

Once again, we are looking at results which could be due to chance, since only two of the four predictions made came up with the anticipated results. This is, alas, pretty much par for the course, and—I reiterate—Liceras is unfailingly straightforward in her presentation of such findings: there are no *post-hoc* attempts at beautification in her reportage.

It would seem that some of the complexities in Liceras' findings come from a failure from within the framework she utilizes to distinguish clearly between concepts such as the initial state, subsequent development and the motor for this development, and variation. As I hope to show, there is a theory—namely, "Processability Theory"—which provides much clearer definitions of development and variation, and these have now been extended to Spanish. Ongoing work promises to clarify at least some of the issues that surround the questions of the initial state and transfer, as well as providing some insights into the motor of development and related phenomena, such as fossilization. Once again, to her credit, Liceras approaches such concepts as the latter from a primarily linguistic point of view. However, in the case of fossilization, for example, she provides no initial definition, merely accepting the given, and, as I have shown elsewhere, very muddled version of that notion (cf. Johnston 1994; Johnston, forthcoming [95]).

In conclusion, White (White 1989 [181, p. 135]) writes that "Liceras' hypotheses are to be welcomed because she attempts to integrate properties of the L1, the L2, and markedness theory, i.e. she recognizes that many different influences interact in second language acquisition. It seems, however, that there are problems in using markedness to predict when transfer will and will not occur, just as there were problems with using it to predict acquisition sequences. Despite Liceras's *sic* predictions, marked properties did transfer, especially in early stages. Unmarked properties sometimes failed to transfer, and marked properties of the L2 input were taken into account".

This is, I believe, a fair summary of Liceras' results in the 1986 study, and I have nothing to add to it here, except to say that there are well-defined stages of acquisition for Spanish as a second language in Johnston (1995 [97]). In terms of these stages, which are for oral production and were formulated on the basis of corpus data, the phenomena which Liceras deals with—for relative clause formation, at any rate—are only likely to appear in a target language form near the end of the stages described. These phenomena are quite complex, and Liceras makes a very praiseworthy attempt at investigating them. The fact that her predictions yielded mixed results *is* indicative of problems in the model she employs, but nevertheless needs to be viewed in the context of the magnitude of her task, which was very great.

2.4 To Criticize the Critic

Lydia White has already been cited extensively, and we have heard what she has to say about a number of studies by her colleagues. Let us now look at some work conducted by White herself.

White (1989 [181, pp. 144 ff.]) points out that “even given the existence of principles in UG, it is still possible... for the child to arrive at incorrect hypotheses for the target language”. She observes that for a target language grammar to be achieved that these incorrect hypotheses “must at some point be disconfirmed” and that, if negative evidence is not available, this can only happen on the basis of positive evidence.

To illustrate her claim, White discusses three different kinds of incorrect hypothesis and the means by which they can be disconfirmed. White notes that “These examples do not depend on UG” but that “the same issues arise in the context of parameters” (White 1989 [181, p. 142]). The author has had very little to say about “parameters” so far, but he begs the reader to bear with him for the moment, since they will be discussed shortly.

The first hypothesis discussed by White involves what she calls “under-representation” (White 1989 [181, p. 142]). What happens here is that a first language learner has an internalized grammar “X” which generates some sentences in the target language “Y”, but fails to generate other sentences of “Y” because it is “less general” than the grammar of “Y”. Hence the “under-representation” mentioned above. As White observes “Positive evidence can bring about change from X to Y”. An example of this involves the verb “see”, which can take both noun phrase complements, as in:

Mary saw John.

and sentential complements is in:

Mary saw that John was tired.

White argues that “learners do not necessarily acquire all the complements of a particular verb at once” (White 1989 [181, p. 142]), and that a learner with grammar “X” might only produce sentences where “see” has a noun phrase complement. This grammar could be extended when the learner comes across sentences with sentential complements and begins to produce them. Thus grammar “X” has evolved into grammar “Y”, with the driving force being positive evidence in the input. (Actually, there is a great deal of speculation about what causes a grammar to evolve, which Steven Pinker (1984 [145]) calls the “extendibility problem”. In point of fact, we do not know why a learner bothers to extend his or her grammar at all, and, while first language learners generally do comply in this regard, many second language learners do not. We shall return to this question later.)

The second kind of incorrect hypothesis discussed by White “requires that a form or rule in one grammar be replaced by something else” (White 1989 [181, p. 143]). A case of this kind could be found in a learner who overgeneralizes the English past tense marker “-ed”, producing forms like “*goed*” and “*bringed*”. These forms can be eliminated on the basis of positive evidence that “*went*” and “*brought*” are the correct forms for the past tense.

However, there is, as White observes (White 1989 [181, p. 143]), a problem with such a claim. This is that learners might act as if they were in the situation outlined for the first hypothesis and “think that *brought*... represents an additional past tense form”, failing to consider the possibility that irregular forms are obligatory. (This is the situation for some speakers of English with the forms *fit* and *fitted*, where *fit* can be both present and past, so White’s point is quite plausible). As White notes, “Many researchers therefore suggest that learners are guided by a Uniqueness Principle, which says that any particular semantic concept will have only one syntactic or morphological realization” (Berwick 1985 [14]; Pinker 1984 [145]; Wexler 1981 [54]). Such a principle would force learners to make a choice between what they get in the input and what they themselves produce, thus eliminating the non-standard forms. Or they might get negative feed-back, although this does not normally appear to be the case.²⁰ Negative feed-back here would produce the same effect as the Uniqueness Principle.

Whatever the case may be, there is still a problem, since neither negative feed-back nor the Uniqueness Principle have undisputable epistemological status. Indeed, in the realm of second language acquisition, this is a very long way from being the case, although we will encounter a phenomenon called “Morphological Blocking” (Aronoff 1976 [7]) which bears some resemblance to the Uniqueness Principle, and which provides a formal account of why a particular form in the lexicon is chosen in place of another, with the mechanism for this choice being a very precise account of specificity, and the structural conditions which form a framework for it [6].

To continue with our discussion of White’s research, the third type of incorrect hypothesis is, in her words, “a more problematic kind of overgeneralization” (White 1989 [181, pp. 143-144]). What happens here is that a learner with grammar “X” uses rules or forms that are not correct for grammar “Y” and therefore have to be eliminated. This differs from the previous case in that the rules concerned must be extirpated entirely: they are not replaced by anything else. An example of this situation would be the following (Baker 1979 [12]):

The child seems to be sleepy.

The child seems sleepy.

The child happens to be sleepy.

²⁰That seems to be the consensus in the literature.

*The child happens sleepy.

Here we have a case where the copula can be optionally omitted after some verbs but not after others. As White says, "It appears that explicit negative evidence would be required to draw to the learner's attention to the fact that sentences... [like the final example above]... are not permitted. This is precisely the kind of evidence that is not reliably available to language learners" (White 1989 [181, p. 144]).

There are proposals which circumvent this putative need for negative evidence. Baker (1979 [12]) suggests that, in some sense or other, children are "conservative" learners, and generate hypotheses which are strictly compatible with the input. More general hypotheses must be motivated by appropriate data in the input. Since sentences like the ungrammatical one above are not produced²¹, there will be no necessity for negative evidence to prohibit them. Baker's proposal runs into problems, however, since, as White notes, "children do... make generalizations that go beyond input". Indeed, one of Chomsky's arguments for Universal Grammar is that, in producing novel utterances, both children and adults do this all the time (cf. Chomsky 1967 [65]). It has been suggested that Baker's conservatism principle would have to be refined, so as to exclude certain generalizations while allowing others (Bowerman 1987 [118]; Pinker 1984 [145]). But it is unclear at this stage as to how this could be done.

Allowing that there are some problems to be overcome, we will proceed with our exposition. While conceding that versions of the Uniqueness Principle and conservatism exist in domains outside of Government and Binding—for instance, Clark (1987 [119]), O'Grady (1987 [131]), Slobin (1973 [64])—White espouses a version of the conservatism hypothesis which has been formulated within Government and Binding: this is the "Subset Principle" (Berwick 1985 [14]; Wexler and Manzini 1987 [121]; White 1989 [181, p. 145]). This, it is claimed, "can account for how a learner picks the correct value of a parameter in circumstances where the input data are ambiguous" (White 1989 [181, p. 145]).

As White puts it, "The Subset Principle is a particular attempt to guarantee that L1 acquisition can be achieved with positive evidence only". For the so-called "Subset Condition" to be met "one must consider two or more grammars which happen to yield languages which are in a subset/superset relation, i.e., the grammars generate the same subset of sentences, and one of the grammars generates additional ones".

Thus, "The grammar that generates the sentences X also generates the sentences Y. Y is a proper subset of X. The learnability problem is as follows: Y sentences are compatible with two grammars, the grammar that generates Y and the grammar that generates X" (White 1989 [181, p. 146]).

²¹except by linguists

White then outlines a scenario in which a learner is acquiring a language containing only sentences for grammar "Y" but formulates one or more rules for grammar "X". The result of this scenario is that the learner will produce overgeneralizations for which there is no positive evidence to disconfirm, since "Y" has no rules for generating these deviant constructions.

According to White, "The Subset Principle overcomes this learnability problem in the following way. It can be seen as an instruction to the learner: given input which could be accommodated by either of two grammars meeting the Subset Condition, the most restrictive grammar consistent with this input should be adopted" (White 1989 [181, p. 146]). For a learner of "Y", this is sufficient for a correct grammar of that language. In the case of an acquirer of "X", there will be "positive evidence of X sentences... [to show]... that the grammar yielding the subset is too restrictive" (White 1989 [181, p. 146]). So a learner of "X" will switch grammars and adopt the superset grammar.

White also notes "that the Subset Principle is neutral about whether an acquisition stage will be found during which the child learning an X language nevertheless exercises the Y choice", adding that in the context of positive evidence "it could be that the switch to the superset grammar will occur immediately" (White 1989 [181, p. 146]). This constitutes a potential problem for predictions about sequences of acquisition, but for the moment I will disregard its implications: they will be reviewed later.

Very importantly for White, "The Subset Condition provides another definition of markedness". In this, it "follows the tradition... that marked values require positive evidence to be set" (White 1989 [181, p. 146]). A subset language is the product of an unmarked initial assumption, while a superset language requires positive evidence for the generation of its grammar. But then, *all* language acquisition requires positive evidence of some kind, so we need a very precise definition of what constitutes a set relation if we are to continue.

White believes that parameter theory (of which more later) provides this, in that "Different values of certain parameters of UG generate languages meeting the Subset Condition" since "they yield languages which are in a subset/superset relationship" (White 1989 [181, p. 146]). Three such parameters are "Adjacency of Case Assignment", "Configurationality" and the "Governing Category Parameter". As White notes, "it is not the case that every parameter of UG yields languages meeting the Subset Condition. The Head-position Parameter, for example... does not do so; there is no way in which head-initial languages are either a subset or a superset of head-final languages".²²

One problem with this whole analysis which I will note but not pursue is

²²What about "mixed" languages like German? Do they belong to Bertrand Russell's elusive "set of items which are not members of any set"?

that the Subset Principle tacitly assumes that children are born with some kind of innate concept of set theory; to say the least, this is an extraordinary and contentious assumption and no evidence whatsoever is presented to support it. The computational burden such an assumption entails is simply enormous. Since the Subset Principle does not appear to apply in any particularly useful way to second language acquisition the burden of proof that it exists at all lies wholly and squarely on White, and on this point she is not forthcoming.

Markedness is a concept which we have considered at some length already, and, as has been noted, it is not unique to Government and Binding. Indeed, some researchers—such as Mazurkewich—have used both the statistically based Greenbergian concept of markedness and the theory-dependent Chomskyan version together, despite the fact that they are, to all intents and purposes, mutually incompatible. White is certainly not guilty of this kind of theoretical confection, but, as we shall see, there are certain problems with the Subset Principle which may be sufficiently serious to disqualify it as an arbiter of markedness, at least as far as second language acquisition is concerned. For the moment, we shall leave these in abeyance and continue with the matter to hand. In this context, it is worth pointing out that, for White this alternative definition of markedness—where “unmarked and marked phenomena will always be in a subset-superset relationship”—overcomes a problem for versions of Government and Binding which use the “core-periphery” distinction to define markedness (with the “core” being unmarked) and run into difficulties in determining what belongs to which.

So far, so good; but now problems begin to crop up. As White observes, “the learner must somehow know which parameter setting results in the subset language” [181]. There are at least two ways in which this could happen:

1. It is possible in UG that parameters are indexed for markedness, and that the parameter contains the necessary information.
2. It could be that the Subset Principle “is sufficiently powerful to compute the possibilities each time it is faced with input”, and that markedness does not have to be built into UG.

These proposals are mutually incompatible, and it is mandatory that one or the other be chosen. The second of these puts an enormous computational burden on the learner (Fodor and Crain 1987 [49]). However, White finds “certain attractive features” in it. This is because it allows for the possibility that UG and learning principles occupy separate “modules”, and that these “no longer interact effectively in second language acquisition”. Thus, differences between first and second language acquisition may be accountable for by the fact that the Subset Principle is not accessible to adults, who might not then be capable of calculating which settings of

certain parameters are marked and which are not, with the result that they sometimes make wrong choices about them, whereas this is not the case with children. This may or may not be the case, and it is clear that a number of very debatable assumptions underlie the position we have arrived at. Once again, however, let us continue.

In her discussion of the Subset Principle, White outlines a number of possible positions for second language acquisition research.

1. The Subset Principle may work for L2 learners in exactly the same way that it does for L1 learners. This she terms the *subset* hypothesis.
2. The Subset Principle is not available in second language acquisition, but where a parameter in the L1 generates a superset grammar, this will apply for the L2 as well, regardless of whether or not it is incorrect. This, for reasons which are obvious, is termed the *transfer* hypothesis.
3. Somewhere between the two positions outlined above, there is a third point of departure. As White puts it, "Some parameters have more than two values meeting the Subset Condition. L2 learners might pick a value which is neither that predicted by the Subset Principle, nor that found in the L1". This would be a possible expression of UG, even if it was incorrect for the L2.

White notes that the transfer hypothesis and the subset hypothesis "make potentially opposing claims whenever one has binary parameters meeting the Subset Condition", since it could be that the learner is choosing an unmarked subset value, or simply transferring properties of the L1. As White puts it, "It is therefore important when investigating the potential operation of the Subset Principle to look at cases where the subset and transfer hypotheses make different predictions, i.e., where the L1 value generates the superset language and the L2 requires the subset" [181].

One such case which meets these conditions is the operation of the so-called "Adjacency Condition on Case Assignment". Briefly, this requires that an NP receiving case be contiguous with its case assigner. Thus, in English, one cannot say:

*Mary does slowly her homework.

although there are a number of other positions which the adverb can occupy, such as the beginning or end of the sentence. In French, on the other hand, one can say:

Marie fait lentement ses devoirs

just as it is possible to say:

Maria hace lentamente sus deberes

in Spanish. These differences suggest that the Adjacency Condition is subject to parametric variation. In the light of this, Chomsky (1986 [31]) has proposed the settings “[+ strict adjacency]” and “[− strict adjacency]” for the parameter in question, with the first value operant in English and the second in French. The unmarked value is, according to Chomsky, the stricter setting. And this setting is only abandoned on the basis of evidence such as that given above for French and Spanish.

White investigated the behaviour of Francophone learners of English with respect to the Adjacency Condition. In this situation, the subset hypothesis predicts that the [+ strict adjacency] setting will operate, since it is the unmarked setting and there is no evidence in native speech for the alternative—marked—setting. The transfer hypothesis, however, predicts that the L1 setting will manifest itself in the L2. White favoured the latter hypothesis, and, without going into the details of her experiment (which are given at length in White 1989 [181]), this is precisely what her findings confirmed. This means that White’s subjects were not acting in accordance with the Subset Principle, in respect of the Adjacency Condition.

White also enlisted the so-called “Configurationality Parameter”, which either licenses or bans “scrambling” of word order in a language [181]. Here the unmarked setting is [+ configurational], since non-configurational languages permit a superset of the word orders found in configurational languages. Japanese is considered—not uncontroversially (Saito 1985 [154])—to be non-configurational. Zobl (1988 [133]) looked at Japanese learners of English. Once again, I will not provide the details of his experiment, as they are fully reported by White (1989 [181, pp. 154–156]). Zobl’s findings were the same as White’s, although some of his more advanced subjects appeared to be sensitive to the configurational status of English. White criticizes Zobl for not using a control group of English speakers, and notes that Configurationality and Adjacency have a “nested” relationship, in that the latter has no meaning if the former does not have a positive setting, and that it could be the case of the advanced speakers of Japanese that they have reset the former parameter but do not adopt the unmarked value for the latter, thereby producing a “possible” language but one that does not observe the restrictions of English. This observation is interesting, but of no particular relevance to the present discussion, which is focussed on the failure of Government and Binding to produce tenable predictions as to how, or indeed whether, it operates in second language acquisition.

In regard to the Subset Principle, White also reports on work done on the “Governing Category Parameter”, but I will desist from reporting this, since the results of the four studies she discusses are consistent with the findings outlined above, namely, they “are inconsistent with the operation of the Subset Principle” (White 1989 [181]). Despite this, she suggests in her

conclusion to the chapter on "Learnability and the Subset Principle" that the kinds of overgeneralizations found in interlanguage grammars nevertheless represent "possible parameter settings". In the author's opinion, this looks like a case of hedging one's bets: there is always a post-hoc explanation for why the predicted results did not eventuate. As with the study of Liceras (1986 [115]), what is attributed to Universal Grammar, may well be nothing more than simple transfer. And indeed, proponents of Government and Binding have a great deal of trouble untwining their concepts of markedness and parameter setting from their much simpler and older counterparts. If they cannot find ways to do this, then they have very poor grounds for advancing the operations of complex and sometimes contradictory constructs in language acquisition when more obvious possibilities for covering the same ground have not been eliminated.

To conclude our review of work in second language acquisition done from within the framework of Government and Binding: it is clear that this theory is a difficult one to apply to second language learning, and that the studies we have looked at are fraught with problems, and frequently find what they do not predict. This, I emphasize, should not be taken as a dismissal of Government and Binding as a theory which can be applied to second language acquisition research; as I have said before, it is much better to have a theory of some kind on which to base research questions than no theory at all. In any case, as any philosopher of science will acknowledge, all observations are, in some way or other, theory-laden, and a "theory-neutral" investigation is really an impossibility: observations inevitably entail assumptions of some type, and observation itself can affect what is being looked (i.e. there is always an "Observer's Paradox" to contend with)²³. Government and Binding is not my own theory of choice in linguistics, and I believe Lexical-Functional Grammar or some other type of "unification" grammar (such as Head-Driven Phrase Structure Grammar [147]) provides a more productive framework from which to operate. Nevertheless, work done within the Chomskyan definition of Universal Grammar is stimulating and valuable, and will perhaps eventually overcome some of the problems that beset it now: further developments should be anticipated with interest.

2.4.1 Epilogue

What was not anticipated in the last paragraph is that Chomsky, in his reformulation of a "minimalist" program, has effectively abandoned principles and parameters. This decision was not made, obviously, on the grounds of findings from second language acquisition research, but it has very considerable repercussions for the kinds of study reported on here. It was pointed out at the outset of this section that it is extremely difficult, if not impos-

²³Formalized, in theoretical physics at any rate, by Heisenberg in the form of the Uncertainty Principle

sible, to substantiate in any satisfying empirical way, the existence of these now abandoned constructs, and the findings reported on here are consonant with such an observation. When one comes to consider the mechanisms of Government and Binding, and how they might work in second language acquisition, efforts to untwine exactly what is due to what—in terms of principles, parameters, parameter settings, markedness and transfer—lead to problems that seem almost unsurmountable, as well as predictions that either do not eventuate or which may be explained in several mutually exclusive ways: thus whatever defects the “principles and parameters” approach may have had in the theoretical domain are in no way remedied when it comes to the actual problem of language acquisition itself.

2.5 Sequelae

In a certain sense much of the criticism in this section is unnecessary, since Chomsky’s minimalist program has discarded many of the principles of Government and Binding, including *d*-structure and Move α , and, if second language acquisition researchers are to continue to rely on Chomsky for their fundamental theory, then this turn of events has invalidated a great deal of work done in the name of a theory whose principal exponent no longer believes in it. What the researchers overtaken by this development will do remains to be seen; some seem to have continued to use the overturned formalism anyway, although it is hard to see how they can justify their actions—others are trying to incorporate the “best parts” of the two theories into one, which is a self-evidently fruitless course to pursue.

In any case, the minimalist program did not come into existence because of problems with Government and Binding revealed by studies of second language acquisition, and I believe it has been a salutary exercise to examine the kinds of difficulties that the theory has had in application to studies in second language acquisition regardless of current developments and future possibilities. I trust what I have written has its own message in its own terms and is therefore justified.

2.5.1 Conclusions

I trust that the preceding discussion has supplied a reasonable idea of the theoretical orientations of the study. A report covering the number of different aspects of English syntax that the present one has been charged with will of necessity be an exploratory one in the first instance. Hopefully though, the exploration is proceeding in the right directions. Despite the very considerable amount of research that has been done on the acquisition of English as a second language by adults, it seems that there is still a distinct need for an enterprise such as the present one.

Throughout the preceding discussion of second language acquisition research one point has consistently emerged: this is the great imbalance that exists between theory and data. In the United States, where a great deal of the theorizing and discussion that we have surveyed has been conducted it has been done so on the basis of data which is far from adequate. Thus, many studies have been based on data collected through means of formal tests and written compositions. A good deal of the data that has been collected has come from a fairly restricted section of the population—namely college students—or, in the case of unelicited data, largely from one language group - Spanish speakers. There are, of course, exceptions (Huebner is a notable one) but they are not numerous. The fact is that there appears to be no extensive corpus of spontaneous speech data from groups of adult learners of English of low proficiency, little experience of formal instruction and non Indo-European language backgrounds in existence. If it achieves nothing else, the present study will help to rectify this.

Chapter 3

Methodology

3.1 Study Design

3.1.1 Basic Considerations

As stated, the purpose of the project was to describe the processes whereby the rules governing given aspects of the syntax of English are learnt, and if possible, to determine what sorts of universal constraints govern the sequence in which these rules are learnt.

In linguistic studies there are two main approaches to the collection of data. These approaches reflect the two main notions of how to approach the question of linguistic universals.

One approach involves the collection of data from many separate sources, on the assumption that in a sufficiently sizeable and comprehensive sample universal patterns will emerge. In theoretical linguistics, this approach is typified in the typological work of Greenberg, *et al.*, and in the work of the so-called universal grammarians, such as Keenan and Comrie [101].

The other approach involves the detailed study of only a few individuals, or even a single individual, on the assumption that the regularities in language are such that a properly conceived and oriented study can always proceed from the particular to the general given that the grammar of any individual is an independent and total system whose structure must necessarily be governed by immutable linguistic universals. This philosophy is exemplified by the many different schools of transformational grammar, where the informant was often the linguist himself, and the choice of language (generally English) was considered to be largely immaterial.

A considerable amount of debate has been generated over the issue of what constitutes good linguistics and good linguistic data, with proponents of the first approach arguing that restricted data bases of the type frequently used by transformational grammarians were apt to lead to the promotion of subjective judgments into assertions of fact and to result in the confusion of the genuinely universal with the language-specific or the merely idiosyn-

cratic, while proponents of the latter approach argued that attempts to find common denominators in an overly extensive data base would preempt the deep study required to lay bare the basic structures of language and result in nothing more than statistical generalizations of a superficial kind [29].

Within the study of second language acquisition itself, these two basic positions obviously have a different status. Nevertheless they are mirrored or manifested to some degree in the form of which choice to make between the two main forms of data base available to the researcher. The alternatives here are basically either the detailed study of an individual grammar as it develops over time—that is, the longitudinal study—and the attempt to construct a picture of an evolving grammar through the study of a number of speakers at what appear to be different stages of development—as the cross-sectional study. Fortunately, since there is no real tradition of linguists studying themselves in the process of acquiring a second language, and since learners' intuitions about their own grammars seem to be considerably vaguer and more unreliable than those of native speakers, this choice has not developed into a theoretical dichotomy [157]. In fairness to Robert Bley-Vroman [19] and Dick Schmidt [162] it should be said that they have, respectively, made excursions into these areas; nevertheless, they are not the *loci* of current debate about data collection in second language acquisition, where corpus data—in some form or other—prevails.

While the longitudinal study possesses the obvious virtue of psycholinguistic coherence, in that a single system is the object of study, it is generally recognized that it is difficult within the context of such a study to sort out what is universal, what is variable in some largely predictable fashion, and what is simply unique to the individual in question. It is evident that these questions can only be decided on the basis of larger samples. Of course, these samples need not be constructed with the emulation of a longitudinal study in mind. In fact, the ideal data base for studies in second language acquisition might simply be a concurrent series of longitudinal studies, which could be cross-referenced as the need arose. Unfortunately, in practical terms the resources required to carry out a large number of longitudinal studies are simply enormous, as projects like the *ZISA* undertaking have shown [36].

With the ideal possibility of multiple longitudinal studies eliminated for practical reasons, the cross-sectional study comes back into contention. Thus the first decision for the present study was which of the two main data bases to build upon.

3.1.2 Study Type—Longitudinal versus Cross-Sectional

This question was settled largely in favour of the cross-sectional study for the following reasons:

1. The purpose of the study in terms of its informational goals was to achieve a high degree of generality, even if this imposed restrictions on the detailed study of individual grammars. The possible invalidity of a study based on only a small number of informants was a very important factor in determining sample size. Where necessary, possible or appropriate conclusions could be followed up more intensively. And, indeed, as this exposition progresses, it will become clear that such contingencies contributed to the architecture of the study.
2. The intensive nature of longitudinal studies makes them much more difficult to administer in the data-gathering phase. A well constructed longitudinal study would require an interview to be conducted with each informant every three to four weeks. This is something which is difficult to achieve if there is no sustaining social relationship between the investigator and the informant, who would otherwise quite justifiably come to feel that his or her privacy was being seriously invaded. With only a single person engaged full-time in the study the possibilities of maintaining the required level of contact with more than one or two informants would have been very low.
3. The difficulties outlined in (2) above are multiplied by a further factor. This is that at the beginning of a longitudinal study it is difficult to predict which informants will make the most rapid progress, and which informants are likely to remain accessible and co-operative over the period of time designated for the study. This is particularly so when dealing with people who are in the very unstable personal situations that are the lot of the newly arrived migrant. It becomes imperative to start any longitudinal study or group of studies with a considerably larger sample than the projected target. Thus the difficulties already mentioned are increased by a factor of two or three. To provide a concrete example: in the present study, to obtain just two interviews with each of twenty-four informants within the range prescribed by the study design it was necessary to interview some thirty-five people.

Accordingly, a decision was taken to make the foundation of the project a cross-sectional study. As already indicated, the cross-sectional study is essentially meant to be the simultaneous (synchronic) emulation of a diachronic process—that is, one which would normally unfold over time. The driving assumption of a cross-sectional study is that a suitable range of informants at various stages of development in their learning of English will produce a developmental map similar to that which would be obtained from the study of a single learner over some given time span. There are, of course, certain problems inherent in this approach, and any projections about diachronic development made on the basis of a cross-sectional study must remain tentative until confirmed by longitudinal data.

As Meisel, Clahsen and Pienemann point out, one problem in making longitudinal projections on the basis of cross-sectional evidence is that they involve the assumption that the process of acquisition is linear and uniform, when in fact longitudinal studies themselves have produced evidence in contradiction of this assumption [129]. The fact that not all systematic variation in learner language can be located on the developmental dimension is an additional constraining factor on the projective utility of cross-sectional studies. These limitations need to be kept in mind, but also put into perspective: in longitudinal studies there is the equally serious problem of sorting out the typical and the idiosyncratic.

In order to offset problems such as the problem of longitudinal projection and to generally enhance the validity of the cross-sectional study, it was also decided that a limited form of longitudinal study be implemented by means of follow-up interviews with a subset of the informants comprising the cross-sectional study.

3.2 Implementation of the Study Design

3.2.1 Sample Size

Having determined the basic architecture of the study—a cross-sectional base with a longitudinal superstructure—the question of sample numbers was the next matter that needed to be decided.

Given the present state of studies in second language acquisition, there are no real guidelines on what constitutes a valid numerical sample. In English, the present study is still the biggest of its kind, so far as the type of data gathered and the amount is concerned. (M. Long, p.c.). The limitations of the data used in many previous studies has already been discussed in the preceding chapter. Large amounts of corpus data are time-consuming to collect, transcribe and analyze. It is still the present author's opinion that one of the best data sets for English in the literature published is Thom Huebner's: this is seventeen hours of spoken speech collected in one hour interviews, but the study is a longitudinal one involving a single informant, and so cannot be directly compared to this study. Looking further afield, work done on German as a second language is represented by three major studies, the Heidelberg Project, the *ZISA* Project, and the Kiel Project [185]. The author has not been able to determine the exact size of the Kiel project, but data base of the Heidelberg Project consisted of two hours of interview material obtained from forty-eight informants, and that of the *ZISA* project a similar amount from forty-five informants, supplemented by a longitudinal study of twelve informants over a period of two years [36]. All three of the German projects had manpower resources considerably superior to the present one. The *ZISA* project, for example, consisted of a group of three principal academic researchers supported by other colleagues and students,

as well as some half dozen research assistants. Given the limited human and financial resources available to the present study, it compares very favourably in size with the German studies.

The determination of sample size was the result of various practical and theoretical considerations. As to the number of informants and the number of interviews it seemed desirable—where feasible—to work with figures comparable to the dimensions of the European projects cited above.

As to the question of specialization, there is always a trade-off between the demands of theoretical rigour and the demands of descriptive adequacy. The result in this particular case put the latter in the forefront of the design picture because in the author's opinion research into second language acquisition in the English-speaking world has suffered from a lack of corpus data in comparison with results elsewhere in Europe. That said, the quest for quantity has not smothered either potential for more intensive theoretical follow-up or obliterated the possibility of limited longitudinal confirmation of the cross-sectional results obtained. The ease with which the SAMPLE data were able to be used in extending the *ZISA* multi-dimensional model is one example of how the data collected in this study contributed to the process of theory-construction, and the existence of task-type data within the corpus offers another possibility for the resolution of some of the questions which are currently being at issue with this kind of data.

For reasons which will be discussed below and which required the data for the cross-sectional segment to be obtained in at least two separate interviewing sessions the number of informants whose data would finally be analyzed was set at twenty-four. This also allowed for the implementation of a longitudinal extension of the study. A figure of this kind enabled an allocation of two hours interviewing time per informant for the cross-sectional study, spread over two interviews.

There were various reasons for breaking the data collection in the cross-sectional study into two parts. One was that it would give informants who might have felt ill-at-ease in the first interview a chance to become accustomed to the interview situation, and in fact in the case of some of the Vietnamese speakers this proved to be an important consideration. Another was that a second interview would provide an opportunity for the interviewers to fashion questions designed to probe specific structures on the basis of their assessment of what had transpired in the first interview, and this too was a productive strategy. In fact, the final section of the second interview was eventually given over to a series of prompted tasks aimed at collecting information on structures which were not generally produced in the less structured discourse situation of the main body of the interview. This task-type data was not analyzed together with the less structured corpus data, and was only elicited when the target interview was complete, since it was important that the informants did not feel they were being given a test of any kind.

On a practical level, a figure of twenty-four informants also provided scope for the transcription of interviews collected for the longitudinal study. It was determined that this part of study should involve a final sample of eight informants, and that they should be interviewed up to five times in the following year. Some flexibility in the timing, and indeed the final tally, of interviews in this part of the study was prefigured, given the high probability that not all the informants would progress in their learning of English at the same rate, or even progress at all in some cases. In fact, this turned out to be the case.

3.2.2 Study Composition

Choice of Language Groups

The question of transfer or interference has been touched upon in the previous chapter. In order that this factor could be monitored in the study (and to increase its generality), it seemed advisable that the informants for the study be drawn from more than one language group. At the time the data was collected, there were large numbers of Polish and Vietnamese immigrants. The author had already done some work on learners of English from Hispanic and Turkish backgrounds [92], and while Turkish would have provided an interesting contrast with Vietnamese—on both the levels of word order and morphology—Polish morphology and phonetics also diverged quite dramatically from Vietnamese and promised to throw a good deal of light on issues relating to the influence of the learners first language. It was a promise that did not disappoint expectations.

Given that the languages selected were Polish and Vietnamese, the similarities in word order typology between other candidate languages—such as Arabic¹ and Russian—the synthetic (that is, morphologically rich) character of Polish seemed to be reason enough for not choosing more than two language groups from which to draw informants. Vietnamese was an obvious choice for one of the languages because it is phonetically and morphologically distinct from the others, and because of the great volume of South-East Asian immigrants entering the country at the time. Also, both languages use Roman script, which facilitates the acquisition of background linguistic information from informants.

While Vietnamese and Polish are both SVO in their canonical word order, and consequently similar in the way they handle many major grammatical features, such as subordination and relativization, on the various levels of organization beneath that of major sentential structures, they diverge quite radically.

Thus, on the micro-level of phonology, they are almost classically opposed. Polish, on the one hand, is a language rich in polysyllabic words, com-

¹While Modern Standard Arabic is VSO, the numerous dialects are all SVO.

plex consonant clusters and fine distinctions between consonantal types—see for instance the oppositions represented by pairs such as /sz/ and /si/.

Vietnamese, on the other, has an almost exclusively monosyllabic lexicon, no consonant clusters—/tr/ is really an affricate—and a much smaller and widely spaced consonant set than Polish. This phonological opposition promised to generate (and indeed provided) much interesting data on the effects of phonetic difficulties on the acquisition of morphology, given the much closer affinity of Polish to English in this regard.

Moving up a step to morphology itself, there is once again a wide contrast between the two languages. Polish exhibits complex and irregular nominal and verbal morphology, while Vietnamese is classically analytic, relying, for instance, largely on adverbs and adverbial phrases for temporal reference, and prepositions and prepositional phrases for spatial and directional reference. In regard to these features, English occupies somewhat of a middle ground, which meant that some useful information about the relative difficulty of “adapting up” and “adapting down” was available.

In fact, since generally target-like word order comes fairly early in the acquisition process [92], these opposed characteristics, together with others of a more arbitrary kind, such as the restricted use of the copula in Vietnamese, and the lack of definite articles in Polish provided an opportunity to examine the effect of more persistent typological differences in the process of acquisition.

In addition to the morphological and phonological differences between the two languages, the two groups presented very different profiles in their conversational and interactional styles. It was not a part of the brief for this study to investigate such matters, but it became clear that in certain areas of syntax which were heavily discourse-dependent, such as the pronominal system, that these characteristics could not be ignored in any adequate description of the learners' language.

Balancing the Sample in Other Regards

The twenty-four places in the final sample for the cross-sectional study were equally divided amongst the Polish and Vietnamese speakers. In regard to other factors which might reasonably be expected to affect language learning, such as educational background, other languages, formal instruction in the target language, and oral proficiency, an attempt to build up a sample with an appropriate range of subjects and a reasonable degree of symmetry between the two language groups was made. As Tables 3.1 to 3.3 show, this was reasonably successful, with any differences between the two language groups being largely “representative” differences as far as the composition of the two communities in general was concerned.

The main imbalance in the symmetry of the study was the disproportionately large number of males in the Vietnamese sample. Attempts to

AJ	-	Andrzej J.
BB	-	Barbara B.
ES	-	Ewa S.
IS	-	Irena S.
JB	-	Jerzy B.
JR	-	Jan R.
KA	-	Krystyna A.
KB	-	Krystyna B.
KS	-	Krystof S.
LJ	-	Ludwiga J.
MM	-	Mieczyslaw M.
ZJ	-	Zygmunt J.

rectify this imbalance merely turned up more females at about the same level of oral proficiency as the ones selected, and were therefore unsuccessful. In any case, there is no convincing evidence that language learning in males and females is particularly different (although females do tend to be more advanced in the matter of change in their native language) [10], so this imbalance is unlikely to be significant.

3.2.3 Naming Conventions

Before examining the statistics on the informants chosen for the final samples it might be worthwhile to provide a brief explanation of the conventions employed for referring to informants and interviews.

In accordance with the standard practice in linguistic studies, the informants are referred to by their given names. In the case of the Polish speakers, an initial was added because in the preliminary sample there were several cases of duplicated christian names (there are still two Krystyna's in the final sample). For reasons of space, the names of the Polish informants had to be abbreviated in Tables 3.1 to 3.3. The following list provides a key to these abbreviations:

The convention in regard to naming interviews is quite simple. Either the name (in the case of the Vietnamese informants), or the initials (in the case of the Polish speakers) is followed by a period and a number. The number refers to the interview. Thus a reference to **aj.1** is a reference to the first interview with Andrzej J., and a reference to **canh.2** signifies the second interview with Canh. These conventions are followed throughout the study.

3.2.4 Relevant Statistics

The information given in Tables 3.1 to 3.3 is mostly self-explanatory. However, a few general comments are in order.

1. The Vietnamese system of education appears to be similar in structure to our own, as regards primary and secondary divisions, and the figures given for years of education are therefore quite straightforward. The Polish system, on the other hand, is somewhat different. Their primary period is of eight years duration. After that there are various options: a four or five year secondary period which serves as a matriculation for university, a five year technical course, a two or three year technical course, which can in turn be followed by a further three year technical course, which itself can also be reached via the four or five year secondary matriculation course. It is not surprising therefore that there was a certain amount of cross-cultural confusion during the interviews about how many years of primary and secondary schooling informants, particularly those with trade certificates, had had. We can assume that it was about twelve or thirteen for these people, with a probably high degree of technical specialization after the eight years of primary preparation.
2. All but one of the Polish informants had been obliged to learn Russian at school, and this is duly noted. The status of Russian as a second language for most of the Polish speakers requires some exploration, however. This question will be dealt with in more detail in 3.4.14 of this chapter. The discussion there will also include some comments on their experience of German.
3. In the author's opinion, the distinction between formal instruction and other forms of learning, particularly self study, is not really a clear one. Although it was not part of the present study to examine in any detail those factors which conduce to learning and those which do not (in any case consider the conclusions reached in Pienemann and Johnston 1987 [130]) some of the points raised here need further clarification. Accordingly, they will be discussed at more length, in 3.4.14 of the present chapter.

3.3 Data Collection

3.3.1 The Oral Interview

The format for data collection was regular and simple. The primary means of data-gathering was through unstructured interviews. The term "unstructured" is used, of course, in a relative sense, given that all discourse forms are structured in some way.

With one or two exceptions, the interviews were conducted by two interviewers. The interviewers were in all cases trained teachers. One of the interviewers was always the researcher: he was assisted in the first round of interviews with the Polish speakers by Geoff Brindley, and in the second by Ken Singh. For the Vietnamese speakers, Marilyn Wise was the other interviewer in both rounds of interviews. The rationale behind having two interviewers was that it would provide a somewhat more open interactional framework than the intense and often interrogatorial situation which tends to develop when a native speaker has to sustain a conversation with a learner of low proficiency. It was felt that the flexibility afforded by the presence of a third person probably outweighed the possible intimidatory effects of the informant's being figuratively outnumbered.

In the case of both groups of speakers there were circumstances that tended to soften the impact of having to talk with a tape-recorder running. The Polish informants were all attending English courses at the time of the interviews, and therefore did not find themselves in a totally unfamiliar situation. The Vietnamese speakers were all interviewed in their own homes or the home of a friend, and one of the interviewers, Marilyn Wise, was already on good terms with them. Some, indeed, appeared to enjoy the contact with an Australian, and the opportunity to practise their English.

3.3.2 Format of the Interviews

There was no predetermined format for the interviews. Before the commencement of the interview it was made clear to the informants, in their own language if necessary, that they were not undergoing a test, and they were encouraged to attempt to express themselves even if they felt or knew that what they were saying was not correct. No specific schedule of questions or tasks was ever followed. There were, of course, typical questions about how long an informant had been in the country, whether they were working, what they had done in their own country, whether they had family in Australia, and so on. These were not asked in any particular order, and allowance was made for differing cultural attitudes towards the importance and possible privacy of the information requested. Generally, at some point in the interview informants were requested to provide some narrative text—for instance, to describe the circumstances of their departure from Poland or Vietnam, or what they did on a typical working day. Informants were also encouraged to talk about their plans, to express opinions and to discuss third parties, such as spouses or children. Naturally, a great deal depended on the proficiency of the informant, and on his or her own volubility. The degree of co-operation was surprisingly high, and in general informants visibly relaxed after the first five to ten minutes, probably when they realized that they would not be required to do anything other than talk.

Naturally, there were differences in the way the two language groups han-

dled the interview situation. The Polish speakers tended to be much more assertive than the Vietnamese speakers. The latter were very punctilious about formally registering a response to every conversational move made by the interviewer(s)—a characteristic which accounts for the frequency of *Yeah* (cf. Vietnamese *Gia*)² in their discourse, but tended to avoid either contradicting the interlocutor or indicating failure to comprehend. The Poles, on the other hand, appeared to have few reservations about saying that they did not understand or producing negative responses to propositions they disagreed with. Extended discourse from the Vietnamese speakers often gave the impression of being somewhat in the nature of a monologue. The net result of all this for the English speaking interlocutor was a sense of more direct interaction with the Polish speakers. These characteristics, together with the fact that English and Polish paralinguistic features seem to be much more similar than those of English and Vietnamese, undoubtedly rendered the interview situation an easier one for the Polish speakers than the Vietnamese speakers.

It should be stressed that the above observations are generalizations, and that there were exceptions on both sides of the fence. The apparent distance displayed by the Vietnamese speakers was much more noticeable with the less acculturated and less well educated members of the sample. With these, the first encounter in some cases resulted in an oral proficiency assessment that was quite considerably lower than that generated by the second interview. This is a point that should be kept in mind in the assessment of oral proficiency in Vietnamese speakers.

3.3.3 Recording Procedures

Since it was not intended that the study focus on the phonological aspects of second language acquisition, no attempt was made to obtain ultra-high quality recordings. In any case, given the often crowded and noisy situations in which interviews had to be recorded this would have been quite impracticable. An ordinary cassette recorder with a detached condenser microphone proved to be quite adequate for the purposes of the study.

A further consideration here is that interviewees were very possibly less daunted by the use of such a pedestrian piece of apparatus (many had superior equipment themselves) than they would have been by something more sophisticated.

3.3.4 Transcription

The interviews were carefully transcribed according to a standard format. The aim of this format was to provide a document that provided an accurate rendition of the speech of both the informants and the interviewers

²A conversational marker of acknowledgement.

and which was at the same time easy to read. In the interests of readability, formats involving such things as separate columns for interviewer and informant were rejected. Likewise, no attempt was made to consistently implement even a modified phonetic script: given the very different nature of the first languages of the informants this would have been a quite herculean task, as well as an unnecessary one, since the focus of the study was on syntax. Various other possible features, such as the precise timing of pauses, and bracketting of simultaneous utterances, were not implemented either, as once again the information conveyed was not germane to the main purpose of the investigation. In addition, the incorporation of such features into the transcriptions would have greatly increased the transcription time.

Finally, since the transcripts were eventually typed into a computer, the interviews would have been ultimately constrained to a line-oriented format, and the ASCII character set of most computational devices. The superscripts and expanded character sets that phonetic or even quasi-phonetic transcription demands, and the graphics that conversational analysis employs would have considerably complicated the data entry and extraction procedures.

Within these constraints, in order to capture some of the flavour of the informants non-native pronunciation, and indeed to indicate the part this played in communication breakdowns, a kind of literary rendition of the main characteristics of the informants' speech was employed.

It should be emphasized, nevertheless, that within the particular parameters determined for the transcriptions great emphasis was placed on their accuracy. A number of people participated in the transcription phase of the work, although the bulk of the task eventually devolved upon one person. Every transcript, however, was checked against the tapes by the researcher himself. The eventual system was for the transcript to be done by hand, and then typed into a computer. At this point the researcher would take a printout, check it against the cassette recording, note down the changes and enter them himself on the computer. In this way an almost entirely consistent set of transcriptions has been produced.

A number of simple but useful conventions were employed in the transcription. There are optional line numbers: these can be suppressed. Tabs constitute the margin and are preceded by the initials of the interviewers and the informant, who is referred to throughout as I. Numbers in the margin are cassette counter units, to facilitate the location of text passages on the cassette itself. All such markers are followed by tab characters and then the body of the text itself. Within the text, there are certain consistent conventions. Major intonational breaks, and pauses, are indicated by a string of three periods, minor ones by a comma. Hesitational phenomena, such as *um* and *er*, have been faithfully reproduced. Comments within the text are enclosed in square brackets. Narrative type comments—such as [LONG PAUSE]—are printed in upper case, while explicatory or transla-

tion type comments are printed in lower case—for instance, this time [tense] is not good. Phonetic transcriptions are delimited with slashes, to distinguish them from explicatory comments—for instance, my name is Hoa...H [/heis/]...O...A. Non-realized phonemes or sequences of phonemes are surrounded by round brackets—for instance, becau(se) I'm very li(ke). This latter convention is particularly useful, in that it allows variant realizations of the same word to be grouped together for the purposes of analysis. Thus, (be)cause, becau(se) and (be)cau(se) can be treated as the same word for lexical purposes, rather than three separate entities. It is worth emphasizing that with computer storage changes in format (should they be necessary) are generally very easy to implement.

3.3.5 Computer Storage and Analysis of the Data

There has been considerable development in the ways in which the data can be handled since the original decision was taken.

Linguistic analysis is essentially a text processing operation, and for this purpose any version of UNIX is much better than other operating systems available. UNIX type systems have built-in utilities for character set translation, string searches and substitutions, duplicate line elimination and so on, as well as such things as elaborate sort programs. Above all they possess a highly flexible command language, and command language interpreter (the shell) which enables system utilities and/or user programs to be combined in such a way that complex tasks can frequently be accomplished without the need for much, or even any, binary software development.

The move to UNIX, and the development of the various tools necessary to facilitate the research has resulted in a very accessible data base supported by a very flexible system. Data is accessible in various ways. The basic organization of the data is quite simple, with each separate interview contained in a separate file. The flexibility of the system, however, allows data extracted from these interviews either individually or in arbitrary bundles, defined, say, by oral proficiency or first language, or indeed any other feature deemed to be relevant. Data itself can be accessed by line number, page number, or some specified characteristic pattern or patterns. It can also be passed through various filters before or after the search to accommodate it to particular uses: for instance, extraneous comments or punctuation can be output or stripped away, as the case may require. Tokens of a particular structure or element can either be output for inspection or counted and only the count recorded. If counts are done, separate totals are kept for each individual interview file, and a grand total is also recorded. Global searches can be performed very quickly; most operations take no more than a second on today's PCs. Global modifications to the data (for particular processing tasks) can also be performed very rapidly.

To this end, a set of dedicated software tools was developed by the author

and enabled the analysis of the seven hundred odd pages of transcript to be conducted rapidly and accurately, from the level of the lexicon to that of the morpheme.

3.4 Evaluation of the Data

There are a number of questions relating to the status of the data which need to be discussed. These have to do mainly with the possible constraints imposed on any conclusions by the way in which the data was collected, and by the actual composition of the sample itself.

3.4.1 Parameters of the Interview Situation

The ideal data set for a study of language acquisition would include data from all conceivable types of linguistic interaction. There are various discourse models which provide taxonomies of the main types of interactional situations. For instance, one model, the so-called Three-Level Analysis, suggests that there are three levels of generality in discourse [78]. Firstly, there is the speech situation: for example, a meeting, an interview or a classroom encounter. Secondly, within the speech situation there are speech events, which are broken down into divisions such as narrative, conversation, and service encounter. Thirdly, within the speech event itself a further division into speech acts can be made. Speech acts, which are probably the best researched elements in this model, fit, in this particular model into the following categories:

Directives	getting someone to do or not do something
Commissives	making promises or oaths
Declarations	which alter some state of affairs on being uttered
Expressives	making statements of feeling or emotion
Representatives	making statements of fact or assertions

Each of these basic acts has a set of possible forms, ranging from mitigated to aggravated, and can be hedged in various ways regarding such things as speaker responsibility or accountability. Thus directives include asking, suggesting, demanding, begging, ordering, and so forth.

The Three-Level Model is given merely as an example. Similar taxonomies have been provided by exponents of the functional/notional approach, and by systemic grammarians such as Halliday. No attempt will be made here to evaluate which of the various possible models seems the most satisfactory: the point to be made is merely the variety of possible discourse situations that exists.

Clearly, data collected from an interview situation, even if it provided examples of all the different speech act types, and some of the gradated

forms possible for each act—which is itself unlikely—would only cover a subset of possible speech events and situations. The ideal data set for a study of language learning would need to provide representative examples of discourse on all three levels, and in all stages of gradation.

The practical difficulties of achieving this would, of course, be enormous. Informants would literally have to be under twenty-four hour aural and visual surveillance, recording would have to be done by radio microphone, and the amount of data to be sifted through would be simply vast.

In the absence of the resources to carry out an operation of this kind, the unstructured interview seemed the most viable linguistic and organizational alternative. Moreover, it can be argued that in the production of syntactic structures and morphological items that conversational context will merely *conduce* to certain forms; it will not make them possible if the informant has not acquired them in the first place.

3.4.2 Rationale for Choice of the Oral Interview

One of the important tenets of sociolinguistic research and language acquisition research is that unmonitored or “spontaneous” speech should provide the most direct and reliable evidence about the nature of underlying rule systems or grammars. This tenet is based both on the intuitively appealing (though not necessarily correct) equation between spontaneity and “naturalness” and on the observations of researchers such as Labov, who found that the more attention subjects (in this case native speakers) paid to a linguistic task, the less regularity there was to be observed in what they produced [149]. It should be said here that we do not know for certain whether Labov’s contention is also true for non-native speakers. In particular, the status of *attention* will be different for this latter group; how it is to be defined and measured is a problem that has yet to be solved, if it is soluble at all. Observers like Tarone [175] and Krashen [104] use the term quite extensively, but without any operationalized definition that the author has been able to find.

Whatever the status of the equation between naturalness and spontaneity (it really needs to be formulated in some testable way and with some consistent and consensual meaning), these latter findings at least encourage the hunch that the most economical descriptions of a given grammar will emerge from data which has not passed through too many (conscious or unconscious) filters. If one’s aim in linguistic research is to characterize some particular system or a fragment thereof, then it is obviously a desirable goal to be able to form some notion of the most compact and coherent organization that is possible within the system or subsystem in question. Cast in these terms, then, there is very definitely a case for using unmonitored speech data to build up initial descriptions of rule systems or entire grammars: in the absence of viable alternatives it is the simplest point of

departure.

3.4.3 Characteristics of the Oral Interview

Although obviously constrained in certain ways, an interview allows the participants a good deal of freedom in what conversational moves they decide to make and gives the informant the opportunity to choose the topics of conversation. This in turn means that the informant is likely to become involved in the subject matter of the conversation and to forget the nature of the task, which increases the amount of unmonitored or "spontaneous" speech likely to be produced. The interview situation provides ample occasion for at least the three main types of speech act cited above—the Directive, Expressive and Representative. On the level of the speech event, there is occasion for the important categories of narrative and conversation. While on the level of speech situation the whole interview constitutes a not atypical cross-cultural encounter, with elements of classroom or bureaucratic encounters added. A detailed exploration of the discourse features of the oral interview has yet to be carried out [151], and would be a worthwhile extension to the present study, in that a fuller understanding of this form of discourse situation would enable the data to be used for the purposes of discourse analysis.

3.4.4 Possible Effects of Observation

Given that the elicitation of spontaneous speech is a desirable goal, one of the questions that has to be asked of data gathered in interviews in the way described, is to what extent the presence of an interviewer or interviewers, and indeed, the whole environment of the interview itself, inhibits the free production of speech and alters the nature of the data.

This is obviously a difficult question to provide a general answer for. On an anecdotal level, it can be said that with some informants from both groups it certainly appeared to be the case that they forgot the tape-recorder completely after a few minutes and became engrossed in the substance of the interview itself, while with others this was not so clear. The only means of objectively settling this question would have involved comparing material from the interviews with material obtained without the informants' cognizance, and lack of resources prevented this. Fortunately, however, just this procedure has been carried out in another piece of research.

This was a study done at the University of Passau by Pienemann, and involved German rather than English [140]. Its particular aim was to determine the effect on instruction of certain aspects of German word order in Italian children aged seven to nine. What is of relevance to the present discussion is that the study involved two types of data-gathering techniques. One technique involved what Pienemann terms "linguistic interviews". These consisted of loosely structured conversations between pairs

of informants and student interviewers, who were equipped with a list of questions and some toys and pictures to get things going; these interviews were conducted in the school environment [140]. The other data-gathering technique involved the attachment of a radio microphone to the child, who then went off into his or her play environment. The children apparently did not fully understand the function of the microphone, and did not seem either disturbed by or particularly interested in it [140], so we can assume the data gathered in this way was quite "natural" and uninfluenced by any "observational presence".

Pienemann's own expectation at the inception of his study was that there would be an obvious difference between the data gathered by the two procedures. In fact, there turned out to be no palpable difference at all. Of course, the fact that the subjects in this study were children needs to be considered. The effect of this, however, is not clear. On the one hand, it could be argued that children are less "self conscious", and therefore more likely to be consistent in their linguistic behaviour, regardless of the context. (Pienemann contests this argument on the grounds that children are amenable, under certain specified conditions, to formal instruction, and that this is evidence of their capacity to monitor [140]). On the other hand, it could be argued that since they were more malleable, the children might have been expected to conform to one set of linguistic norms in the more formal situation, and another when they were at play.

The fact remains that there was no difference in the language produced in the semi-formal and the informal situation. As Pienemann has observed, while we have reason to believe in theory that there might be a difference between data elicited through unstructured or loosely structured interviews, and data collected without the informant's cognizance the empirical evidence on this point all indicates that there is no such difference [140]. This is of course an extremely encouraging conclusion for the present study, since it implies that at least the speech act and event types which occur in the interviews are representative of their spontaneous counterparts.

3.4.5 Naturalistic Data versus Mixed Data

It is generally agreed that there are three main types of learning situations in second language acquisition. These are:

1. The purely naturalistic situation, where the learner receives no formal instruction in the target language, and learns by a process of absorption.
2. The purely formal situation, where the learner's entire exposure to the target language is within the context of formal instruction.

3. The mixed situation, in the naturalistic and the formal situations are combined.

It is worth noting for the purposes of subsequent discussion that these terms are essentially behavioural, in that they describe an observable condition, and do not take into account the learner's own mental processes.

As indicated above, there is a consensus in second language acquisition studies about the importance of obtaining data on "natural" orders of acquisition. A reason for this has already been advanced—namely that natural systems appear to be the most regular and coherent. To this end it has been generally assumed that the best kind of data for the investigation of natural systems will come from "naturalistic" learners, that is, learners who have experienced no formal instruction and have merely absorbed their language from the environment in which they live and work. This seems at first glance an obvious and uncontentious assumption. By extension, however, it is also normally assumed that data from other kinds of learner is unsuited to the purpose of determining how languages are learnt naturally. While it is reasonable to suspect that there may be differences in the patterns of development exhibited by learners in different learning situations, it is not so reasonable to simply assume that this is the case. Whether or not it actually is so is clearly an empirical question, and the safest alternative—the exclusive use of naturalistic data—may not turn out to be the only possible course for a researcher. Indeed, as we shall see, the ostensibly safest course may itself lead to difficulties.

Because the learners in the present sample are learners from a mixed acquisitional background (albeit with a fairly small admixture of formal instruction in most cases) the question of whether, and if so how naturalistic, mixed and formal learning differ is of importance to the present study.

3.4.6 Possible Effects of Formal Instruction

Tables 3.1 to 3.3 provide figures on the amount of formal instruction in English received by each informant. In the case of the Polish informants at the time of the first interview, this was either four or six weeks in all cases; three of the informants had experienced some formal instruction in English before their arrival in Australia—either at school or university, or in Austria. The figures for the Vietnamese informants are somewhat more varied, although still quite low in most cases. Once again, several of the informants had been taught some English before coming to Australia—in all cases this was at school.

Because it has always been assumed that formal instruction is efficacious, the number of studies which have addressed themselves to the question framed above is not great. In addition, as we shall see, there are some difficult problems to be overcome in achieving valid research designs for studies

of this kind. Such findings as do exist have been reviewed in recent papers by Pienemann [140], Pica [139], and Long [116]. Pienemann, whose review is the most recent and takes cognizance of the other two papers, provides the most comprehensive overview of the studies relevant to this question, and interested parties are referred to his paper. The following discussion is indebted to it.

Approaches to the Question of Formal Instruction

There are three main ways of approaching the question of whether instruction makes a difference. One approach involves an examination in hindsight of learning under different conditions and combinations of exposure and instruction. We could term this approach the survey approach. The second approach involves the comparison of language produced under conditions of formal instruction with language known to be characteristic of natural acquisition. We could call this the structural approach. The third approach involves controlled intervention in the acquisitional process itself with the aim of determining if and how it can be manipulated. This we could call the experimental approach.

Survey Type Studies

A typical review of all known studies of the first type has been conducted by Long (1983 [116]) [116]. The review involved thirteen studies. These studies used both integrative and discrete point tests (of which more later) as a means of assessing the language proficiency of their subjects. Long suggests that two distinctions help to clarify his analysis. The first is a distinction between the absolute effect of instruction, on the one hand, and its relative utility on the other. The second is a sub-classification of studies according to whether or not they take into account the learner's total opportunity to acquire the language [116]. Thus, with regard to the extent of exposure and the amount of instruction five different types of learning environments were examined. The questions addressed were the following:

1. Relative utility of exposure only and the same total amount of instruction and exposure.
2. Relative utility of differing amounts of instruction and exposure in populations with the same total amount of both.
3. Effect of amount of instruction on populations with the same amount of exposure.
4. Effect of amount of exposure on populations with the same amount of instruction.

5. Effects of amount of instruction and of amount of exposure (independently) on populations with differing amounts of both instruction and exposure.

Long's analysis of these studies is thoughtful and detailed. His conclusion was that "For SLA theory and SL educators alike, on the basis of currently available studies, an answer to the question, 'Does SL instruction make a difference?' is a not-so-tentative 'Yes'". He notes, however, that "even if . . . the data on instruction have been correctly interpreted here, they are obviously not as clearcut or as 'positive' as most TESOL professionals would like" [116].

There are grounds for belief, however, that Long's conclusions are somewhat optimistic. On a head count, seven of the studies indicated a positive effect for instruction, three indicated a negative effect and three were unclear. This is hardly an overwhelming majority. Then, in terms of methodology, as Pienemann has noted, there are some serious problems [88]:

1. The informants in almost all cases were of the "mixed" type—that is, they had also had naturalistic exposure to English. This makes it very difficult to gauge the effects of their formal learning alone.
2. In those studies in which extent of exposure was a variable, quantification of this variable in behavioural terms is not very meaningful: it would only provide the roughest of guides without the mediation of psychological and other measures. Tables 3.1 to 3.3 show how loose the correlation between assessed speaking proficiency and exposure can be.
3. Given the testing instruments used in the studies (for instance, the SLOPE test) the "difference" attributed to instruction would have to be given a very specific and restricted interpretation, namely a higher degree of correctness in certain structures. Correctness and proficiency are not by any means directly equatable, as the *ZISA* project and other enterprises (including the present one) have established.
4. In addition to the above criticisms (due to Pienemann), and following on from (3) above, it should be noted that one of the likely effects of instruction is enhanced performance in instructional type activities such as tests. It would not therefore be surprising to find that those subjects who had had relatively more instruction did relatively better in tests. Long notes that "Instruction appears to be especially useful in the early stages of SLA" [116]; this is precisely when one would expect training in the specialized activity of doing tests would be most beneficial, given the early learner's lower adaptability to unfamiliar (not to say bizarre) situations such as those posed by most testing procedures.

5. In general the studies analyzed by Long suffer from what one might term "shotgun empiricism". That is, they have no real proposal to make about the possible effects of instruction and simply apply statistical tests to differing populations in the hope that they will reveal differences. That there will be differences of some kind is very likely; their significance in the absence of any coherent theoretical proposal to predict or even account for them is another matter. This is perhaps the point where the differing viewpoints of Long and the author is most evident.

For the reasons enumerated above the author is inclined to be somewhat more cautious about Long's results. This should not be taken to mean that he believes that instruction does not make a difference—merely that studies of the kind analyzed by Long are not capable of providing decisive evidence on the question.

There have been many other studies conducted since the one discussed but they tend to share the same orientation. That is, they deal in hindsight with concepts which should be explicitly postulated at the outset.

3.4.7 Other Relevant Survey-Type Enterprises

Morpheme Order Studies

Morpheme order studies have produced claims as to the effect of formal instruction on language learning, in so far as this may or may not disturb the rank order of morpheme accuracy (see 2.1.2 for a description of these studies). These studies [110] have been critically reviewed by both Pica [139] and Pienemann [88]. Both authors make the following points:

1. Results of the various studies conducted are conflicting, with two studies [106] appearing [57] to confirm the hypothesis that formal instruction had no effect on unmonitored speech, one [120] appearing to confirm the same hypothesis in regard of both monitored and unmonitored output, and another [127] appearing to disconfirm the hypothesis for unmonitored speech.
2. The two studies which disconfirmed the effects of formal instruction were in fact not properly controlled for the formal versus informal instruction variable. Thus, the entire population for one study were in fact "mixed" type learners, not purely naturalistic or formal, as methodology would demand [106], while for the other study the "naturalistic" subjects were school children, who had probably been exposed to language arts curricula [58].
3. Rank order accuracy for morphemes is hardly coterminous with language learning as a whole. Morpheme order studies do not even reveal

the processes by which the morphemes in question are acquired, much less shed light on the many other processes which constitute language learning: in particular, the assumption implicit in morpheme order studies that language learning is a linear process involving "a gradual increase in target language correctness" is not borne out by findings from longitudinal studies [88].

4. In addition to the points made by Pica and Pienemann, it should be noted that the role played by some of the data elicitation techniques (such as the Bilingual Syntax Measure) in the data collection process is an equivocal one, and may have serious repercussions for the validity of the findings even within their own terms—see 2.1.2 for further comments.

Recent Input Studies

Pienemann also reviews a recent study by Lightbown on the influence of formal input on formal second language development [164]. The results of this study are in conflict with a previous study by Larsen-Freeman as regards rank morpheme order in teacher talk and rank order of accuracy in the output of the subjects in Larsen-Freeman's study, where it was claimed that learner orders reflected input frequencies; nor was there a direct relationship between these two orders in Lightbown's own study. Thus, this study does nothing to clarify the already confusing picture that has been outlined.

3.4.8 Structural Studies

The work of Felix is typical of this approach [60]. In a study of thirty-four German high school students learning English in a purely formal setting, Felix found that "the students' utterances showed many structural features which are also known to characterize L1 and naturalistic L2 acquisition". He concludes that "It thus appears that formal instruction cannot eliminate or suppress those processes which constitute man's natural ability to acquire language(s)" [60]. Felix did find one difference between his formal learners and naturalistic learners. This was that when forced to produce structures for which they were not developmentally ready they would sometimes randomly select a quite inappropriate structure: in other words, when pressed they said the first thing that came into their heads.

Other studies conducted from within the same framework as the Felix study described above, involving phenomena as diverse as acquisition of the indefinite article [139], through phonetic substitutions [62] to an entire longitudinal study of purely formal learning [74], have produced the same basic findings, namely that in spite of consistent differences in input, the structures and systems exhibited remain very close [88].

Experimental Studies

An example of this type of study is the one conducted by Pienemann [141]. This involved ten Italian children aged from seven to nine. In Pienemann's words, "The main idea of this experiment ... [was] ... that the children's interlanguage [was] recorded before and after a period of formal instruction so that the changes in the interlanguage ... [could] ... be investigated" [141].

The theoretical framework for Pienemann's experiment was the "multi-dimensional" theory of variation developed by the *ZISA* group, and outlined in 2.1.8. Both developmental phenomena (in this case word order rules) and variational phenomena (copula insertion) were examined in the experiment.

In the case of the word order rules investigated, it was found that a given structure could "only be learned by instruction if the learner's interlanguage is close to the point when this structure is acquired in the natural setting" [141]. This finding was termed the "teachability hypothesis".

In the case of copula insertion, however, the effect of instruction was in some cases quite dramatic, with the rate of copula insertion increasing spectacularly for some of the children. A recording of one of the children made some months after the experiment, however, showed that this increase appeared to be transient [141].

Pienemann's work, while it categorically implies that some structures are unteachable at a given stage of a learner's development is actually the most positive of the three approaches in terms of the predictions it makes about the effects of instruction. Thus, if the learner is developmentally prepared, Pienemann claims that "instruction can improve acquisition with respect to (a) the speed of acquisition, (b) the frequency of rule application and (c) the different linguistic contexts in which the rule has to be applied", while "for variable features...there is evidence that instruction has a drastic effect on L2 speech production" [88].

Pienemann points out that specific evidence for his hypothesis is "so far only related to children" and that since "the cognitive structure in adults and their memory capacity is quite different from that of children, instruction might have a different effect" [88]. While this question will have to be resolved empirically, the general similarities in adult second and child first and second language learning suggest that there is a good chance of Pienemann's findings essentially holding for adults as well.

The Question of Instruction—Summary

As far as empirical evidence is concerned, then, there is some evidence and further suggestions that instruction can, under specified conditions, have a direct effect on learning. There is to date very little or perhaps no evidence that formal language learning is a substantively different process from naturalistic learning [74]. Where instruction does appear to have an effect, this

consists in the acceleration of naturalistic processes or in possibly diverting the learner towards a less simplifying (that is, more correct) variety of learner language. As regards the effect of instruction on learner language itself it seems that there are few or no substantive differences between the language of formal and naturalistic learning. This is, of course, an encouraging conclusion from the point of view of the status of the present corpus.

3.4.9 The Relation of Formal Language Instruction to Education

As is evident from the foregoing review and discussion the status of formal language instruction as a variable in second language learning is a privileged one. This privilege derives from various assumptions, of which the two most important are (1) that instruction is efficacious, and (2) that second language learning (and, by extension, received instruction) is qualitatively different from other forms of psycho-motor learning.

The previous discussion should have made clear that (1) is somewhat of an open question. As regards (2), this is also the case. A great deal of discussion has been devoted to the question of whether and in what ways language learning differs from other kinds of learning. For example, Chomsky has postulated the existence of a "language acquisition device", an entity which is in fact a virtual organ with its own genetic program, to account for the uniformity, rapidity and completeness of first language learning despite the corrupt and incomplete data on which the child has to base his or her grammatical hypotheses [29].³ Even if the existence of this device could be established for child first language learners, which is not to date the case, the question of whether such a device is accessible to child and/or adult second language learners would have to be settled before a satisfactory answer to (2) could be produced. To be sure, claims about the relationship between first and second language learning have been made (compare the discussion on Monitor Theory in 2.1.5 for an example), but they are at best indecisive [62], or at worst based on demonstrably false premisses [71]. As to the claims made by Chomsky and his followers, there has been an extensive discussion in Chapter Two.

Given our present state of knowledge, and allowing that (2) remains a vexed question, it might be a worthwhile exercise to suspend for the moment the privileged status *vis-a-vis* language learning accorded to formal language instruction and to consider it in the wider context of formal education in general.

³Recent work in neurolinguistics puts this mode of thought in the biological dark ages.

The Effect of Formal Instruction—Some Proposals

As we have seen, a defect of many of the attempts in the published literature to deal with the question of how formal instruction might influence the learning process is their failure to formulate explicit hypotheses as to the kinds of effects that instruction might have. This *ad hoc* approach is convenient, in that it gives a researcher *carte blanche* to interpret any differences that may be found as evidence for the very general proposition that motivated the study. The cost in predictive, and even explanatory power, however, is very great. Some broad proposals as to how formal instruction might actually manifest itself in the learning process are therefore in order.

A convenient point of departure here is to examine first the basic aims of instruction itself. There would probably be a high degree of general agreement that these were (1) to increase the accuracy or target-like character of the learner's speech and its communicative effectiveness, (2) to accelerate the learning process itself, and (3) to equip the learner with a capacity for self-instruction through the development of general analytical tools which he or she could consciously apply outside of the formal learning situation.

These three aims are formulated in terms of different goals or objects. The object of the first is a product, namely language; the object of the second, is a process; while the object of the third is the producer—that is, the learner himself.

As far as the evidence permits, we have already examined the effects of instruction in respect of the first and second goals. We can therefore proceed to an examination of instruction in terms of the third goal. The terms "formal", "mixed" and "naturalistic" have already been used in this chapter, with the rider that they were essentially behavioural descriptions. In the process of examining the effects of formal instruction on the learner, we may also be able to evaluate the usefulness of terms such as these as descriptions of variables of relevance to the description of the language learner's environment.

3.4.10 The Effect of Instruction on the Learner

As stated, there would probably be a general consensus that the principal aim of formal instruction on the learner *qua* learner is to increase his or her level of "linguistic awareness". Instruction is meant to provide the learner with principles and habits that allow him to filter his own speech, as well as the input to which he is exposed, through a conscious monitor. In this way formal knowledge can affect the organization of the learner's linguistic system. The precise mechanisms whereby the conscious mind interacts with and influences automatic processes are, of course, not well understood, and the present author has no wish to add his own speculations to the mass of unsubstantiated claims already in print. (Levelt 1989 [113] is a welcome and

promising exception here, while other claims have already been discussed in connection with the Monitor Model in 2.1.5). In any case, for the purposes of the present discussion, it is not necessary to go beyond the point of registering the connection between formal instruction and increased conscious involvement in the activities of speech production and comprehension.

Given this point, we have to then ask whether the conscious activity that formal instruction is meant to encourage is different in kind from that which accompanies other forms of learning. While this is, of course, a possibility, at present there is no compelling evidence that it is the case [88].

If it is not the case, then once we separate the content of instruction—the product—from its effects on the learner, the special status of formal instruction in the target language is somewhat diminished, even before we settle the question of its effects. This is because it becomes merely a part of the learner's much more extensive educational history in general. To reiterate, this is not to say that the consciousness raising effects of formal instruction are negligible. The proposition is rather that they should not be considered in isolation from similar effects arising from other learning experiences.

The question of whether formal instruction in the target language is different from other educational experiences, and somehow privileged (questions of content apart) in regard to language learning is an empirical one. Moreover, it is one that can be considered in the light of the data from the present study.

If formal instruction is privileged in the way that is implied by its treatment as a variable in many discussions of second language learning one would expect a fairly evident correlation between some of the features documented in Tables 3.1 to 3.3, such as communicative effectiveness as measured by oral proficiency, and degree of progress. If, on the other hand, it is not essentially different from other forms of instruction in its ability to equip the learner to consciously direct his or her mental activities, then we would expect rather a correlation between the learner's whole educational profile and the features mentioned, given that formal language instruction is, for most people, likely to constitute a relatively small percentage of their total experience of formal education.

It is precisely this latter correlation that we find. Thus, five of the six most proficient Polish speakers had had university educations, as had three of the five most proficient Vietnamese speakers. (The latter all had over three years residence in the country as well, which indicates, of course, that we also need to take other factors into account, bearing in mind that at this stage of human measurement that we have barely an inkling of how to go about the task [130]).

Education, then, in promoting conscious control of the learning task, appears to carry over into all learning situations. Self-study, for instance, if conducted by an experienced learner might be almost as effective as in-

struction delivered by a third party. If we look at the case of Mieczyslaw M., who was adjudged to be the most proficient of the Polish speakers, it is clear that this informant's basically solitary study of English over a two year period while in Poland must have a good deal to do with his progress. Yet Minh, from the Vietnamese sample, with basically the same pattern of non-naturalistic learning, has progressed considerably less, despite the advantage of naturalistic exposure to English at work. The quality and effectiveness of these learners' self-study—and indeed of all their learning—appears to have been strongly influenced by their different educational levels. To put it bluntly, other things being equal, five years of engineering or chemistry may be a good deal more useful to a language learner in the long term than quite a few months of instruction in the target language.

This brings us back to the question of the usefulness of behavioural descriptions like "naturalistic" and "formal". These terms imply propositions about such things as levels of learner consciousness without really making them explicit, and yet they provide no formal recognition of the psychological dimension whatsoever. To use a distinction first formulated by Pit Corder, they assume that input—what is available to the learner—and intake—what he or she can actually process—are the same thing. We have seen that there is evidence that this is not so [44].

If educational level is important in promoting a productive state of awareness which allows the learner to learn more efficiently, whatever the circumstances of his or her exposure may be, then the distinctions between different kinds of learning can become very blurred. A classroom situation for one kind of learner who finds it difficult to compare and conceptualize, and to stand back from his or her own mental processes, may not end up being very qualitatively different from a purely naturalistic one, and may indeed be more confusing. A naturalistic situation for a learner who is equipped with the faculties mentioned above—that is, who has a kind of "inbuilt teacher"—may not be radically different from a classroom situation either, but for entirely the opposite reasons. An extreme case of this latter situation involves the case of the anthropological linguist living with a tribe whose language he is in the process of describing. In behavioural terms the linguist's situation is clearly naturalistic—there are no books or cassettes or qualified teachers. But since the linguist himself is his own teacher is the behavioural description a very useful one? In this case it is easy enough to provide a negative answer. In the many possible intermediate cases between that of the linguist and that of the totally untutored learner the answer is not so easy to supply.

It is the author's opinion that outside of their purely behavioural, and not very illuminating, meaning, the independent status of terms such as we have been discussing is very dubious.

3.4.11 Implications For the Present Study

In terms of effects on the learner, then, the effects of formal instruction may only really be interpretable within the wider context of a learner's educational experiences as a whole. Those learners most likely to be able to take advantage of it will probably be those who have already reaped a fair share of the consciousness-raising function of other forms of education. Of course, the preceding discussion is not meant to suggest that education is the only important parameter in determining success in language learning—rather, that is one of several. The length of the previous discussion should not be taken as an index of the importance of education as opposed to other factors. Quite the contrary, it is the result of trying to put into perspective factors which in the author's opinion have loomed too large in much recent discussion of the issues involved in second language learning.

One thing that is worth stressing at this point is that if an important effect of formal instruction of any kind is its consciousness-raising function, then those forms of formal language instruction which are likely to have the most long-range beneficial effects are just those which promote an active and exploratory role for the learner. "Brute force" methods of instruction, such as extensive drilling, obviously do not rate very well in this regard; individualized and self-directed approaches appear much more promising.

3.4.12 The Effects of Instruction—Conclusions

From the available evidence, it appears that the effects of instruction may not be qualitatively as significant as is often assumed. This is partly so because the question as it is usually formulated is somewhat misconceived, in that instruction needs to be considered in the context of other related variables. As it is formulated, as far as the formal characteristics of language produced in the behavioural environments labelled "formal", "naturalistic" and "mixed" are concerned, the question of whether instruction makes a difference must be answered largely in the negative. This means that we can be reasonably confident that the processes observed in our sample of mixed learners are not significantly different from those which a wholly naturalistic sample of similar sociological and cultural composition would reveal.

3.4.13 Other Features of Possible Importance to Learning

While it is not within the scope of the present study to engage in a detailed discussion of the factors which may influence language learning, there are certain features recorded in Tables 3.1 to 3.3 which should receive a modicum of discussion, given that they reflect on the symmetry of the sample from the point of view of language grouping. One of these is prior second language learning experience, which has the status of a constant for the Polish speakers, but is non-existent for a majority of the Vietnamese speakers.

3.4.14 Other Languages

Prior language learning experience is often mooted as a factor likely to render the task of further second language learning somewhat more amenable. Given the differing composition of the Polish and Vietnamese samples from this point of view, this point requires some discussion.

Russian for Polish Speakers

All but one of the Polish informants had been obliged to learn Russian at school. The majority, however, claimed that they could barely understand or speak it. As far as the researcher can determine this is akin to an Italian speaker saying that he can barely understand Spanish, or communicate with a Spanish speaker, or vice versa. Of course, the hostility of many Polish speakers (though less often the well-educated) to Russian is understandable. Similar professions of mutual incomprehensibility have been reported for speakers of Serbian and Croatian, despite the very minimal differences between these two languages. Given the fact that a knowledge of Polish itself automatically results in a degree of passive competence in Russian, and the resistance of many of the Polish speakers to extending this competence in any way, we can probably largely discount the effect of Russian as a learning promoting experience, at least for those Poles who were ill-disposed towards the language and culture. An analogy for the English speaker would be the effect of exposure to some non-prestige dialect of English on, say, their learning of French.

German for Polish Speakers

It is fair to assume that the Polish speakers' experience of German was somewhat more constructive as regards their learning of English. Use of German words was not uncommon amongst Polish speakers in the first round of interviews.

All of the Polish speakers had spent at least six months in a German-speaking environment prior to their arrival in Australia. However, most appear to have made no special effort to learn German during this time, and since the majority did not work it can be assumed that their contact with German speakers was quite limited. In general, the informants' own estimates of their proficiency in German were that they spoke and understood it less well than English.

Given the level of proficiency in German that the Polish speakers reached, and the probable unimportance of Russian for the reasons given, it seems that while their prior experiences of other second languages may have been of some assistance to the Polish speakers, this particular asymmetry in the sample would not appear to be particularly important, and should certainly

not be invoked as a significant factor in the more rapid progress shown by this group as compared to the Vietnamese speakers.

A Note of Caution

While there appears to be a connection of some kind between external factors and language development there is absolutely no mechanism to account for how these factors may actually impinge on the development of an inter-language grammar, and recent surveys have shown that the more one tries to focus on a nexus of some kind, the more elusive it becomes—even to the point of conceptualization and identification, given the web such variables tend to form [130].

The Sound Barrier

It is evident from a comparison of length of exposure to English for the two language groups that the Vietnamese learners find the acquisition of English a considerably more difficult task than the Polish speakers. The reasons for this are probably multifarious, and it is not within the scope of the present project to investigate them. From an anecdotal point of view, however, it would appear that cultural distance, and its various psycho-social projections are important factors.

Another factor that ought to be noted here, since it is not evident in the tables of statistics, is the phonological distance between Vietnamese and English. Vietnamese is tonal, lexically monosyllabic and devoid of consonant clusters. English is atonal, lexically polysyllabic, and rich in consonant clusters, and it is within these phonetically difficult consonant clusters that important phonemic information is located. Thus, for the Vietnamese speaker the task of isolating lexical units, and morphemes within these, in the stream of English speech involves a major phonetic reorientation, as does the task of producing these units in a comprehensible fashion. This is not nearly so much of a problem for the Polish speakers, whose language is phonetically much more similar to English, even to the extent of having some of the same (and in English, morphemically significant) consonant clusters. (For example, Polish has /ts/, /dz/, and /kt/).

For the Vietnamese speaker, all of the English morphemes with the exception of *-ing* present production and comprehension difficulties, whereas for the Polish speaker it is probably safe to say, acceptable variants are within the range of their phonological competence from the very outset. It is the author's guess that this factor is an extremely important one in explaining the overall difference in learning rates for the two groups. Some concrete evidence for this will be presented in the next chapter.

3.4.15 Potential Difficulties with a Naturalistic Sample

It was mentioned in an earlier section (3.4.5) that the safest course for the selection of data for an analysis of natural sequences in language learning was to restrict oneself to data gathered from naturalistic learners, just in case data from mixed sources turned out to be different in some way. Because this did not turn out to be possible a good deal of discussion has been devoted to the question of the status of data gathered from mixed learners. The conclusions reached were that, on the basis of the available evidence, this data was unlikely to differ very dramatically from purely naturalistic data. A further point needs to be made, however. This concerns a possible problem with naturalistic data itself.

In Australia, where most migrants have the opportunity to attend English classes, naturalistic learners are likely to be restricted to a particular band of the sociological spectrum. Thus, they are likely to be more culturally, socially and psychologically distant than other learners; it is also probable that their level of education will be lower. (Obviously, there would be exceptions to this pattern).

3.5 Limitations Imposed on the Analysis

3.5.1 The State of the Longitudinal Study

As stated in 3.2.1, the original aim of the project was to supplement the cross-sectional study with a limited form of longitudinal study.

This longitudinal study was to have a final sample size of eight learners, four from each language group. The informants for this study were to have an initial *ASLPR* rating of between 0 and 1, mainly on the assumption that less advanced learners were more likely to exhibit some progress in their learning in the ten to twelve month period over which the data was to be gathered.

The data for this longitudinal component of the study was duly collected, transcribed, and typed. One modification to the study design for the longitudinal study was made—this involved the elimination of one round of interviews for three of the Vietnamese informants, on the grounds that they did not appear to be making sufficient progress to warrant a more intensive schedule of interviews. While this was primarily the judgement of the researcher, it was reinforced by the fact that a self-perceived lack of progress amongst the Vietnamese speakers generated a certain amount of resistance to a more intensive schedule of interviews. The number of rounds of interviews, therefore, was five for the Polish speakers, and four for the Vietnamese speakers (this includes the two rounds which were part of the cross-sectional study). The fact that four rounds of interviews were concluded with this latter group is somewhat of an achievement, to judge from

some other projects which sought the long term co-operation of South East Asians.

Regrettably, however, the huge volume of work involved in extracting and analyzing the data collected in the cross-sectional part of the study has prevented, at this point in time, any detailed examination of the longitudinal data.

The rationale of the longitudinal study was that it should act to help validate conclusions formulated on the basis of the cross-sectional data: developmental projections made there would hopefully find substantiation or refutation in later interviews. It was not envisaged that the longitudinal study would have other than an ancillary function, since with a projected maximum number of interviews of five over the period of a year there would not have been sufficient detail or density of material for the study to stand on its own.

That there has so far been no real possibility to check the cross-sectional study against the longitudinal one, therefore, is unfortunate but by no means methodologically disastrous, since the cross-sectional study stands by itself and does not depend on its longitudinal extension. Follow-up work on the longitudinal data would, however, be an obvious next step in the research if further work along these lines was to be conducted.

The alternative of simply merging the longitudinal material with the cross-sectional data to produce an enlarged version of the cross-sectional study was also rejected. The cross-sectional study was carefully designed and balanced as regards its range and composition and the introduction of extra material from informants already represented in the study would have distorted its structure without increasing its representativity in any way.

3.6 Oral Proficiency Ratings

The final points regarding the organization of the data base for the study concern the application of an oral proficiency rating scale to the output of each of the informants chosen. Since one of the requirements of the brief was for the researcher to try and determine what, if any, correlation existed between speaking proficiency as assessed by an instrument like the *ASLPR* and the rule-systems of learners, and since some preliminary form of grading or sorting of the informants was necessary, the final step in readying the data base for analysis was to obtain a series of reliable oral proficiency ratings for the informants. Tables 3.5 and 3.6 show the results of these assessments.

Because the researcher himself and the most experienced raters available were considerably more familiar with the Adult Migrant Education Speaking Proficiency Descriptions (*AMES* scale) than the Australian Second Language Proficiency Ratings (*ASLPR* scale), an initial rating figure was obtained using the *AMES* scale. The figures presented in Tables 3.5

and 3.6 are thus figures from the *AMES* scale.

Given the basic similarity between the *AMES* Descriptions and the *ASLPR*, it and the fact that the *AMES* scale has more gradations than the latter, there is no real problem inherent in converting from *AMES* scale to *ASLPR*, and this is accordingly done in all subsequent references to oral proficiency. The conversion scale, which was worked out by Geoff Brindley, is presented below in Table 3.7.

In order to validate this procedure, a selection of eight interviews was given to Maggie Gray, who was familiar with both scales. The results are presented in Table 3.7, and once again show a high degree of concurrence with other figures.

Rating was not done at the time of the interview. Rather, it was done from the cassette recordings of the interviews, which were repeated several times if necessary, until the rater was satisfied with the rating. In the case of collaborative ratings (as with Ken Singh and the researcher in the second round of interviews) the procedure was for each rater to write down his rating and then for a discussion to take place if there was a discrepancy, with the tape being played again. Discrepancies, as it turned out, were never very large and it was always possible to resolve them consensually, rather than arithmetically.

As can be seen from a comparison of the figures, there was a high degree of consistency in the ratings. Ken Singh tended to rate the less proficient informants slightly higher than Geoff Brindley, who in turn tended to rate the more proficient informants slightly higher than Ken Singh. The present author tended to rate the less proficient informants lower than either of the other two raters. This is probably a reflection of our differing classroom experiences; in any case, the margin of difference was minimal.

Where there is a positive difference between a given rater's assessment of an informant in the second interview as compared with the first, this can almost certainly be attributed to the informant's either having made some progress in his or her learning of English or (in the case of some of the less proficient Vietnamese speakers) being more relaxed and forthcoming in the second interview. Where there is no difference, we have (hopefully) some useful evidence of a rater's consistency. There is one case of a slight negative difference. This was produced when Geoff Brindley rated Sang lower in the second interview than the first. All other ratings of Sang had put him at a somewhat higher position on the scale, and there is therefore some cause for doubt about this particular rating, from within the context of the oral proficiency rating process itself. We shall return to this point in a moment.

Since it was decided to use oral proficiency ratings as a means of sequencing informants in most of the tabular data to be presented in the next chapter it was necessary to make some definite choice about who was to follow who. Given that Geoff Brindley was the most experienced rater, and that the author of the study collaborated with Ken Singh on one set of rat-

ings, while Geoff's ratings were all made independently, these latter ratings were adopted.

It was mentioned that one of Geoff's ratings was contentious. In the interests of consistency the rating has been let stand. There is a further reason for doing this: if it is the case that there is some correlation between a learner's syntactic profile and his or her oral proficiency then the case of Sang in the second interview might provide an interesting test case. Consistent independent syntactic evidence that he has been wrongly ranked would support a hypothesized connection between oral proficiency and manipulation of syntax, and would demonstrate how evidence from syntax can help to decide disagreements that cannot be resolved from within the proficiency scale itself.

3.7 Conclusions

In this chapter an attempt has been made to describe and justify all the basic decisions that had to be taken regarding the implementation of the study design.

It is the author's opinion that the principal objections that might have been registered against the kind of data collected, the means of collection, and the selection of informants from whom to collect it, are not nearly so serious as theory alone would suggest they might be. Where empirical evidence can be called upon to mediate in questions concerning the possible validity of the data the outcome has been encouraging for the original study design. For the purposes of syntactic analysis, then, it is fair to say that the data can be considered to be good data. The principal limitation on it is that it comprises a cross-sectional study. Even here, however, one has the option of cross-checking hypotheses against the longitudinal extension.

It has already been remarked that many studies of second language acquisition in English are seriously flawed in either the composition of their samples or the techniques of elicitation they have employed, or in both these things. The present set of data has been compiled with the avoidance of these defects in mind. To the author's knowledge it is probably the most comprehensive and carefully compiled set of its kind so far for the English language.

Name:	IS	KS	ZJ	JB	JR	KA
Sex:	F	M	M	M	M	F
Age:	30	30	28	34	35	45
Time in Aust:	-	-	-	-	-	-
Months:	1	1	2.5	2	3	3
Profession:	Techn	Plmbr	Electn	Prntr	Fitter	Mngr
Occupation Now:	Stdnt	Stdnt	Stdnt	Stdnt	Stdnt	Stdnt
Years of Educ'n:	13	13	13	13	13	11
Other Languages:	-	-	-	-	-	-
Formal:	Russn	Russn	Russn	Russn	Russn	-
Naturalistic:	German	German	-	-	German	German
Formal English:	-	-	-	-	-	-
At School:	-	-	-	-	-	-
Hours/Week:	-	-	-	-	-	-
Years:	-	-	-	-	-	-
Elsewhere:	-	-	-	-	-	-
In Australia:	-	-	-	-	-	-
Hours/Week:	20	20	20	20	20	20
Months:	1	1	1.5	1.5	1.5	1.5
Self Study:	-	-	-	-	-	-
Hours/Week:	-	-	-	6	3	3
Months:	-	-	-	5	6	9
Informal Exposure:	-	-	-	-	-	-
to English:to English:	-	-	Shops	-	-	-

Table 3.1: Statistics: Polish Informants—Interview 1a

Name:	BB	ES	AJ	KB	LJ	MM
Sex:	F	F	M	F	F	M
Age:	34	27	33	32	33	33
Time in Aust:	-	-	-	-	-	-
Months:	2	2	2	2.5	2	2
Profession:	Engnr	Tchr	Tchr	Clerk	Tchr	Engnr
Occupation Now:	Stdnt	Stdnt	Stdnt	Stdnt	Stdnt	Stdnt
Years of Education:	16	16	16	12	16	16
Other Languages:	-	-	-	-	-	-
Formal:	Russn	Ru.Ge	Russn	Russn	Russn	Russn
Naturalistic:	German	German	German	German	German	Ru.Ge
Formal English:	-	-	-	-	-	-
At School:	-	-	-	-	-	-
Hours/Week:	-	-	-	1	-	-
Years:	-	-	-	4	-	-
Elsewhere:	-	-	-	-	-	-
Hours/Week:	-	7	2	-	-	-
In Australia:	-	-	-	-	-	-
Hours/Week:	20	20	20	20	20	20
Months:	1	1	1	1	1	1
Self Study:	-	-	-	-	-	-
Hours/Week:	6	8	8	-	8	4
Months:	6	2	1	-	1	24
Informal Exposure:	-	-	-	-	-	-
to English:	-	-	-	Friend	Friend	Friend

Table 3.2: Statistics: Polish Informants—Interview 1b

Name:	Van	My	Duc	Dung	Minh	Hoa
Sex:	M	M	M	M	M	F
Age:	21	25	30	27	25	28
Time in Aust:	-	-	-	-	-	-
Months:	1	15	24	20	24	15
Profession:	Mech	Lab'r	Artisan	Mech	Photog	H'wife
Occupation Now:	Stdnt	Worker	Cook	Worker	H'wife	Stdnt
Years of Educ'n:	5	9	7	12	12	4
Other Languages:	-	-	-	-	-	-
Formal:	-	-	-	-	-	-
Naturalistic:	-	-	-	Mandarin	-	-
Formal English:	-	-	-	-	-	-
At School:	-	-	-	-	-	-
Hours/Week:	-	-	-	-	-	-
Years:	-	-	-	-	-	-
Elsewhere:	-	-	-	-	-	-
Hours/Week:	-	-	-	-	-	-
In Australia:	-	-	-	-	-	-
Hours/Week:	12	12	12	12	6	2*
Months:	1	1	1	6	1	7
Self Study:	-	-	-	-	-	-
Hours/Week:	2	1	-	1	4	-
Months:	1	15	-	20	24	-
Informal Exposure:	-	-	-	-	-	-
to English:	-	Social	Work	Work	Work	Social

Table 3.3: Statistics: Vietnamese Informants—Interview 1a

Name:	Sang	Vinh	Tam	Canh	Long	Phuc
Sex:	M	F	M	M	M	M
Age:	21	25	30	27	25	28
Time in Aust:	-	-	-	-	-	-
Months:	3	12	42	48	48	30
Profession:	Baker	Stdnt	Sold'r	Photog	Sold'r	Stdnt
Occupation Now:	H'wife	Welder	Worker	Worker	Workert	Worker
Years of Educ'n:	7	14	12	14	10	14
Other Languages:	-	-	-	-	-	-
Formal:	-	French	-	French	-	French
Naturalistic:	-	-	-	-	-	-
Formal English:	-	-	-	-	-	-
At School:	-	-	-	-	-	-
Hours/Week:	-	6	1	2	-	6
Years:	-	2	2	3	-	2
Elsewhere:	8	-	-	-	-	-
Hours/Week:	3	-	-	-	-	-
In Australia:	-	-	-	-	-	-
Hours/Week:	20	20	12	12	20	-
Months:	2	4	4	1	0.5	-
Self Study:	-	-	-	-	-	-
Hours/Week:	8	-	1	4	-	-
Months:	3	-	30	48	-	-
Informal Exposure:	-	-	-	-	-	-
to English:	-	Social	-	Work	Work	Work

Table 3.4: Statistics:Vietnamese Informants—Interview 2b

VIETNAMESE INFORMANTS			POLISH INFORMANTS					
Rater:GB			Rrs: GB and KS					
Range	Name	Level	Name	Level	Name	Level	Name	Level
0.0- 1.0	Van	0.5	Van	0.5	IS	1.0-	IS	1.0-
1.0- 2.0	My	1.0	My	1.0+	ZJ	1.0	ZJ	1.0
	Duc	1.5+	Minh	1.5	KS	1.0+	KS	1.5
	Dung	1.5+	Duc	1.5+	JB	1.5-	JB	1.5
	Minh	1.5+	Hoa	1.5+	JR	1.5	JR	1.5
	Minh	1.5+	Hoa	1.5+	JR	1.5	JR	1.5
			Dung	2.0-	KA	2.0-		
2.0- 3.0	Hoa	2.0	Sang	2.0+	BB	2.0	BB	2.0
	Sang	2.0+	Vinh	2.5	ES	2.0+	KA	2.0
	Vinh	2.5	Long	2.5+	-	-	ES	2.0+
3.0- 4.0	Tam	3.0	Canh	3.0	AJ	3.0+	AJ	3.0+
	Canh	3.0	Tam	3.0	KB	3.5	KB	3.0+
	Long	3.0+	Phuc	4.0	LJ	4.0-	LJ	3.5
	Phuc	4.0	-	-	MM	4.0	MM	4.0

Table 3.5: Interview 1: Oral Proficiency Ratings—GB and KS

VIETNAMESE INFORMANTS			POLISH INFORMANTS					
Rater: GB			Rrs: KS and MJ					
Range	Name	Level	Name	Level	Name	Level	Name	Level
0.0- 1.0								
1.0- 2.0	Van	1.0	Van	1.0	IS	1.5+	IS	1.5
	Duc	2.0-	My	1.5	KS	1.5+	KS	1.5+
	Sang	2.0-	Duc	1.5	ZJ	2.0-	JB	2.0-
			Hoa	1.5+	JR	2.0-	KA	2.0-
			Minh	1.5+	KA	2.0-		
		Dung	2.0-					
2.0- 3.0	Minh	2.0	Sang	2.0+	JB	2.0	JR	2.0
	My	2.0	Vinh	2.5	BB	2.5-	Z	J2.0
	Hoa	2.0	Long	2.5+	-	-	BB	2.5-
	Dung	2.0+	-	-	-	-	ES	2.5
	Vinh	2.5						
3.0- 4.0	Tam	3.0	Canh	3.0	ES	3.0	KB	3.5
	Canh	3.0	Tam	3.0	AJ	3.0+	LJ	3.5
	Long	3.0+	Phuc	4.0	KB	3.5	AJ	4.0-
	Phuc	4.0	-	-	LJ	4.0-	MM	4.0+
				MM	4.0			

Table 3.6: Interview 2: Oral Proficiency Ratings—GB and KS

AMES	ASLPR
0.5	0
1.0	0+
1.5	1-
2.0	1
2.5	1+
3.0	
3.5	2
4.0	

Table 3.7: Conversion Scale for the AMES Scale and the ASLPR

Interview	Rating
jb.1	0+
ka.1	1-
bb.1	1
lj.1	1+
mm.1	2
duc.1	1-
sang.1	1
hoa.1	1+
tam.1	1+
long.1	2

Table 3.8: Direct ASLPR Ratings for a Selection of Informants

Chapter 4

Analysis, Results and Conclusions

4.1 General Statistics

The following tables provide some statistics regarding the interviews.

4.1.1 Length of the Interviews

Table 4.1 shows the length of the interviews in minutes. The section entitled "Qs:" refers to the elicited data, which was not used for the analyses presented in this study. The target time for the first round interviews was forty-five minutes, but for informants lower on the *ASLPR* the interviews often had to be terminated well before this. In a few cases first-round interviews ran longer than the targeted time; in one case—that of Long—the interview was double the proposed length. For the second round interviews, which also included a section of elicited data the target time was roughly thirty minutes.

4.1.2 Word Counts

Table 4.2 provides word counts for the informants' output. As is evident, these vary quite considerably, even for interviews of the same length: compare, for instance, the word counts for *es.1* or *vinh.1* with those for *mm.1* or *phuc.1*. Tables 4.3 and 4.5 and 4.6 provide information on the informants' vocabulary size and the relative percentages of the categories of noun, adjective, verb and adverb in this. The major point of significance is the increase in the percentage of verbs in the vocabularies of the more orally proficient informants; other categories seem to increase at a rate largely commensurate with the overall increase in vocabulary size. It should be stressed that Tables 4.3, 4.4 and 4.5 and 4.4 do not provide information on the relative frequency of items from each category in actual speech, where

functors such as articles, and certain verbs such as *be* would obviously recur with some frequency, although they only represent tiny percentages of the total vocabulary.

4.1.3 Fluency and Volubility

The variable relationship between the length of an interview and the total number of words produced prompted the compilation of some general statistics on what can loosely be called fluency, or perhaps volubility. The purpose was to see to what extent this correlated with assessed oral proficiency. It should be borne in mind that these figures for word rates are affected by various considerations.

Some informants, such as Long or Ludwiga J., have a monologuing, as opposed to an interactional, style of conversation, and therefore use most of the available time in the interview themselves. Other informants with this tendency are Canh, Hoa, Barbara B. and Jan R. On the other hand, informants such as Ewa S. throw the burden of conversation back on the interlocutor, either by the brevity of their own contributions, or through frequent requests for confirmation regarding what they have said, or through direct questions. In addition, the interviewers themselves can influence the length of conversational transactions in an interview themselves. GB and MJ, for instance, differ somewhat in this regard, with the former tending to attempt to guide the conversation more than the latter, and consequently tending to interrupt more frequently.

For reasons of conversational style, then, word rate alone is only a rough guide to volubility, and a much rougher one still to fluency. Nevertheless, there does seem to be some correlation between global word rate and oral proficiency, especially if we exclude the monologuers or penalize their word rate. From the data from the first round of interviews, a rate of under thirty words per minute would be likely to correlate with an *ASLPR* rating of less than 0+, from thirty to fifty with a rating of between 0+ and 1, fifty to sixty-five with a rating of between 1 and 1+, and sixty-five and over with a rating of 1+ upwards. The data from the second round of interviews supports this if the word rate is lifted some five words per minute for each proficiency level; perhaps the fact that the second interviews are generally shorter has some bearing on the higher word rates. Despite the fact that volubility and fluency are not the same thing, it appears likely, then, that the rate of word production is a factor which may quite strongly influence the assignment of oral proficiency ratings.

4.1.4 Learner Types

The informants' different conversational styles brings us to another question which has not been taken up in the present study, but which is of consider-

able interest. This is the question of learner types. It will be recalled that in 2.1.8 a “multi-dimensional” model of variation developed by the *ZISA* group in Germany was described. Central to the concept of this model was the notion of a “variational” dimension upon which different learners could be located. Thus, although learners might pass through the same developmental stages, their speech might involve more or less “simplification”—deletion of elements, for instance, or acquisition of developmental rules in a small subset of the contexts in which the rule could function in the target language [128].

Since independently motivated developmental sequences similar to those of the kind used as an index by the *ZISA* group have been developed for English by the author in collaboration with Manfred Pienemann and reported on in joint publications and, in addition, that framework has now been reconceptualized into Processability Theory it is not appropriate or feasible to apply the model to the present data except in a restricted form. Nevertheless, there might be some value in indicating on an anecdotal basis how the informants in the study would be located along a “standardizing-simplifying” axis. While such a procedure is partially *ad hoc* it is worth remembering that it is recognized in communicative proficiency scales that learners can be communicatively effective without being very grammatically accurate, and *vice versa*—such disparities result in so-called “unequal profiles”. Naturally, assessments of the above kind are difficult to defend on empirical grounds, and constitute one of the problem areas in the validation of proficiency scales. In Chapter Five, there will be some discussion as to whether or not it is possible to provide any empirical base for these judgements. In the meantime, Tables 4.7 and 4.7 display the researcher’s intuitions on this aspect of learner types. It classifies learners according to a tri-partite division of “standardizing”, “neutral” and “simplifying”.

As Table 4.7 and 4.8 show, it appears that those informants with a monologuing style of conversation tend also towards simplification. This is not particularly surprising, in that the monologuers seem to be less concerned with the details of their language than in communicating their message, or, in some cases, simply holding the floor. The less interactional speakers appear to monitor *all* aspects of the conversational situation less than their more interactional and “correct” counterparts—that is, their reduced monitoring is not merely a linguistic phenomenon, as in the Monitor Model [26]. The question of learner types clearly requires a great deal more research and it is not presently clear whether we are even in a position to conceptualize it adequately outside of restricted frameworks like the one employed here.

Infmt	1:	2:	Qs
aj	44	32	35
bb	42	29	23
canh	86	19	49
duc	30	27	20
dung	40	21	31
es	49	27	28
hoa	39	20	16
is	21	26	6
jb	31	30	26
jr	48	28	45
ka	45	25	31
kb	40	30	25
ks	35	32	41
lj	47	40	40
long	90	10	26
minh	28	17	31
mm	44	26	31
my	11	31	28
phuc	45	21	21
sang	32	21	29
tam	44	33	27
van	5	12	6
vinh	41	27	24
zj	41	25	34

Table 4.1: Length of Interviews in Minutes

Interview	Words	-	Interview	Words
van.1:	126	-	van.2:	551
my.1:	379	-	ka.2:	1029
is.1:	621	-	is.2:	1051
minh.1:	1022	-	long.2:	1082
zj.1:	1280	-	minh.2:	1179
jb.1:	1291	-	dung.2:	1184
dung.1:	1419	-	zj.2:	1194
ks.1:	1576	-	sang.2:	1572
sang.1:	1589	-	ks.2:	1604
ka.1:	1675	-	vinh.2:	1648
duc.1:	1865	-	jb.2:	1652
hoa.1:	2075	-	duc.2:	1692
vinh.1:	2229	-	hoa.2:	1706
es.1:	2469	-	es.2:	1887
jr.1:	2580	-	jr.2:	1891
bb.1:	2619	-	phuc.2:	2140
kb.1:	2811	-	canh.2:	2215
aj.1:	2909	-	my.2:	2279
tam.1:	2994	-	bb.2:	2346
mm.1:	3559	-	mm.2:	2421
lj.1:	4543	-	tam.2:	2484
phuc.1:	4674	-	aj.2:	2508
canh.1:	6457	-	kb.2:	2694
long.1:	9199	-	lj.2:	4491

Table 4.2: Word Counts for Informants' Text

Informant	is	zj	ks	jb	jr	ka	bb	es	aj	kb	lj	mm
% adjs:	10	10	11	10	9	12	11	15	14	15	15	13
% nouns:	47	40	40	37	38	38	46	43	33	36	43	41
% verbs:	9	10	14	18	17	15	16	13	22	22	22	21
% advbs:	4	4	4	5	4	7	4	2	5	4	5	4
# words:	171	302	289	302	463	305	392	498	407	445	567	512

Table 4.3: Percentages for Major Categories: Interview 1

Informant	is	zj	ks	jb	jr	ka	bb	es	aj	kb	lj	mm
% adjs:	14	12	9	11	9	12	15	11	12	14	14	14
% nouns:	41	42	39	44	40	35	39	36	38	35	39	37
% verbs:	15	13	18	17	17	15	18	19	19	23	21	21
% advbs:	5	5	4	6	7	4	4	5	5	4	5	7
# words:	235	313	352	245	213	325	344	368	432	425	619	413

Table 4.4: Percentages for Major Categories: Interview 2

Informant	van	my	duc	dung	minh	hoa	sang	vinh	tam	canh	long	phuc
% adjs:	0	9	9	13	6	10	9	12	10	13	13	11
% nouns:	33	42	39	38	36	35	34	34	35	44	45	39
% verbs:	14	13	19	19	21	16	19	23	24	23	20	25
% advbs:	6	9	5	6	7	7	6	7	6	4	5	7
# words:	48	116	359	304	202	274	308	334	399	828	654	655

Table 4.5: Percentages for Major Categories: Vietnamese Informants—1

Informant	van	duc	sang	minh	my	dung	hoa	vinh	tam	canh	long	phuc
% adjs:	6	8	35	7	10	11	10	10	12	11	12	12
% nouns:	49	38	37	32	44	34	32	39	33	30	26	31
% verbs:	12	17	21	21	15	23	20	20	21	25	20	29
% advbs:	5	6	6	9	4	7	8	6	7	7	10	8
# words:	115	323	336	199	370	272	290	328	393	444	223	360

Table 4.6: Percentages for Major Categories: Vietnamese Informants—2

ASLPR	Standardizing	Neutral	Simplifying
2		Mieczyslaw M.	Ludwiga J.
1+	Krystyna B. Andrzej J.		
1	Ewa S.		Barbara B.
1-	Jerzy B.	Krystyna A.	Jan R.
0+	Krystof S.		Zygmunt J.
0	Irena S.		

Table 4.7: Learner Types: The Variational Dimension—Polish Informants

ASLPR	Standardizing	Neutral	Simplifying
2	Phuc		
1+	Vinh		Long Canh Tam
1	Sang		Hoa
1-	Dung Minh		Duc
0+			My
0			Van

Table 4.8: Learner Types: The Variational Dimension—Vietnamese Informants

4.2 Verbal Morphology and Semantics

4.2.1 Limitations

This section deals with the use of all verbs, other than *be* and *have* and modals—since these forms were deemed to warrant separate treatment. The emphasis is on the syntax of the verbal system, rather than its semantics. The author recognizes that there are certain problems inherent in separating these two components when dealing with a system as complicated as the one presently under scrutiny. For instance, a discussion of, say, past tense forms is evidently restricted if figures for postulated contexts for the production of these forms are not available. In practice, due to time constraints it has not always been possible to give detailed descriptions of the semantic fields for the syntactic events under consideration. In some cases this restriction is more important than others; in any event, it has often been possible to make rough predictions about probable temporal contexts, and so forth. Nevertheless, this limitation should be noted.

4.2.2 Verbal Features Investigated

The aspects of the verbal system that were closely investigated were primarily those involving verb marking. It is just these aspects that receive

the greatest attention in the classroom. In the present study, seven basic categories were investigated. These were:

1. Non-standard -ing marking.
2. Irregular past marking.
3. Regular (that is, -ed) past marking.
4. Third person singular -s marking.
5. *Auxiliary + verb + '-ing'* marking—that is, the so-called progressive or continuative aspect, henceforth referred to as *aux_ing*.
6. *Auxiliary + verb + -ed* marking, henceforth referred to as *aux_en* marking. This surface realization covers a number of different structures, some of which are not always definitively distinguishable—*copula + verbal adjective* (for example, he is tired), agentless passive (for example, they were injured), full passive (for example, you were accepted by Australian deligation), and finally, perfect aspect forms (for example, I have just arrived in Australia).
7. Verbal nominalizations or gerunds—excluding those where no common alternative nominal form exists, such as swimming.

Tables 4.9 to 4.12 provide a breakdown of the occurrence and frequency of tokens in the above categories for the informants in the cross-sectional study. The tables are basically set out in descending distributional frequency of the form across the sample.

4.2.3 Non-Standard '-ing'

The default case for verbs in the present data is, of course, that they occur in stem form. Thus, technically, null marking is the most common form of verb marking in the corpus. With null or unmarked forms there can be a problem in providing an appropriate categorial assignment, as in the following example:

MJ ... have you studied English?... did you l... learn English?
I ... no school English

- my.1: [197-200] -

(Other examples of categorially vague tokens are given in 4.10.3). Categorial blurring is a common phenomenon in the language of beginning learners and can persist beyond level 1 on the *ASLPR*. As we shall see, marking

of stem forms is in fact a means whereby learners can indicate the category of a particular item.

Amongst the non-null forms of verb marking, *-ing* marking of verbs is the most prevalent form of marking in the sample, in both gross terms and on a distributional basis. In addition, *-ing* marking is probably the first type of verbal marking to appear. This is suggested by previous studies conducted by the author, and others [92]. In the present study also, where there is only one form of verb marking present, it is *-ing* marking. In **van.1**, for instance, there is no marking of verbs—apart from one formulaic occurrence of a verbal adjective—and in **van.2** when marking appears it is *-ing* marking. Similarly, in **my.1** the only form of marking is *-ing* marking. *-ing* marking provides one of the best demonstrations of the difference between learner language and target language systems, in that a form common to both is implemented in radically different ways in the two systems. In Standard English *-ing* marking serves to indicate non-completive aspect in auxiliary + verb structures, to indicate nominalized verbs, and as a complementizer for certain classes of complement-taking verbs—notably those of perception.

In terms of application it is interesting that ESL teachers frequently interpret *-ing* marking in learner language in Standard English terms. Thus a learner who produces *-ing* marked verbs is assumed to have acquired the morphology, syntax and semantics of the present continuous. In fact, this is usually not the case.

In the learner's system *-ing* may come to assume these Standard English applications, but it also serves other quite different functions.

Tables 4.13, 4.14, 4.15, and 4.16 provide some figures for *-ing* marking across the whole cross-sectional corpus. The analysis first makes a division between syntactic context and temporal context. Since these categories (with the exception of verbal complement, where temporal reference is not borne by the complement) are not mutually exclusive a particular token may be marked down under both these headings—for instance, an *-ing* marked verb may occur in a subordinate clause and have an obviously past temporal reference. In practice, tokens which had present temporal reference and were found to occur in one of the syntactic contexts outlined in the table were not noted down again in the Temporal Context side of the table. Within the two major divisions, a series of subdivisions were made. For Syntactic Context these were Subordinate Clause, Co-ordinate Clause, Verbal Complement, Negative Verb Phrase, and Question. For Temporal Context, the divisions were Past, Present and Future. As can be seen from Tables 4.13, 4.14, 4.15, and certain syntactic contexts—namely Subordinate Clause, Co-ordinate Clause and Verbal Complement—appear to provide favourable environments for *-ing* marking. Likewise, the temporal context Past also appears to be a congenial environment. Figures for the relative frequency of these environments as compared to other environments (such as Main Clause and Present) throughout the interviews are not available, but it is reason-

able to assume the tabled environments—with the exception of Present—are not the most frequent overall. However, questions of frequency aside, it is fair to claim that on the basis of complexity the syntactic environments are “marked” in relation to other possible environments, such as Main Clause, as is the temporal context Past in relation to Present. Thus the environments which in general favour *-ing* marking are marked environments. If this is the case, then we can begin to explain the reasons for *-ing* marking in learner language.

As previously noted, *-ing* marking appears to be the first form of verbal marking produced by learners. When *-ing* marking first appears, it is most likely to occur in default or unmarked syntactic or temporal contexts, since these are by far the most prevalent in early learner language. Apart from this globally enforced regularity, there are no discernible syntactic or semantic correlatives of *-ing* marking at this stage. (There may possibly be some lexical regularities, in that certain verbs—such as *work*, *look* and *go*—regularly, and even invariably, take the *-ing* form). Given a lack of syntactic or semantic parameters for early *-ing* marking and also given the concurrent emergence of categorial distinctions of other kinds, the probable initial function of *-ing* marking is to indicate that the marked word is a verb, and thus help clarify sentences for processing by interlocutors.

Thus, far from being a tense or aspect marker, *-ing* begins life as a categorial marker, a verb marker whose marking function is entirely self-referential: to declare the marked object as a verb. The choice of *-ing* over other verb markers offered by Standard English (such as *-ed* or *-s*) can probably be explained by its phonological salience, since of the various bound markers available, it alone is consistently syllabic. (Lexical markers such as modals and auxiliaries are also subject to reduction and cliticization in casual speech—for instance, *I will* becomes *I'll*—which, of course, considerably reduces their salience).

In the interviews with the less proficient informants, as in **van.2**, **my.1** and **zj.1**, the syntactic environment is probably the default case, Main Clause, and the temporal environment is Present. However, as the learner begins to produce utterances of greater syntactic complexity and to complexify his or her temporal reference scheme, *-ing* marking apparently migrates from the default (unmarked) environments to the more marked environments described in Tables 4.13, 4.14, 4.15 and 4.16. A likely explanation for this is that the learner feels a need to mark verbs in some way in these marked environments and in the absence of specific hypotheses as to what these markers might be resorts to the stock verb marker *-ing*. The need to mark verbs in these marked environments is twofold for learners. In the first place, verb marking is common in natural languages in syntactic contexts such as subordinate clause and temporal contexts such as past. In the second place, marking of the verb in recently acquired complex structures enhances the processability of the utterance, as it does with simple struc-

tures produced by less proficient learners. (Although precise figures are not available, there also seems to be some tendency for *-ing* marked verbs to appear more frequently without subject noun phrases or pronouns than unmarked verbs. This may merely be a side-effect of the construction of the complex structures which favour *-ing* marking. On the other hand, since marking of the verb may render the structure in question parsable and is less complicated than selecting the appropriate anaphoric pronoun, this may actually be a contributory factor to *-ing* marking in syntactically complex environments).

As can be seen from the tables, *-ing* marking does not vary regularly with assessed oral proficiency. The question therefore remains whether it is a variable or a developmental feature. This question is further complicated by the fact that *-ing* marking is a non-standard feature that can be introduced by acquisition of new structures, which themselves represent developmental progress. Further research is required to resolve these questions.

4.2.4 Irregular Past Marking

Irregular past forms (including past participles) are the next most common form of marked verb after *-ing* marked verbs, both in gross terms and on a distributional basis. Tables 4.17 to 4.20 show the distribution of these forms in descending order of frequency across the sample. Although the total list of irregular verbs is quite long, it is worth noting that the number of verbs actually used by any single informant does not rise above ten until the 1+ oral proficiency threshold is attained, with the average number of verbs per informant at about three before that. (It rises to about eight thereafter). Further analysis of Tables 4.17 to 4.20 reveals that the five most common irregular verbs on a distributional basis are *went*, *said*, *got*, *saw*, and *came*—all of which occur in at least three interviews in each of the four interview groups.

The pattern of usage of irregular verbs seems to be basically the same for both language groups, with one exception. This involves *got*, which is used more (both frequency-wise and distributionally) by the Vietnamese speakers. In Standard English, *got* is either the past tense form or the past participle of the active verb *get*.

In this latter capacity it occurs in the idiosyncratic item *have got*, which is generally synonymous with *have*. In the speech of the learners in the study *got* has three functions. Two of these are the same as for Standard English. The third involves the use of *got* as a (frequently present tense) stative verb to signify possession—that is, in the contexts where *have got* would appear in Standard English. The appearance of this third function has an obvious phonological explanation—speakers either do not hear or have difficulty in producing the reduced auxiliary *have*. The majority of instances of *got* in the speech of the learners from both language groups involves either

the standard participial usage (both language groups) or the non-standard stative usage (Vietnamese speakers); in both cases to signify possession. In other words, *got* appears where *have* would also be appropriate. The wider distribution and more frequent use of *got* by the Vietnamese speakers is amenable to various explanations. One possibility is that this is the result of an application of the form-function constraint. (In fact, it seems that this principle can be grammatically formalized, with suitable adaptations, as a case of what Andrews refers to as “morphological blocking” within the theoretical framework of LFG [6], since what is occurring is that a more specific entry is blocking the choice of a less specific one. In order to apply the concepts of specificity and subsumption to learner interlanguage one would have to extend these notions to categorial distinctions—a step which is unnecessary with mature versions of a language—and extensions of this kind are beyond the scope of the present study, with the consequence that we will continue to use the original terminology here, with the caveat that if space permitted the “form-function principle” could be formalized in a way that would distinguish it from similar proposals in the literature, such as Andersen’s [4]). Returning, then, to the present case the argument here is as follows. *Have* is used by the Vietnamese speakers, though not the Poles, as an existential verb. For example:

ah... tortoise shell... where in Australia have?

- duc.1: [761] -

Given the form-function principle, which would demand that different verbs preserve different (and unique) functions, Vietnamese speakers may therefore tend to use *got* to signify possession and reserve *have* for its existential function. A possible objection here is that there are a significant number of tokens (see Tables 4.19 and 4.20 for details) of *got* as a participle as well as a verb, which means that *have* appears in the construction in any case. However, an analysis of the participial tokens of *got* reveals that they occur overwhelmingly in the scope of negation. The upshot of this is that *have* appears in the bound form *haven’t*, which appears to be a monomorphemic negator—see 4.10.3 for a detailed discussion. Thus, no direct duplication of form with *have* actually occurs, and the form-function principle is not violated. A more serious objection is that existential uses of *have* as exemplified above are not very frequent. If form-function considerations do not play a part in the selection of *got* as the lexical verb for possession, then it is possible that an input explanation might be the correct one. Thus, the Vietnamese speakers have had, in most cases, more exposure to native speech, where *have got* is the preferred form, than the Polish speakers. This point could do with further investigation.

Irregular Pasts and the Form/Function Principle

The fact that irregular past forms appear more frequently and probably earlier (certainly so in the case of the Vietnamese speakers) than regular past forms lends weight to the form-function principle, which predicts that a separate lexical form will be preferred for a separate function. The processing cost of lexical, as opposed to morphological, marking may also be lower. In fact, an investigation of the semantic principle of optimization of form and function from a speech processing viewpoint might in general be a fruitful exercise, and would supplement the formalization of this somewhat abstract principle as a form of morphological blocking.

4.2.5 Regular Past Marking

Regular verb marking (including past participles, but not verbal adjectives—such as *married*) is the next most frequent and widely distributed form of marking. For the purposes of this study verbs marked with non-standard syllabic *-ed* (that is, with an epenthetic vowel inserted to avoid a cluster) are credited as tokens. Such syllabic marking is more common amongst those lower down on the *ASLPR*, and may be the form in which *-ed* marking tends to first emerge. While the insertion of an epenthetic vowel before the */d/* past morpheme is explicable as a phonological simplification it may in fact be interpretable also as a spelling pronunciation: given the lack of aural salience for *-ed* the morpheme may come to the attention of learners through written material before it is perceived in speech. This would explain the behaviour of Polish speakers who produce the morpheme in its epenthesized form when it is within their native phonetic competence to produce consonant clusters like */kt/*¹. Tables 4.21 to 4.23 show the distribution of regular marked forms in descending order of frequency across the sample.

As can be seen from the tables, production of regular past tense forms is considerably more common amongst the Polish speakers than the Vietnamese speakers. None of the latter group with a an *ASLPR* rating of less than 1- produced a single token of a regular past tense form. Given that there is no such discrepancy between the two groups in regard to production of irregular past forms, the explanation is almost certainly phonological: Vietnamese lacks final consonant clusters, and Vietnamese speakers consequently experience difficulty in detecting and/or producing such clusters in English. Polish, on the other hand, is rich in consonant clusters—including some of those that result from *-ed* marking in Standard English—and so Polish speakers are not confronted with the same phonological problem.

(Proponents of contrastive analysis type explanations for syntactic phenomena could also point out that Polish speakers would already be sensitive to verb morphology phenomena. Given the phonological considerations

¹M. Pietukowski, p.c.

above, however, it would be very difficult to evaluate this proposal).

Amongst the Polish speakers, those verbs which occur in three or more interviews in both the first and second round of interviews are worked and lived.

Amongst the Vietnamese speakers, there are never more than two informants per round who produce regular past forms. Asked is the only verb which appears in two interviews in each round. These verbs are high frequency items at all proficiency levels, so regular marking of verbs is most likely determined by nothing more than frequency of use of the verb in question; the more it is used, the more likelihood there is of it being marked.

Tables 4.21 to 4.24 show that when regular past marking does occur, it appears to be generally contextually appropriate. In fact, for the Vietnamese speakers, all the tokens produced were in past contexts. In the case of the Polish speakers, however, the exceptions are quite interesting and help to throw some more light on the principles behind verb marking in learner language.

Non-Standard Regular Past Marking

As pointed out in the notes to Table 4.21, there are a number of tokens of past forms (flagged with asterisks in the table), produced in non-past contexts.

Irena S. uses stayed in both the first and second interviews in habitual contexts; both tokens are also subjectless. Although Jan R. uses worked seven times in past contexts in the first interview, he uses it an almost equal number of times in present or habitual contexts. The supposedly unmarked form, work, itself, however, appears only once as a finite verb: as the corrected form of worked in a past context! (Working is corrected to work in the same way in the second interview). Since work does appear eight times as a noun, worked may in fact be the unmarked verb form—or at least one of them, since working appears twice as a main verb in past contexts. Krystyna A., also in the first interview, uses her only regular past form, worked, once in a subordinate (when conditional) clause, and once in a future context (the other tokens of work are nouns). (There is also a token of worked as a noun). And Krystyna B. uses liked twice in present contexts, once after don't in a negated verb phrase.

In the second round of interviews—see Table 4.22—Andrzej J. produces founded—an interesting individual composite of both regular and irregular past marking—as the complement of will, Krystyna B. produces stopped as the complement of must, while Ludwiga J. produces observed as the complement of impossible and also provides two tokens of waited in (probably) non-counterfactual if clauses.

All of this is very similar to what has already been observed with non-standard *-ing* marking. Jan R., in the first interview, for example, pro-

vides an instance of baseline verb marking, with *worked*. Krystyna A. and Krystyna B. and Ludwiga J. provide instances of verb marking in subordinate clause environments, and the latter two plus Andrzej J. provide further tokens of marking in verbal complements.

Interestingly, too, in longitudinal terms, after the first interview Jan R. abandons his baseline marking of *work*, and Krystyna A. her subordinate clause environment and future context marking. Both informants, in fact, produce fewer (in the case of Jan R., far fewer) regular past forms as a result of these adjustments. (Compare, Huebner's Postulate of Second Language Acquisition, Number I, which states that "the acquisition of the target language function of a given interlanguage form may require the reduction of the use of that form in target language obligatory contexts" [85]).

With the Polish speakers, then, for whom *-ed* marking in Standard English is phonologically salient, we seem to have a reduplication of the situation described for non-standard *-ing*. The adoption of *-ed* marking may have more fortuitous consequences than for *-ing*, given the contexts which favour such marking. Addition of *-ed* to the verb in the most favourable temporal context, Past, may very frequently result in the right form being produced. And even among the syntactic environments, in counterfactual *if* clauses, there is a possibility of stumbling on the right form.

Of course, this means that, in the case of the Polish speakers at any rate, the data on regular past marking has to be interpreted with caution. The instances of regular past marking in apparently appropriate contexts may, to some undeterminable extent, represent a fortuitous coincidence of learner marking patterns and Standard English rules, and not the direct application of the Standard English rules themselves.

4.2.6 Third Singular '-S' Marking

Tables 4.9 to 4.12 show the occurrence of *-s* marking of verbs for the four interview groups. As is evident, the extent of *-s* marking varies somewhat from interview group to interview group. Variation aside, however, it is evident that *-s* marked verbs are not common at any stage, for either language group. This is superficially surprising, given the apparent simplicity of the rule; and of course failure by learners to apply it has generated a good deal of pedagogic frustration. As will become clear, however, the non-application of this particular rule is not surprising when considered from a learner viewpoint.

The first thing to note about the figures in Tables 4.9 to 4.12 is that they are simply counts of the number of tokens of *-s* marked verbs. Closer inspection of these tokens reveals a number of things.

First, not all such tokens involve third person singular verbs in present or habitual contexts. Those informants whose output is either totally or largely non-standard, person-wise, have their counts flagged with an aster-

isk. Tables 4.9 to 4.12 show that non-standard usages are common amongst informants under level 1 on the *ASLPR*. Table 4.25 provides a detailed breakdown in terms of person and time reference of *-s* marking for all interviews in which it occurred.

The two main categories for the breakdown are Person and Time Reference. While the overwhelming number of tokens produced are third person singular present tense, there are a significant number of exceptions. With these, where the rule governing person and number is violated, the violation generally involves the marking of a verb with a first person singular subject; and where the rule governing time reference is violated, it is generally by a verb whose time reference is past. There are in fact a sufficient number of these exceptions for only twelve of the twenty-eight interviews in which *-s* marked verbs are to be found to exhibit totally standard usage. In addition, only three informants (Dung, Tam and Ludwiga J.) maintain totally standard usage through both interviews. And this is with no more than two tokens per interview.

Thus, where it occurs at all, *-s* marking could not be said to be very well established. This brings us to the second point, which is that *-s* marking in all probability occurs in only a small percentage of "obligatory contexts". Definitive statistics are not presently available in defence of this point. Table 4.26 might give a very rough idea of the situation, however. It contrasts the number of occurrences of he and she in the first and second interviews with the number of *-s* marked verbs, excluding *is* and *has*, found after either pronoun. Even allowing for the variety of contexts in which these subject pronouns could appear without occasion for *-s* marking (with verbs whose tense is other than present, with modals, in questions, etc.) the number of marked verbs would seem to be very small.

Why should such an apparently straightforward rule be so incompletely applied?

There are probably a number of mutually reinforcing reasons.

From a form-function viewpoint the *-s* morpheme in English is particularly confusing. It marks noun phrases as plural, denotes the genitive case, and serves as well as a (singular) verbal marker. Morphological marking of any kind probably runs contrary to the form-function principle at its strictest, in that it does not result in the production of clearly separate forms, each with a unique function. A morphological marker itself which has one form and many functions is worse still!

From a functional viewpoint, the third singular *-s* marker is redundant, since person and number are already marked in the subject noun phrase or pronoun.

In addition, if learning is driven by principles of universal grammar, learners of English are required to master an exception to general principles of verb marking in acquiring the third person singular *-s*. This is because the observed tendency in verbal paradigms is for the third singular to be the

unmarked form (compare Spanish or Italian) [114]. In English, of course, just the reverse is the case, and so learners have to swim against the universal current, as it were.

From a speech-processing point of view the production of the plural *-s* morpheme is a discontinuous phenomenon, in that the constituent governing plurality, the noun phrase, and the plural morpheme are separated from each other by a verbal constituent. It has been shown in studies of word order that production of utterances involving discontinuous phenomena involves the violation of certain optimizing constraints, which considerably increases the computational difficulty of producing these structures [126]. Examples of structures in which the appropriate discontinuous order has not been attained are not uncommon in learner language, and attest to the process hypothesized above:

he's have

- ka.1: [624] -

she's remember me and my sister

- vinh.1: [348] -

(For a more detailed discussion see 4.12.4). All of this constitutes a powerful disincentive for the learner. The rule of plural *-s* marking may be conceptually simple, but if all, or even some, of the above holds, it should be evident that conceptual simplicity is no guarantee of linguistic "naturalness" or "simplicity". And the evidence surrounding the acquisition of third person singular *-s* suggests that the latter principles are the ones which matter to the learner.

4.2.7 Aux-ing Marking—The Continuous Aspect

This section deals with the production of verbal structures to indicate the continuous or progressive aspect. In Standard English these take the form [BE]...[VERB]-ing. Syntactically, the task faced by the learner acquiring these structures is thus somewhat more complicated, since more than one element has to be manipulated and an auxiliary has to be introduced. The same is true for the *aux-en* structures dealt with in the next section. This syntactic complexity reflects greater semantic complexity as well, of course. However, in the case of these structures, it appears that mastery of the syntax does not signify mastery of the underlying semantics—an obvious point, but one worth reiterating for the more complex structures.

Tables 4.9 to 4.12 show the distribution of *aux-ing* structures for the four interview groups.

As can be seen from the tables, it is only amongst informants over the 1+ level on the *ASLPR* that non-formulaic tokens of *aux-ing* structures occur. In addition, there is a distinct difference between the two language groups in the production of these structures, which are far less common in the output of the Vietnamese speakers. (In fact, valid tokens may be restricted to one or, at best, two informants).

A considerable number of the tokens produced have been labelled formulaic. The principal reasons for this are:

1. If all the tokens are repetitions of the same phrase or contain the same verb or verb phrase, or
2. The main verb is headed by monomorphemic proforms such as I'm or I am.

These reasons cover the tokens judged to be formulaic in **jb.1** (two of four), **ka.2**, **dung.1**, **dung.2**, **sang.1**, **hoa.2**, **long.2**, **phuc.1** and **phuc.2**. (Further information is provided in the notes to Tables 4.9 to 4.12).

For the apparently *bona fide* tokens of *aux-ing* there are some interesting observations to be made.

In the first round of interviews with the Polish speakers, Andrzej J., Krystyna B. and Mieczysław M. are the only informants to produce instances of non-formulaic tokens. For these speakers there are in fact quite a large number of tokens. What is interesting about their output is that in all cases the majority of the tokens occur in past contexts. The time reference is appropriately marked in the auxiliary, was—which, at this stage, appears to be invariant for number. This is itself interesting because copular *be* is realized as *were* in the appropriate circumstances (past reference, plural or second person singular) by the same informants. This is another instance of how contextual and categorial features need to be taken into account when describing the spread of a form. Thus, while a *was/were* distinction exists for these speakers in locative and equative constructions, where *be* is categorially a copula, in *aux-ing* constructions, where *be* is an auxiliary, the distinction has apparently still not emerged. It is also worth noting that while *were* occupies three of the five paradigm slots for past forms of *be*, the initial form chosen is *was*—probably because it is the first person singular form. A neat instance of this contrast between copular and auxiliary *be* is provided in **aj.1**:

Mm, yes... from time to time... and, er... when we... when we,
er... were in Austria, er..., we... er, was writing to him

To return to the main theme, however, the notable thing about these tokens is that in the first interviews (or instances) past contexts predominate. In **aj.1** the ratio of past marked tokens to present or other is ten to five. In **mm.1** the ratio is nine to four; and in **kb.1** it is a rather less decisive four to three. This predominance of past referent tokens can also be observed in the output of one of the two Polish speakers whose use of the form dates from the second interview, Ewa S., where the ratio is two to zero. Given a degree of interchangeability between past continuous and preterite forms in Standard English itself, it is difficult to definitively determine with some of the tokens whether the continuous form is appropriate in Standard English terms or not. Nevertheless, in **aj.1**, eight of the ten tokens would appear to be inappropriate, with one optionally possible and one appropriate. In **kb.1**, one token is inappropriate, one is optionally appropriate, and two are appropriate. In **mm.1**, one token is inappropriate, and the other nine are optionally appropriate. In **es.2**, one token is inappropriate, and two are appropriate.

The first thing to note here is that where there is a high ratio of past to present tokens—**aj.1** and **mm.1**—there is also a high number of inappropriate or optionally appropriate aspectual selections. Pursuing this further, by referring back to Tables 4.17 to 4.23 and 4.24, it turns out that, with one exception, the alternative forms to the *aux-ing* forms actually employed—the regular or irregular preterites—are not produced. In **aj.1**, doubtful *aux-ing* tokens occur with the verbs *work*, *go*, *mind*, *write*, *study* and *concentrate*. With the exception of *worked* none of these verbs occur in simple past form. In **mm.1**, optional *aux-ing* tokens occur with the verbs *work* (seven tokens) and *think* (one token), neither of which occurs in preterite form. (The same is true for Krystyna B., who uses *study*, *walk* and *do*).

In other words, in these speakers, where *aux-ing* tokens are both largely past and either semantically inappropriate or at best optional, for the verbs concerned they are the invariant past form. This implies that the “optional” semantic status accorded to the past tokens of *aux-ing* in **mm.1** is probably meaningless—there is no visible alternative.

Even the exception—*worket* in **aj.1**

is probably not a case of random coexistence of two forms. This can be seen from the following example:

another work... and then I was...eh, I worket, er, in the rlittle
private farm [firm]... er, when, er, I wor... when I worket... w... was
working by, er, painter...

- aj.1: [197-199] -

Here, it appears that what is happening is that the informant is attempting to correct a phonetically non-standard *worket* token, by replacing it with

an *aux-ing* form. An examination of the context does not suggest that this is particularly semantically well motivated (the discourse at this point is not very coherent), but at least the latter form is phonetically correct. This uncertainty on the part of the informant concerning *worket* probably explains the joint presence of phonetically correct preterite forms, phonetically incorrect ones, and *aux-ing* forms. Even here, then, there is no real randomness or duplication of form—the variation is produced by an attempt to achieve phonological standardness. The *aux-ing* form seems to constitute the most accessible path towards this goal. (Just as the *-ing* form does for earlier attempts at less specific verb marking). Further confirmation of the role of *aux-ing* as a marking strategy in cases where obvious doubt exists also comes from **aj.1**:

I ... when this man, er...er...er... was, er... had a work, er...er,
he, er, taught me about it, and, er... I, er... I goed...

GB Oh, ho!

I Scuse me, this time [tense] is not good... I was going to... to
him... and I worked there

- aj.1: [210-7] -

Here, when the informant becomes aware that *goed* is not the correct form he explicitly indicates it and then resorts to the *aux-ing* form. (*Went* is not produced by Andrzej J. in either of his two interviews).

Aux-ing Marking—An Interpretation

The conclusions to be drawn from the above discussion should now be fairly obvious. For some informants at least, *aux-ing* structures simply provide an invariant way of past-marking particular verbs. In this capacity they can coexist with other forms of past marking. Thus both Andrzej J. and Mieczyslaw M. produce regular and irregular past forms. It is possible that this particular form of *aux-ing* evolves out of non-standard *-ing* marking. This intuitively appealing conclusion receives some support from the data. The three verbs which receive non-standard *-ing* marking in past contexts in **aj.1** are *work*, *study* and *write*, and these all figure amongst his *aux-ing* verbs as well. The same is true for *think* in **mm.1**. However, there are no instances of the high frequency *aux-ing* verb *work* amongst his *-ing* marked tokens. If non-standard *aux-ing* structures do in fact represent a refinement of the hypotheses which result in non-standard *-ing* marking, then we have a very good example of how a highly non-standard feature can contribute to the eventual acquisition of standard rules. And of course this constitutes a very powerful argument against pedagogical suppression of phenomena such as non-standard *-ing* marking.

Whether the phenomenon of non-standard past *aux-ing* observed in **aj.1** and **mm.1** is a general one is not clear. Nor is it clear that past *aux-ing* tokens are the first non-formulaic instances of *aux-ing* to appear. Of the two informants who begin to produce non-formulaic *aux-ing* structures in the second interview—Jan R. and Ewa S.—the former's tokens are mostly present and the latter's all past. Although past tokens predominate in the output of Andrzej J. and Mieczyslaw M., there are a considerable number of semantically standard present tokens, and there is no way to deduce what came first.

One possibility is that non-standard *aux-ing* has to be looked at in the context of the verb marking system as a whole, where it can be understood as an overgeneralization phenomenon resulting from the spread of *aux-ing* structures to past contexts, or perhaps as a systematic attempt to mark all past context verb phrases in some way. In this connection it is worth pointing out that the most frequently chosen verbs for non-standard *-ing* marking are the same as those verbs which are legitimately marked with the morpheme, which strongly suggests that both standard and non-standard *-ing* marking are a product of the same basic operations. It is clear that this issue warrants further attention. Hopefully, the longitudinal sample should provide more specific evidence on how individual systems evolve.

In the second round of interviews with the Polish speakers, three more informants produce possible non-formulaic tokens of *aux-ing* structures. These are Jan R., Jerzy B. and Ewa S. In **jr.2**, three of the four tokens are present and one is past. One token—a present context one—is semantically non-standard. It would be interesting to check later interviews with Jan R. to see whether he subsequently passes through the phase characterized by a predominance of non-standard past tokens observed in **aj.1** and **mm.1**. In **jb.2**, the non-formulaic status of the four tokens is not so definite as for **jr.2**. One token is a repetition of a formulaic future usage which occurs in the first interview, and two of the three others are headed by the possible monomorphemic proforms *he's* and *she's*. All tokens, valid or not, are semantically standard. In **es.2**, the two tokens produced are both past and semantically inappropriate, so this speaker may possibly be passing through the non-standard past phase also. Two tokens is not much to go on, however, and it would be interesting here too to check later interviews.

Turning to the speakers who produced non-formulaic tokens in the first interviews, we find that the ratio of past to present tokens is much more even. In **aj.2**, it is five to six, and the past tokens produced are semantically standard. In **kb.2**, it is six to eight, with two of the past tokens semantically appropriate and four optional. In **mm.2**, the ratio is three to four, with one past token semantically standard, one optional, and one inappropriate. This seems to indicate an evolution in the grammars of at least Andrzej J. and Mieczyslaw M. towards a more standard use of *aux-ing* structures. (Krystyna B., it will be remembered, did not produce a marked number of

non-standard past tokens in her first interview).

A further development of interest is the appearance of a *was/were* distinction for past auxiliaries in the two informants highest on the *ASLPR*—Krystyna B. and Mieczyslaw M. In *aj.2*, however, in the one obligatory context for *were*, *was* is produced.

Aux-ing Marking—The Vietnamese Speakers

As already noted, the above discussion, concerns only the Polish speakers. Amongst the Vietnamese speakers, tokens, formulaic or otherwise, are less frequent. In all but two cases, where they occur at all, *aux-ing* tokens are almost certainly formulaic. The exceptions are Canh and Phuc. In the case of Phuc, four tokens are headed by the proform *I am*, and one is infinitival; it is largely by virtue of the remaining token that there are grounds for not considering these to be formulaic. The deciding token is the following:

they come to... a port, you know... many people were waitin(g) for them... but all mos(t) of them are

- phuc.1: [876-7] -

This is semantically appropriate (the context is past) and exhibits the singular/plural distinction in the auxiliary, made elsewhere only by the Polish speakers most advanced on the *ASLPR*. (It raises interesting questions about the possible co-presence of formulas and parsed structures, or whether it is legitimate to consider likely formulas to be parsable items once an almost certainly parsed example of the same kind appears—see 2.2.3).

The case of Canh is somewhat problematic—his use of *aux-ing* structures seems to be both irregular and idiosyncratic when compared to the behaviour of the other informants. Non-past tokens constitute the whole output. Of these, one is semantically inappropriate for aspectual reasons, three are inappropriate for temporal reasons (the marking is present, while the reference is past), three are optionally progressive, and one obligatorily so. Of the tokens which should have borne past marking, one is definitely progressive, one optionally so, and the other inappropriately marked. The rules governing production of *aux-ing* tokens in this informant are consequently not obvious. Six of the eight tokens occur in subordinate clause or quasi-relative clause environments, or questions. For example:

You see... the mon(k)s... I think they are hiding for military service, they want to go...

- canh.1: [2426-7] -

or:

Vietname(se) come here... some people, they are... living in the...
 countrysi(de)...

- canh.1:[1450-1] -

or:

Ah... have... have you ever think, ah, the Vietname(se) people,
 come Australian, ah... they are making, ah... ah... problem(s)

- sang.1: [1847-8] -

It is just these environments which favour *-ing* marking, so the explanation may lie in this direction.

For the Vietnamese speakers then, we are left with one informant whose system with regard to *aux-ing* is superficially standard (Phuc) and another whose system is difficult to characterize (Canh). This does not permit any meaningful conclusions about developmental processes to be made for this group. The lack of *aux-ing* marking in two speakers whose ratings on the *ASLPR* are comparable to those of the Polish speakers for whom numerous tokens of *aux-ing* exist points to a conflict between assessed oral proficiency and syntactic features. This conflict is also evident in the case of Ludwiga J., who produces no *aux-ing* tokens in the first interview, and only formulaic tokens in the second (it is not only in this that Ludwiga J. resembles the Vietnamese speakers).

Aux-ing Marking—A Tentative Developmental Sequence

From the evidence to hand, it is possible to suggest a (take note) tentative developmental sequence for *aux-ing*. Since the first step in any such sequence will be the formulaic tokens, it would be appropriate to make some observations on these before proceeding.

In terms of form and apparent temporal reference, the great majority of formulaic tokens are present context. The formal exceptions come from **jb.1** (two will be tokens), **jb.2** (one will be token), and **long.2** (one will be token). The exceptions in time reference come from **jr.1** (a dubious token) and **hoa.2** (two tokens), plus, of course, the formal exceptions already cited. Definitive judgements on the aspectual appropriateness of the formulaic tokens are difficult to make, and serious analysis of the semantics of formulas may not be a meaningful enterprise, in any case. Bearing this in mind, however, it appears that with the exception of **hoa.1** and **hoa.2**, where the tokens are definitely aspectually inappropriate, the remaining instances of formulaic tokens are both temporally and aspectually appropriate. While this might seem surprising at first glance, it should be remembered that formulas, especially with informants not right at the beginning of the learning

process, are likely to be produced only in the discourse situations in which they have been learnt, where they are normally correct.

The first step in the sequence, then, is characterized by the production of formulaic tokens, whose form and probable temporal reference is generally present. If the reference is not present, then it will almost certainly be future—for instance, **jb.1**, **jb.2**, **lj.2** and **long.2**.

The next step might then involve the “deformularizing” (that is, spread) of present form tokens, as in **jb.2** and **jr.2**.

Following this, there could be a stage where past forms are introduced and then come to predominate, but with the semantics very much awry, as in **aj.1** and **mm.1**. The appearance of *was* as an auxiliary during this stage, it is worth noting, postdates its appearance as a copula, as is the case with *were*, which emerges in the next stage.

There would then follow a readjustment during which appropriate constraints on the past forms were introduced. During this stage, the past auxiliary would develop a distinct plural form.

Aux-ing Marking—Conclusions

In terms of general principles, then, the developmental processes revealed in the acquisition of *aux-ing* structures reveals a number of interesting things.

1. It appears that a final target structure may be the product of different acquisitional processes, even in the same informant. Thus, present form *aux-ing* structures may evolve out of formulaic tokens, while past form structures of the same kind may primarily represent a refinement of the hypotheses responsible for non-standard *-ing* marking of verbs, rather than a straightforward generalization of present form structures to other (primarily past) contexts. In other words, learners using *aux-ing* structures in one temporal reference context do not perceive that it is the aspectual feature of non-completion that governs production of the structure, and having made this perception go on to produce the structure in other temporal contexts, when aspectually appropriate. When they do produce *aux-ing* structures in other contexts it is generally in response to some more elementary need (such as that of marking tense), and the choice of the *aux-ing* structure is determined not by aspectual semantics but by earlier patterns of verb marking in the informant's own developmental history. The consistent association of the aspectual feature of non-completion with *aux-ing* structures in fact appears to follow the spread of the structures to tense contexts other than the present, and is not absolutely established even in the most advanced informants in the study.
2. Following on from this, the fact that, at least for some learners, highly non-standard patterns of verb marking can evolve into, or contribute

to the evolution of, standard patterns (as *-ing* marking does in **aj.1** and **mm.1**) provide pedagogical grounds for tolerating these patterns in learners. Even the most apparently non-standard features of learner language may turn out to be developmental stepping-stones.

3. The fact that *were* is realized as a copula while not necessarily as an auxiliary reinforces the case for implicational scaling as a means of understanding learner language phenomena.
4. Finally, the fact that superficially standard phenomena, such as the *aux.ing* tokens in **mm.1**, turn out, when inspected more closely and in the context of other aspects of an informant's output, to be governed by rules quite different from the standard ones, emphasizes once again the necessity of looking at learner language in terms of its own dynamics, rather than those of Standard English, even when the latter appear to account for what is initially observed.

4.2.8 *Aux-en* Marking

aux-en marking, as defined here, encompasses those Standard English structures which are characterized by an auxiliary derived from *be* or *have* and a main verb in the form of a past participle. This structural description actually covers a number of distinct possible sub-structures, if lexical and semantic considerations are taken into account.

Referring to Tables 4.9 to 4.12, we can see that the main category of *aux-en* has various subdivisions.

The first of these subdivisions, and the category into which the largest number of tokens fall is that of verbal adjective. This is in fact a category with somewhat ill-defined borders. Verbal adjectives are morphologically past participles. Formally, structures containing verbal adjectives look like passive structures without a surface agent—(for instance, *Coal is mined*). Semantically, however, they involve states rather than processes. (This semantic distinction is recognized in some languages—such as Spanish, which employs a different auxiliary for states and processes). Some verbal adjectives, however, appear to straddle this distinction between states and processes. Common examples would be verbal adjectives like *worried*, *interested*, and even *tired*. While these verbs describe physical or mental states, they can appear in passive-like structures—*He is worried about his work*, *They are interested in the offer*, *I'm tired of films*. All of these examples have obvious active counterparts. With such structures, the agentive preposition is not the usual *by*, and this may be a morphological way of flagging their difference from regular passives.

One approach to verbal adjectives would have been to simply treat them as adjectives with an accidental resemblance to past participles and exclude

them from a discussion of the learner's verbal system. This seemed inadvisable, however.

In the first place, since verbal adjectives are morphologically identical to certain verb forms their use by a learner is significant, in that it indicates that the learner can at least produce these forms. This may help to decide questions such as those concerning the role of phonological difficulty in inhibiting, say, regular verb marking. If an informant produces regular look-alike verbal adjectives but not regular pasts then we would know that phonetic difficulty alone was not the reason for the absence of the latter. The present study provides some interesting material in this connection.

In the second place, the structures in which verbal adjectives appear resemble other apparently more "difficult" structures. Simple equative structures containing verbal adjectives resemble those of agentless passives, and these same structures extended into pseudo-passives by the addition of a prepositional phrase are similar to full passives. These resemblances, and the abovementioned semantic features of some verbal adjectives, may provide the learner with an entree to acquisition of full passives. As we will see, the present data provides some support for this hypothesis.

Regular Verbal Adjectives

Regular verbal adjectives, as can be seen from Tables 4.9 to 4.12, are more frequent among the Polish speakers than the Vietnamese speakers. This is a reflection of the situation *vis-a-vis* regular past marking, and it helps to confirm that it is phonetic difficulty which inhibits the production of regular past forms by the Vietnamese group.

This conclusion is strengthened when we look for verbal adjectives or past participles in the output of those informants who do not produce any regular past forms. In the fifteen interviews concerned, verbal adjective or prepositional phrase tokens with *-ed* marking are to be found in only three. Given that most speakers who produce regular pasts also produce verbal adjectives, this strongly suggests that phonetic difficulty is a factor in inhibiting the production of regular past forms.

Interestingly, in two of the three cases where the barrier to regular past marking does not appear to be phonetic (Barbara B. and Long) there are other instances of greater than normal disregard for morphological marking [94].

Amongst the verbal adjectives produced by more than one informant are married, tired, closed, and surprised.

Irregular Verbal Adjectives

Irregular verbal adjectives, other than got, occur only in the output of those informants rated most highly on the *ASLPR*—Ludwiga J., Mieczysław M.

and Phuc. Since irregular verbal adjectives differ from regular verbal adjectives only in being less numerous in the target lexicon, their restriction to these speakers is probably a matter of lexis. Use of irregular verbal adjectives other than *got*, then, may be a useful benchmark for determining the size of a learner's lexicon.

Got itself deserves special mention. The peculiar characteristics of this verb have been discussed at some length in 4.2.4, to which the reader is referred. To recap just briefly, *got* exhibits the following notable features:

1. Its use as a participle is far more common amongst the Vietnamese speakers than amongst the Polish speakers. In the latter group, only Mieczyslaw M. and Zygmunt J. produce tokens of participial *got* (three between them), while in the former, Duc, Dung, Tam, Canh, Long, and Phuc produce a total of fifty tokens. This count would in fact be much higher if tokens of the semantically identical verbal form of *got* were included—see Tables 4.19 and 4.20.
2. *Got* appears as a participle, as opposed to a non-standard verb signifying possession, mainly under the scope of negation. That is, most cases of participial *got* occur in the phrase *haven't got*. This could mean that for some speakers at least *got* is not really a participle at all, but rather a verb. Parsing *haven't got* in this way eliminates the distinction between the participial form and the non-standard verbal form, which tidies this part of the grammar, but at the cost of forcing *haven't* to be classified as a idiosyncratic negator, which complicates the proposed system of negation.

It is not clear why *got*—be it participle or verb—is so much more frequently produced by the Vietnamese speakers. There are various possibilities.

At the time of the interviews almost all the Vietnamese speakers had had considerable naturalistic exposure to English, while the Poles had not. *Got* is probably heard more outside the classroom than within it. Sang, the one Vietnamese informant whose exposure to English at the time of our first meeting was largely formal, does not use *got* in the first interview, while in the second, by which time he was working with Australians, he does. (It would be worth looking at later interviews with the Polish speakers to see if they use *got* more frequently as their conditions of exposure to English change).

Another possibility, already canvassed, has to do with the fact that Vietnamese speakers use *have* as an existential verb and in seeking to preserve an identity between form and function develop another form to signify possession. While this would be a rather neat explanation, it does not receive much support in the data. There are a good many tokens of possessive *have*

in the output of the Vietnamese learners—and while existential *have* is reported to be quite common amongst Vietnamese learners ², in the present study there are few examples to be found (three in **duc.1**, one in **vinh.2**).

Closer scrutiny of the contexts in which *have* and *got* appear would perhaps produce a semantic or discourse-based explanation of the *got* phenomenon. In the meantime, the input explanation seems the most probable.

Agentless Passives

These structures have the form *SUBJ + BE + PAST PARTICIPLE*, and are therefore structurally identical to verbal adjective structures. The difference between agentless passives and equative verbal adjective structures is a semantic one. Examples of agentless passives (henceforth **APs**) from the data are:

English is... used in all... all... world

- es.1: [52] -

Lignite... eh, was, er, transported to the power station

- mm.1: [242] -

before I get married, you know

- long.1: [1060] -

two of my friends were injure(d)

- phuc.1: [832] -

Some of the tokens of *APs* are clearly formulaic. With others it is difficult to judge—for instance, the token from Ewa S. Reliable judgements can only really be made if an informant produces full passives also. Nevertheless, it is quite probable that the production of agentless passives represents a step towards the development of full passives. This hinges on the learner perceiving that the same structure can express a state or a process. Once this semantic distinction has been made the learner is in a position to explore what kind of syntactic extensions to the basic structure can be used to flag the agent in the process. A discussion of the full passive structures produced may perhaps make this last point clearer.

²G. Brindley, p.c.

Full Passives

Full passives have the structure *SUBJ + BE + PAST PARTICIPLE + PREPOSITIONAL PHRASE*. The prepositional phrase signifies the agent (demoted subject) in the process referred to, and is normally headed with *by*.

Regular full passives occur only in the output of the two informants most highly placed on the *ASLPR*—Mieczyslaw M. and Phuc, and even here the number of tokens is very small. Examples are:

Yes but, eh, I, heh, eh, I know that, eh, Polish government is, er,
press(ed) by Russian government

- mm.2: [357-8] -

you were accepted by Australian deligation

- phuc.2: [980] -

One other informant, Krystyna B., produces a pseudo-passive structure:

I am worried about Poland... about my family in Poland

- kb.2: [354] -

This is an interesting token, because it involves a verb of the type common amongst verbal adjectives—one referring to a state of mind or body. The evidence is obviously too scanty for any valid conclusions to be drawn, but it would be interesting to determine if the case of Krystyna B. is a representative one—that is, are the pseudo-passive structures that result from making an agentive connection with this particular class of verbs the precursors of true passives? (There is a similar example in **mm.1**).

4.3 Passives—Summary

Passives are morphologically, semantically and pragmatically complex. This complexity is reflected in the apparent lateness of their acquisition by the informants in this study. While there is insufficient evidence to provide a detailed description of how they are acquired, some suggestions have been made. Traditionally, passives are taught by demonstrations of how they are derived from active structures. If there is in fact a developmental connection between verbal adjectives, agentless passives, pseudo-passives and full passives then pedagogic practice is far removed from the paths followed by learners.

4.4 Perfects

The final structure discussed under the heading of *aux-en* is the one generated by the expression of the perfect aspect. This is characterized by the elements *HAVE + PAST PARTICIPLE*. Depending on other aspectual considerations a second participle (present or past) can follow the first; in which case the first participle is coerced to *been*.

The semantics of perfects are very complex. At least four distinct conditions for their production have been identified [122]. Not surprisingly, then, examples of perfects are not common in the present data. No figures for likely or obligatory contexts for perfects throughout the interviews are available. However, as a matter of deliberate policy, almost all of the second-round interviews began with a question about what the informant had been doing since the previous interview, so that there were, in most cases, occasions for the production of perfect structures. In addition, subsequent discourse would have generally produced others. Many informants were unable to understand the question about what they had been doing, and it often had to be rephrased in some other way. Of probable relevance here is the fact that the key time adverb in this question, *since*, is itself used by only four informants - Barbara B., Ewa S., Mieczyslaw M., and Phuc. It is quite probable, then, that many of the other informants did not even understand the adverbial component of the question; and adverbs, as we shall see, appear to be the basic elements in learners' schemes of temporal reference.

Amongst the Polish speakers, only Ewa S. (one token) and Mieczyslaw M. (three tokens) produce recognizable examples of perfects. Ewa S. and Krystyna B. also both produce formally correct structures with preterite temporal reference. In the case of Ewa S.'s acceptable token (in *es.2*) the context would appear to demand a present perfect continuous whereas a present perfect only is supplied. Amongst the Vietnamese speakers, only Sang (both interviews) and Minh produce tokens of the present perfect. Minh produces only one token, which could well be formulaic. The semantics of at least two of Sang's tokens are not entirely standard, and in all but one case (or possibly all) the participle is not marked with any realization of the *-ed* morpheme. Moreover, three of the six tokens produced occur with one of the various keywords associated with the perfect aspect, *just* - which raises some doubt as to their non-formularity.

In any case, whatever judgement one comes to about the uncertain cases, the conclusion remains much the same: perfects are very infrequently produced. To judge from the adverbial evidence provided by use of *since*, only a very few informants even indicate any productive mastery of one of the most basic semantic strands of perfectivity in English. Where perfects do appear, except in a few formulaic contexts, they are frequently defective. With a target aspectual system so intricate that the apparently opposite

notions of perfectivity and continuativity may require simultaneous expression, this is not surprising. Equally, it is not surprising that most of the learner's communicative efforts can successfully ignore the level of discrimination represented by perfects.

Developmentally, emergence of a primitive perfect may coincide with other features observable in a morphologically advanced learner above level 1+ on the *ASLPR*. Since the number of tokens is always going to be rather small, there would be considerable difficulty in practice in sorting the formulaic tokens from those displaying some degree of rule generation. As is the case with other formulaic structures of very limited generalizability, those tokens which appear may seem quite standard. Appearance of perfect structures, then, might not be a very practical developmental benchmark.

4.5 Verbal Nominalizations

The final category to be examined under the rubric of verb marking is that of gerunds. Given the importance of *-ing* marking in learner language, the gerund, as a legitimate case of this form of marking deserves some attention.

For the purposes of the present study, nominalized verbs for which no common alternative form exists—such as swimming and walking—are not classified as gerunds. In the data to hand the majority of tokens classified as *bona fide* occur in prepositional phrases. Examples would be:

after our... leaving Polish

- lj.1: [407] -

I don('t) know abou(t) speaking English

- canh.1: [503] -

I got (a)noder job for... doin(g) mysel(f)

- long.2: [30] -

There are also some tokens where the nominalization is the subject of the sentence, or the direct object:

my writing English is better than my, er... speak

- aj.1: [27] -

Makin(g) sure you can do it

- phuc.2: [260] -

I.../...try translate my thinking in Polish to English

- lj.2: [290-1] -

The production of gerunds such as those above requires a good deal of structural complexity and clear categorial definition within the learner's speech, and is a correspondingly restricted phenomenon, as is evident from Tables 4.9 to 4.20.

One informant from the higher *ASLPR* bracket, Canh, produces a number of curious nominalizations, which seem almost the result of categorial uncertainty, such as the following example:

or you mu(st) go to the hiding... from police

- canh.1: [1498-9] -

These are, however, uncharacteristic of the sample as a whole.

Lower down on the *ASLPR*, Krystof S., Jan R. and Barbara B. produce several lexically non-standard tokens of nominalized verbs. What is interesting about these is that all the tokens occur in existential sentences:

in Austria is not... er... working for... not platz working

- bb.1 [107-8] -

Sunday... mm, is big, er... running

- jr.1: [1117] -

It is also worth noting that all three informants, particularly Jan R. and Barbara B., are frequent users of non-standard marking. It is very possible, given this, that their gerunds are fortuitous products of their favoured strategy of using *-ing* when marking appears to be required. This conclusion is reinforced by the fact that the tokens produced are non-standard and not likely to have been heard.

The cases of Jan R., Barbara B., and Krystof S., are another example of how non-standard *-ing* marking can result in standard patterns.

It would require further investigation to determine whether these cases genuinely represent the beginnings of nominalization. The question of why it is existential sentences in which gerunds first make their appearance needs further attention also.

Use of gerunds may be a reasonable indicator of syntactic development. While the number of tokens in the study is not large, their pattern of use is clear cut, and there seems to be no problem with formulas.

4.5.1 Adverbial Tense/Aspect Marking

It should be clear from the preceding discussion that morphological marking of verbs while a productive phenomenon in developmental terms is nevertheless, for the majority of the informants in this study, a restricted one. Given the functional importance of being able to signify tense/aspect distinctions, learners who are in the process of acquiring verbal morphology clearly have to have other means at their disposal for indicating temporal reference. One way to do this is by using lexical markers—time adverbs.

Tables 4.93, 4.94 and 4.95 and 4.96 provide figures for the distribution of time adverbs in the present corpus. The patterns of use that emerge are, somewhat surprisingly, quite implicational in appearance. For both groups, as might have been expected, the most frequent and widely distributed time adverbs are *before*, *after*, and *now*. As can be seen, this basic tripartite temporal distinction is established quite early. Once this distinction emerges, “directional” adverbs of time, like *ago*, and sequence markers, like *then*, can be seen to emerge. (*Before* and *after* can also function as sequence markers, of course). During this stage “aspectual” adverbs, such as *still*, *yet*, and *already* also appear. Later additions to the repertoire of adverbs tend to constitute refinements of the basic categories, like *yesterday* and *tomorrow*. The implicational-type patterning that can be observed in the tables suggest that this process of refinement is gradual and predictable. In general, perhaps because of the greater difficulties posed to them by morphology, the Vietnamese speakers use time adverbs more extensively than the Polish speakers.

The role of time adverbs in temporal reference and their relationship to these lexical markers and morphological marking are topics which could be fruitfully researched in much more detail. In this connection, it would also be a worthwhile enterprise to try to establish what interrelations might exist between temporal, spatial and discourse deixis as expressed by time adverbs, and personal and deictic pronouns. While not much is known about these matters at present it is obvious that the use of time adverbs should be fostered in pedagogical practice, since they are acquired early, are functionally important, and may even assist the learner to develop a framework of temporal reference appropriate to English.

4.5.2 The Verbal System—A Tentative Order of Acquisition

Keeping in mind that any postulated order of acquisition is predicated on cross-sectional data and needs to be verified by reference to longitudinal studies, we can suggest the following order of acquisition:

1. Following categorially uncertain lexical items, such as *work* the first definite verbal elements are attested to by

2. *-ing* marking, which is the first form of marking to emerge. Initially purely a categorial marker, *-ing* seems to come to be produced more frequently in “marked” environments—in past contexts, and subordinate clauses, for instance. *-ing* marked verbs are followed by some irregular past forms. Initially, these are not always produced in past contexts.
3. The next form of marking to appear is regular past marking. Phonetically, the /d/ marker may be preceded by an epenthetic vowel, even when it is already within the phonological competence of the speaker to produce the relevant cluster, as it frequently is with Polish speakers. Once again, these forms may not always appear in past contexts.
4. This is followed by third person singular *-s* marking. Such marking may not always initially occur in third person singular contexts.
5. *aux-ing* forms are the next verbal forms to appear. Semantically, these forms may serve as an alternative form of simple past marking for some speakers, and be restricted to particular lexical items. A good deal of idiosyncratic behaviour can be expected with these forms.
6. At about the same stage some productive *aux-en* forms may also appear, having been prefigured by verbal adjectives and formulaic or pseudo-passives. Productive expressions of perfectivity are very rare, as are full passives.
7. Also at this point, or perhaps even later, we find some standard-looking verbal nominalizations. At an earlier stage, a very limited number of non-standard *-ing* marked verbs may appear in existential sentences in the output of some informants.

While the above sequence has been described in conventional terms, like “regular” and “irregular”, it is worth keeping in mind that superficially different forms of verb marking may in fact be governed by a small set of underlying principles for quite some time in the learning process. These principles essentially entail the marking of verbs in some way in syntactic or temporal contexts which are “marked”—basically, more complicated in some sense. As a result of this, target-like patterns of marking, such as *-ing* marking in complements of verbs of perception or even *-ed* marking in past contexts may be more fortuitous than they appear to be. However, since the principle of marking in marked contexts also holds in developed natural languages, learner systems can be expected to ultimately converge with the target system.

4.6 The Verbal System—Conclusions

Verbal morphology receives a great deal of attention in language pedagogy. It is evident from the above descriptions that the development of the verbal system in learner language is a slow and complex process which bears little resemblance to the course mapped out for it in current teaching practice. Assumptions that learners have acquired target language semantics because they use some target language forms—even when these forms appear in appropriate contexts—should in particular be avoided. While a suitable approach to teaching the morphology, syntax and semantics of the verbal system needs to be worked out in detail in the classroom, it would seem that given that even the most ostensibly non-standard features can evolve productively into target forms that this is one area where learners should be permitted to proceed at their own pace and in their own style, at least until more rational pedagogic approaches to teaching verb morphology have been developed and trialled.

4.7 The Copula

4.7.1 Production of the Copula

Tables 4.27 to 4.30 display the distribution of the various forms of *be*—both free and bound.

At this point, several general observations are appropriate.

1. Tokens involving apparently contracted forms of *be*, such as *I'm* or *what's*, may in some cases be monomorphemic proforms or noun phrases. This is clear in the following examples from Hoa:

but I'm not go school, you know

- hoa.1: [191] -

I'm got a jo(b), you know

- hoa.2: [813] -

There is a problem, however, in deciding whether, on the basis of examples like those above all tokens of the form are monomorphemic, particularly if the majority of tokens occur in utterances which are superficially standard.

2. Similarly, some orthographically independent forms of *be* may in fact be fragments of monomorphemic noun phrases or proforms. Thus *am*, in some cases, may actually be part of a proform *I am* rather than a particular form of *be*. In some cases, this is demonstrably so, as in the following examples:

Informant	is	ks	zj	jb	jr	ka	bb	es	aj	kb	lj	mm
NONSTD_ING#tokens	4	11	1	8	35	3	18	1	6	3	14	12
NONSTD_ING#verbs	2	4	1	6	14	3	11	1	4	2	9	4
IRREGS#tokens		2?	1	2	6	8	2	6	11	35	14	15
IRREGS#verbs		2?	1	1	4	2	2	5	6	11	8	10
REGS#tokens	1*			3	23	1		9	10	14	26	17
REGS#verbs	1*			3	7	1		5	7	7	11	12
3SG_S		2*		1*	1*			2	11	1	1	
AUX_ING				4*	2*				15	7		13
AUX_ENreg_vb_adj				1F	1F	1F	4		2	3	1	2
AUX_ENirr_vb_adj											1	2
AUX_ENa'lesspass								1			1	5
AUX_ENfullpass												1
perfects								2*		1*		2
AUX_ENbeen				1F				4F		3F		
GERUNDS		1*			1*		1*		3		3	4

Table 4.9: Distribution of Verb Forms: Polish Informants—Interview 1

NOTES:

1. Counts suffixed with an “F” indicate probable formulaic tokens.
2. The single regular past form occurs in a present context in the case of *is*. The perfect forms occur in preterite contexts in the cases of *es* and *kb*.
3. The tokens of third singular “-s” involve verbs with second person subjects in the cases of *ks*, *jb* and *jr*.
4. Two of the *aux_ing* are probably formulaic in the case of *jb*. The remaining tokens, which are questions, are dubious, as are the tokens produced by *jr*.
5. The gerunds are lexically non-standard, and appear in existential sentences in the cases of *ks*, *jr* and *bb*.

Informant	is	ks	zj	jr	ka	jb	bb	es	aj	kb	lj	mm
NONSTD_ING#tokens	7	4	6	37	1	6				3	16	6
NONSTD_ING#verbs	5	4	6	12	1	5				2	9	2
IRREGS#tokens	3	10	2	11	9	2	17	12	11	30	8	13
IRREGS#verbs	1	4	2	4	5	2	6	9	5	9	5	8
REGS#tokens	4	4		3	1	8	3	9	7	7	15	17
REGS#verbs	2	3		3	1	4	3	5	6	7	7	8
3SG_S								5	10	10	2	4
AUX_ING				4	2F	4*		2	11	14	5*	8
AUX_ENreg_vb_adj		2		2	1F		2*		1?	4	2	1*
AUX_ENirr_vb_adj			1F									2
AUX_ENa'lesspass						1F						3
AUX_ENfullpass										1*		1
AUX_ENperfects		1F						2				6
AUX_ENbeen				1F				1F	2F			
GERUNDS				1*							3	2

Table 4.10: Distribution of Verb Forms: Polish Informants—Interview 2

Informants	Van	My	Duc	Dung	Minh	Sang	Hoa	Vinh	Tam	Canh	Long	Phuc
NONSTD_ING#tokens	2	7	5	3			10	1	11	34	84	13
NONSTD_ING#verbs	2	5	4	3			5	1	5	16	17	9
IRREGS#tokens		2	8	3	14		3	12	40	47	64	58
IRREGS#verbs		2	3	2	4		2	5	8	16	12	18
REGS#tokens				1	1			3	5	7		4
REGS#verbs				1	1			2	3	5		3
3SG_S			4*	2			1*			9	3*	18
AUX_ING				2F	1F	1F			8*	1?	3*	
AUX_ENreg_vb_adj	1F			1F	1F							
AUX_ENirr_vb_adj			1F	8F					5F	20F	7F	1
AUX_ENa'lesspass			1F					1F		1?	2*	2
AUX_ENfullpass												2
AUX_ENperfects					5*		1			1		
AUX_ENbeen										6*		
GERUNDS									1F	10*		3

Table 4.11: Distribution of Verb Forms: Vietnamese Informants—1

NOTES:

1. Counts suffixed with an "F" indicate probable formulaic tokens.
2. Tokens of *aux_ing* for *lj* all involve "will be" and are probably formulaic. One token for *jb* is possibly not formulaic.
3. Tokens of *aux_en* are non-standard in the cases of *bb* ("is goed") and *aj* (intransitive verb). The passive produced by *kb* involves "worried about".
4. The gerund is lexically non-standard, and appears in an existential sentence in the case of *jr*.

Informants	Van	Duc	Sang	Minh	My	Hoa	Dung	Vinh	Tam	Canh	Long	Phuc
NONSTD_ING#tokens	1	8	7	5	8	2	7	3	19	27	24	1
NONSTD_ING#verbs	1	6	5	3	6	2	4	3	7	13	8	1
IRREGS#tokens		4	10	18	4	5	18	9	37	16	5	18
IRREGS#verbs		4	7	7	3	2	9	7	9	7	3	9
REGS#tokens				3			2	2	5	6		
REGS#verbs				2			2	2	2	5		
SSG_S		2	10*	1			1		1	6		3
AUX_ING			1F			3F	1F				1*	3
AUX_ENreg-vb-adj												1
AUX_ENirr-vb-adj							4F		2F	1F	1F	1F
AUX_ENa'lesspass								1F				3
AUX_ENfullpass												
AUX_ENperfects			2*	1								
AUX_ENbeen										1F		
GERUNDS										1	5	3

Table 4.12: Distribution of Verb Forms: Vietnamese Informants—2

NOTES:

1. Counts suffixed with an "F" indicate probable formulaic tokens.
2. Tokens of third singular "-s" involve verbs with first person subjects for *sang*.
3. Tokens of *aux_en* lack final "-ed" marking in the case of *sang*.
4. Tokens of *aux_ing* are dubious in the cases of *sang*, *hoa*, and *long*, due to monomorphemic proforms.

Int	SCL	CCL	VCP	NVP	QUE	PST	PNT	FUT	#TKS
jr.1	1	6	1	1	4	22	6		35
bb.1	1	4	3			12	2		18
lj.1	2	6		4		8			14
mm.1	4	3	2		2	1		12	
ks.1	1	1	1	1	1	8		1	11
jb.1		1	1		2	5	2		8
aj.1	1		1			3			5
is.1		2				1	1		4
ka.1						3			3
kb.1				1		1	1		3
es.1		1							1
zj.1							1		1
Total	10	21	10	9	7	67	14	1	116

Table 4.13: Non-standard "-ing" Marking: Polish Informants—1

Int	SCL	CCL	VCP	NVP	QUE	PST	PNT	FUT	#TKS
jr.2	8	4	4	1	1	4	13	1	37
lj.2	1	8	2	1		3	1	1	16
is.2			4			3	1		7
jb.2		2		1	1	3			6
mm.2	2	1	2				1		6
zj.2	2				1		2	1	6
kb.2		1	1			1			3
ks.2		1	1			1			3
ka.2							1		1
Total	14	16	14	3	4	14	19	3	85

Table 4.14: Non-standard “-ing” Marking: Polish Informants—2

NOTES:

SCL = Subordinate Clause; CCL = Co-ordinate Clause; VCP = Verbal Complement; NVP = Negative Verb Phrase; QUE = Question; PST = Past Context; PNT = Present Context; FUT = Future Context; TKS = Tokens.

Int	SCL	CCL	VCP	NVP	QUE	PST	PNT	FUT	#TKS
long.1	18	18	14	1		41	8	1	84
canh.1	8	6	10	1	1	4	2		34
phuc.1	2		8			1	1		13
tam.1	3	1	1	1	1	4			11
hoa.1		1	3	3		4	2		10
duc.1		1	2			3	1		7
dung.1	2		2			1			5
minh.1			1			2			3
my.1				1			1		2
vinh.1		1				1			1
Total	33	28	41	7	2	61	15	1	170

Table 4.15: Non-standard “-ing” Marking: Vietnamese Informants—1

Int	SCL	CCL	VCP	NVP	QUE	PST	PNT	FUT	#TKS
canh.2	8	1	7	1		4	3		27
long.2	8	3	1	1	1	7	1	4	24
tam.2	7	2	4			6			19
duc.2	1		2			3	2		8
my.2	2	2	2	1		2		1	8
dung.2	3	1			2	2		7	
sang.2	2	1	1			2	1	1	7
minh.2						4	1		5
vinh.2	1		1				1		3
hoa.2	2					1			2
phuc.2	1								1
van.2							1		1
Total	33	9	19	3	1	32	12	6	112

Table 4.16: Non-standard “-ing” Marking: Vietnamese Informants—2

I am an(d) my wi(fe), sewin(g) now too

- my.2: [703] -

No...no every day...er, sometime(s)... before I am mu(s)t to work, er...to work

- minh.1: [515-6] -

Sometimes, however, no decisive evidence is produced one way or the other.

- Some of the examples of the actual form *be* itself occur in almost certainly monomorphemic locutions like *will be* (these are discussed in 4.9). It is therefore not clear what status to assign to the form *be* in such tokens. Informants who produce monomorphemic *will be* are Jerzy B., Ludwiga J., and Long. In the case of the two latter informants, the *will be* tokens constitute a relatively small subset of their *be* tokens (twenty-three from ninety-two, and three from twenty-six respectively). In the case of Jerzy B., however, in the first interview the two tokens of *be* both occur in *will be*, and in the second interview *will be* accounts for one of the three tokens of *be*. (The other examples occur with *must be*—this may indicate a possible route for the emergence of *be* in some learners).

The counts presented in Tables 4.27 to 4.30 represent the number of times a given form appeared in a particular interview. Tables 4.9 to 4.12 document those cases in which some form of *be* appears as an auxiliary (in

Informant	is	ks	zj	jr	jb	ka	bb	es	aj	kb	lj	mm
went			1	1			1			1	1	
got		1?							5*	2		2*
said									1	14	5	1
left				3E			1?					5
learnt								1	3			2*
heard								2	1		1	
saw										3	1	1
found		1?									1	
did				1				1				
wrote			2E						3			
told					2			1				
built								1E				1*
bought										3		1
made										1		4*
stolen										1*	1*	
sent											1	4
came						7						
spoke						1						
ate								1				
eaten								1*				
taught									1			
done									1E			
took										1		
thought										5		
bore											1	
broken											1*	
born												1*
spent												1*
understood												1

Table 4.17: Distribution of Irregular Past Forms: Polish Informants—1

NOTES:

1. Counts suffixed with an asterisk indicate that the form in question was used as a past participle or verbal adjective, unless otherwise described below. Counts suffixed with an "E" indicate that the token was produced as an echo.
2. Past forms were produced in present contexts in the cases of **ks** (all tokens) and **aj** ("got"—one token), and in an irrealis context in the case of **mm** ("got"—one token). Two tokens of "made" are past participles in the case of **mm**.

Informant	is	ks	jr	ka	zj	jb	bb	es	aj	kb	lj	mm
said			3	1			9	1	4		4	1
went		4	1		1		3		1	2		
saw				1						9	3*	1
made	3	3								3		
bought		3*						3*				3*
came						1			1	6		
got					2*							1*
told							1			8		
thought							1				1	
learnt							1	2				
gave								1		1		
found									4*		1	
took										1		1
sent											1	3*
left			5*									
wrote				4								
lost				2								
spoke				1								
born						1*						
won								3				
knew								1				
beaten								1?				
taught									1			
felt										2*		
heard												2*
done												1*

Table 4.18: Distribution of Irregular Past Forms: Polish Informants—2

NOTES:

1. Counts suffixed with an asterisk indicate that the form in question was used as a past participle or verbal adjective, unless otherwise described below. Counts suffixed with an "E" indicate that the token was produced as an echo.
2. Tokens of past forms are participials in the following cases: **ks** and **es** ("bought"—one token) and **mm** ("bought and "sent"—two tokens).
3. Past forms were produced in present contexts in the cases of **aj** ("found"—one token) and **kb** ("got"—one token), and **mm** ("heard"—one token).

Informant	Van	My	Duc	Dung	Minh	Hoa	Sang	Vinh	Tam	Canh	Long	Phuc
came			1	4	1		2	1	3	8	44	2
got			1*	8*		3		2	11*	35*	8*	3
went				3			7		10	2	10	10
left			1E				2		2	1	1	1*
said						1		6	16	1	3	
lost						1E	1?				7*	1
heard								1		4*	1	1
bought			1		3					1		
took								2		1		3
told								8			1	10
thought							1					4
born								1*		4*		
met										4*		3
made										2		2
shot										3		1
sent											1	1
seen				1								
gave							3					
caught								1*				
forgotten								1*				
drove									1			
gone									1*			
fed										1*		
knew										3		
sank										2		
won										3*		
broken											1*	
found											1*	
felt												3
kept												2
saw												1
slept												1
spent												2
spoke												1

Table 4.19: Distribution of Irregular Past Forms: Vietnamese Informants—1

NOTES:

1. Counts suffixed with an asterisk indicate that the form in question was used as a past participle or verbal adjective, unless otherwise described below. Counts suffixed with an "E" indicate that the token was produced as an echo.
2. Tokens of past forms are participials in the following cases: **tam** ("got"—five tokens) and **canh** ("got"—twenty-two tokens, "heard"—one token) and **long** ("got"—six tokens).

Informant	Van	Duc	Sang	Minh	My	Hoa	Dung	Vinh	Tam	Canh	Long	Phuc
got			3*	1*		5*	5*	1*	5*	7*	2*	4*
told		1	2	4			1	1	11		2	3
went		1	2				5		1			1
saw				1	2		1*		2	1		
said				7			2	3	16			
did							1			2		3
came							1		1	1		
took		1?			1?							
bought				3								1
forgot							2*		1*			
lost											1	3*
caught		1										
sent			1									
broken				6*								
broke				2*								
left								1				
learnt								1				
born								1*				
rang								1				
woke									1			
heard										1*		
understood										1		
thought												1
drank												1
became												1

Table 4.20: Distribution of Irregular Past Forms: Vietnamese Informants—2

NOTES:

1. Counts suffixed with an asterisk indicate that the form in question was used as a past participle or verbal adjective, unless otherwise described below. Counts suffixed with an "E" indicate that the token was produced as an echo.
2. Tokens of "got" are participial in the following cases: **Sang, Minh, Canh, Vinh, Canh, Phuc** (one token), **Long** (two tokens) and **Dung** (three tokens). With the exception of the case of Phuc, verbal "got" is used in present contexts.

Informant	is	zj	ks	jb	jr	ka	bb	es	aj	kb	lj	mm
lived					2			4	1	2	3	1
worked					13*	4*			5	7		
arrived				1	3				1			1
decided									3		12	6
learned									1		1	1
started										1	1	1
stayed	1*			1								
finished				1							2	
asked					2				3			
looked									1	2		
tried											1	1
produced											1	1
writed					3							
maked		1										
watched					1							
sleeped								2				
stopped								1				
teached								1				
danced								1				
listened									3			
thought									1			
goed									1			
readed									1			
liked										3*		
married										1		
interested											2	
suggested											2	
helped											1	
showed											1	
buyed											1	
visited											1	
moved												1
improved												1
exported												1

Table 4.21: Distribution of Regular Past Forms: Polish Informants—1

NOTES:

1. Participial forms have been excluded from this table. They were not numerous.
2. Tokens of past forms occur in non-past contexts in *is* ("stayed"), *jr* ("worked"—six tokens), *ka*, ("worked"—two tokens), and *kb* ("liked—two tokens).

Informant	is	ks	zj	jr	ka	jb	bb	es	aj	kb	lj	mm
finished		1		1					2		1	2
worked	3					3		3				
lived								1		1		3
looked									1	1	1	
stayed	1*											1*
happened				1	1E							
arrived						2					1	
learned						2		3				
talked									1	1		
called										1	1*	
studied		1										
fixed		2										
helped				1E								
composed						1						
goed							1					
meaned							1					
worried							1					
ended								1				
exercised								1				
writed									1			
knowed									1			
founded									1*			
watched										1		
stopped										1*		
decided											8*	
waited											1*	
observed											2*	
travelled												2
occupied												2
expected												1
enclosed												1

Table 4.22: Distribution of Regular Past Forms: Polish Informants—2

Informant	Van	My	Duc	Dung	Minh	Hoa	Sang	Vinh	Tam	Canh	Long	Phuc
asked							1		2			
studied								2				1
prayed								1				1
worked					1							
married									2			
changed									1			
happened										3		
scared										1		
failed										1		
finished										1		
contacted										1		
helped												2

Table 4.23: Distribution of Regular Past Forms: Vietnamese Informants—1

Informant	Van	Duc	Sang	Minh	My	Hoa	Dung	Vinh	Tam	Canh	Long	Phuc
asked									1	1		
called					2							
looked				1								
lived							1					
started							1					
goed								1				
weighed								1				
talked									1			
enjoyed										2		
tried										1		
used										1		
produced										1		

Table 4.24: Distribution of Regular Past Forms: Vietnamese Informants—2

Interview	3SG	1PN	3PL	PNT	PST	FUT	TOTAL
phuc.1	18			16	2		18
aj.1	7	1	1	2	5		11
aj.2	10			10			10
kb.2	9	1		9		1	10
sang.2	8	2		10			10
canh.1	4	5		6	2	1	9
kb.1	5		2	2	5		7
canh.2	5		1	6			6
es.2	5			5			5
duc.1	1	3			4		4
mm.2	4			4			4
long.1	1	1	1	2	1		3
phuc.2	3			3			3
duc.2	2			2			2
dung.1	2			2			2
es.1	2			2			2
ks.1		2		2			2
lj.2	2			2			2
tam.1	2			2			2
dung.2	1			1			1
hoa.1		1		1			1
jb.1			1	1			1
jr.1		1			1		1
ks.2	1			1			1
lj.1	1				1		1
minh.2	1				1		1
mm.1	1			1			1
tam.2	1			1			1
Total	96	17	6	97	22	2	121

Table 4.25: Environments for Realization of Third Singular "-s"

Interview	"S" Marking	Pronouns
aj.1	1	7
aj.2	4	18
bb.2		6
canh.1		8
canh.2	1	17
duc.1	1	30
duc.2	1	28
dung.1	1	5
dung.2	1	22
es.1		3
es.2	3	30
hoa.1		27
hoa.2		37
is.2		10
jb.1		4
jb.2		13
jr.1		23
jr.2		16
ka.2		7
kb.1		23
kb.2	5	40
ks.1		6
ks.2	1	10
lj.1		5
lj.2		19
long.1		91
long.2		4
minh.2		19
mm.1		26
mm.2	3	19
my.1		2
my.2		23
phuc.1	5	28
phuc.2		4
sang.1		5
sang.2		17
tam.1		64
tam.2		51
vinh.1		17
vinh.2		22
zj.1		3
zj.2		6

Table 4.26: 3sg“-S” Marking Compared to Instances of “He” and “She”