INSTRUCTED INTERLANGUAGE DEVELOPMENT*

Michael H. Long
Department of English as a Second Language
University of Hawai`i at Manoa

Abstract

Several theorists have claimed that interlanguage (IL) development in instructed (classroom) learners does not differ significantly from that in learners acquiring a second language (SL) naturalistically. The processes and/or sequences in SL development are held to be the same in both acquisitional contexts. Accordingly, some writers on language teaching have advocated provision of "natural" language learning experiences for classroom learners, and the elimination of structural grading, a focus on form and error correction, even for adults.

This paper examines the evidence offered in support of the claims concerning instructed IL development. Some recent studies are summarized which illustrate the potential of formal instruction in four areas: (1) acquisition processes, (2) acquisition sequences, (3) rate of acquisition, and (4) level of ultimate SLA attainment. The conclusion is that the claimed similarities between instructed and naturalistic SL acquisition are based on insufficient and weak evidence, that instruction affects learning positively in three of the above four areas, and that the prescriptions for language teaching, therefore, are certainly premature and probably wrong.

1. Introduction: early research on the effect of instruction, and some claimed implications

One of the many positive outcomes of modern second language acquisition (SLA) research has been the jolt it has given the language teaching establishment. Many language teachers in the 1960s and 1970s had been lulled into a false sense of security by the confident pronouncements of methodologists concerning the efficacy of contrastive analysis, pattern drill, structural syllabuses, notional-functional syllabuses, grammar explanations, translation, error correction, communicative language teaching, any number of language teaching "methods", or whatever else the writers happened to believe in. Most teachers assumed that the people making the pronouncements had taken the trouble to test them, that we knew how people learned second languages in classrooms and how best to teach them. In fact, of course, this was, and still is, simply untrue.

As wave after wave of unsubstantiated prescriptions washed over them (sometimes conflicting prescriptions emanating from the same "experts"), teachers and applied linguists adopted different defense mechanisms. Some "converted" to the dogma of one or a particular group of gurus (see Maley, 1983, for an insightful analysis of this phenomenon). Others (see Clarke, 1982) opted for eclecticism, and still others even for the "eclectic method" (whatever that is). An increasing number, however, decided that a more responsible solution was systematically to investigate classroom language teaching and
classroom SLA, the process which, as teachers, they were employed to facilitate.

Perhaps as a reaction to the extreme interventionist era of contrastive analysis, neo-behaviorist learning theory and audiolingualism, many researchers began by looking for, finding, and stressing some of the inescapable similarities between naturalistic and instructed SLA. Not infrequently, they went on to claim that, therefore, teaching could have little or no effect on the acquisition process - a logical possibility, given the findings, but not necessarily true, as will become apparent.

An example of this type of research and argumentation is a study by Felix and Simmet (1981) of the acquisition of English pronouns by German high school students over an eleven-month period. The researchers showed that the children (ages 10-12) acquired ESL pronominalization in a highly systematic manner, with the errors resulting from substitutions of one pronoun for another falling into only eight of a mathematically far larger number of potential error types. The children followed a process of gradually adding grammatical and semantic features ([person] vs. [possessive] > [number] > [personal] > [gender]) to their interim pronoun grammars. (1) Needless to say, this was not the way their instructors were attempting to teach them English pronouns. Rather, new pronouns were being presented and drilled

(1) It is not clear to me why, in this and other papers, Felix and Simmet collapse the longitudinal data from this study, and then resort to implicational scaling of (ostensibly) cross-sectional findings to establish acquisition sequences.
as distinct morphemes, with clusters of features "ready packed", as it were. The acquisition strategies observed paralleled those noted in naturalistic acquirers, leading Felix and Simmet to conclude that

"(T)he students' instruction-independent learning strategies demonstrate . . . that the learning process can only be manipulated within narrow limits and that the principles and regularities of natural language acquisition must also be considered in foreign language instruction." (1981, p. 26)

In another publication from the same study, Felix (1981) reported finding structural parallels between the interlanguage (IL) negation, interrogation, pronouns and sentence types of German high school EFL students and naturalistic acquirers of ESL. Felix (1981, 109) concluded:

"... foreign language learning under classroom conditions seems to partially follow the same set of natural processes that characterize other types of language acquisition . . . there seems to be a universal and common set of principles which are flexible enough and adaptable to the large number of conditions under which language learning may take place. These observations furthermore suggest that the possibility of manipulating and controlling the students' verbal behavior in the classroom is in fact quite limited." (emphasis added)

In a similar vein, Wade (1981) compared findings on the acquisition of English negation in different types of language learning: child language development, foreign language learning, naturalistic second language learning and relearning, pidginization and creolization. While recognizing that differences did exist, the similarities he found in the developmental structures and developmental sequences across acquisitional types, Wade claimed, reflected universal processing abilities and (innate) language learning strategies (e.g. the
initial preference for free over bound forms), and the availability of these abilities and strategies in any language learning context and at any period in a learner's life. The results further indicated, according to Wode, that teachers "should not devise their teaching materials and teaching procedures to go counter to natural learner abilities." (1981, 231.) Wode did not elaborate as to what kinds of teaching would constitute 'going counter to' (or facilitating) the working of these natural abilities. Neither Wode's nor Felix's research, it should be noted, had studied alternatives in language teaching.

At about the same time, North American researchers produced evidence that the order in which accurate suppliance of certain grammatical morphemes in obligatory contexts attained criterion (80% or 90%) was similar across learners from different first language backgrounds (see Burt and Dulay, 1980, and Krashen, 1977, for review), and in naturalistic and instructed learner groups (see, e.g. Krashen, Sferlazza, Feldman and Fathman, 1976). The first finding was interpreted by Dulay and Burt (1977) as evidence of a common underlying acquisition process, creative construction. Because it seemed that this process would operate automatically in child SL learners if they were exposed to natural samples of the target language, Dulay and Burt (1973) concluded that children should not be taught syntax.

Krashen (1982 and elsewhere), too, claimed that the similarities reflected a common underlying process, which he calls acquisition, responsible for the bulk of SLA in any context, including the classroom. Krashen also claimed that unconscious, 'acquired' knowledge of the TL was responsible for
normal SL performance. Conscious knowledge of simple TL grammar rules, learning, was rarely accessible in natural communication, when the language user is focused on meaning, not form. Further, it could not later become acquisition (Krashen and Scarcella, 1978). Hence, the instruction which produced learning was also relatively unimportant. Most of a SL cannot be taught, Krashen claims; it must be acquired.

The European and North American research has certainly been useful in drawing attention to the unarguable similarities between naturalistic and instructed SLA. At the very least, it emphasizes the importance of the learner's contribution to language learning, and serves as a healthy reminder to teachers that they are partners, not masters, in a joint enterprise.

Unfortunately, however, many of the conclusions about the limitations or inefficacy of instruction are non sequiturs or, at best, inferences from studies which have looked not at the effects of instruction, but at similarities in the interlanguages of naturalistic and classroom learners. Yet it has been the inferences, not research, which have in turn formed a large part of the basis for prescriptions for language teaching.

While some researchers (e.g. Felix and Wode) have been more circumspect, the prescriptions have occasionally been of the kind which equate teaching with nothing more than the provision of comprehensible input. Krashen (1981, 59), for example, writes:

"The research on the efficacy of instruction, the research on methods comparisons, and the Fundamental Pedagogical Principle ["Any instructional technique that helps second language acquisition does so by providing comprehensible input." (Krashen, 1981, 59)] all lead me to the conclusion that the second language class is a very good place to acquire a
second language! It is a place where the beginning student, especially the older beginner, can obtain the input necessary for improvement, CI [comprehensible input] that the outside world is often unwilling or unable to give."

This is what is known as a left-handed compliment.

Currently, the major methodological realization of these ideas is the Natural Approach. Krashen and Terrell (1983) advocate provision of comprehensible input in the form of the roughly tuned teacher and peer speech that arise naturally from communication, delivered in a positive affective classroom climate, as the essential ingredient of any successful language teaching program. Proscribed are structural grading, a focus on form, grammar and vocabulary explanations, error correction, and other traditional language teaching activities, except where those activities could help with the learning of a few low level target language rules, help satisfy learner expectations, or serve as an indirect way of providing more comprehensible input.

The goal of the classroom, Krashen writes (1981, 61):

"is not to produce native speakers or even error-free second language performance. It is, rather, to develop "intermediate" second language competence, to bring the student to the point where he can begin to understand the language he hears and reads outside the class and thus improve on his own."

Another possible implementation suggested elsewhere by Krashen (1981, 66-67) is for foreign university students to receive ESL at the "beginning" level (with the main purpose of instruction being the provision of comprehensible input), to take "sheltered subject matter" courses at the "intermediate" level, (e.g. Psych. 101 for foreign students, along the lines of Canadian immersion programs), but with optional ESL work as a supplement, and to be mainstreamed into regular subject matter
courses at the "advanced" level, with no accompanying ESL at all at this level. (2) Such prescriptions may yet turn out to be

(2) 'Beginning', 'intermediate' and 'advanced' appear in inverted commas here since Krashen defines them vaguely and variably, although the meaning they have is often important in interpreting the outcome of studies (see, e.g. Krashen, 1985, 28-31) and could presumably be crucial for the success of his proposals for language teaching described above.

justified, but until the evidence is in, e.g. from SL classroom research, they need to be treated with great caution, a point which, to his credit, Krashen (1981, 67) himself stresses.

Opinions about the Natural Approach, sheltered subject matter classes, etc. will obviously vary depending on one's training and field experience in applied linguistics and language teaching. An experienced SL program designer, for example, might be impressed by the Natural Approach's psycholinguistic credentials and/or by its methodological innovations, but would flinch at its disregard for learner needs identification or, indeed, for any kind of syllabus (content) at all (see Long, 1985, for discussion).

Regardless of one's language teaching background, however, there is a serious flaw in the reasoning behind these proposals: it is assumed that a program with (what Krashen and Terrell believe to be) the necessary and sufficient characteristics for successful language learning is automatically the most efficient/effective program possible. Yet this is patently untrue. It is equivalent to claiming that because some plants will grow in a desert, watering the ones in your garden is
a waste of time. In fact, of course, while the desert may provide the minimum conditions for a plant to grow, watering it may help it grow faster, bigger and stronger, that is, to realize its full potential. So with language learning: while comprehensible input may be necessary and sufficient for SLA (3), instruction may simplify the learning task, alter the processes and sequences of acquisition, speed up the rate of acquisition and improve the quality and level of SL ultimate attainment. In other words, while identifying the simplest, least powerful, theory is the goal of SLA research, that theory (alone) will not necessarily constitute the soundest basis for SL teaching, precisely because it is the simplest, minimal solution.

(3) My own view is that there is evidence of the necessity of comprehensible input (evidence reviewed in Long, 1981), that it is, as Krashen says, a causal variable in SLA. On the other hand, there is almost no research on whether comprehensible input is sufficient for acquisition, but suggestive evidence that it is not (see, e.g. Higgs and Clifford, 1982; Schmidt, 1981; Swain, 1985), unless one can tolerate sometimes (1) quite limited levels, and (2) slow rates, of attainment. Evidence for the beneficial effects of instruction on the efficiency of SLA is the subject of this paper.

Whatever one's view of Krashen's claims concerning the necessity and sufficiency of comprehensible input for SLA, just how strong, in fact, is the evidence for the inefficacy of conventional SL instruction (with a focus on form) which is further assumed by his proposals, and implied as we have seen, by other SLA theorists? The following review will attempt to show that (1) SLA research to date has barely begun to probe the effects of instruction on IL development, but that (2) studies
conducted thus far have already revealed some potentially very positive contributions instruction can make. If either of these statements is correct, it follows that prescriptions from theorists at this juncture are premature if they effectively involve the abandonment of instruction. The review of research is not exhaustive. Rather, it attempts to delineate four distinct, though related, areas for future work, and to illustrate each with selected studies and findings.

2. The effect of instruction on IL development

2.1. The effect of instruction on acquisition processes

The SLA literature contains a dazzling array of putative acquisition processes. A partial list includes transfer, transfer of training, (over)generalization, restrictive, elaborative and conformative simplification, nativization, pidginization, depidginization, creolization, decreolization, regularization, stabilization, destabilization and, of course, the onset of linguistic rigor mortis, fossilization.

Some of these processes have been linked to various contextual factors, including characteristics of the linguistic environment. Thus, pidginization is believed to be at least partly due to the attempt by speakers in bi- or tri-lingual contact to develop a common SL in spite of restricted and often deviant input from the superstrate language (Bickerton, 1976). Destabilization (of potentially fossilizable forms) is claimed to occur through the reception of expected negative feedback on the cognitive dimension, and fossilization through reception of predominantly expected positive feedback on the cognitive
dimension (Vigil and Oller, 1976).

Other processes are thought to be encouraged by certain types of performance tasks. Transfer and restrictive simplification, respectively, for example, have each been claimed to be more frequent when learners are obliged to outperform their current SL competence (Krashen, 1981) or when they opt for communicative efficiency over accuracy (Meisel, Clahsen and Pienemann, 1981).

Now, while most of these claims concern naturalistic language learning, contextual variation may also be a useful way of thinking about acquisition in the classroom. I would claim that, beneath superficial differences among teaching methods, materials and syllabuses, alternatives in SL instruction consist essentially of varied selections among options of two kinds. First, there are options in the way linguistic input to learners is manipulated. Choices here exist fundamentally in such matters as (1) the sequence in which learners will encounter linguistic units of various kinds, along with (2) the frequency/intensity and (3) the saliency of those encounters.

Second, there are options in the types of production tasks classroom learners are set. It is reasonable to expect that formal instruction may trigger such processes as transfer, transfer of training and (over)generalization, depending on the choices teachers and materials writers make in this area. For example, are students allowed or encouraged to avoid error, or are they set tasks which lead them to take linguistic risks, e.g. by using generalization in applying a new linguistic item in a context in which they have not yet encountered its use? Do the
pedagogic tasks teachers set allow more or less attention to speech, with resulting higher or lower rates of target-like use (Sato, 1985; Tarone, 1984)?

Further, if various characteristics of (1) the linguistic and/or conversational environment and (2) the performance tasks are what trigger some of the processes, it would seem reasonable to expect instructed and naturalistic acquirers to exhibit either partially different acquisition processes or, at least, different degrees of preference for the same processes. For example, one result of teachers and textbooks isolating grammatical forms such as third person -s and -ing is the increased saliency of those forms in the input. The increased saliency may cause instructed learners to notice and use the forms earlier, resulting in differing and perhaps ultimately "healthier" error profiles. Increased awareness of and attempts to use what are often, after all, communicatively redundant grammatical elements may also lead to faster rates of acquisition (4) and/or to higher levels of ultimate SL attainment. In addition, instructed learners may ultimately become more native-like in the sense of exhibiting greater grammatical accuracy.

(4) Pienemann (1984) has shown that instruction can also slow down development in certain areas, however, as when suppliance of copula inhibits learners' attempts to apply a new syntactic movement rule over copula in GSL word order development.

Exploratory work on the effect of instruction on acquisition processes by Wode, Felix, and Felix and Simmet was outlined earlier. The researchers' focus, it was noted, was
the similarities which exist in the acquisition processes of classroom and naturalistic acquirers. Despite the potential effects of context on acquisition processes, there has been very little work to date which looks for differences as well as similarities in this aspect of interlanguage development, with the major study being that by Pica (1983). As with so much of the research on the effect of instruction on IL development to date, however, Pica's findings are highly suggestive, and encouraging for teachers.

Pica distinguished three acquisition contexts in her work: naturalistic, instructed and mixed, the last being a combination of classroom instruction plus natural exposure in the target language environment. After some initial screening interviews, 18 adult native speakers (NSs) of Spanish learning ESL were identified whose learning histories placed them uniquely in one context. There was a total of 6 subjects per context, with the subjects in each cell in the criterion group design representing a fairly wide range of SL proficiency, as defined by the stage each had reached in his or her acquisition of ESL negation (No V, don't V, aux-neg., and analyzed don't). Each speaker was interviewed informally (the six instruction only subjects in Mexico City), with each conversation covering the same range of topics. Approximately one hour of free speech was transcribed and analyzed in a variety of ways.

The first and simplest analysis Pica performed was a supplied in obligatory contexts (SOC) analysis of nine grammatical morphemes in the speech of learners from the three language learning contexts. This revealed morpheme orders which
correlated highly with each other and with a "natural order" previously established by Krashen (1977), suggesting some basic similarities in SLA, regardless of context, and providing additional support for the claims made by previous researchers to this effect.

While the SOC morpheme rank orders for all groups correlated strongly with one another, Pica noted that there were considerable differences among the groups in the case of certain morphemes in terms both of the ranks they occupied and the SOC percentage scores on which the ranks were based. For example, the instruction only group scored 19 percentage points and one or two ranks higher on plural -s than the mixed and naturalistic groups, respectively, and 38% and 41% higher than the naturalistic and mixed groups on third person singular -s. Pica notes that both these morphemes have transparent form-function relationships ("easy grammar" in Krashen's terms), and suggests that it may be precisely in this area that instruction has its greatest effect.

Aware of the many limitations of SOC analysis (for a recent review, see Long and Sato, 1984), Pica next conducted a target-like use (TLU) analysis of the same morphemes. The way researchers perform TLU analysis varies somewhat (see Pica, 1984, for a detailed account), but always involves looking not just at accurate suppliance of elements in obligatory contexts, but also at target-like and non-target-like suppliance of the elements in non-obligatory contexts. TLU analysis, therefore, captures such important distinctions as that between the following two (hypothetical) learners. As measured by SOC analysis, both supply
definite articles with over 90% accuracy. However, while one scores that high by differentiating between contexts for definite and indefinite articles, the other uses definite articles in all contexts for articles of both types (thereby scoring well for definite but zero for indefinite), and has not really grasped the use of definite articles at all.(5)

(5). See Andersen (1985) for a real example of this sort.

Pica's rank orders for TLU of the same morphemes correlated well across the three groups and with the SOC orders. What the TLU analysis also revealed, however, was a number of fascinating differences between the three groups, with the greatest differences obtaining between the instruction only group and the other two.

Controlling for proficiency level as measured by negation stage, Pica looked at the kinds of errors made by the learners in all three groups, and compared the acquisition strategies and processes revealed by those errors. Pica found that learners who had never received formal SL instruction tended to omit grammatical morphemes, such as ing and plural -s, whereas classroom learners (and to a lesser degree, and in later stages, mixed learners) showed a strong tendency to overapply morphological marking of this kind.

Overapplication errors consisted of two types: (1) a small number (2% of the total errors for classroom learners, and 1% for naturalistic learners) of overgeneralization errors, involving suppliance of regularized irregular morphemes in
obligatory contexts (e.g. He bought a car yesterday), and (2) frequent errors of overuse of morphemes in non-obligatory contexts (e.g. He lived in London now, I don't understanding these people). While both naturalistic and instructed learners made errors of these kinds, the frequency of such errors in instructed over uninstructed learners was significantly higher at almost all proficiency levels. Mixed learners performed like naturalistic learners at lower proficiency levels, but became more like instructed learners at higher levels of proficiency. Further, while instruction only subjects used the plural -s form significantly more often than subjects in the other two groups, the naturalistic group tended to omit target-like noun endings and to use a free form quantifier instead (two book, many town), a production strategy observed in many of the world's pidgins and creoles.

On the basis of these results (presented here in summary form only), Pica draws the following conclusions. (1) Similarities (e.g. common morpheme difficulty orders) across the three learner types support the idea that a great deal of SLA depends upon learner, not environmental, or contextual, factors. (2) Instruction affects SL production/performance (a) by triggering oversuppliance of grammatical morphology and (b) by inhibiting (not preventing altogether) the use of ungrammatical, even if communicatively effective, constructions found in pidgins. The last point (b) appears to hold for any learners receiving formal instruction, i.e. mixed as well as instruction only learners. Mixed learners show a greater inclination to pidginize
in the early stages, but appear to "shake off" this tendency later. In sum, Pica notes that, as evidenced by the error profiles of her subjects,

"differing conditions of L2 exposure appear to affect acquirers' hypotheses about the target language and their strategies for using it." (1983, p. 495)

Pica cautions that no conclusions can be drawn about rate of acquisition or level of ultimate SL attainment from her findings, only about SL production. It is noteworthy, however, that the tendencies to overapply grammatical morphology and to avoid pidginization strategies distinguished instructed from totally uninstructed learners at nearly all proficiency levels in her (cross-sectional) study. This could signal long-term, even permanent, differences between the two types of learners.

More likely, such differences mean differing probabilities of eventual target-like attainment for the groups. One hypothesis would be that the instructed learners will eventually relinquish what appears to be something akin to "psycholinguistic hypercorrection". (In a longitudinal study of Francophone children learning English at school in what was effectively an EFL setting in Quebec, Lightbown (1983, p. 239) found that the learners oversupplied -s on clause-initial NPs, but that this tendency gradually decreased over time.)

Naturalistic acquirers, on the other hand, may be less likely to begin supplying what are often, after all, communicatively redundant and probably still non-salient forms, especially after prolonged periods of communicatively successful TL use of their grammatically reduced codes.

This is to enter the realm of speculation, however.
What is needed is some research on the long-term effects (if any) of these initial differences in preferred acquisition processes. To my knowledge, not one study has addressed this basic issue. It goes without saying that until such work is done, it is premature to recommend that teachers give up on conventional SL instruction. Such suggestions may or may not turn out to be justified. At present, we simply do not know.

2.2. The effect of instruction on acquisition sequences

A major study of the effect of instruction on acquisition sequences is that by Lightbown and her colleagues in Montreal (Lightbown and Barkman, 1978; Lightbown and Spada, 1978; Lightbown, Spada and Wallace, 1980; Lightbown, 1983). Using a panel design, Lightbown et al. conducted both longitudinal and cross-sectional studies of Francophone children, aged 11 to 17, learning ESL in Quebec, few of whom had much contact with English outside the classroom. There were 175 children in grades 6, 8 and 10 in the first year of the study, and 100 of the same children in grades 7, 9 and 11 in the second year. All had started English in grade 4 or 5.

Early studies, using a variety of speech elicitation devices (verbally cued picture descriptions, communication games, etc.), found differences from previously established orders in the accuracy with which the French speakers produced various -a morphemes (copula, auxiliary, 3rd person singular, plural and possessive) and -ing. Several of these differences appeared attributable to influences from French, which uses the periphrastic possessive, and in which final /s/ is silent. The
children were also observed to make large numbers of what Pica calls overuse errors, e.g. 'The girl(s) want a cookie' when describing a picture of only one girl.

Additional motivations for the error patterns were sought in various aspects of the instruction the learners received. No direct relationship was found between the frequency of the items in teacher speech or in their textbooks and either the frequency or accuracy of students' use of those forms at the same point in time. However, Lightbown (1983, p. 239) reports a "delayed" frequency effect.

Intensive practice of -ing early in grade 6 appeared to be what led to that item remaining in grade 6 students' speech throughout the year, even though it was relatively infrequent in classroom language after its initial presentation. Students' suppliance of -ing during this period included both accurate suppliance in obligatory contexts and overuse. Later, however, after uninflected verbs (simple present forms, imperatives and catenatives) had been taught, both students' overuse and accurate use of -ing declined in favor of uninflected verbs, the forms favored by naturalistic acquirers from the outset. Lightbown wonders whether the kind of intensive drill work used in the audiolingual method to produce "overlearning" may not create artificial barriers to natural interlanguage development, obstacles which learners later have to overcome before they can construct their own productive interlanguage systems.

As reported earlier, after intensive practice of various -s morphemes, there was a parallel tendency for students
to overuse those items, especially by adding -s to clause-initial NPs, errors which then decreased over time. An important difference between what subsequently occurred with -ing and with certain -s morphemes, however, was that, unlike the -ing form, appropriate use of -s in obligatory contexts for copula and auxiliary did not decrease in tandem with the decrease in overuse errors with -s morphology. With some of the -s morphemes, that is, instruction appeared to accelerate attempts to use the forms, but with some negative side-effects (overuse errors). The side-effects wore off with time, however, leaving the benefits intact.

While providing more evidence of possibly beneficial effects of instruction on acquisition processes, Lightbown's findings suggest overall that formal SL instruction is only successful in altering acquisition sequences in a trivial manner. On the basis of the Quebec findings, the effects in this second area seem to be temporary, and possibly harmful. While some studies reported below (section 2.3.) might superficially appear to show an alteration of sequences, too, this is probably not the case, as will become clear. Acquisition sequences may well be immutable.

Further support for the idea that acquisition sequences are impervious to instruction is to be found in a study by Pienemann (1982/1984). (See also Daniel, 1983; Westmoreland, 1983.) Through analysis of the spontaneous speech of 100 Italian children acquiring German as a second language (GSL) naturalistically, Pienemann identified ten who were at stage two (adverb-fronting) or stage three (particle shift) in the GSL word order sequence in main clauses previously established in
longitudinal and cross-sectional studies of migrant workers by the ZISA group (see, e.g. Meisel, Clahsen and Pienemann, 1981; Nicholas and Meisel, 1983). The 10 children, aged 7 - 9, then received two weeks of classroom instruction (including both linguistically focused and communicative exercises) in the fourth GSL word order stage (subject-verb-inversion). At the end of this period, the children's spontaneous speech was again recorded and analyzed to determine whether they had progressed to stage four in word order development.

The results were fascinating and quite clear. Children who had begun at stage three had progressed to stage four, a process normally taking several months in untutored development. Children who had begun the study at stage two were still at stage two. Pienemann's interpretation of these findings is that students can only learn from instruction when they are psycholinguistically "ready" for it - the learnability hypothesis. The learnability of a structure in turn constrains the effectiveness of instruction - the teachability hypothesis. Instruction in something for which learners are not ready cannot make them skip a stage in an acquisition sequence. Instruction for which they are ready can speed up the rate of progress through the sequence, however.

The learnability/teachability hypotheses provide the most likely explanation for the results of several other studies which have shown either no effect or no lasting effect for instruction in particular structures. Thus, Lightbown, Spada and Wallace (1980) found that instruction in the copula in equational
sentences, locative prepositions and some -s morphology resulted in an average 11% improvement in accuracy on those items on a grammaticality judgment test, compared with a control group's average improvement of 3%. The gain was temporary, however, with the experimental group's scores declining to the norm on a readministration of the same test six months later. Schumann's efforts to raise his subject, Alberto's performance of ESL negation directly from stage 1, No V (No like hamburger) to stage 4, analyzed don't (He doesn't like hamburgers) through intensive practice in the target forms had no effect on Alberto's spontaneous speech, although brief improvements were obtained during the drills themselves (Schumann, 1978). Similarly, Ellis (1984a) found no improvement in the spontaneously produced WH questions of 13 children following three hours of instruction in both the meaning of WH pronouns (what, where, when and who) and in inversion in WH questions. The children's spontaneous speech prior to this part of Ellis's study showed that they were beginning to use uninverted WH questions (of any kind) when the instruction was provided.

It should be noted, however, that while a lack of effect for instruction in studies like these is probably due to the researchers' choice of items which were developmentally beyond the reach of the learners involved, i.e. to poor timing of instruction, alternative or additional explanations are also possible. First, the findings in some studies (e.g. Bruzzeze, 1977; Schumann, 1978) could be the result of the subjects having fossilized before receiving the instruction. Second, instruction can be expected to have differential effects according to whether
the targeted structures are 'developmental' or 'variational' for the particular learners receiving the tuition (Pienemann, 1985). Variational features, such as copula, are considered to reflect a learner's (relatively) integrative or segregative orientation to the target language (Clahsen, Meisel and Pienemann, 1983), as well as some effect for native language (Johnston, 1985, forthcoming), and omission/suppliance of such features to depend on such considerations as communicative effectiveness and communicative effort (Nicholas, 1984). Once having appeared in a learner's interlanguage, variational features appear to be teachable (with lasting effects) free of the kinds of (processing) constraints which affect the teachability of developmental features (Pienemann, 1985).

Further research in this area is clearly a high priority, but investigators will need to to select subjects and targeted structures very carefully. In addition, if the aim is to establish a causal relationship between instruction and SL development/performance, more researchers than have done so to date must be prepared to adhere to such principles of experimental design as the inclusion of a control group in their studies and random assignment of subjects to groups.

2.3. The effect of instruction on rate of acquisition

As noted above, Pienemann's 1984 study suggests that it is impossible to alter acquisition sequences, but simultaneously provides evidence of instruction's facilitating effect on the rate of SL learning. It is in the latter area, in fact, that instruction is most clearly beneficial, with empirical support
for the claim strong and diverse. A rate advantage is, of course, theoretically less interesting than the possibility of altering acquisition sequences, since it demonstrates that instruction has an effect, but does not explain how. Nonetheless, speeding up acquisition is extremely important for teachers and learners and so worthy of consideration.

In an earlier paper (Long, 1983), 11 studies were reviewed, including six which clearly showed faster development in children and adults receiving formal SL teaching, two (Fathman, 1976, and Hale and Budar, 1970) whose findings, while ambiguous, were arguably in the same direction, and three which showed minor or no effects for instruction. A summary table containing the results of those studies appears below.

Table 1 about here

Two additional studies appearing since that review was undertaken support the conclusion that instruction speeds up learning. First, Weslander and Stephany (1983) report a large scale evaluation of "pull-out" ESL for 577 limited English-speaking children (grades 2 through 10) in public schools in Des Moines, Iowa. Results showed that children receiving more ESL instruction outperformed those receiving less on the Bilingual Syntax Measure, with effects being strongest at lower levels (BSM levels 2.2 - 2.8) in the first year of schooling, and then diminishing in importance in the second and third years.

Second, Gass (1982) describes an experiment at Michigan showing the effectiveness of instruction in accelerating the
### TABLE 4

Relationships Between Instruction (I), Exposure (E), and Second Language Acquisition

<table>
<thead>
<tr>
<th>Study</th>
<th>SLA Type</th>
<th>Subjects</th>
<th>Proficiency (B, I or A)</th>
<th>Acquisition Environment</th>
<th>Test Type (DP or I)</th>
<th>Instruction helps?</th>
<th>Exposure helps?</th>
<th>I &gt; E or E &gt; I?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Studies showing that instruction helps</strong></td>
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<tr>
<td>1. Carroll (1967)</td>
<td>FLL in USA &amp; SLA abroad</td>
<td>adults</td>
<td>B IA</td>
<td>mixed</td>
<td>I</td>
<td>yes</td>
<td>yes</td>
<td>E &gt; I</td>
</tr>
<tr>
<td>2. Chihara &amp; Oller (1978)</td>
<td>EFL (Japan)</td>
<td>adults</td>
<td>B IA</td>
<td>poor</td>
<td>DP</td>
<td>yes</td>
<td>no</td>
<td>I &gt; E</td>
</tr>
<tr>
<td>5. Krashen &amp; Seliger (1976)</td>
<td>ESL in USA</td>
<td>adults</td>
<td>IA</td>
<td>rich</td>
<td>I</td>
<td>yes</td>
<td>no</td>
<td>I &gt; E</td>
</tr>
<tr>
<td>6. Krashen, Jones, Zelinska, &amp; Uprich (1978)</td>
<td>ESL in USA</td>
<td>adults</td>
<td>B IA</td>
<td>rich</td>
<td>DP</td>
<td>yes</td>
<td>yes</td>
<td>I &gt; E</td>
</tr>
<tr>
<td><strong>Ambiguous cases</strong></td>
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<tr>
<td>8. Fathman (1976)</td>
<td>ESL in USA</td>
<td>children</td>
<td>B IA</td>
<td>rich</td>
<td>I</td>
<td>?</td>
<td>yes</td>
<td>E &gt; I?</td>
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<tr>
<td><strong>Studies showing that instruction does not help</strong></td>
<td></td>
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<tr>
<td>9. Upshur (1968; Experiment I)</td>
<td>ESL in USA</td>
<td>adults</td>
<td>IA</td>
<td>rich</td>
<td>DP</td>
<td>no</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>10. Mason (1971)</td>
<td>ESL in USA</td>
<td>adults</td>
<td>IA</td>
<td>rich</td>
<td>DP</td>
<td>no</td>
<td>—</td>
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</tr>
<tr>
<td>11. Fathman (1975)</td>
<td>ESL in USA</td>
<td>children</td>
<td>B IA</td>
<td>rich</td>
<td>I</td>
<td>no</td>
<td>—</td>
<td>—</td>
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<tr>
<td><strong>Additional study showing that exposure helps</strong></td>
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<tr>
<td>12. Martin (1980)</td>
<td>ESL in USA</td>
<td>adults</td>
<td>IA</td>
<td>mixed</td>
<td>DP</td>
<td>—</td>
<td>yes</td>
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Note: B = beginning  
I = intermediate  
A = advanced  
DP = discrete-point  
I = integrative

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learning of relative clause formation ("hard grammar" in Krashen's terms, and so supposedly unteachable). Gass taught one group of adult ESL students relativization on the object of a preposition (OPREP) for three days' classes. OPREP is the fourth lowest in Keenan and Comrie's (1977) proposed universal accessibility hierarchy of relative clause formation. A control group received the same amount of instruction in relativization, but starting from the highest (subject and object) positions in the hierarchy. Subjects' knowledge of any kind of relativization was minimal at the outset, as shown by their performance on pretests consisting of both grammaticality judgment and sentence-combining measures.

Post-tests using the same measures produced two main findings of interest here: (1) overall scores (all relativization positions) of the experimental group had improved significantly on the grammaticality task, and (2) on the sentence-combining task, both groups' post-test scores were significantly improved, the experimental group's scores being better not just on OPREP relatives, but also for relatives in all the higher positions in the accessibility hierarchy, i.e. those on which they had not received instruction, but which would be implied as known by subjects who knew OPREP relativization. As in the Pienemann (1982) study, in other words, here is more evidence not only of the effect of instruction on the rate of acquisition of particular structures, but also of the generalizability of the effect to other constructions, at least where these are the implied terms in a markedness relationship. (Similar findings have since been obtained by Zobl, 1985, as discussed in section
Commenting on the Long (1983) review, Krashen (1985, 28-31) maintains that the findings in Table 1 do not show an advantage for formal instruction. In his view, the fact that instructed learners outperformed naturalistic acquirers in most studies simply reflects the utility of the classroom as a source of comprehensible input (CI) for 'beginners', who find it difficult to engage native speakers in conversation outside classrooms.

As pointed out in the original review, however, this argument is problematic in light of the findings of beneficial effects of instruction for intermediate and advanced learners, too (Brown, 1980, and several studies in Table 1), learners whose higher second language proficiency means they no longer depend on the classroom as a source of comprehensible input. Krashen's response to this (1985, 28-31) is that learners in some of those studies are wrongly classified as 'intermediates' and 'advanced' in the 1983 review (and in Table 1). Two studies, he says, involved only 'beginners', non-native speaking university students in the Queens College English Language Institute (Krashen, Seliger and Hartnett, 1974; Krashen and Seliger, 1976), while another utilized students 'at various levels' in extension courses at Queens College (Krashen, Jones, Zelinski and Usprich, 1978), 'with large numbers in the lower levels' (Krashen, 1985, 29). Krashen agrees that the study by Carroll (1969) did involve more advanced learners (US college foreign language majors with an average proficiency of 2+ on the FSI scale), but notes that
the benefits of instruction there, though statistically significant, were not large, and that, despite a year abroad in the target language environment, the classroom was still a major source of CI for those learners.

Since Krashen provides no proficiency scores for the learners in question, nor defines what he means as a 'beginner', it is difficult to evaluate his arguments. One notes that students who were classified as 'at various levels' of proficiency in the original research reports are now classified as 'beginners' or as in 'the lower levels'. Further, while instruction was originally claimed to be useful only for beginners (and then only indirectly, as a source of CI), Krashen (1985) claims that

"language classes are useful primarily for the beginner, and [that the studies] are consistent with the interpretation that their value is in the comprehensible input they supply" (Krashen, 1985, 29, emphasis added).

This statement raises two questions. First, does 'primarily' mean that Krashen now accepts that instruction also helps learners who are more advanced than beginners (still undefined)? If so, just how advanced must they be before language teachers are wasting their time? Second, the original claim was that classroom learning was only useful as a source of CI in an "acquisition-poor" environment, i.e. one in which target language exposure was not available outside the classroom. If this is a valid description of New York City (the setting for the three Queens College studies), Krashen needs to document that, at least for the subjects in his studies. Or is this claim also
now being modified to recognize instruction as useful in "acquisition-rich" settings as well?

In fact, the Long (1983) review raised four counterarguments to Krashen's interpretations of the same research. It seemed that instruction was beneficial (1) for children (who lack the cognitive maturity to develop metalinguistic awareness and, hence, a monitor) as well as for adults, (2) for intermediate and advanced learners, (3) on (supposedly unmonitorable) integrative as well as discrete-point tests, and (4) in acquisition-rich as well as acquisition-poor environments. None of these findings are predicted by Monitor Theory. Krashen (1985), as reported above, mentions and attempts to respond to only two of them (2 and 4).

Finally, it is interesting to note how Krashen et al (1978) originally interpreted the findings of their own research, a result which they then claimed (1978, 260) "replicates and extends previous findings (Krashen and Seliger, 1976; Krashen, Seliger and Hartnett, 1974, [i.e. the New York series]). In my opinion, theirs was and still is the correct interpretation:

"What may be inferred from these results is that formal instruction is a more efficient way of learning English for adults than trying to learn it 'on the streets'." (Krashen et al 1978, 260)

2.4. The effect of instruction on the level of ultimate SL attainment

Even less research has been conducted in this fourth area, the long-term effects of instruction on SL proficiency, than in the three areas discussed thus far. This is clearly a sad
reflection on the state of knowledge concerning language teaching, but equally clearly a fact which should (but has failed to) preempt hasty conclusions about the (in)efficacy of instruction by SLA researchers and theorists.

The major study to date is that by Pavesi (1984), who compared relative clause formation in instructed and naturalistic acquirers. The instructed learners were 48 Italian high school students, aged 14 - 18, who had received from two to seven years (an average of four years) of grammar based EFL teaching, and who, with the exception of three who had spent two months or less in Britain, had had no informal exposure to English. The naturalistic acquirers were 38 Italian workers (mostly restaurant waiters), aged 19 - 50, in Edinburgh, who had received only minimal or (usually) no formal English instruction. They had been in Britain for from three months to 25 years (an average of six years), during which time they had been exposed to English in a variety of home, work and recreational settings.

This is, then, a non-equivalent control groups design, preempting the testing of any causal relationships. In addition to the difference in age between the two groups, Pavesi notes that the overall educational level of the naturalistic acquirers was generally quite low, and their socio-economic background also lower than that of the school students. The latter, she reports, had also been exposed to a substantial amount of British literature and other written English. On the other hand, while the exact amount of informal SL exposure for the naturalistic group was difficult to determine, the balance was clearly in their favor, i.e. they had had many more hours of exposure than
the students had had of instruction. Hence, finding that the school students outperformed the naturalistic acquirers, as Pavesi did, provides further evidence of the positive effect of instruction - or a factor associated with it - on rate of SL development, assuming one discounts the intergroup differences. Rate of development was not the focus of Pavesi's study, however.

Relative clause constructions were elicited by asking subjects about the identity of characters in a set of pictures ('Number seven is the girl who is running', etc.), with relativization off all NP positions in the Keenan and Comrie Accessability Hierarchy (AH) being elicited. Using implicational scaling, the developmental sequences for each group were then plotted, and each found to correlate statistically significantly with the order in the AH, with a progression from least to most marked constructions. The learning context, that is, had not influenced acquisitional sequence (another result consistent with those of the studies reviewed in section 2.2.). This, as we have seen, is the kind of finding which has led some researchers to conclude that instruction does not affect acquisition at all. As Pica (1983) had done, however, Pavesi looked further before discounting instruction, and like Pica, found that her subsequent analyses revealed interesting differences between the two groups.

The differences were of two kinds. First, more instructed learners reached eighty percent criterion on all of the five lowest NP categories in the AH, with differences between the groups attaining statistical significance at the second lowest (genetive, 'whose') position, and falling just short
(p<.06) at the lowest (object of comparative) level. More instructed learners, that is, (and in absolute terms, very few naturalistic acquirers) were able to relativize off NPs at the more marked end of the implicational hierarchy. In gross terms, instructed learners had "gone further", or reached higher levels of SL attainment.

A second difference to emerge between the groups concerned the kinds of errors each made with regard to resumptive nominal and pronominal copies. Naturalistic acquirers exhibited statistically significantly more frequent noun retention than instructed learners ('Number four is the woman who the cat is looking at the woman'). Instructed learners, on the other hand, produced statistically significantly more resumptive pronoun copies than naturalistic acquirers ('Number four is the woman who the cat is looking at her'). (The fact that neither Italian nor English allow copies of either kind, coupled with the finding that the developmental sequence for all learners followed the AH, is further evidence of the need to treat interlanguage syntax as an emergent autonomous system.)

While Pavesi's results have been presented here in terms of the differences they suggest can result from formal SL instruction, Pavesi herself does not in fact interpret them this way. Instead, following Ellis (1984b), she suggests that the instructed group's superior performance derived not from formal SL instruction per se, but from the instructed learners' exposure to the more elaborated, more complex input of language used as the medium of instruction, i.e. from their exposure to what Ochs (1979) terms 'planned discourse'. Planned discourse has been
documented as containing, among other things, a higher degree of grammaticalization (Givón, 1979), including a higher frequency of linguistically more marked constructions. If an explicit focus on form, i.e. the object, not the medium of SL instruction, was producing the observed effects, Pavesi argues, how could one account for the failure of such instruction to alter acquisition sequences which, as has so often been shown, do not reflect teaching syllabuses?

My own view is that the well attested failure of interlanguage developmental sequences to mirror instructional sequences (for which Pavesi's study provides further evidence), is due to the powerful influence of universals, themselves the product of internal learner contributions, and/or to the failure of instruction to respect principles of learnability/teachability such as those outlined by Pienemann. Further, in Pavesi's study, it is presumably those same universal tendencies which account for both instructed and naturalistic groups' use of resumptive nominal/pronominal copies, since these are disallowed in English and in Italian and would not have been present (let alone salient) in either simple/unplanned or complex/planned discourse modes. Hence, if the (marked) copies are not being acquired through exposure to planned discourse, why should one believe that the (marked) relative clause constructions are, as opposed to as a result of the SL instruction itself?

While an interesting idea, the 'discourse mode' explanation also seems unlikely for the simple reason that so many of the marked/language-specific features that the elaborated
mode undoubtedly contains (and provides exposure to) will
nevertheless not be perceptually salient to the learner. A focus
on form which (some kinds of) SL instruction provides, on the
other hand, would draw the learner's attention to such items.

Strong (impressionistic) evidence for this view can be
found in a recent diary study, supplemented by subsequent
analyses of recorded interlanguage speech samples, of the
acquisition of Brazilian Portuguese by a trained linguist and SLA
researcher (Schmidt, in press). Schmidt kept detailed notes of
his interlanguage development over a six-month period, including
records of linguistic items (1) which he was taught in a formal
Portuguese as a SL class in Rio de Janeiro, (2) which he
noticed/failed to notice in the Portuguese to which he was
exposed outside the classroom, and (3) which he produced (not
necessarily accurately) or ignored or avoided in his own speech.

After much detailed discussion of these and other data
sources and of relationships among them, Schmidt concludes (in
press, 54):

"It seems, then, that if [I] was to learn and use a particular
type of verbal form, it was not enough for it to have been
taught and drilled in class. It was also not enough for the
form to occur in input, but [I] had to notice the form in the
input . . . [I] subjectively felt as [I] was going through
the learning process that conscious awareness of what was
present in the input was causal."

Schmidt also notes that several items, such as reflexive se,
though frequent in the input, had little or delayed effect on his
production because of their lack of saliency.

Finally, his retrospective analyses convinced Schmidt
that he usually noticed forms in the out-of-class input after
they were taught. One excerpt from the diary must suffice to
illustrate the process here:

"Journal entry, Week 6

This week we were introduced to and drilled on the imperfect. Very useful! The basic contrast seems straightforward enough: ontem eu fui ao clube ["yesterday I went to the club"] vs. antigamente eu ia ao clube ["formerly I used to go to the club"]. L [the teacher] gave us a third model: ontem eu ia ao clube, "yesterday I was going to the club . . . but didn't", which L says is a common way of making excuses. The paradigm is also straightforward . . . though maybe not as easy as I first thought . . . Wednesday night A came over to play cards, and the first thing he said was: eu ia telefonar para voce ["I was going to call you"], exactly the kind of excuse L had said we could expect. I noticed that his speech is full of the imperfect, which I never heard (or understood) before, and during the evening I managed to produce quite a few myself, without hesitating much. Very satisfying!

(Schmidt, in press, 52.)

Rather than "voting" on the discourse mode/formal SL instruction issue, however, one way of resolving it empirically would be to compare advanced non-native speakers who received SL instruction with a focus on form with the graduates of immersion or submersion programs. The latter receive massive exposure to elaborated/planned SL discourse through being educated through a SL, but (in theory, at least) with no focus on form. An indication of the way such a comparison might result can perhaps be seen in the findings of a study of the product of French immersion programs in Canada by Swain (1985). Swain's study shows that the results of SL learning through immersion education are impressive, but also documents the failure of immersion students to have mastered even a wide range of unmarked morphology and syntax after seven years.

Further evidence for this interpretation may lie in the findings of a series of three studies reported by Zobl (1985) on the teaching of English possessive adjectives to French-speaking
university students in Canada. Zobl's first study of the
difficulty orders of 162 French-speaking learners of English
corroborated linguistic arguments concerning markedness in two
domains. The study showed (1) that *his* is the unmarked member of
the *his/her* pair, and (2) that categorical control of the rule
governing gender marking of possessed animate or human entities
(*his* mother, *her* father', etc.) implies categorical control of
the rule governing possessed inanimate, or nonhuman, entities
(*her* hand', *his* car', etc.), but not *vice versa*, i.e. that
nonhuman is the unmarked member of the human/nonhuman pair.

Zobl next ran a study in which two randomly formed
groups of approximately 20 low-level adult speakers of French
each received 15 minutes of instruction in the use of the
possessive forms. One group was exposed only to examples with
human possessed entities; the other group exclusively experienced
elements with nonhuman possessed entities. Controlling for input
frequency, the instruction consisted of intensive oral question
and answer practice, based on pictures, with no overt
explanations or rules, but with corrections from the teacher
where necessary through rephrasings of incorrect student
responses, i.e. some focus on form. Pre- and post-tests consisted
of responses to questions written as quickly and unreflectingly
as possible. A year later, a third (replication) study was run on
a new sample of students.

The findings of the two experimental studies were (1)
that students who had experienced the input containing marked
(human) examples improved in both the human and nonhuman domains
(confirmed in both studies), while (2) students who had received exposure only to unmarked (nonhuman) input slightly deteriorated in that domain (first study) or improved in that domain, but less than the human data group in that domain (replication study), and showed no improvement in the marked (human) domain (both studies). In other words, students who had been exposed only to marked data improved more than students who had been exposed only to unmarked data in both the marked domain and the unmarked (nonhuman) domain in which the other group, and only the other group, had received instruction.

Zobl employed various measures of the students' test performance. Among other features he noted were a tendency for the groups receiving unmarked input to show a higher incidence of rule simplifications following the treatment (e.g. overuse of the unmarked determiner, his). Conversely, the group receiving marked input supplied more gender-marked, third person forms in new contexts, including overgeneralizations of the marked form, her, showed less use of articles, (which the first, descriptive study had revealed as a transitional form in acquiring the possessive adjectives), and also less avoidance (through use of immature forms like the gender-neutral your or determiner omission).

Zobl concludes by offering a very interesting explanation for the finding that exposure to unmarked data appeared to lead to rule simplification (overgeneralization of the unmarked his), while exposure to marked data produced rule complexification (overgeneralization of the marked her). He suggests that:

"once grammars reach a certain level of complexity such that
their rules begin to predict to unmarked structures with some regularity, marked data become necessary if progress on unmarked structures is not to stagnate." (Zobl, 1985, 343)

Further, he notes that both experiments showed that exposure to the marked (human) domain led to overgeneralization of the marked he, whereas exposure to the unmarked (nonhuman) domain produced overgeneralization of the unmarked his. That is, exposure to the unmarked nonhuman triggers the correlated markedness value, unmarked his; conversely, exposure to the marked human triggers the correlated markedness value, marked he. If this explanation is correct, and if it translates from the experimental to the naturalistic acquisition context, Zobl hypothesizes, it would mean that acquisition along one parameter entails acquisition along another related parameter, which would in turn mean a significant reduction in the amount of input a learner requires to reach the same level as a learner who experiences mostly or exclusively unmarked data.

To the extent that instruction focuses on marked elements in the SL, here, then, is a potential explanation for its positive effect on the rate of acquisition. Note, too, that Zobl's findings on the benefits of exposure to marked data are consistent with those of Pavesi in two respects. They help explain the rate advantage for the Italian high school students, and potentially explain the higher level of ultimate attainment. It could be that the preponderance of unmarked data that naturalistic acquirers encounter not only slows them down, but also leads to simplifications in the grammars before full target competence is attained. i.e. to premature fossilization.
3. Conclusion

The review of research on the effect of instruction on SL development suggests the following conclusions. First, formal SL instruction has positive effects on SLA processes, on the rate at which learners acquire the language, and on their ultimate level of attainment. Findings in the last area even suggest that it may be impossible to reach full native speaker competence without instruction. Instruction does not, on the other hand, seem able to alter acquisition sequences, except temporarily, and in trivial ways, which may even hinder subsequent development.

Second, there has clearly been insufficient research to warrant firm conclusions in any area we have considered, and no research at all in other important ones, such as the kinds of sociolinguistic competence (e.g. collocational abilities) achievable with and without instruction. Third, and following from the first two, the position taken by some theorists and methodologists that formal instruction in a SL is of limited use (e.g. that it is good for beginners only, or for "simple" grammar only), is obviously premature, and almost certainly wrong.

Fourth, future research on this issue must be conducted with greater rigor than has typically been the case to date. Reference has already been made to the need to choose subjects carefully, to follow standard procedures in their (random) assignment to treatments, to employ control groups, and to select for teaching experiments those aspects of the SL which are "learnable" at the time instruction is provided.

It is also important, however, for investigators to
record and report precisely what "instruction" consisted of in their studies. This would have two effects. First, it would disambiguate potential confounds between such factors as a focus on the SL itself and exposure to linguistic features through the SL. Second, should instruction prove to be beneficial, as currently seems likely, it might help preempt misuse of such a finding as a blanket justification for returning to some of the more neanderthal teaching practices which, as was noted at the outset, SLA research first helped to discredit.

One example may help clarify the last point. For reasons beyond the scope of this paper, my own view is that a focus on form is probably a key feature of SL instruction, because of the saliency it brings to targeted features in classroom input, and also in input outside the classroom, where this is available. I do not think, on the other hand, that there is any evidence that an instructional program built around a series (or even a sequence) of isolated forms is any more supportable now, either theoretically, empirically or logically, than when Krashen and others attacked it several years ago. It is not hard to imagine, however, that a return to teaching discrete grammar points, plus or minus overt grammar explanations, is just what some methodologists will see vindicated by any finding that formal SL instruction is beneficial. Clearly, we want to avoid an unwarranted inference of that kind. Were researchers to specify just what kind of instruction was involved in their studies, along this and other parameters, it might help avoid another pendulum swing in the field, and would certainly save a lot of time on subsequent research on the relative effectiveness of
different types of instruction, time that all too few language learners can afford.

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