S

It can be argued that plural S may be a non-essential marker insofar as occurrences tend to appear in association with some other indicator of plurality (eg a quantifier). The plural S marking is therefore largely communicatively redundant. As a result, one might expect delays in its regular appearance. In other words, despite the transparent form-meaning relationship, the communicative redundancy of the marker may encourage learners at the early stages to make the strategic decision to save processing capacity by ignoring plural S. In consequence, despite the transparency of the form-meaning relationship encouraging the use of plural S, its communicative redundancy may discourage it. Early language production may therefore contain less target norm plural S use than would be expected.

In addition, due to the constraints on planning imposed by limited processing capacity, one would expect the plural S to appear more often in production situations where planning was possible than in those where it was not.

Moreover, if the learner opts to use well-established circuitry (ie essentially L1), one would again expect the non-occurrence of plural S in oral situations due to its phonetic absence in spoken French. On the other hand, one might then expect relatively more frequent appearance in a written corpus.

5.4.2.2.4.2. Possessive S

As we saw above (section 5.4.2.1.2), sorting out form-meaning rela-
tions for the possessive S is a complex affair. Under the circumstan-
ces, one would expect its use to take up a great deal of processing
capacity and strategic competence to come into play. As we saw in
chapter four, this is likely to take the form either of a prototypi-
cal base form or of transfer through the option to use well-
established circuitry (previously proceduralised knowledge) - ie the
L1.

It would appear likely that, in this case, prototypical base form be
pragmatically (ie, again via strategic competence) derived, along the
lines of the NN word order possessives produced by children acquiring
their L1.

5.4.2.2.4.3. The Articles

Given the highly complex nature of the English article system, one
might expect learners to apply strategic competence extensively
either to avoid article use or to use existing circuitry. Although
this latter may occur, we would argue that, in this instance, it
results from the difficulties of successful hypothesis formation due
to surface resemblances. On the other hand, given the predisposition
to maintain morphological marking, one would not expect avoidance of
a form that can be readily produced through existing circuitry.

5.4.2.2.5. The Existence of Transfer

5.4.2.2.5.1. Plural S

The nature of plural marking in French renders plural S more salient to the French learner since French commonly uses the same form. On the other hand, the phonetic dropping of plural S in final position in spoken French (ie its deletion in oral production) may lead to lower frequency of use than one would otherwise expect.

One might therefore expect to have more target occurrences of plural S in samples of written production than in oral samples.

5.4.2.2.5.2. Possessive S

French has no similar structure to the N's N and NN forms of English. Learners thus have one form to express the three which English possesses. Under the circumstances, mismatches of form-form/meaning pairings would appear unlikely. One would therefore not expect the L1 to act as a constraint on hypothesis formation in this instance because the matching problem is entirely related to discerning L2 form-meaning pairings.

However, as we saw above (section 5.4.2.4.2), this does not mean that transfer will be entirely absent, since it may appear through the application of strategic competence.

5.2.2.5.3. The Articles

As we have already emphasised, the influence of the L1 on article usage is considerable, because of both surface similarities and the notional complexity of the L2. The L1 can thus be expected to play the principal role in initial hypothesis formation, and, indeed, to maintain a major role for a considerable period of time due to the closeness of L1 and L2 circuitry and to the complexity of the L2 system.

In the acquisition of the articles, therefore, we can expect to derive clear evidence for the constraining role of the L1 in hypothesis formation.

5.4.2.3. Testing the Predictions: Guidelines for Further Research

5.4.2.3.1. Investigating Morphemes

5.4.2.3.1.1. Plural S

As we saw above, we have conflicting predictions about plural S. However, any research protocol which seeks to investigate the relative impact of the various factors in the acquisition of plural S must necessarily include the following features:

(1) both written and oral tasks;

(2) both planned and unplanned tasks (for both the oral and written tasks):

(3) subjects from S-plural languages and non S-plural languages, and also subjects from a language which does not mark plural morphologically;

(4) a cross-sectional analysis which differentiates between learner levels, and/or a longitudinal study.

5.4.2.3.1.2. Possessive S

Given the patterns of possessive S acquisition suggested above, any research protocol seeking to investigate these hypotheses would need to include:

(1) a breakdown of the various notions expressed by the possessive S - and the other formal possibilities - in both English and the L1;

(2) data collected from both planned and unplanned production situations;

(3) a longitudinal study over several years, and/or a cross-sectional study with data processed according to learner level;

(4) comparative data from both classroom and 'natural' learners;

(5) subjects from languages which mark the relevant notions in different ways.

5.4.2.3.1.3. The Articles

The internally complex nature of the English article system will inevitably make any investigation difficult. However, any relevant research protocol will have to include the following features:

(1) a notional analysis of the article system of English (such as Bickerton's 1975 semantic wheel) and of any L1 involved;

(2) subjects from a variety of L1 backgrounds to investigate the differential impact of transfer according to the effect on hypothesis formation;

(3) a longitudinal study over a considerable time period, or appropriately level processed cross-sectional data;

5.4.2.3.2. Investigating Language Acquisition as a Three-Stage Restructuring Process

As we saw in section 5.4.2.2.2 above, the acquisition of both possessive S and the articles would appear to follow a three-stage pattern. On the other hand, it would seem unlikely that plural S does so. Although this may appear at first sight unfortunate for the construction of any second language acquisition theory, in fact it may well explain the fact that many aspects of a second language are acquired apparently 'spontaneously'. In other words, a three-stage process is only necessary for certain areas of the L2, when the form-meaning matching is 'difficult' for some reason - eg L1/L2 mismatching or a particularly complex L2 system. Hypothesising on the

existence of a three-stage system therefore needs to take this into account by determining in advance whether a particular notion or form-meaning pairing is likely or not to lead to a three-phase pattern. From our own analyses, for example, we would expect such a pattern to emerge for the acquisition of the past simple, the articles and possessive S, but not for plural S - *at least as concerns French speakers*. This latter warning is necesary insofar as the amount of 'difficulty' involved in form-meaning matching is at least partially related to the learners' L1.

5.4.2.3.3. Investigating Language Acquisition as Hypothesis Formation

As we saw in section 5.4.2.2.3 above, the investigation of hypothesis formation is complicated by the existence and possible application of strategic competence. Any research protocol seeking to examine this aspect of second language acquisition therefore needs to identify a language area where strategic competence is expected to have only a limited or insignificant role. Our analysis revealed this to be probably the case with the articles.

5.4.2.3.4. Investigating the Role of Strategic Competence

As we saw in section 5.4.2.2.4 above, strategic competence is hypothesised to play a major role in the acquisition of both possessive S and plural S - as indeed it did in the acquisition of the past simple - but only a minimal role in the acquisition of the articles. The investigation of the role of strategic competence

should therefore expect its differential use according to the language area under examination. Presumably, it would be preferable to concentrate on areas where it might be expected to play a major role, as with possessive and plural S.

Additionally, given the importance of processing time in the use of strategic competence, the same language area would need to be investigated with the same subjects, but under planned and unplanned production conditions.

5.4.2.3.5. Investigating Transfer

As we saw in section 5.4.2.2.5 above, transfer can influence both hypothesis formation and the application of strategic competence. It should come as no surprise, therefore, that its existence has been so frequently denied or relegated to an insignificant role. As long as transfer is considered as a formal feature, this position can be maintained. It is only when the language area in question is analysed notionally - for both the L1 and the L2 - that the influence of transfer as a constraint on hypothesis formation due to its impact on the learner views the construction of meaning potential can become clear. Any investigation of transfer must therefore include a notional analysis.

5.4.3. SUMMARY

We have suggested the following hypotheses for further investigation, together with protocol outlines for their examination:

1. second language acquisition is essentially a process of matching form to meaning;

2. this process may involve a three-stage restructuring of initial hypotheses;

3. second language acquisition is a process of hypothesis formation and testing;

4. strategic competence brings to bear strategies designed to compensate for gaps in knowledge and lack of processing capacity;

5. transfer is a widespread phenomenon.

We argue that failure to disprove these hypotheses should count as evidence to support Cognitive models of second language acquisition.

5.4.4. CONCLUSIONS

At the beginning of section 5.4. we restated the prerequisites for a theory to aspire to 'scientific' status. In this section we shall briefly review what has been said about Cognitive models as a means of establishing their 'scientific' credentials.

5.4.4.1. The Explanation of Current Data

Chapters two, three and four are largely consecrated to explanations of the data contained in our corpus. It is our belief that, at present, Cognitive models provide the best explanation for the full range of factors identified.

5.4.4.2. The Generation of Useful Hypotheses

Section 5.4.2 above was essentially devoted to hypotheses based on current observation and an acceptance of the tenets of Cognitive models. It should be clear from this section that they are indeed capable of generating numerous hypotheses about the nature of second language acquisition. It should also be clear that a number of the predictions made may be interpretable otherwise, and also that the very nature of the experience under investigation - in particular its subjection to a plurality of (possibly conflicting) influences - makes the statement of fully explicit hypotheses - of the statistical, 'scientific' type - difficult. However, it is once again our contention that the hypotheses thus generated are both useful to an understanding of the nature of second language acquisition, and sufficiently explicit to admit of falsification.

5.4.4.3. The Statement of Valid Predictions

In section 5.4.2. above, a number of predictions were stated. How valid they are will depend on future research.

5.4.4.4. The Falsifiability of Propositions

As we mentioned in 5.4.4.2. above, it is difficult, if not impossible, within the field of second language acquisition to generate wholly unambiguous propositions. However, we believe that the hypotheses generated above are sufficiently unambiguous to be accepted as lending support to Cognitive models, should they fail to be disproved.

5.4.4.5. Practical Applications

We suggested in chapter one that there was no obligation that an abstract theory should lead to practical applications. Indeed, we argued that there is a regrettable tendency in our field to make practical applications too rapidly. Until a single model has been around long enough and attained sufficient dominance to merit serious attention, therefore, we are reluctant to suggest any direct practical applications to the classroom. This is not to say that such proposals could not be made, however, and one could, for example, readily adopt Cognitive models of second language acquisition as a theoretical underpinning for Communicative approaches to language teaching.

5.5. SUMMARY AND CONCLUSIONS

In this final chapter we have brought together the four main 'fragments' identified in chapters two, three, and four and attempted

to place them within a single coherent framework. This involved an extended discussion of each of them in turn: (1) that language is meaning potential and second language acquisition is essentially learning to express these meanings in another way; (2) that, as a result, variation is widespread; (3) that strategic competence plays a major role in second language acquisition, at least in the early stages when processing capacity is limited; and (4) that transfer is an important element in second language acquisition, impacting on both hypothesis formation and the application of strategic competence. This extended discussion necessitated a careful examination of the claims of: (1) the Notional Approach, which was seen as an important means of investigating the acquisition of meaning potential; (2) the Variable Competence Model, whose explanatory value was believed to have been considerably enhanced by its espousal of a Notional Approach and the adoption of the planned/unplanned discourse dichotomy; (3) strategic competence; (4) transfer; and (5) hypothesis formation.

A discussion then followed of exisiting Cognitive models, in particular the general language model of Anderson, but also that of McClaughlin. In particular, the identification of declarative and procedural knowledge was felt to be important, although we argued that language learning, at least that part which is rule-governed, is essentially procedural. This leads one to wonder whether it is ultimately necessary to posit a dual knowledge system, or whether Connectionist theories, which attempt to parallel interlinked and interactive brain networks - ie in essence a wholly 'procedural'

outlook - may not be sufficient. It is not our intention to discuss this here, as we feel that further theoretical work in this domain is necessary (see Quinlan 1991 for a useful critical account), but it is certainly an area that future research could fruitfully explore.

From the Anderson and McḈLaughlin models, three acquisition stages were identified, commonly exhibiting a U-shaped learning curve. Although other researchers have also identified such a curve, we argued that it may only occur with certain language items, depending on their relative saliency and form-meaning transparency. However, this was in no way felt to place doubt on the power of Cognitive models. On the contrary, their explanatory power was believed to be enhanced, since it is obvious that a great deal of a second language is acquired almost effortlessly.

At this stage it was also emphasised that interlanguage should be considered to be a cline - "a dynamic evolving system" as Selinker and Lamendella suggest - within which a given structure can have a different status according to a number of factors, like saliency and form-meaning transparency, but also according to notion, different notions possibly being at different stages of development.

The model thus developed from the initial fragments was then used to generate predictions about other language areas - plural S, posses-sive S and the articles, and research protocols suggested for their investigation, before applying the criteria of criticism outlined in chapter one.

From this, a Cognitive model of the type developed in this chapter was indeed found to be a powerful T2-type theory capable of wide application within the investigation of rule-governed behaviour. Moreover, the interactive networks (circuitry) required for the development and application of procedural knowledge, closely assimilable to those within a Connectionist approach, are potentially powerful means of linking the hitherto separately studied areas of the lexicon and the grammar. Given the increasing interest in the imapct of lexical phrases, this is clearly an important development, and any theory which can encompass such diversity is obviously potentially particularly powerful.

Notes

1. ie the opposite pattern to U-shaped development, with performance improving and then declining. Ultimately, presumably, such A-patterns will turn out to be N-patterns, with a final rise towards target norm usage.

CONCLUSION

We began this thesis with a question: "How do human beings learn languages other than their first language?" Without suggesting that we have provided an answer, I would nonetheless argue that the research reported here does provide evidence to support a number of hypotheses, and that these hypotheses can be usefully grouped within a single framework, which we have derived by uniting several partially competing theories under the heading of Cognitive Models. At this stage it may be worthwhile recapping on the hypotheses in question, and briefly discussing how these led us to adopt this particular model.

The hypotheses can be summarised as:

(1) Language learning involves the acquisition of a new system of meaning potential. The learner thus engages in a process of form-meaning matching both within and between languages. The fruitfulness of this approach in terms of explaining the apparently random variation that was going on in our subjects' acquisition of past tense marking convinced us that only an approach which took meaning into account could satisfactorily explain language acquisition. This is the main reason why we have adopted a Notional Approach rather than, say, Universal Grammar and its system of markedness.

(2) Transfer is thus a widespread phenomenon, constraining hypothesis formation by the learner, but itself constrained by the inter- and intra-language form-meaning transparency of the language item in question. In other words, whenever form-meaning relationships tend not to be transparent, transfer is to be expected. On the other hand, where such relations are transparent, transfer may not occur.

Such a formulation no doubt raises theoretical difficulties in terms of defining degrees of *form-meaning transparency*. However, as we outlined in chapter five, we believe this to be possible, at least in practical terms, as long as: (a) both macro- and micro-notions are taken into account; and (b) both inter- and intra-language transparency is examined.

Although research within a Universal Grammar framework has done much to bring the influence of transfer on language acquisition back into consideration, it is our belief that a Notional Approach, paired with a view of strategic competence as considered below, is a more powerful means of placing transfer in the acquisition equation, particularly given the vexed, and often circular, question of whether a particular language item is or is not marked.

(3) However, even when form-meaning relations are transparent, transfer may take place due to lack of processing capacity. Indeed, we have argued that the variable processing demands made by different production situations should have a variable impact on the application of strategic competence applied to maintain communication. When processing capacity is short, learners will tend to maintain communi-

cation by relying on well-traced language networks - ie, at least in the early stages, L1 circuitry.

We believe that, whether or not the computer analogy is valid (and although currently useful, it will undoubtedly ulimately prove to be invalid), human beings are language processors. And even though we are able to process at phenomenal speeds, this is only possible with networks that have received repeated stimuli and whose neuronal connections are thus easily activated. For the vast majority of language learners this implies that L1 circuitry will always take precedence over weaker - because later and less frequently used - L2 circuits. Under the circumstances, in production situations where demands are made on the learner to produce language, for example, in real time, there will be a tendency to bypass L2 networks and rely on L1 circuitry. In other words, proceduralised knowledge takes time to build up, and in any case only develops well through use. L2 proceduralised knowledge, for most learners, is therefore unlikely to attain the level of such L1 knowledge.

Moreover, given this, learners will be encouraged to make use of their strategic competence in a variety of other ways - such as planning and monitoring (in a non-Krashen sense) their language output.

(4) Strategic competence is always present and used by the learner to deal with such factors as lack of processing capacity or even lack of knowledge of the language item in question.

(5) Some language items, whose form-meaning relationship is transparent, are learned virtually spontaneously - eg the pronoun system or S pluralisation. On the other hand, items whose form-meaning relationship is less transparent may well exhibit a three-stage learning sequence: (a) in which the learner is looking for form-meaning pairings which may not be apparent, and is therefore forced to rely on finding L2 forms to express L1 meningss; (b) in which the learner is able to identify such form-meaning matchings more readily and the system - at least for some meanings (it should not be forgotten that a learner can develop a long way with one or several notions, while remaining unable to express another notion adequately); (c) the learner more or less controls the L2 system (although most learners will continue to have difficulty with some notions). Clearly, intra-language transparency depends on the complexity of the form-meaning relationship within a language: placing an S at the end of a singular noun to make it plural is a case in point, despite the occasional exceptions. This is made obvious in the case of children who make L1 mistakes like the following (personal observation): "It's a fock". In other words, the singular must̶ c̶a̶n̶n̶o̶t̶ be *fock* because *fox* = *focks* = plural. On the other hand, inter-language transparency depends on the closeness of the languages, where closeness depends not only on perceptions of relative distance between the languages, but also *absolute* distance in terms both of whether similar meanings are expressed by similar forms (eg the present perfect and passé composé), and also to what extent there is overlap in the expression of the various (perceived)

macro- and (unconscious) micro- notions between the languages.

(6) Language acquisition is a process of hypothesis formation and testing, as indicated in the three-stage model outlined above. Once again, the constraints on hypothesis formation are both L1 and L2 in origin, the latter creating greater saliency for particular items (although the salient feature identified may be 'wrongly' associated with the L1 token).

This is at variance with Universal Grammar, which sees hypothesis formation as above all constrained by the nature of Universal Grammar itself. Although this may be true of L1 acquisition, we would argue that such a strong hypothesis is no longer necessary for L2 acquisition since (a) the nature of *language* has been established for the learner by the acquisition of his or her L1; and (b) the hypotheses which can be formed will be largely constrained by this view of language. Put another way, the learner will only notice in the L2 that which is rendered salient by expectations derived from the nature of the L1.

Considering the confidence with which the above hypotheses have been expressed, it may seem perverse to end with a number of caveats. However, given the context within which this research was conducted - and its differences with findings elsewhere, these must be made:

(1) The subjects in this research were beginners. Findings related, in particular, to the application of strategic competence may therefore indicate greater use than occurs at other levels. It is

our contention that this is not the case, but only further studies directed towards this will show whether it is or is not, in fact, the case.

(2) Adult French learners of English are virtually never total real beginners due to the pervading presence of English in everyday life. As a result, it may be that our subjects actually began producing language at a later - more syntactic - stage than would normally occur. Once again, we believe this not to be the case. However, we do admit the possibility that an early 'pragmatic' stage of language production may have been skipped by our subjects. But this, we would argue, is the result of two other factors: the level of education of the people involved (most studies involving real beginners are of subjects whose level of education is low or even very low); and

(3) Classroom learners may not learn exactly the same as 'natural' learners. Although there is every chance that they do, since we would argue that natural acquisition processes always come into play, there is some direct evidence that classroom learners do behave differently (Perdue 1993). This, we would argue, is related to the saliency which the classroom can bring to language items, thus leading to the intake of items which were not particularly present in the input other than as pre-selected teaching items. Of course, the proceduralisation of such items will not go very far owing to the lack of the large quantities of meaningful practice necessary to the formation and development of networks.

(4) French is a relatively close language to English, both in terms of the notions it expresses and in the means of expressing them. This clearly influences both saliency and transparency. Further research related to the findings in this study should therefore deal with languages at a greater distance.

BIBLIOGRAPHY

Abbott G. (1980) 'Towards a more rigorous analysis of foreign language errors' *IRAL* XVIII: 121-34.

　　　　　(1984) 'Analysis of errors and errors of analysis' *World Language English* 4: 67-70.

Adjemian C. (1976) 'On the nature of interlanguage systems' *Language Learning* 26: 297-320.

Allwright R. (1988) 'Why don't learners learn what teachers teach?' Paper presented at the British Council, Paris.

Andersen R. (1977) 'The impoverished state of cross-sectional morpheme acquisition/accuracy methodology' *Working Papers in Bilingualism* 14: 47-82.

　　　　　(1983) 'Transfer to somewhere' in Gass S. & Selinker L. (eds) *Language Transfer in Language Learning*, Rowley, Newbury House.

Anderson J.(1983) *The Architecture of Cognition*, Cambridge Mass., Harvard UP.

　　　　　(2nd ed: 1985) *Cognitive Psychology and its Implications*, San Francisco, Freeman.

Bachman L. (1990) *Fundamental Considerations in Language Testing*, Oxford, OUP.

Bailey N., Madden C. & Krashen S. (1974) 'Is there a "natural" sequence in adult second language learning?' in Hatch E. (ed), 1978, *Second Language Acquisition: A Book of Readings*, Rowley, Newbury House.

Bailly D. (1984) *Éléments de Didactique des Langues*, Paris, APLV.

Bartelt G. (1983) 'Transfer and variability of rhetorical redundancy in Apachean English interlanguage' in Gass S. & Selinker L. (eds) *Language Transfer in Language Learning*, Rowley, Newbury House.

Benveniste E. (1966) *'Les relations de temps dans le verbe français'* in Benveniste E. *Problèmes de Linguistique Générale*, *tome 1*, Paris, Gallimard.

Bickerton D. (1975) *Dynamics of a Creole System*, Cambridge, CUP.

          & Givon T. (1976) 'Pidginisation and syntactic change: from SXV and VSX to SVX' in Stever S., Walker C. & Mufwene S. (eds) *Papers from the Parasession on Diachronic Syntax*, Chicago, Chicago Linguistic Society, cited in Odlin T. (1989) *Language Transfer*, Cambridge, CUP.

Brown H. (1980) *Principles of Language Learning and Teaching*, New Jersey, Prentice Hall.

Brown R. (1973) *A First Language: the Early Stages*, Cambridge Mass., Harvard University Press.

Canale M. & Swain M. (1980) 'Theoretical bases of communicative approaches to second language teaching and testing' *Applied Linguistics* 1: 1-47.

Carroll J. (1993) *Human Cognitive Abilities: A Survey of Factor-Analytic Studies*, Cambridge, CUP.

Cazden C., Cancino H., Rosansky E. & Schumann J. (1975) *Second Language Acquisition Sequences in Children, Adolescents and Adults*. Final Report, US Dept of Health, Education and Welfare.

Chaudron C. (1988) *Second Language Classrooms*, Cambridge, CUP.

Chevalier J-C, Blanche-Benveniste C., Arrivé M. & Peytard J. (1989) *Grammaire du français contemporain*, Paris, Larousse.

Chomsky N. (1957) *Syntactic Structures*, the Hague, Mouton.

          (1964) *Current Trends in Linguistic Theory*, the Hague, Mouton.

(1980) *Rules and Representations*, Oxford, Basil Blackwell.

Clark R. (1974) 'Performing without competence' *Journal of Child Language* 1: 1-10.

Comrie B. (1976) *Aspect*, Cambridge, CUP.

(1985) *Tense*, Cambridge, CUP.

Corder S. (1983) 'A role for the mother tongue' in Gass S. & Selinker L. (eds) *Language Transfer in Language Learning*, Rowley, Newbury House.

Coulmas F. (1989) *The Writing Systems of the World*, Oxford, Basil Blackwell.

Crystal D. (1971) *Linguistics*, Harmondsworth, Penguin.

Culioli A. (1979) 'Why teach how to learn to teach what is best learnt untaught' *Cahiers Charles V* 1: 199-211.

Cunningsworth A. & Horner D. (1985) 'The role of simulations in the development of communication strategies' *System* 13: 211-18.

Dittmar N. (1981) 'On the verbal organisation of L2 tense marking in an elicited translation task by Spanish immigrants in Germany' *Studies in Second Language Acquisition* 3: 136-64.

Dulay H. & Burt M. (1973) 'Should we teach children syntax?' *Language Learning* 23: 245-58.

(1974) 'You can't learn without goofing: an analysis of children's second language errors' in Richards J.(ed) *Error Analysis*, London, Longman.

(1974) 'Natural sequences in child language acquisition' in Hatch E. (ed), op cit.

(1975) 'A new approach to discovering universals of child second language acquisition' in Dato D. (ed) *Developmental Psycholinguistics*, Washington, Georgetown University Press.

& Krashen S. (1982) *Language Two*, New York, OUP.

Eisenstein M., Bailey N. & Madden C. (1982) 'It takes two: contrasting tasks and contrasting structures' *TESOL Quarterly* 16.

Ellis R. (1984) *Classroom Second Language Development*, Oxford, Pergamon.

(1985a) *Understanding Second Language Acquisition*, Oxford, OUP.

(1985b) 'Sources of variability in interlanguage' *Applied Linguistics* 6: 118-31.

(1987) 'Interlanguage variability in narrative discourse: style shifting in the use of the past tense' *Studies in Second Language Acquisition* 9: 1-20.

(1990) 'A response to Gregg' *Applied Linguistics* 11: 384-91.

Faerch C. & Kasper G. (1983) *Strategies in Interlanguage Communication*, Harlow, Longman.

(1984) 'Two ways of defining communi- cation strategies' *Language Learning* 34: 45-63.

(1985) 'Procedural knowledge as a component of foreign language learners' communicative competence' in Boete H. & Herrlitz W. (eds) *Kommunikation im (Sprach-) Unterricht*, Utrecht, University of Utrecht.

(1987) 'From product to process - introspective methods in second language research' in Faerch C. & Kasper G. (eds) *Introspection in Second Language Research*, Philad- elphia, Multilingual Matters.

Fayerabend P. (1979) *Contre la Méthode. Esquisse d'une Théorie Anarchique*, Paris, Seuil.

Flaeschman S. (1990) *Tense and Narrativity*, New York, Routlege & Kegan Paul.

Fuller J. (1978) *An Investigation of Natural and Monitored Difficulty Orders by Non-native Adult Students of English.* Unpublished PhD thesis cited in Krashen S. (1981) *Second Language Acquisition and Second Language Learning*, Oxford, Pergamon.

Gass S. & Madden C. eds. (1985) *Input in Second Language Acquisition*, Rowley, Newbury House.

      & Schachter J. eds. (1989) *Linguistic Perspectives on Second Language Acquisition*, Cambridge, CUP.

      & Selinker L., eds. (1983) *Language Transfer in Language Lear-ning*, Rowley, Newbury House.

Giles H., Robinson W., & Smith P. eds. (1980) *Language: Social Psychological Perspectives*, Oxford, Pergamon.

      & StClair R. eds. (1979) *Language and Social Psychology*, Oxford, Basil Blackwell.

Granfors T. & Palmberg R. (1976) 'Errors made by Finns and Swedish-speaking Finns at a commercial college level' in Ringbom H. & Palmberg R. (eds) *Errors Made by Finns and Swedish-speaking Finns in the Learning of English*, Abo, Abo Akademi ERIC Report.

Gregg K. (1984) 'Krashen's Monitor and Occam's Razor' *Applied Linguistics* 5: 79-100.

      (1990) 'The variable competence model of second language acquisition, and why it isn't' *Applied Linguistics* 11: 364-83.

Grotjahn R. (1983) 'On the use of quantitative methods in the study of interlanguage' *Applied Linguistics* 4: 235-41.

Hatch E. (1978) *Second Language Acquisition: a Book of Readings*, Rowley, Newbury House.

Hakuta K. (1974) 'A report on the development of grammatical morphemes in a Japanese girl learning English as a second language' in Hatch E. (ed) op cit.

      (1976) 'Becoming bilingual: a case study of a Japanese child learning English' *Language Learning* 26: 321-51.

Halliday M. (1970) 'Language structure and language function' in Lyons J. (ed) *New Horizons in Linguistics*, Harmondsworth, Penguin.

      (1973) *Explorations in the Functions of Language*, London, Edward Arnold.

(1975) *Learning How To Mean: Explorations in the Development of Language*, London, Edward Arnold.

(1978) *Language as Social Semiotic*, London, Edward Arnold.

(1985) *An Introduction to Functional Grammar*, London, Edward Arnold.

Hammarberg B. (1979) 'On intralingual and developmental solutions in interlanguage' in Hyltenstam K. & Linnarud M. (eds) *Interlanguage*, Stockhom, Almqvist & Wiksell.

Houck N., Robertson J. & Krashen S. (1978) 'On the domain of the conscious grammar: morpheme orders for corrected and uncorrected ESL student transcriptions' *TESOL Quarterly* 12: 335-339.

Huddleston R. (1984) *Introduction to the Grammar of English*, Cambridge, CUP.

Huebner T. (1979) 'Order-of-acquisition vs. dynamic paradigm: a comparison of method in interlanguage research' *TESOL Quarterly* 13: 21-28.

Hulstijn J. & Hulstijn J. (1984) 'Grammatical errors as a function of processing constraints and explicit knowledge' *Language Learning* 34: 23-43.

Hyltenstam K. (1977) 'Implicational patterns in interlanguage syntax variation' *Language Learning* 27: 383-411.

(1978) *Variation in Interlanguage Syntax*, Working Papers No 8, Dept of General Linguistics, Lund University.

Jakobson R. (1963) *Essais de Linguistique Générale*, Paris, Éditions de Minuit.

Jansen B., Lalleman J. & Muysken P. (1981) 'The alternation hypothesis: acquisition of Dutch by Turkish and Moroccan foreign workers' *Language Learning* 31: 315-36.

Jordens P. (1977) 'Rules, grammatical intuitions and strategies in foreign language learning' *Interlanguage Studies Bulletin* 2: 5-76.

Karmiloff-Smith A. (1986) 'Stage/structure versus phrase/process in modelling linguistic and cognitive development' in Levin T. (ed) *Stage and Structure: Reopening the Debate*, Norwood, Ablex.

Kellerman E. (1977) 'Towards a characterisation of the strategy of transfer in second language learning' *Interlanguage Studies Bulletin* 2: 58-145.

(1983) Now you see it, now you don't', in Gass & Selinker (eds).

Klein W. (1986) *Second Language Acquisition*, Cambridge, CUP.

, **Dietrich W. & Noyau C.** (1993) 'The acquisition of temporality' in Perdue C. (ed) *Adult Language Acquisition: Cross Linguistic Perspectives*, Cambridge, CUP.

Kleinman H. (1978) 'The strategy of avoidance in adult second language acquisition' in Ritchie W.C. (ed) *Second Language Acquisition Research: Issues and Implications*, New York, Academic Press.

Krashen S. (1981) *Second Language Acquisition and Second Language Learning*, Oxford, Pergamon.

& Seliger H. (1976) 'The role of formal and informal linguistic environments in adult second language learning' *International Journal of Psycholinguistics* 3: 15-21.

, **Madden C. & Bailey N.** (1975) 'Theoretical aspects of grammatical sequencing' in Burt M. & Dulay H. (eds) *Second Language Learning, Teaching and Bilingual Education*, Washington, TESOL.

, **Houck N., Giunchi P., Bode S., Birnbaum R. & Strei G.** (1977) 'Difficulty order for grammatical morphemes for adult second language performers using free speech' *TESOL Quarterly* 11: 338-41.

, **Butler J., Birnbaum R. & Robertson J.** (1978) 'Two studies in language acquisition and language learning' *IRAL* 39/40: 73-92.

Labov W. (1970) 'The study of language in its social context', *Studium Generale* 23: 30-87.

Lado R. (1957) *Linguistics Across Cultures*, excerpts reprinted in Gass & Selinker (eds).

Laroche J.M. (1983) 'Acquisition of second languages perceived as "close" or "remote": the perspective of error analysis' *System* 11: 143-148.

Larsen-Freeman D. (1976) 'An explanation for the morpheme accuracy order of learners of English as a second language' in Hatch E. (ed) op cit.

Lavendera B. (1978) 'Where does the sociolinguistic variable stop? *Language in Society* 7: 171-82.

Lightbown P. (1983) 'Exploring relationships between developmental and instructional sequences in second language acquisition' in Seliger L. & Long M. (eds) *Classroom-oriented Research in Second Language Acquisition*, Rowley, Newbury House.

(1985) 'Great expectations: second language acquisition research and classroom teaching'

Littlewood W.T. (1981) 'Language variation and second language acquisition' *Applied Linguistics* 2: 150-58.

Long M. (1983) 'Inside the "black box": methodological issues in classroom research on language learning' in Seliger H. & Long M. (eds) *Classroom Oriented Research in Second Language Acquisition*, Rowley, Newbury House.

(1985) 'Input and second language acquisition theory' in Gass & Madden (op cit) eds.

McLaughlin B. (1978) 'The Monitor Model: some methodological considerations' *Language Learning* 28: 309-32.

(1987) *Theories of Second Language Acquisition*, London, Edward Arnold.

(1990) 'Restructuring' *Applied Linguistics* 11: 113-28.

, Rossman T. & McCleod B. (1983) 'Second language learning: an information-processing perspective' *Language Learning* 33: 135-58.

Meisel J. (1987) 'Reference to past events and actions in the development of natural second language acquisition' in Pfaff C. (ed) *First and Second Language Acquisition Processes*, Rowley, Newbury House.

Merio K. (1978) 'The psycholinguistic analysis and measurement of interference errors' *IRAL* 16: 27-44.

Montredon J. (1979) 'Analyse d'un phénomène de fossilisation: imparfait et passé composé chez l'apprenant japonais' *Encrages*, numéro spécial: 68-74.

Nagel E. (1961) *The Structure of Science: Problems in the Logic of Scientific Explanation*, London, Routledge & Kegan Paul.

Nattinger J. & DeCarrico J. (1992) *Lexical Phrases and Language Teaching*, Oxford, OUP.

Ochs E. (1979) 'Planned and unplanned discourse' in Givon T. (ed) *Syntax and Semantics Vol. 12: Discourse and Semantics*, New York, Academic Press.

O'Malley J. & Chamot A. (1990) *Learning Strategies in Second Language Acquisition*, Cambridge, CUP.

Perdue C., ed. (1993) *Adult Language Acquisition: Cross-Linguistic Perspectives. Volume II: the Results*, Cambridge, CUP.

Peters A. (1976) 'Language learning strategies: does the whole equal the sum of the parts?' *Language* 53: 560-73.

(1983) *The Units of Language Acquisition*, Cambridge, CUP.

Pfaff C. ed. (1987) *First and Second Language Acquisition Processes*, Rowley, Newbury House.

'Functional approaches to interlanguage' in Pfaff (ed).

Pica T. (1985) 'Adult acquisition of English as a second language under different conditions of exposure' *Language Learning* 33: 465-97.

Pienemann M. (1987) 'Psychological constraints on the teachability of languages' in Pfaff C. (ed) *First and Second Language Acquisition Processes*, Rowley, Newbury House.

Popper K. (1973) *La Logique de la Découverte Scientifique*, Paris, Payot.

Quinlan P. (1991) *Connectionism and Psychology*, Hemel Hempstead, Harvester Wheatsheaf.

Rosansky E. (1976) 'Methods and morphemes in second language acquisition research' *Language Learning* 26: 409-25.

Rumelhart D. & Norman D. (1978) 'Accretion, tuning and restructuring: three modes of learning' in Cotton J. & Klatzky R. (eds) *Semantic Factors in Cognition*, Hillsdale, Erlbaum.

Rutherford W. (1982) 'Markedness in second language acquisition' *Language Learning* 32: 85-107.

Sampson G. (1982) 'Converging evidence for a dialectical model of function and form in second language learning' *Applied Linguistics* 3: 1-28.

Saussure F. (1916) *Cours de Linguistique Générale*, Paris, Payot (3rd ed, 1971).

Schachter J. (1974) 'An error in error analysis' *Language Learning* 25: 205-14.

       (1983) 'A new account of language transfer' in Gass S. & Selinker L. (eds) *Language Transfer in Language Learning*, Rowley, Newbury House.

       (1986) 'In search of systematicity in interlanguage production' *Studies in Second Language Acquisition* 8: 119-33.

Schank R. & Abelson R. (1977) *Scripts, Plans, Goals and Understanding*, Hillsdale, Erlbaum.

Schmidt M. (1980) 'Co-ordinate structures and language universals in interlanguage' *Language Learning* 30: 397-416.

Schmidt R. (1991) 'The role of consciousness in second language learning' *Applied Linguistics* 11: 129-58.

Schneider W. & Shiffrin R. (1977) 'Controlled and automatic human information processing I: detection, search and attention' *Psychological Review* 84: 1-64.

Schumann J. (1978) *'Second language acquisition: the pidginization hypothesis* in Hatch E.M. (ed) *Second Language Acquisition*, Rowley, Newbury House.

Selinker L. & Lamendella J. (1978) 'Two perspectives on fossilization in interlanguage learning' *ISB* 3: 143 - 188.

Sharwood-Smith M. (1981) 'Consciousness-raising and the second language learner' *Applied Linguistics* 2: 159-68.

Shiffrin R. & Schneider W. (1977) 'Conrolled and automatic human information processing II: perceptual learning, automatic attending, and a general theory' *Psychological Review* 84: 127-90.

Sjoholm K. (1976) 'A comparison of the test results in grammar and vocabulary between Finnish- and Swedish-speaking applicants for English' in Ringbom & Palmberg (eds).

Skehan P. (1992) 'Second language acquisition strategies and task-based learning' *ELT Working Papers, West London Polytechnic* 1:1.

Slobin D. (1993) 'Adult language acquisition: a view from child language study' in Perdue C. (ed) op cit.

Sorace A. (1985) 'Metalinguistic knowledge and language use in acquisition-poor environments' *Applied Linguistics* 6: 239-54.

Spada N. (1987) 'Relationships between instructional differences and learning outcomes: a process-product study of communicative language teaching' *Applied Linguistics* 8: 137-61.

Stern H. (1983) *Fundamental Concepts of Language Teaching*, Oxford, OUP.

Swan M. (1987) 'Non-systematic variability: a self-inflicted conundrum' in Ellis R. (ed) *Second Language Acquisition in Context*, Prentice Hall International

& Walter C. (1984) *The Cambridge English Course 1*, Cambridge, CUP.

Tarone E. (1979) 'Interlanguage as chameleon' *Language Learning* 29: 181-91.

(1981) 'Some thoughts on the notion of communicative strategy' *TESOL Quarterly* 15: 285-95.

(1982) 'Systematicity and attention in interlanguage' *Language Learning* 32: 69-82.

(1983) 'On the variability of interlanguage systems' *Applied Linguistics* 4: 143-63.

(1985) 'Variability in interlanguage use: a study of style shifting in morphology and syntax' *language Learning* 35: 373-404.

(1988) *Variability in Interlanguage*, London, Edward Arnold.

(1990) 'On variation in interlanguage: a response to Gregg' *Applied Linguistics* 11: 392-400.

& Parish B. (1988) 'Task-related variation in interlanguage: the case of articles' *Language Learning* 38: 21-44.

Terrell T., Gomez E. & Mariscal J. (1980) 'Can acquisition take place in the language classroom?' in Scarcella R. & Krashen S. (eds) *Research in Second Language Acquisition, Rowley, Newbury House*.

Trévise A. (1980) *Éléments de l'Analyse de l'Activité Langagière des Étudiants Francophones Apprenant l'Anglais en Milieu Institutionnel*. Unpublished PhD thesis, Université de Paris VII.

(1986) 'Is it transferable, topicalization?' in Kellerman E. & Sharwood-Smith M. (eds) *Crosslinguistic Influences in Second Language Acquisition*, New York, Pergamon.

(1987) 'Toward an analysis of the (inter)language activity referring to time in narratives' in Pfaff C. op cit.

Véronique D. (1987) 'Reference to past events and actions in narratives in L2. Insights from North African workers' French' in in Pfaff C. (ed) *First and Second Lnaguage Acquisition Processes*, Rowley, Newbury House.

de Villiers J. & de Villiers P. (1973) 'A cross-sectional study of the acquisition of grammatical morphemes in child speech' *Journal of Psycholinguistic Research* 2: 267-78.

von Stutterheim C. & Klein W. (1987) 'A concept-oriented approach to second language studies' in Pfaff (ed).

Wagner-Gough (1978) 'Excerpts from comparative studies in second language learning' in Hatch E. (ed) *second Language Acquisition: a Book of Readings*, Rowley, Newbury House.

Widdowson H. (1978) *Teaching Language as Communication*, Oxford, OUP.

Wilkins D. (1976) *Notional Syllabuses*, Oxford, OUP.

Wode H. (1976) 'Developmental sequences in naturalistic L2 acquisition' reprinted in Hatch E. [ed] (1978) *Second Language Acquisition*, Rowley, Newbury House.

(1980) *Learning a Second Language 1: An Integrated View of Language Acquisition*, Tubingen, Narr.

Wong-Fillmore L. (1976) *The Second Time Around: Cognitive and Social Strategies in Second Language Acquisition*. Unpublished PhD thesis, Stanford University.

Zobl H. (1980) 'The formal and developmental selectivity of L1 influence on L2 acquisition' *Language Learning* 30: 43-57.

'Developmental and transfer errors: their common bases and (possibly) differential effects on subsequent learning' *TESOL Quarterly* 14: 469-79.

APPENDIX

SAMPLES OF LEARNER CORRESPONDENCE

GROUP 1 (11 subjects)

Robeline

First Data Collection Point

1.   It's my second letter. You didn't answer my first letter.

2.   I'm glad that you spend your holidays in Paris.

Second Data Collection Point

3.   The strike and the snow have upset the Parisian's routine.

4.   I'm sorry I couldn't write to you last week. My timetable was
full. This year the Social Security has restricted its repay, the
Society where I work was obliged to revise its contract.

5.   For some time past, the Sunday I sleep late ... But today the
sun gave me liveliness. I got up at a quarter to nine with loud
music. I didn't do the cooking. I took my husband and two boys to eat
in a restaurant. Afterwards we were going for a walk.

Third Data Collection Point

6.   This week was dead calm.

7.   You ask me "How old are my sons?" They're in the   second   and
first forms.   They've both stayed down the second form...   Since   the
fifth form,   they've both been in England every year.   But last year,
the eldest went to America in the midwest.

8.   These   last days the weather was sunny but there was very   cold
wind.

9.   How did you spend your weekend?   I spent mine before tv.   Canal
Plus gives good films which were showed on pictures just 3   months
ago. I've spent an enchanting and exceptional weekend.

10.   We received bad news last week ... On wednesday, a telegram told
us the death of one of my husband's neice 27 years old. The next day,
thursday, the phone awoke me at six o'clock to announce the death of
my brother 38 years old.   A mass was provided for on saturday at   11
o'clock ...   A lunch was given after the mass.   Of course, I prepared
all the cooking the day before. The saturday, I stood up at 5 o'clock
to make the last things for lunch. I left home at half past eight ...
I was   back home at half past ten.   the church is   just   behind   our
building.   I   just   had the time to glance at,   if all was   ready   to
receive the 50 persons who assisted at the mass.   And then we went to
the church. the mass lasted one hour.

11.   Last week you wanted us if we didn't know our grandfather... my
grandmother is died in 1968. He was a civil servant, he stayed 1 or 2
years in a town,   then he went to another town for the same time.   He
was unhappy because he had not a point of   tie.   He   prevented   his
children   to   continue   far   in their   studies   not   to   become   civil
servant.   In counterpart, my grandfather gave every of his children a
capital. About 1945 ... the trade was developped.

12.   Last week I had a seminary about "gestion du potential humain".
On saturday I worked from half past nine to half past six.   After   I
went shopping.   I went back home,   I ate there I slept because I   was
very tired.   On sunday I stayed in bed until 9 o'clock.   I cleaned up
the house. After that I started to cook for lunch but also the dinner
for my children because in the afternoon,   my husband and I had to go
the son of one of my husband's cousins' baptism.   The mass started at
4 o'clock and finished about 6 o'clock.   We had a drink to   congratu-
late the baptized called Thomas,   and his parents.   They then invited
us to dinner, we were about thirty. We stayed until midnight.

Marianne

First Data Collection Point

1.   When it is Christmas time, I like to decorate the house and every year I make new decorations ... This year with a garland and balls of paper we make a fir tree. I make also a "crèche" in the fire place of the dining room. I put the little presents or the sweets for the children on the fir tree. I do not forget to put some holly and some mistletoe in the entrance and put flowers on the dining room table.

Second Data Collection Point

2.   I work in a needle house but ony the clothes for women have maked in the workshops... The sweaters, the pants, the bras have maked by the others manufacturers. The clothes for men have also realized by the others manufacturers. All the clothes have sold in the shops of Paris.

3.   For years I go on a journey.

4.   On saturday morning I tidied my bedroom in the afternoon I watched a rugby match on television towards six o'clock I went to see a friend who works in the children's bookshop. In the evening I watched the Walt Disney show. On sunday I looked at some magazine because I can't do it during the week. In the afternoon I revised my law course for the test. It wasn't a very interesting weekend.

Third Data Collection Point

5.   Once upon a time there was a doll house's very nice; its walls were of red brick's and its windows, paint in white, had got an trains of muslin .. and it was front door and chimney. The house belonged to two dolly, one of whom called Lucile and the other Jeanne. In fact the house was Lucile but Lucile did not command never meal. Jeanne she was cooker, but she did not make never the cooking because a dinner had been deliver all make in a big box.
On the menu there were two scarlet lobsters, a ham, a fish, a cream desert, some peas and some oranges. We couldn't take this food off the plates but they were very nice to look at

6.   On a beautiful morning Lucile and Jeanne went for a walk in the doll pram. There was no-one in the children's room and everything was silent. A few moments later one could hear hurried steps and scratchings sound in a corner near the fireplace. In the place were there was a hole under the skirting board Petit Poucet put his head out a moment and then pulled it back qickly. Petit Poucet was a mouse. A minute later his mate, Sanigette, did the same thing and when she was assured that the children's room was empty she carefully worked on the floor and she hid under the coal box. The doll house was at the other end of the fireplace. petit Poucet and Sanigette walked across the carpet in front of the fireplace. They pushed the entrance's door it wasn't locked.

Janine

First Data Collection Point

No data available.

Second Data Collection Point

1.   My two sons go to holiday camp for one week. They take the train at station "Gare de Lyon" the sunday...They got back the after weekend. During their absence, my husband and me will repaint and cover the kitchen. We bought a brown and white checked wallpaper and brown paint.

2.   Last week, I have not work: one holiday's week. I am not go to mountains or somewhere else. I am stay in my house with my two sons. We have a rest: we have watch tv and we have go out for a walk very much. Netherless, the sky was grey and rainy and the weather was cold. What quiet holidays! Monday, I am go to my office and tuesday to university. the busy life of a family's mother student and hardworking has begin again. And you, had you take holidays with your family?

Third Data Collection Point

3.   I descibe the book that I read at the moment. It's "Tendre Eté" write by Joseph Joffe...Once upon a time a young boy and a young girl ... It's the summer, Jean-Pierre is a poor farmer who leaves with his parents in a farmhouse in Loire Department. He is an unsociable

and tender teenager. Alexandra is an urban person. She dreams to be lady of the manor. They are fifteen. With him she finds out nature, forest, country ...I have not finish the book...
For many months, I have not much time to do pleasant activities. Between office, University and my house with my children, it left a few time for spare time. Fortunately, in October, the classes will be finished. I could make many things for my pleasure.

4.   I don't go never to England....

5.   Since last thursday, I was sick .. I had got fever and I have passed my weekend in my house, without go out. Most of the time, I was to the bed.... I slept a long time, I read the book "L'Impératrice" write by Jean-Loup Sulitzer...After have slept and read, I watched to the tv...Too I gave my medecine between every activity. I have played too with my second son (the older were not here: he went to England). We have played with playing cards and little horses. After this long time off, Monday is arrived. My health is better and I go to work.

6.   Today I recount my last Easter weekend. During three days, I made many things: Saturday, I went to market for buy different foods and look at clothes. I bought among other things fruits, vegetables, cheese and meat. Afternoon, I gardened a little: I lifted weeds, I mowed the lawn ... the evening, I had got a pain in my back, therefore, I went to bed early. Sunday, I had a long lie. With my husband and my sons, we went to restaurant ***** Then, we went to ******

7.   I am happy to have pass this English's hours: I had kept a bad memory of my English's schooling ... I am nt still self-confident between simple Past and Past Participle ... (Why we haven't correct the exercises make in class?) When I was young, I almost went to America during one year. I had afraid to leave my family and I was not start. Now, I regret, but it's too late.

8.   It's an historic monument know under the name "the Poissy Collégiale"

Annie

First Data Collection Point

No data available.

Second Data Collection Point

1.   This week, I read book, write for Jean-Marie Cavada "En Route Liberté" Jena-Marie Cavada is a journalist. He was radio reporter and television reporter at first.

2.   I read a book, write for sixty writer, he call "Chat Plume".

3.   This weekend I am visited cattle of "Vaux-le-Vicomte". This is fabulous. Nocolas Fouquet had arranged the creation "Vaux-le-Vicomte". He likes, letters, Arts, Wives, Poets, Flowers, Paintings, Tapestry, books, Statues, all forms bauty and voluptuous. He lavish generously at Artists "gifts, Jobs and encouragements: In this way he estimate, "La Fontaine, Molière, leNotre, ... All court admire Vaux le Vicomte.

Third Data Collection Point

4.   This morning, I listen to the beatles with the greatest of pleasure. John, Paul, George and Ringo are better at singing. Over twenty years ago the beatles appeared for the first time at the Hollywood Bowl in Los Angeles. It was not long after they had made their first impact on the United States.....Those performances were. It was not just the voice of the beatles. It was experiences of the young people of the world.

5.   Sometimes and more often I go "Belle Ile en Mer" Corsica ... I like go cycling in "Belle Ile en Mer", I take dert track, often we came the long way round .....

Josette

First Data Collection Point

1.   Excuse me, I hav'nt can go to IUT the last week, because ... it was "grève".

Second Data Collection Point

2.   Today I am very tired: I work half past nine. This morning I am begin at eight o'clock and this evening I am finish at quarter to seven; and friday I begin again. But I have a good luck: when I come to my house (at quarter to eight) the dinner is finished, my stepmother cooks. This evening we have eat pottage, chicken, rice, cheese and I, besides, I eat lumps of chocolate because I am very gluttonous.

3.   The last week I have not can to go the IUT. Excuse me, but in my enterprise there is many many work and two collègues was sick. Also I had not the time to write to you.

4.   Good morning, have you take good holidays? I learn the last lesson and I see it is an explication to read a plan.

5.   I am sorry but last week it was not possible for me to go to the IUT; because I had many, many work at the bank and two colleagues are absent, one taked holidays and the second was sick.

Third Data Collection Point

6.   I am sorry to not write my letter before. But I have some work to do: my "exposé" of economics this afternoon and I had not finished. The friday evening I go to do some shopping with my husband. We buy meat, drink, vegetable, fruit for all the weekend and after we go to our house for the dinner. Saturday morning I sleep until ten o'clock, I take my breakfast and after I clean my house meanwhile my mother in law cook. we have lunch to two o'clock as all the Saturdays. The Saturday afternoon, I go with my husband to buy a new television. For the dinner we go to the restaurant and after we go to the pictures to see "Le Nom de la Rose". And after we return home and we sleep until Sunday Morning ten o'clock. For the lunch, We receive friends and the afternoon we don't go for a walk because it rains, we have talked. The evening after the dinner we look the télé and around eleven I work my exposé during one hour.

7.   The week before this week end I took holidays, I went in "Auvergne" to see my mother. I lived in mother's house. The Saturday we went, my husband and me, to walk in the mountains with the dog. There was sun, it was a wonderful day. The Sunday all my family went to my mother's, my sister, her son, my cousins. We had well eat and then we walked again. The monday morning we went home to Paris with the car, because we worked the next day.

8.   I your letter you asked to me if I liked my work, yes I like very much.

9.   Last weekend I musted to write my memorandum for DUT but the sun was shining and it was fair weather; I prefered to work in my garden. It was a nice idea because after this weekend it was cold and this since Monday.

Catherine

First Data Collection Point

1.   My sister's name is Sylvie ...   sh's a university teacher in Wales .. for four days she's back in France.

2.   At Christmas, for 1st January 87, I'm going with my boy-friend at firends house.

3.   At Christmas there, at Paule and Alassan house, there is Philippe and his boy Léo ... Jacques and Raquel too was there ... We had eat enormously and we had drink enormously too! At midnight we say: "Happy New Year!" And the firends kiss. And we had dance up to seven o'clock. At eight o'clock, we coming at our house, because we are tired. In my bed, I said to oneself, I speak of oneself ....

Second Data Collection Point

4.   Last week I went with my boyfriend to Cardiff ... My sister's Sylvie lives in Cardiff for one year. I and my boyfriend left at nine PM, we travelled by bus during fiveteen hours. Then we travelled by boat. I like very much a boat, but my boyfriend don't like very much, because he's ill in a boat. The English people are very stupid, because they ate a meal of sausages, eggs, beans, tomato sauce and a lot of beer. They're stupid because after they were ill! Everything ill. We arrived in London at seven o'clock. Then we travelled by bus during three hours. At twelve o'clock, we arrived In Cardiff. My sister lives with two boys, Paul and Chris.... Chris is very nice. Because Wednesday, Chris suggested us to go in the countryside. Chris has got an old red car. We went to the mountains, through the Rhonda Valley...... It's a poor valley. Chris saids to me its the more poor region of Wales. I remember the strike last year. Mrs tasher made this valley more poor again...The mountains are nice, but it's very cold. They aren't many colours on the mountains, it's brown. there was little snow. there were a ships, many ships [= sheep] in the mountains. this afternoon was very nice....I was funny for me to speak english with a people, particullary with Paul and Chris....

5.   The last week, I was vey tired. I was ill I've got very important headache. Then, Friday, I decided that the week, I take a rest. After university, friday, I went in a restaurant with five good friends, us a pizza. I like very much pizza, and my friends too. I debated a long time with an economist, Marxist economist ... we debated for my memory for the university. Saturday I slept as far as ten. Then, the afternoon, I wrought my task, economy, psychology. A night, I watched TV with my boyfriend. I debated for him for demonstration, the next day, on Sundays. The sundays, my boyfriend and I, rose at nine o'clock. We coming meet people for to go to Paris a "Nation" for demonstration. It's demonstration for protection social security with my union CGT. It was very very nice and fantastic. There was many many people. 1 million people about. We walked during four hours. There is sun. I found a friende of St Etienne. this demonstration was very important. At night, we was very tired.

6.   My weekend of march the 21th and 22th was very good.
Saturday the 21st
I woke up at quarter to seven. At quarter past seven I take the bus going to Villetaneuse IUT, where I have a lesson of informatique until twelve thirty. I come back home at half past one PM for eating. The afternoon is busied by the household and the courses to the shops centre "La Défense". The evening a couple of friends come to eat some brittany waffles and drink some champagne. We celebrate the birthday of my boy friend. We go to bed early.
Sunday the 22nd
We wake up very late. Just for eating, because it's lunch time, after I go to learn my lessons. the evening, after dinner, during the sunday movie night I iron. As I good pupil ... I prepare my attache case for tomorrow, before to go to bed. The rain knows on the shutters of the bedroom.

7.   During the last on holiday, in February, my boy friend and I went in Wales. We went, the last day, in London. It was the first time for we go in London. We arrived in London at 3 A.M.. We sought a restaurant. The restaurants are expensive in London, more expensive than Cardiff. We sought next to Victoria Station. We was tired, and we had our bags, three bags. It was impossible for we to go far station with the bags, and at 7 A.M., the bus will start to Paris... Then, there're many pizzas, fast-food in London. We went in pizzaria. We ate a deep pan. It was very nice. It's pizza with a thick dough, cooked on a frying pan... After, we walked in London. We visited monuments, but I don't remember the names. It was raining. With rucksacks, it was very funny!! we sought Big Ben. It's normal. In Paris, english tourists seek Eiffel tower, and in London french tourists seek Big Ben. We walked, and in a moment we was next to a tower, very nice tower. I ask to a policeman: "Where's Big Ben please?" the policeman look up the tower and me too. I burst out

laughing. I said "What dit you hope?" I said "I don't know, but I hoped a large tower, bigger than it looks like. the policeman, my boyfriend and I had guffaw... We visited a little, London, but on foot, with the bags, it was difficult. The bus was expensive for we, and no more money. At 6 A.M., we returned at station. At 7 A.M. we arrived in Paris. I was raining. 2 days after, I was in Villetaneuse... I don't like very much London, but this week at Wales, was ever so nice. It was nice holiday, limited but nice. It was funny for me to speak english.

8.   For the last holidays, I went away with Jean-Lou and Céline from Orléans, in his brother's house. It was for easter weekend, for 3 days. It was to for his father's birthday. He's 60. There was many people. Jean-Lou have got 2 brothers... All this family is born in Saint-Etienne... We walked with the kids. I like the childrens. I stayed with them in a forest. They gathered flowers. There was a big sun... On sundays we went in a restaurant. We ate during five hours. It's horrible........We ate too... On mondays morning, the parents had chocolate eggs in a garden. It's very old tradition in France. The children sought the eggs cheerfully. I aidée Cyril, because he's very little.. Jean-Lou and I left before the meal. Céline stay for the holidays. This weekend was nice......We're very different, but this weekend I was nice.

Brigitte

First Data Collection Point

1.   I have been holidaying in Paris. Christmas in family and the new year with some friends. Now the holidays are finished.

Second Data Collection Point

2.   The audience were very happy, me too. The film was a success. Some people have clapped of satisfaction.

3.   In the fourth letter, you ask me: "What kind of music do you listen to?" ...... From my holidays in Scottish I bring back a record of Battlefield Band. Now I love the folk Scottish.

4.   I just finish my exercices on the Practice Book. This isn't obvious......My control in Law was correct. Nevertheless I needed to learn several pages and it's not easy for the memory when there is ten years that I have lived the school.

5.   Let go on your right, you arrive to Courbevoie. So, you have walked about ten kilometres ... Never mind the teapot is always ready for you.

6.   I am gone to the cinema friday evening to see "Mosquitos Coast". This is about the story of an american scientific who doesn't believe any more in the USA..."Mission" realized by "Almain Goffe" is better than "Mosquitos coast".

7.   Monday 25 march, I went to the Theatre with my boyfriend. It was at Saint Denis ... It played "Hamlet" written by Shakespeare ...It was a pleasant and original entertainment during 3 hours. There was a short entracte. Hamlet was interpreted by a famous actor Daniel Mesgisch. There were thirteen others actors with some beautiful costumes. The scenaries were easy and sometimes some smokes invaded the stage, so we thought to be in the smog of London.

8.   Yesterday exceptionaly we haven't had lessons in the afternoon. The mathematics teacher was ill. The weather was fine. I am gone to see my mother to her office then I have researched some documentaries. I haven't found all I wanted. I have the impression to waste my time. I haven't found my memory subject.

9.   My Eastern weekend could have displeasant end but .. We are gone to Normandy and we haven't found room for sleeping the sunday. All was full, luxury hotels too .. We thought to be obliged camp inside the car all night long. Happily we have met next to the church on the main square a simple couple and very kind which have lodge us for a night in their couch in the dining room. This little unforeseen was a good remember for us. we have drunk cider and eaten some good seafood with fresh white wine. Do your children have found their Eastern eggs?

10.   Saturday my brother is come to see me with his woman and their daughter. She is two years old. She is born January the 18th ... Snoopy "It's hers". It never leaves her ...... Hoping she never losts it ... saturday afternoon I went shopping. There was many people. The sun shined. People weared summer clothes. Someones were with short breeches. I buy a clear dress.

Corinne

First Data Collection Point

1.   I writ you from Nice......The sun shine since three days.

Second Data Collection Point

2.   Friday 22 January I was not in the english course because I was ill and at the hospital. How many exercises have you do?

3.   In English course, you learn to us the recipe.

Third Data Collection Point

4.   Today, our teacher of management participatif has to end his course at one o'clock. We were very happy because with my friend Catherine we were to go to "centre Georges Pompidou", exactly to George Pompidou's Reading Room..... we sit down with our papers and our books. Two men are in front of me and my friend is on Right here, people is quiet. We work to ten o'clock because the Reading Room closes.

5.   Friday, I took the T.G.V. at the railway station, from Paris to annecy. The TGV is faster than the other trains, and it took only three hours and a half. My Husband and my children were at Crest Voland (skiing village) since one week. They were waiting for me for the weekend. There was a lot of snow. We were living in the nice mountain house with nine friends and four children. It was very friendly... Saturday, we went down the sloapes all day long. On Saturday evening, every body has played at "Trivial Poursuites". We went down the sloapes sunday also until four o'clock. My children have got a lunch and we took our car and come back home. The way is six hundred kilometer and we were at home at ten o'clock... It was a beautiful weekend, with many people with snow and sun. My husband, my children and me were very happy. I forget: Nicolas, my son, has got his "Flocon", the first place for ski.

Françoise

<u>First Data Collection Point</u>

1. My job was chemist but now I'm unemployed.

<u>Second Data Collection Point</u>

2. I see, in comparison with her sister, Claire emilie has never plaid fool that Lison does. for exemple, two years ago she had going to shave her. She has take the shave soap and the rasor in the bath room. I was in the bedroom with Claire Emilie when I had ear to cry her. When I came in the bathroom Lison was cover with blood. I have be affraid. You imagine the sorts of fool that she may do. I had break habit of that. I stop because it's very difficult to explain that at passed.

3. This is a old church which have two bell towers wich have a long story. It was the subject of excavations. Those have been profitable but I don't remember that it has been find.

<u>Third Data Collection Point</u>

4. At the end of afternoon, after to have work all the afternoon my computering's lesson I was going to get Pascal at his job, both we were going to get Lison, Emily waited us in the house. When we are arrived, she took a bath. Then, Emily and Lison, both put on their pyjamas. I was cooking and then we have eating. During the dinner we spock with Pascal and my children what about we maid all the day. Pascal was very happy because he has been selected to run a holiday's center for this summer. So am I, I am very happy because I have got good results in the IUT. We got the children to bed and we are going to bed too .....

5. Saturday
The alarm clock have ringing at seven o'clock. Lison was coming to do a cuddle with us. then Emily and me got up and after our shower, we were wearing, and both we have prepared the breakfast. Pascal and Lison are coming with us and we have take the breakfast. I have driving Emily at the school and I went at the IUT... When I came back, My daughters were go out with their father...We have dinner both, Pascal and me. After Pascal is going at the Mother's house and me, I cleaned my flat. When my sister with heir children, Elodie and Olivier, are arrived. We have discuss during two hours. She's go out

then Pascal is come back. Olivier stayed behind to work mathematic with Pascal. I seized the opportunity to work my mathematic's lesson. Around half past seven. We brough Olivier again. We tooked a drink in the house's sister. our house, Friends, Agnes and Jean Claude with her daughter July, are arrived to take a coffee. We spend a nice evening together!!!

6.   I had a nice party with my two daughters Emily and I we have decided to hide the chocolate eggs in the garden among the flowers while Pascal and Lison went to fetch the grandmother for the lunch. When Pascal came back with Lisa and the grandmother. The both daughters went to look for the hidden eggs. Emily similated to be ignorante and so she took pictures from her sister each time Lison found eggs. She was very excited. There was a good day.

Marc

First Data Collection Point

1.   For my holidays I was in Holland.

2.   I don't remember if you know my flat. I think you never visit it.

3.   My brother and his girl friend gone to Holland six years ago. she is dutch. They have a good idea, in Holland is not many pizzeria. They have got a bus and decide to make pizza and fast food....But the dutch don't like the pizzas. So they have stoped their activity. Now my brother is a cooker and his girl friend doesn't work. Last week they are in Italy for holidays and they ski a lot.

Second Data Collection Point

4.   This week was very heavy. Yesterday I've gone with friends to MEUDON, in the west suburbs of PARIS, to look a painting exhibition. I's very interesting because the artists are young talents. Later we decide to diner chinese food in Belleville's part. In this place it's easy to find cheap restaurants. so I go to bed very late. It's a reason I was tired this morning.

5.   Last week was not interesting, so this is the reason I don't write a letter. My girl friend works for few months with a famous and creative team. they imagine and make a collection of clothes. She is an assistant and this time,they prepare everything for the big exhibition. Friday in LOUVRE place all the creators present their

collections, their models to the all journalist in the world. it's why she come back at home too late.

6.   last weekend I get up at nine o'clock. I had my breakfast one hour later. I went to see my parents and I ate with us. After lunch I spoke with my brother Eric what about his new job.....After this, it was three o'clock and we decided to watch the rugby match at the tv. we adored this match. French win and achieved the "Grand Chlem". It's very important for us. later I went to the supermarket. I came back house. I put on my new clothes. I went to see Nathalie and we past very good party until two hours of the morning. On Sunday I rested.

7.   this evening I was in the movies. the film's title was Round Midnight of Bertrand Tavernier. I like very much the jazz music and it was for me a great pleasure to see it.

Nathalie

1.   During the christmas Holidays, I visited Paris from museum to exhibition. I've been to cinéme to see "le nom de la rose" played by Sean Connery. it was a nice movie.

2.   I hope that you spent nice vacations and I wishes you an happy new year.

No data available.

3.   I'm going to Nice see my Mother for a few days in Febrary. we have gossip together and I have gaze at Carnaval of NICE. Some garment was gauty, golden, silkin - the people swarms, to press as rush hours, but it is very lively, only the Mediterranian sea was

quiet. the scenery of the carnaval was luxurious with many spot-
lights, by night. Many people was enjoy, specialy the children was
very funny.

4. this last weekend, I'm gooing to the ciné, I would like talk you
about this film. Not any grass, not sheep. the Action is in a cabaret
just before the second mondial warm. there are a good suspense and I
don't remember the time of film. Same rest is costume of "chanel"
"Poiret" are beautiful. It is not a very good film but you passed a
pleasant moment.

5. I drink many many champagne and the morning, I can't gooing to
the english course. Excuse me David I apologize for thet.

6. The train slowed down almost to walking pace and Finally came to
a stanstill. My little sister Floriane said me: "go on Nathalie we
want take two seats in the compartment, But I have forget my suitcase
in the left-luggage office. Floriane look at me and said: "Nathalie I
don't dare stay alone, I'm a little afraid". OK, comes with me. the
next train is in two hours. I'm so sorry Floriane the journey not
begin punctual, and not very restful. We are going to the refreshment
room and after in a waiting room. I see the guard. "Good morning,
mister, we would like go to London, please, which platform?"
"Platform 5" he said me.
"thank you."
the station master blows his whistle now we are off.

7. When I wake up Saturday morning, the weather it's not fine.
During the breakfast, I listen music, I take two cups of coffee with
bread and butter. After I read a book about "Antonin Arthaud". For
the lunch I'm going to see a friend to the restaurant. A Pizzeria at
"Maubert Mutualité". When I come back to the house it was seven
o'clock. I received for the dinner Marc. We have learn English until
two hours of the morning. later I'm going under my eiderdon I sleep
until twelve o'clock.

8. Yesterday I had a entertainment. A fun pastime not dull. I met a
player of cards. I said: "I' am a little awkward" and I at the
beginning lost. Till I felt a draw, after I thought that at the
middle of the game that trumps is good for me and with perversity and
will I understood the wit of game. After we had play dominoes and
more late at draughts and for finish we had on an exciting game of
chess. David. Did you like games and leisure?

GROUP TWO (13 subjects)

Lionel

First Data Collection Point

No data available.

Second Data Collection Point

1.   Daniel BALAVOINE is singer Frenchman, Thierry SABINE is organize
"RALLY PARIS-ALGER-DAKAR" ... are dids yesterday.

2.   Yesterday evening I have ask my friend girl if she want to go to
the cinema ... she say "yes, I go with you" My friend don't want to go
if far...we don't take a car. She say "What time is the next film"? I
say "the next film is twenty hour" and " How much time for to go"? She
say " "We have a time" The film begin a time and is good.

Third Data Collection Point

3.   Counterpart the holidays of February. I am go to the cinema twice.
I am not go to university. I take the bus every day. I occasionally go
to the restaurant. I never go to the swimming pool because I prefer the
sea Mediterrané. I clean my teeth with tooth-past and tooth-brush every
day and I clean my short dark hairs twice by week. I many work my
English lesson.

4.   The last weekend, I am going with my friends ... in the cinema of
Paris. We are look a wonderful film ... Counterpart Holidays of
February, I work my Lesson d'English...

5.   Other day I drink a Irish coffee, it's good... Other day I go to a
Greek restaurant with Maria and Catherine and Dominique, it was a first
time that I eat Greek food.

6.   The last weekend, I have sold my old bed ... I have bought a new
bed ... I went and took my new bed on Sunday morning and I have made
the assemblage on Sunday evening...

7.   Tonight I looking the match of Cup Europe of football ... The Nantais good play and mark a goal ... The Italian play but give the blow of feet in the legs ... The Italian mark also a goal ... Immediately after, a penalty is whistle and the French mark again. The arbitrator whistle the alf-time ... The match begin again, after 8 minutes ... José Touret is wound ... and other French player is expel. The french play with player less. A penalty is again whistle but for Italian and mark a new goal. The Italian mark again a goal. The Italian play with serenity and calmness. The last quarter is begin and the Italian domineer always.

8.   Last thursday, I am go to play football with three friends in the wood of St Germain. A friend has give a great instep in the ball is fall in a hole. We have try to catch the ball with the hand, we aren't arrive. A friend has a idea and he leave but a snake arrive about we and a hole. We have fear. Our friend come back with a basin of water out of the head and we have make a noise for make to go a snake. We have put a water in the hole and the ball is go up and we are happy.

9.   During the Holidays of PAQUES. I am go to in the brother ...

10.   last week-end, I am go to eat with my friend to the restaurant. We have eat mustard's rabbit.

Catherine

First Data Collection Point

No data available.

Second Data Collection Point

1.   The last week, I go to the theatre "Mogador". The play is "la femme du Boulanger" ... Every the actors are very good. Some actors sing or play the music. There are two decor. I am very happy d'avoir vu this play.

2.   The last week ... there is a terrible accident. Five persons are died in a helicopter ... there are ... Thierry Sabine and the singer Danile Ballavoine. His vocation is to help (the) people who dead de faim.

3.   Last Friday, I go to the cinema with friends. We watch film "Subway"... After, we go in Paris. We eat in the Greek restaurant because it is my birthday... There are musicians who play guitar. There is very sympathetic.

Third Data Collection Point

4.   Last year, in June I went to Greece during fifteen days...In the group, we were eighteen persons. We arrived in Greece during the elections. In Athens, the museums and the shops were closed. Next days, we went in Pelopenèse. We saw Olympie, Mycènes and the Epidaure Theatre. It was wonderful.... I am very happy to have seen this country...

5.   Last Saturday, I went go shopping to Paris...I buy any clothes: a jeans ...

6.   Tuesday evening, I went to the cinema in Montparnasse. I watched film "Les Longs Manteaux" ... The history is happen in a little village in Bolivie ...

7.   Last Thursday, during the afternoon, we went my friends and me to play football in the country. We began the match. Five minutes after, the ball fell in a hole. We would not take the ball. Philipp went away at the house. He returned with a wash-basin with water. Philipp refilled the hole with the water. The ball went up. We were contents and Philipp said: "I am a little genius!" We laughed and the match began again.

8.   Monday evening, I went to the cinema. I watched film "Out of Africa"... the history is happen in Kenya ...

9.   In Denmark, Karen writes "Out of Africa" in 1937. I am very happy to have seen this film...

Maria

First Data Collection Point

1.   It's 5 years I work at the EDF-GDF to the DEFENSE.

2.   This weekend I'm student the (Droit) because we have a control Monday... I'm student also the mathematics...

Second Data Collection Point

3.   My friend's name is Jesus ... this weekend, he's dead in a
accident of car. he was 24 nearly 25.

Third Data Collection Point

4.   I don't married for a long time. It's 8 months that I'm married
but before we lived together since february 1982. My husband is also a
student... It's a professional reclassify because when he had 19 years
old, he had meet with motoring accident. He was immobile for one year.
He had 11 operations altogether. His accident was pass in 1978...My
husband   and I decide to get married because we are meaning to have
children...

5.   I like to travel. I went already to Marocco ..I go to Holland in
April because when I went in 1982 with my husband we stay only 2 days
... In was a week-end of Easter...When I will go in April, I will like
to visit the Van Gogh Museum (it's closed when I went)...Next time I
will speak of the Greece. I visited twice.

6.   In September 1983, my husband and I, we went to Greece ... We
taked the boat to Ancona in Italy to Patras in Greece. From Patras we
visit the Peloponèse ... It was wonderful .... next we went across the
Canal of Corinthe for go Athens but we didn't stay because we didn't
park. We went on to Delphe...This we had please also. We taked back the
boat to Igoumissista. we was very sad because the holidays was
finished.

7.   Last thursday, after English course, we went to see our class-
room's boys to play football. There was Lionel ... Suddenly Lionel
tryed to seize the ball, Alain leaved somewhere and a snake approached
softly. That was dangerous! Suddenly, Alain reappeared with a basin of
water. The boys sayed: "Why a basin of water?" And Alain poured the
water in the hole so the ball comed up again and they could continue to
play football.

Frédéric

First Data Collection Point

1.   I'm a student at Villetaneuse and I learn English there ... I
started this year ...

2.   For my Christmas Hollidays I am going to ski in Grindelwald...

<u>Second Data Collection Point</u>

3.   The last english course, ... my teacher didn't came. Every body was very sad. the new teacher ... was very young. He was not tall, nor big but he was alright. I think he wasn't an englishman but I am not sure because he had a very white skin. He wore: blue jeans...

4.   This weekend I didn't study ... because I had some electricity to repair...

<u>Third Data Collection Point</u>

5.   This weekend I didn't study my homework for the 'FAC' because I had some electricity to repair in my flat .....

Serge

<u>First Data Collection Point</u>

No data available.

<u>Second Data Collection Point</u>

1.   Yesterday I watched the match on television, NANTES-Spartac of Moscou. FRANCES and RUSSIAN have made match one and one.

<u>Third Data Collection Point</u>

2.   Last Monday, I go to the cinema with my wife. We watch film "trois hommes et un couffin" ... After, we go to Rueil Malmaison we eat in the Italian...

3.   Last week, I go to television, the play is "malade Imaginaire"...
It's a long story, very good interpret all the actors are very good
there are very good decors...

4.   Yesterday morning, I have met one of my friend I haven't seen him
since eight years. he is married five years ago... we have exchanging
our address...

5.   Last night, for my birthday, my wife and me, we have going to eat
out. my little girl was going to my mother's. I'm 28 years old. we have
eating pizza, and after, we have gone to the cinema to see "le
justicier de new York" it was very interesting.

6.   Last tuesday, ... four children ... playing football. During this
party, Jeremy who is goal let out his balloon, sent by bob. The balloon
roll very far and fell in a hole deep. The other children puzzled and
they looked around for find a solution. Suddenly bob found a solution
and had gone fetch a bowl full of water. Jeremy, Michael and peter
looked at bob and they have been surprised, but when a water was
pouring into the hole by bob, they comprised. The water push the
balloon and he go up again. And the fouth companion are happy because
they playing again their party.

Gisèle

First Data Collection Point

1.   Last summer, I went to Greece for three weeks. I found Greece very
beautiful.

Second Data Collection Point

No data available.

Third Data Collection Point

2.   I like very much the North of ITALY But I prefer SICILY ... I went
during five years in Holidays to the SICILY ...

3.   Every time when I went to Greece, I'm Happy and sad in the same
time ... I'm sad because I love the animals and in Greece they are very
sad ... When I saw this cats, I gave their the food.

4.   In March 1985, I went To the south of Tunisia ... The weather was very nice ... Every day I swam in the swimming pool Because the sea was cold. I travelled through the country and I saw nice landscapes. I like to go to Tunisia in spring ...

France

First Data Collection Point

1.   I come from Paris where I was born...

2.   ... I beg your pardon for my absence the December 11 nineteen eighty-five. I was sick and I was not be able to goto the University this day.

Second Data Collection Point

3.   past saturday I invited some friends to entertain my birthday. then we have singing this famous song "happy Birthday"...

Third Data Collection Point

4.   At the office, I come to finish the déclaration of professional formation... Its very important work because we have to ... justify the school payments and all of organisme names whose organised these training. My son Frank was going to see a country music festival at Wembley, he came back very happy. It was an extraordinary atmosphere.

Jean-Pierre I

First Data Collection Point

1.   I have never learnt English.

2.   I went to mountain eight days There wasn't snow. For the children it was sad because they hadn't skied...

Second Data Collection Point

3. I'm born the 20th september 1942...

4. I never had the gladness to learn English and today where I have possibility to study, the time fail me ...

Third Data Collection Point

5. I like a lot the sun ... I'll have liked living in South of France ... I've traveled often in foreign mais ... I've never gone in Great Britain ...

6. I'm to 3 months from the end of this D.U.T. and I haven't already begunn my memoir...

7. I left in Tunisia from 13 to 20 april ... we've been a little embarrassed by the police's control ... We were a little group (ten persons). When we left in the south, we were twenty persons... This was (?) even if I've met some difficulties. The guide spoke in the two languages. We were attentive when he gave explication in English because we tried in each instant to translate what he said. When he traduced in French we could establish if our traduction was good or not.

8. On the april 24th, I'm not able to go to lesson ... I've always, during this three years of study, tried to not violate the lessons. But the enterprise cannot be neglected ...

Alain

First Data Collection Point

1. My parents are from Mouton, they are coming for the Christmas and New Year holidays...

Second Data Collection Point

2. I'm not to go in Holidays for February Holidays. I have to work English. I'm very happy because I do progress ...

3.   Yesterday I did a talk on the naturism ...

4.   I had an accident with my car. the driver from the other vehicle to refuse the right of way ... Fortunately the accident was not serious the bumper was only to damage ... I am going to see the final of football cup of France to Parc des Princes. It is Bordeaux team who has win. David did you look this final?

Pascale

First Data Collection Point

1.   Now, i look for a 'stage' in a firm for the month July. I have got written letter and i have got send with my 'CV'...

Second Data Collection Point

2.   The day before yesterday i went in the cinema. I see the film "the Bateau-phare" ...   Last night we have visit the very pretty exhibition of Vienne ...

Third Data Collection Point

3.   I went to see the exhibition about Vienne. I liked it very much. I specially appreciated Klimt ... At the theatre I saw a play of Marguerite Duras. the actors played with a lot of itensity.

4.   This week, I went a lot to the cinema. I take time for friends. We eat together ...

5.   Last Saturday I went to 'Bon Marché' in order to choose some items among the presents offered for my mariage. I took a large colour tv ... This morning was very sunny and warm. After two hours spend in the store, my husband became very impatient. so we went outside.

6.   I spent one very nice week in southern France ... The harbour has been excavated for fifteen years ... Last thursday, we had a nice evening. Children played balloon in the   street. Among them was a little girl: she suddenly cried. her big brother   came and said "I

am going" and he moved away. The children remaioned   silent and
stiff. Then they saw the young boy, standing on a high wall   ... he
reached the balloon, wich fell among the children ...

Jean-Pierre II

First Data Collection Point

1.   Before, I live in Asnières, and I work at EDF... today the
musicien Daniel Ballavoine is Dead...

2.   This evening I have eat a pizza ... I have drunk a glass of wine.
Then I have smoked a cigarette. Then I studied my lesson...

Second Data Collection Point

No data available.

Third Data Collection Point

3.   today thursday I have meet Catherine and nadia at the cafeteria,
and we took a cup of tea. Catherine was not very happy because it was
cold but nadia had not cold because she wear a big coat. The cafeteria
was full of students. It was noisy.

4.   I am very pleased to have an English course ... I learn many
things that I didn't know, many new words ...

5.   Well, the last English course. I wasn't very good in the beginning
but at the end it was better. It was very hard work for me   ...

Francis

First Data Collection Point

1.   You are right, I lived in St Mandé, but now I live in Paris... I
live in Paris only since the first January. I like Paris, but I like
very well St Mandé, because ... my house was near the vincennes wood,

it was also the house of my childhood. It was a large and old house ...
unfortunately the town hall buy this suburban house for to build a
school.

Second Data Collection Point

2.   I was in London there is one year.

3.   temperature this winter is very cold, but then occasionally rain
and I prefered this climate ...

Third Data Collection Point

4.   I have got a car and it is fantastic. This is not Japanese car but
Italian. Before buy it I diden't the Italians cars ... I had a friend
who work at the garaging fiat and he was good engineer ... then I have
got buy a Italian car ...

5.   Morning the last week I close my front door and I want to lock,
but the key it's not in my pocket, the key it's behind the door, it's
on the lock and now I can't open the door. I'll phone at the phone box
at a locksmith, he come and take up box a wire, poush on the [gache]
and open the door...

6.   Do you know Alphonse Daudet? It's a french poet who write on the
life in Provence at the last century. this written "la diligence de
beaucaire"...

7.   the last week I was in the park. I was going to a ride. four
children were playing football. The youngest trow it under his friend
who run after but ... the ball fall into a profound hole. Boys couldn't
catch the ball. Children's noice wake a serpent which was sleeping. The
youngest boy has got a good idea. he goes and fetch some water and he
fill up the hole and the ball goups.

8.   Did you know my name was Francis? In the fifties when I was born
in south of France where my parents lived the Royal England family was
very modern...

Thibaud

First Data Collection Point

1.   I am go a university. In the hall of university, I have go up staircase. I am return of the room Q207. In the room, a professor wait what the studiants come. The course begin. This course is a course English. I am see hours and I am see numbers. The professor and we we are see the different country. I look show, It is one o'clock. The day is stop. Before to leave, the professor we are speaking the controle. We have say goodbay the of professor. We are leave to eat.

2.   Tonight, I am go to seek Damien at the day nursery ... A lot of parents was there ... The father Christmas is come to say good morning at the childrens...

Second Data Collection Point

3.   Mr Harris is a businessman. He is go to London in a businesses. His blind is go to with him. They have arrange to meet at ten o'clock . . .

Third Data Collection Point

4.   I am go to Scotland ... I am put up at a hotel ... My hotel is luxurious. The restaurant and the room is very well. The citizens are well-meaning. In the city, the museums and the shops were closed. The climate is temperate. There is a spell of rain. I am go to visite the country seat ... Every day I have a feast day ...

5.   Wednesday I am go for the reunion parents. There was many people. we have speak several stock... We have speak the new organisation. In the course the reunion, we have food by cake and we have drink with parents. He has land several answers. I am very satisfied to have attend these reunion parents.

GROUP THREE (8 subjects)

René

First Data Collection Point

1.   For these holidays I go to your village I ask somebody if he knows
David. He answers me: stranger go home .... I'm sade. It rains in the
west. por lonesome immigrant! I'm just coming to learn english. What do
I do now? ... I come back to London ... In London ... I see a beautiful
girl. I speak her. I ask: .... but she's not happy and calls a
policeman who invit's me at the police station. Well! I stay here all
my holidays. I don't see David and I don't eat british's porridge.
Patrick helps me. He comes by helicopter ....

2.   This weekend I'm sleeping too much ... I get up at 11 o'clock.
After breakfast. I to washing up. The afternoon I'm training my hands
and my arms ... at 3 o'clock I'm eating, after that I'm playing with my
daughter ... I'm tired, my daughter no ... The end the afternoon I'm
going by car to visit my wife's parents. The sunday night I'm waiting
the Danish friends. they are visit Paris ... They live in my house
during there stay.

3.   ... Yesterday my friends invite me for a party ... A lot of people
go to the party. there are about hundred fifty persons ...

4.   a night I travel with a lot of neighbourgs ... For this first
travel, our group is very worried. It's opportunity going to Caribbean
... the bank of the cup is not so far that's why I can not afraid the
hijaker. Soembody eat sauerkraut. ... there are trafic lights who cause
a trafic jam ... because we don't put the brown sugar and we don't make
to turn the table I wake up before to arrive ...

Second Data Collection Point

No data available.

Third Data Collection Point

No data available.

Odette

First Data Collection Point

1.   What do you do at that weekend? Saturday, I have invited my Parents. I am very content but we have eated too much! Today I haven't breakfast and I go walking in the forest; after that, I go to see my friends ... their son Olivier comes back of a long travel...

2.   On saturday we are go to see a picture exhibition. It was very nice but some pictures were naturally interesting they were for me (?) Today we go to P"lace des Vosges ... Place de la Bastille there is a traffic jam, a fire car is stopped. We take the first street . then we go straight on. We arrive directly ... Unlucky, all is finished. We come back at home: everybody is disappointed. We have dine, then we watch a scinence fiction film ... it is terrifying, my daughter is afraid but she stays in front of the tv.

Second Data Collection Point

3.   I went on "Lavandou". Unlucky my husband is on the sick list, but we are swum. We have celebrate Christmas at home... We have eated too much chocolate. This night was very nice. We have danced all the night. We was very tired.

4.   Friday the 20th at 10h30: I run to rejoin my family at the metro station ... We immediately start out for ... Haute Savoie. We arrive ... in the evening ... The tomorrow morning the sun shines but there is a lot of snow and it is very cold. We start out ... We arrive at 9.30am. The travel was good. ... This week we have spent time on ski our guest house was very good ... Everything was very well.

Third Data Collection Point

5.   During the last weekend, we went to Lyon to visit our friends. We stayed three days. we were happy to be together. Together we went to visit a little village ... The weather was nice. The sun shined. it was wonderful. We had lunch into a restaurant-farm, the meal was very good. there were at the next table some English tourists. They were very glad and appreciated the french cook ... In the evening we came back to Lyon and went back home. We have a good trip.

Judith

First Data Collection Point

1.   I have decided to write you this letter for speaking about my
short holidays. I went to Spain ... The weather was fine it was sunny I
went for a lot of walks with my parents ... who were very happy ... I
had time enough tp practice my English ... I hope you passed some good
holidays too.

Second Data Collection Point

2.   My holidays are very exciting. I go to Sahra desert ... I take the
boat to Alicante from Casablanca ... I wait for Paris-Dakar really. I
do the desert...

Third Data Collection Point

No data available.

Josette

First Data Collection Point

1.   Pending these four days of holiday thas I've to go at home ...

2.   I've holiday's hanging four days ... Parents and friends come here
... i'm to go tut put also to make flowers on bedroom ... Now I prepare
several meals ... I go make cake ... Afternoon we come in forest ...
I've very work ... the pretty dog is very pleased, because she's got
caress ... The time is very beautiful, the reception is successful ...

Second Data Collection Point

3.   My brothers and daughters are all at home their children are also
here... Much noise, much dance, but they are always ingrid. We have
their walk in Paris. The children are very happy. Much difficult
parking my car..

No data available.

Gérard

First Data Collection Point

1.   The last weekend I don't write because some english friends take
all my time ... What do I do yesterday? We are both in a little house
... before the winter I work too much ...

2.   There is a very long time I don't receive some news of you!!! ...
I was born the 22th of november, consequently yesterday there was my
birthday ... I was worn out because I had to much work. I was in my
habitual country in suburbs ... i have demolish a long pavement, in may
the garden was a garden overrun with weeds ... Now it is different ...

Second Data Collection Point

3.   During the Christmas hollidays I was in the mountains with my son,
my wife and my sisters. She lives in Geneva and for she the road was
short but for my it was a long way. A lot of snow falls every day ...
but it is still possible to make cross-country skiing. The weather is
not cold and with light clothes we make a long promenade ... it was
very tiring ... In middle of skiing we stop in a little chalet to eat
...

Third Data Collection Point

4.   During the holy week I hurtled along by bike. I made a cycling
tour in the south of France ... In this region people had two gods. In
1243 the pope decided to eliminate ... the last Cathares. These holded
castles situated on the top of mountains!!! All the mornings I got on
my bike ... the road was pleasant ... Every afternoon I arrived in an
isolated hotel. The night was noiseless ... and tomorrow was the same
thing. last d   ay I left mountains to rejoin the plaine ... with cabin
cruise boats who slided slowness ... and stopped every kilometer before
numerous loks who calmed streams who descended from mountains. That
was a very good ... pleasant idea but ... my wife cried always. I was

far before ...

Geneviève

<u>First Data Collection Point</u>

1. I have been in Province to Longwy ... I went tuesday and I came back saturday. i travelled in car. I have been cimetery because members of my family are put in the eart. I visited also friends ... They gave some apple tarte ...

2. It was a short weekend. On saturday I want go to the supermarket ... This supermarket kept his anniversary. there was many products cheaper. In afternoon, I have been to consult my doctor and in the evening I loocked at the television. I hope that you have had a good weekend.

3. This weekdays it's quicly past. The noember eleven holiday I went to pictures in Paris ... This weekdays I annoyed because it was strike on always. There was only one train on two ... This saturday, I went to the public library to give back books that, I had borrowed seventeen days ago ... I hope that you have had a good weekend.

<u>Second Data Collection Point</u>

4. I have buy presents. I am go restaurant. I am go picture. I am telephoned a lot wishes. I was offered a book. I was look at the tv ... I am writting letters and received letters.

5. I hope that you have past a good holiday with your family. For Christmas my mother come in Herserange from Lorraine ... we were pleased to be together. In the living room we decorated a Christmas tree ... my sister could not came at home because it was strike of trains ... Finally we went to see her ... We gave presents to children. My son is stayed a few days ... Yesterday, it was sunday, we kept the King's day.

6. During the holidays I guest at home my sister ... They came from Chalons to Paris in train. We went to meet them ... We were very happy to see them. The children would see the Eiffel Tower. We went up second floor. There was a merveillous view but the weather was cold. There was some snow. Another day, we went on Champs Elysées ... We went also to the picture ... Then we visited Enghien ... At home my son lend to his cousins his computer. They enjoyed yourselves ... All people pleased for holidays.

<u>Third Data Collection Point</u>

7.   Last weekend I went in Lorraine to see my mother who was sick. I saw again a few friends and notably a childhood friend who are invited me to diner. The weather was cold, and same it snowed. Come back to ermont I visited a neighbour who was to maternity because she have had a baby. he was a very nice baby named Mathieu. wednesday evening friend's father of my son came home with the son's bike that he had repaired because a pneumatic was bursted. he was very kind of him. Friday evening, I went to visit ... Saturday evening, i went to a conférence ... the theme was "Necessity of a new humanism. It was interesting ...

8.   ... It was fine weather during the weekend and friday we went in Lorraine for visited my mother. I went also to see a friend who invited me to diner. Saturday we went shopping and bought eggs Easter, it was a present for family. Sunday I was invited by my godmother ... I was glad to see her because I didn't see her for two years

Georgette

<u>First Data Collection Point</u>

1.   last weekend, saturday, I get up on eleven, I am go to market, afternoon we go (?) castle ... Sunday I stay to my flat ... I have past two year from British Institute ...

<u>Second Data Collection Point</u>

2.   I have past the very good holiday ...

3.   To begennis in the week my husband's oncle died in Suisse. He sick long since about seven years. He was a very good doctor. We are start there two days, after we are return in Paris because I have something to do ... My husband did very side because he loved his oncle very mush. I haven't do a good hollidays.(?) died did very side for all people. His wife, his girl and all a patient who became to see him when they are sick ...

Third Data Collection Point

No data available.

Touré

First Data Collection Point

1.   During the holidays of Toussaint, I have took two days ...
Afterwards, I'm going to my friend ... When we have time, one was to
cinema.

2.   During the weekend, I get up at 6 o'clock. I have take the
breakfast, next I go to monoprix ... The evening I go to walk a little
... sundays, after my waking ... I made for footing. When I am return,
I made cook and I remain in te house ...

3.   During the week I have been to cinema once only ...

Second Data Collection Point

4.   I have to spend my holiday in Paris. I haven't celebrate noel ...
but I have well celebrate new year ... We are organise an Eve the 31
and the first, I go to cinema, assited to rally Paris-Dakar sometime,
then I am return at home. I have well to spend my holiday because I was
vey happy and I have had a present.

5.   I spent winter holiday in Paris. I required to go ski, but I don't
skied ... I spend my time to ... look at tv. I don't go to cinema so to
concert. I slept all the time and I learned some irregular verbe. I
have had the visite of a friend ... we are going to restaurant
together.

Third Data Collection Point

6.   i want recount all that I did during the 13th to march 21st. Every
day after my english lesson, I retourned my home for listened music and
did my exercices. I often went to visual room ... I had exceptionally
this week to change my programme. I watched a film ... Then I slept and
spent the time to read newspaper. On saturday and sunday I went to my
girlfriend's ... I occasionally walk with their.