

GRAMMAR TEACHING - WHAT KIND WORKS BEST FOR SECOND LANGUAGE ACQUISITION?

Rod Ellis

Temple University Japan

November 1991

Introduction

A number of studies in the late sixties and seventies indicated that second language (L2) learners follow a 'natural' order of acquisition (cf. Krashen, 1977). Other studies showed that learners go through a sequence of stages when acquiring complex syntactical structures such as negatives, interrogatives and relative clauses (e.g.. Cancino et al, 1978). This led a number of researchers to ask whether instructed learners followed a similar pattern of development. In particular, these researchers were interested to what extent and in what ways grammar teaching affected classroom language learning.

There are now a number of comprehensive reviews of this research (cf. Long, 1983a and 1987; Ellis, 1985, 1990 and forthcoming). The general findings can be summarised as follows:

- (1) Learners who receive plenty of comprehensible input in classrooms where the bulk of the teaching is directed at providing opportunities for communication and there is little or no grammar teaching (e.g. learners in immersion programmes) do not seem to acquire many of the more marked grammatical features of the L2 (Swain, 1985). Hammerly (1987) suggests that the result is a kind of classroom pidgin.
- (2) Learners who receive grammar instruction are likely to follow the same order and sequence of development as learners who do not. In other words, learners do not always acquire grammatical features in the same order as they are taught and do not seem to be able to avoid the transitional stages evident in the acquisition of developmental features (Pienemann, 1989).
- (3) Learners may be able to use developmental features which they have been taught in planned language use even if they

are not able to do so in more unplanned language use (Schumann, 1978).

- (4) Learners who receive grammar instruction may progress more rapidly along the order and sequence of development than those who do not (Long, 1983).
- (5) Grammar instruction may be effective in teaching grammatical features that are not 'developmental' (i.e. those features that research has shown are not acquired in a fixed order or sequence of acquisition but are acquired at variable times by different learners) (Pienemann, 1984).
- (6) Grammar instruction can help learners to use features that they have already acquired more accurately (White et al, forthcoming).
- (7) Learners who receive instruction in a marked grammatical feature may succeed not only in improving their accuracy of use of that feature but also of other less marked features that are in some way 'implicated' in the marked feature (Eckman et al, 1988).
- (8) Learners may demonstrate improved accuracy in the use of a taught grammatical feature over a sustained period of time, providing they have communicative opportunities to use the feature. Conversely, improved accuracy in a taught feature may disappear over time if there are no such communicative opportunities (Lightbown, forthcoming).

It should be noted that the general picture afforded by the research is, for a number of reasons, less clear-cut than the above list suggests. In general, though, there is ample evidence to show that within a set of constraints that govern learners' receptivity to new grammatical information, formal instruction directed at specific grammatical properties of the L2 works.

It is not my purpose in this paper to review the research that has led to these findings. Instead, I wish to switch attention towards another question - what kind of grammar teaching works best for acquisition? The bulk of the research to date has treated formal instruction generically, as it has been concerned to establish whether a focus on specific grammatical forms aids their acquisition. This is an important issue for theory construction but it is, arguably, of limited interest to language teachers, who, unlike L2 acquisition researchers, have tended to assume that grammar teaching is useful and have been more concerned with finding the most effective way of accomplishing it.

Methodological options in grammar teaching

A good starting point is to consider what are the methodological options available to teachers. Figure 1 shows some of the principal choices. A general distinction is made between grammar instruction as planned intervention and as feedback on performance. In the case of the former, grammar lessons are devised on the basis of some kind of grammatical syllabus. In the case of the latter, the instruction takes the form of corrective feedback of learners' errors. Such feedback is not usually pre-planned but rather is 'negotiated' between the teacher and the learners as part of the on-going process of a lesson (cf. Allwright, 1975). Feedback on performance may occur within the context of a grammar lesson but may also occur in other types of lessons, including those designed to engage the learner in communication of various kinds.

Each of these basic options leads to a series of other choices. Planned intervention can involve presentation and practice (a familiar distinction in grammar teaching. In one type of presentation the teacher provides the learners with data that illustrates the target feature and encourages them to 'discover' the feature for themselves. This is the implicit option. Alternatively the teacher provides the learner with explicit descriptions of the target feature in the form of verbal and non-

verbal explanations with or without examples. An important distinction with regard to practice is whether it is comprehension-based or production-based. In the former, the learners are engaged in tasks that require them to pay attention to the target feature in oral or written input but they are not called upon to demonstrate an ability to use the feature in their own output. In contrast, production-based practice does require output from learners. Such output can be strictly controlled as in substitution drills and transformation exercises (i.e. text-manipulation activities) or it can be elicited more 'naturally' by means of communication activities that have been specially designed to provide opportunities for its use (i.e. text creation activities). The distinction between text-manipulation and text-creation activities reflects a continuum; that is, activities can involve more or less text-creation.

The various options available for providing feedback on performance have been described by a number of researchers (cf. Allwright and Bailey, 1991). In Figure 1 the only option shown is that between overt and covert corrective feedback. The former involves the kind of error correction that often occurs in conversations between mothers and young children. It often take the form of some kind of topic-incorporation device such as when one speaker seeks clarification of what another speaker has said. Schachter (1986) calls this type of correction 'indirect' and describes a number of different types. Covert feedback is 'direct' in the sense that the main illocutionary force of the utterance is to draw the learner's attention to some grammatical error that has been made.

Figure 1 does provide a comprehensive account of the methodological options available in a grammar lesson. Rather it details some of the main distinctions which have been discussed in the pedagogical literature and which have been the subject of empirical study. The 'options' which have been identified are not to be seen as 'alternatives'. It is not intended to suggest, for example, that grammar instruction must consist of either planned instruction or

feedback on performance or that planned instruction must involve either presentation or practice. Obviously any one grammar lesson can involve various combinations of these options. For example, a lesson based on (1) planned intervention might involve both (3) presentation and (4) practice, during which (2) feedback on performance occurs. The presentation might be of the implicit kind (7). The practice might consist of both (9) comprehension and (10) production based activities that provide for both (11) text manipulation and (12) text creation activities. Another lesson based on planned intervention might involve only an explicit presentation (8) followed by various comprehension-based activities (10).

Ideally we want to know not just which options work best but also which combinations of options. However, it may be some time before researchers are able to examine combinations effectively, so I will limit discussion in this paper to specific options. The options I will consider are (1) planned intervention vs. feedback on performance, (2) implicit vs explicit instruction, (3) comprehension-based vs production-based instruction and (4) text-manipulation vs text-creation activities. I will not attempt a comprehensive review of the relevant research, but rather try to use the research to examine some of the key pedagogic issues.

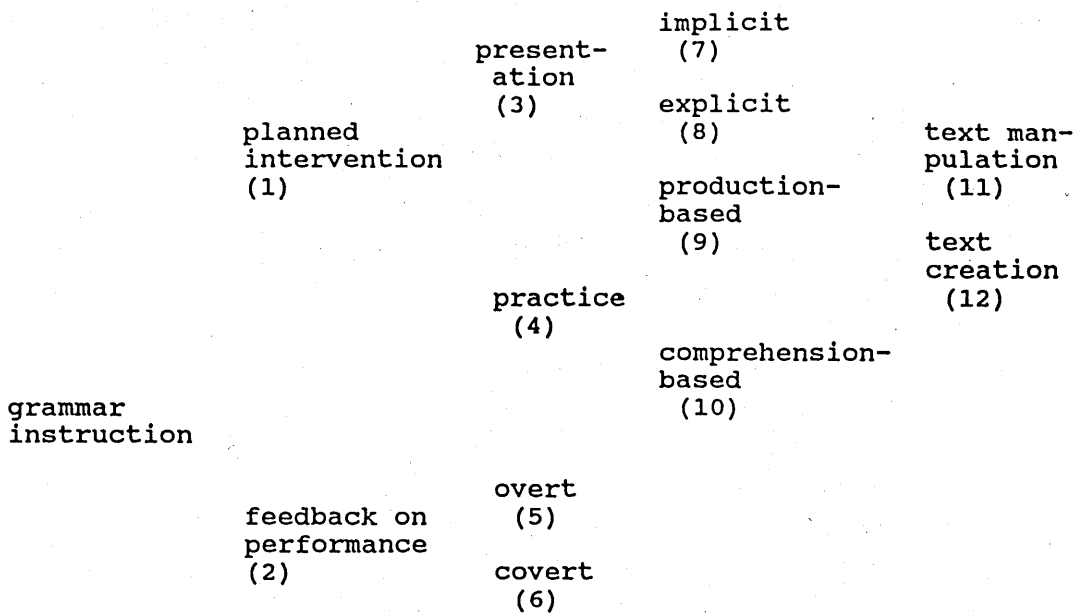


Figure 1: Options in grammar instruction

Planned intervention vs feedback on performance

The teacher can elect to try to teach grammar systematically in a

'structure-of-the-day' approach or to deal with it on a more ad hoc basis through selective correction of learners' errors as and when they occur. In the case of planned intervention teachers will have to decide what grammatical structures to teach and how to teach them. In the case of performance on feedback no a priori choice of grammatical structures needs to be made; instead, the teacher simply responds to the grammatical problems evidenced by the learners' errors, when and if they occur.

There has been no study that has compared the effects of regular planned intervention as opposed to feedback on performance. Indeed it is unlikely there ever will be such a study. It is possible to envisage an approach to language pedagogy that does not involve any planned intervention (cf. Prabhu's (1988) Communicational Language Teaching Project in India) and that 'teaches' grammar only through either overt or covert error correction. However, it is difficult to envisage a programme of planned intervention that does not involve some kind of feedback on performance.

It is possible, however, to consider the two options from a more theoretical standpoint. Long (1987) distinguishes formal instruction as a focus on forms (planned intervention) and as a focus on form (feedback on performance) and goes on to argue strongly for the latter:

... 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 it was when Krashen and others attacked it several years ago.

Although he does not specify the objections he has to planned intervention, Long probably has in mind research that shows that learners follow their own developmental route irrespective of the

teaching syllabus and the consequent failure of attempts to teach them grammatical structures which they are not ready to acquire. Elsewhere (Long, 1985), he has pointed out the difficulties of trying to construct an instructional programme that takes full account of the 'learnability' of grammatical structures.

It is, however, premature to reject planned instruction in the way Long does. First, Long's objections are based on the problems of teaching learners new grammatical features which they are not ready to acquire. However, planned grammar lessons may help learners to increase their accuracy over linguistic features that they have already acquired, as a number of studies have demonstrated. Second, Long's (and Krashen's) dismissal of grammar lessons is based on the assumption that such lessons will require learners to produce the targeted structures. But as Figure 1 shows grammar lessons can be comprehension rather than production based. There is no evidence to show that the problems of 'learnability' affect what structures the learner can comprehend. A course of instruction directed at helping learners to notice features in specially prepared input, therefore, cannot be rejected on 'theoretical, empirical and logical' grounds.

A recent study suggests just how wrong Long might be. Tomasello and Herron (1988; 1989) report on the effects of two kinds of instruction directed at problematic constructions that typically result in the overgeneralization of an L2 rule or the transfer of an L1 pattern in the speech of beginner learners of L2 French. In one treatment the problems were explained and illustrated to the students. In the other, learners were induced into producing overgeneralization or transfer errors and were then corrected. The results showed that 'leading students down the garden path' was more effective. The garden-path approach is presumably the kind of language instruction that Long favours, as it involves an attempt to make features salient to learners which in the course of 'natural' acquisition they intend to ignore. It constitutes a kind of 'focus on forms'. The garden-path approach, as used by Tomasello and

Herron, however, constitutes a clear example of planned intervention. The researchers taught a 'grammar course'. What is interesting about this study is that it suggests that planned intervention can be conducted in such a manner that it is compatible with principles of 'natural' learning.

In arguing that Long is wrong to dismiss grammar lessons, I do not wish to imply that he is also wrong in attributing importance to feedback on performance. Indeed, the Tomasello and Herron study suggests just how important corrective feedback can be. Lighbown and Spada (1990) studied the effects of differences in the amount of attention that teachers paid to learner errors in the context of a communicative ESL programme in Quebec. Their study provides support for the view that correcting errors when they occur spontaneously in learners' speech aids acquisition. Interesting, though, not all errors proved equally sensitive to correction. For example, whereas learners who received feedback on the use of 'It has ...' (in place of the correct 'There is ...') made fewer subsequent errors in their communicative speech, no such effect was evident for correction of errors of adjectival placement.

A safe conclusion is that learners can benefit from grammar instruction based on both planned intervention and feedback on performance. Planned intervention that takes account of 'natural' learning processes is more likely to succeed than that which does not.

Implicit vs explicit instruction

The relative effectiveness of grammar instruction that involves an explicit presentation of target features in comparison to

instruction that requires learners to induce rules from examples has been debated extensively in language pedagogy and has also been investigated in a number of studies.

The 'language teaching controversy' (Diller, 1971) of the sixties and early seventies pitted the claims of an empiricist approach to language teaching against those of a rationalist approach. The former emphasised learning by 'analogy', while the latter stressed the role of conscious 'analysis' in the learning process. This distinction is the principal distinguishing characteristic of such methods as grammar translation/cognitive code and audiolingualism/oral-situational. A number of 'global method studies' attempted to investigate which approach to language teaching was most effective. The results were inconclusive, however. Smith (1970) found remarkably few differences in the learning outcomes of learners taught by the 'functional' audiolingual method and those taught by a 'cognitive' method that involved the direct presentation of grammatical rules. The GUME project in Sweden (cf. Von Elek and Oskarsson, 1975), however, did show that although there were no overall differences between 'implicit' and 'explicit' teaching in the case of adolescent foreign language learners, explicit instruction seemed to work better for adults. It also benefitted some adolescent learners (e.g. females of above average intelligence). However, global method studies constitute a very crude way of investigating the effects of inductive and deductive grammar teaching. They shed no light on which criteria features of a method are responsible for any differences in learning outcomes that are found. Also, as has often been noted, there is no guarantee that differences apparent in the external descriptions of methods are reflected in actual classroom processes.

Other studies have focussed more narrowly on the effects of implicit and explicit instruction in individual lessons. Seliger (1975) found that adult ESL learners in the United States retained knowledge of a rule better from an explicit than from an implicit

presentation. However, Hammerley (1975) found that some grammatical structures were more amenable to a deductive approach, while others were better suited to an inductive approach. Hammerley's finding is supported by research on implicit and explicit learning in psychology. A series of studies conducted by Reber (1976;1980), for instance, indicates that explicit instruction works when the material to be learnt is relatively 'simple' but not when it is 'complex'. The factors determining the level of difficulty are (1) the number of variables to be mastered and (2) the extent to which the critical features in the input data are salient.

Work in general psychology also points to another factor that may be important where explicit presentation of grammar rules is concerned - whether the rule is presented in isolation or in conjunction with examples. Gick and Holyoak (1983) investigated the conditions that resulted in maximal transfer of abstract problem-solving schema from a taught problem to analogous problems. They found, not surprisingly perhaps, that maximal transfer occurred when learners were presented with an abstract principle (i.e. a rule) along with examples of the rule in operation.

There is clearly a need in L2 research for fine-grained studies of implicit/explicit instruction of the kind common in general psychology. One such recent attempt is N. Ellis's (1991) study of the effects of three types of instruction on adult university students' ability to mutate initial consonants in Welsh nouns (e.g. /t/ > /d/) in accordance with a complex set of contextual factors. The three types of instruction were (1) an implicit training programme which provided learners with randomly ordered examples of mutating and non-mutating nouns in different contexts, (2) an explicit training programme which taught learners the rules of soft mutation and (3) a 'structured' training programme which provided learners with both explicit rules and examples of how they are applied. Learners receiving each type of instruction were also taught the English translations of a set of Welsh nouns. The treatments were carried out on micro-computers. The learners who

received the implicit instruction were successful in learning word meanings, but showed only very uncertain knowledge of the rules of soft mutation. The learners who were taught the explicit rules developed - as might be expected - a solid knowledge of the rules, but were not always able to apply it by making accurate judgements regarding correct and incorrect noun forms. The learners receiving the 'structured' treatment did best. They knew the rules and were also able to apply them. Ellis notes that 'this group alone knows when novel phrases are ungrammatical'. This study, then, suggests that a blend of explicit rule instruction and structured examples may work best for learning complex grammatical features.

On balance the available evidence indicates that an explicit presentation of rules supported by examples is the most effective way of presenting difficult, new grammatical material. Yet it is wise to exercise caution before jumping to the conclusion that this is the best way to teach grammar. Not all learners may benefit from explicit grammar teaching. Abraham (1985) reports that learners with a field-independent cognitive style benefited from a deductive lesson on English participle formation, while field-dependent learners performed better as a result of an inductive lesson in which only examples of the use of participles in context were provided. This study supports Eisenstein's (1980) claim that learners are likely to differ in the kind of presentation (explicit vs implicit) they learn best from.

There is another reason to query the value of explicit rule presentation. It is not clear to what extent the explicit rules that learners develop are accurate. Seliger (1979) investigated the nature of the explicit rules that adult ESL learners had constructed to account for the use of the indefinite articles 'a/an' with nouns and found that in many cases they were vague and anomalous.

Clearly we need to know a lot more about how learners construct

explicit rules and what value they play in the development of implicit knowledge before we can be sure that they are worthwhile teaching. However, in the meantime teachers have to take decisions about what to do; there is sufficient evidence to support the inclusion of explicit rule presentation in grammar teaching at least for educated adult learners.

Comprehension-based vs production-based instruction

In general grammar instruction has been aimed at developing the accurate production of targeted features. A quick look at Ur's (1988) handbook of grammar practice activities shows just how much practice has been linked with production. Ur states that the function of a grammar task is to stimulate 'active language use' by means of 'production of instances of the structure on the part of the learners themselves' (p. 17). She does acknowledge that tasks can also be directed at enabling learners to perceive, discriminate, understand and interpret grammatical features, but she offers few suggestions for such tasks and seems to restrict this kind of grammar work to the presentation stage of a lesson.

When we talk about the 'comprehension' of grammatical structures we may be referring to two rather different notions. One sense of 'comprehension' refers to the learners' conscious identification of a grammatical rule - to the idea of developing an explicit representation. A second sense refers to the learners' ability to distinguish the meaning(s) performed by a particular grammatical structure - to the idea of developing an understanding of the signification (in Widdowson's (1978) sense of the term) of grammatical forms. An explicit representation of a grammatical rule may or may not be accompanied with the ability to recognize the signification of a feature in use.

'Comprehension' grammar tasks differ from traditional grammar tasks in that they emphasise the learner responding to input rather than

the elicitation of learner output. The response learners are asked to make to the input they are exposed to can be of two kinds, corresponding to the two senses of 'comprehension' referred to above. The learner may be invited to examine structured input data in order to discover an underlying rule - to make explicit what is implicit in the data. For example, learners may be given sentences that illustrate the use of the present simple tense to realise two different meanings (say habitual activity and future plans), asked to sort the sentences into two groups, identify and finally label the different meanings of the verb form. I will refer to this kind of grammar comprehension task as a consciousness-raising task. Alternatively, the learners may be required to respond non-verbally to structured input data in such a way as to demonstrate their understanding of the targeted feature. For example, learners may be asked to listen to sentences (some of which are active and some passive in voice) and then state whether each sentence is true or false in relation to pairs of pictures, one of which corresponds to the input sentence and one of which does not. I will call this kind of task an interpretation task.

The case for consciousness-raising tasks rests on the argument that whereas the acquisition of implicit knowledge is regulated by various constraints to do with the the nature of grammatical feature and the learner's stage of development, the internalisation of explicit knowledge is not. In other words, the problems of learnability that prevent grammar instruction working in the case of implicit knowledge do not apply where explicit knowledge is concerned. For example, Pienemann (1984;1989) provides evidence to suggest that a German word order feature such as inversion can only be taught successfully (in the sense that it is subsequently available for use in communication) if learners have reached the stage of development that enables them to handle the processing operations responsible for this feature. Inversion can be taught successfully as explicit knowledge, however, irrespective of the learner's stage of development. Teaching grammar for explicit knowledge is a lesser goal than teaching it for implicit

knowledge, but Ellis (1991) argues that it is still valuable. He suggests two important functions for explicit knowledge in L2 acquisition. First, as Krashen (1981) has pointed out explicit knowledge can be used to monitor output, thereby improving its formal accuracy. Learners can then use their own improved output as input for acquisition (cf. Sharwood Smith, 1981). Second, Ellis suggests that learners with access to explicit knowledge of an L2 feature are more likely to 'notice' it in the input. If noticing is as important as Schmidt (1990) has recently claimed, explicit knowledge may be of considerable importance in preventing premature fossilization.

There is as yet no research to directly support Ellis's claims that explicit knowledge facilitates the subsequent development of implicit knowledge. However, recent studies by Fotos and Ellis (1992) and Fotos (1991) provide some indirect support. It has been shown that Japanese college students can form accurate representations of the rules for such structures as dative alternation, adverb placement and relative clause placement as a result of carrying out tasks that require them to work out the explicit rules from an array of structured input data. Furthermore, because these tasks were constructed in accordance with information-gap principles, the learners were also given opportunities to communicate). 'Grammar' became the content that the learners 'negotiated' in order to achieve mutual understanding (cf. Rulon and McCreary's (1986) study of content negotiation). The tasks, therefore, had two goals; (1) to develop explicit knowledge and (2) to stimulate communication. Fotos' research shows that consciousness-raising tasks can work effectively in both respects. Furthermore, Fotos has been able to demonstrate that learners with well-developed explicit knowledge do tend to notice more in subsequent communicative input than learners with less explicit knowledge. Thus whereas learners who had completed consciousness-raising tasks reported frequent noticing of the grammatical structures in subsequent dictation and listening comprehension activities, learners who had not completed the consciousness-raising

tasks reported noticing these structures only rarely or not at all. Consciousness-raising tasks, therefore, seem a promising device for promoting classroom language learning, although, as Ellis (1991), has pointed out they also have a number of limitations (e.g. not all learners may be interested in or capable of inducing explicit representations of grammatical rules from data).

A rationale for interpretation tasks is provided by Van Patten and Cadierno (forthcoming). They distinguish two stages in the acquisition of implicit knowledge; (1) input processing, during which learners create intake out of input by means of strategies that promote form-meaning connections during comprehension and (2) restructuring of the learner's interlanguage system, which occurs when learners are able to accommodate new intake. They suggest that:

Rather than manipulate learners' output to effect change in the developing system, instruction might seek to change the way that input is perceived and processed by the learner.

and go on to emphasise the importance of input in the form of 'language that encodes meaning'. An experimental study lends some support to their claims that 'input processing' promotes acquisition more effectively than 'production training'. Learners of Spanish at university level who received instruction that provided them with opportunities to perceive and interpret information relating to Spanish word order and the use of clitic pronouns in structured input performed better in interpretation tests than a similar group of learners who received practice in producing these target structures. Furthermore, the input processing group performed at the same level as the traditional group on production tests, which might be expected to favour the latter. Interpretation tasks, therefore, also look promising.

There are strong theoretical arguments to support grammar instruction that focuses on comprehension - either in the form of consciousness-raising tasks or as interpretation tasks. However,

there are only a few empirical studies of this approach to date and so little is known about its effectiveness. In particular, we need to discover how viable such an approach is pedagogically by encouraging teachers to experiment with it in their own classrooms.

Text-manipulation vs. text-creation activities

Mainstream grammar teaching relies on a range of activities designed to elicit production containing the targeted features. These activities are often divided into three types; (1) controlled exercises such as substitution drills, (2) situational exercises which invite learners to practise a particular feature within the context of a situation that has been specially contrived to afford opportunities for its production and (3) structure-based communication tasks which are designed in such a way that 'grammatically encoded information is essential to task success' (Loschky and Bley-Vroman, 1990). These three types occur on points of a continuum, at one end of which there are activities calling only for text-manipulation and at the other end of which there are activities calling for text-creation.

Traditional grammar instruction aims to lead learners along the continuum. Thus, first they are given opportunities for controlled practice in activities that call for the manipulation of decontextualised sentences. Next, they are required to produce sentences in relation to a given situation, often using information provided. Such activities can involve different degrees of text manipulation and creation. Finally, they perform a communicative task based on information-gap principles. The task will have been constructed in such a way that the use of the target structure is either natural, useful or essential (Loschky and Bley-Vroman, 1990).

There are a number of problems with such an approach, some of them psycholinguistic in nature and others pedagogic. The main psycholinguistic problem has already been mentioned - learnability. Learners may not be able to use a particular feature in production

if they have not developed the necessary processing operations. This may not be a problem where text manipulation activities are concerned, as learners may be able to make use of 'controlled processing' involving explicit knowledge to produce the targeted structure. However, it is likely to be a major problem in text creation activities that call for more 'automatic processing'. If the targeted feature is 'new' (in the sense that it is not yet part of the learner's interlanguage system), it seems very unlikely that its acquisition can be achieved by manipulating learners' production. Tuz (forthcoming) attempted to teach adjectival order to a group of Japanese college students by first having them practise it under relatively controlled conditions and then use it in an information-gap activity designed to elicit noun phrases with multiple adjectives. She found that the students performed the controlled activities satisfactorily but simply avoided using the targeted structure in the communicative activity. Given the amount of effort that goes into the preparation of materials designed to lead learners from controlled to communicative use of grammatical features (cf. Widdowson, 1986 for a good example of this kind of thing), it is surprising that there has been so little research into when and under what conditions such materials can be successful. At the moment there is no clear evidence to demonstrate that the underlying assumption of such materials - that 'practice makes perfect' - is correct (cf. Ellis, 1988, for a review of studies that have investigated the effects of amount of practice on the acquisition of grammatical features).

It does not follow, however, that traditional grammar instruction is of no value. If the targeted feature is already part of the learner's interlanguage system but is not yet under full control, opportunities for using it in production may prove more helpful. As we noted in the introduction, there are a number of studies which show that grammar instruction can improve the accuracy with which already learnt features are used. A good example is Harley's (1989) study of the effect of functional grammar teaching on English students' acquisition of two French

verb tenses. Harley was able to show that immersion learners who had received plenty of comprehensible input were unable to use these tenses accurately but were able to do so after they been given focussed opportunities to use it in text-creation activities. It could be, therefore, that grammar instruction based on communicative grammar tasks helps the automatization of features that have already been acquired.

It will be necessary, however, to overcome a number of pedagogic problems with such tasks. One concerns the anxiety which some classroom learners suffer when faced with the demand they communicate (cf. Horwitz, Horwitz and Cope, 1986). This problem may be dealt with, however, by making production, at least in front of the whole class, voluntary (i.e. by the teacher eschewing student nomination) and by emphasising group work, where anxiety is likely to be less acute. Another problem is less easily solved, however. As Tuz's study showed it is not easy to devise communicative tasks that oblige the use of the targeted structure. Loschky and Bley-Vroman (1990) come to the same conclusion in their lengthy discussion of structure-based communication tasks. Learners can use their strategic competence to bypass the use of a targeted structure. They argue that tasks have to be constructed so that the target-structure is essential and not merely natural or useful. But they accept that this criterion may be easier to meet in comprehension than in production tasks, as it is possible to control the language used in the former to a much greater extent than in the latter. In effect, then, Loschky and Bley Vroman provide a further argument - pedagogic rather than psycholinguistic - in favour of interpretation tasks.

I have argued, production tasks are problematic where the aim is to teach a new grammatical feature but may be useful in helping learners automatize their existing grammatical knowledge. The question arises whether this can be best achieved through text-manipulation activities such as those found in the audiolingual and oral-situational methods or through text-creation activities such

as those promoted in communicative language teaching. There are strong arguments and some research to support the latter. First, as Johnson (1988) has pointed out effective skill-learning involves giving learners the opportunity to practise the components of a skill under 'real operating conditions'. Text-manipulation activities provide very artificial conditions for using the targeted structure, as learners do not usually go around filling in blanks, sorting out jumbled sentences, transforming sentences from one pattern to another etc.. In contrast, they will be required to create text in the course of using the L2 in a variety of communicative situations. For this reason, then, text-creation activities are to be preferred. An interesting study by Castagnaro (1991) lends some empirical support to this conclusion. He investigated the effects of two kinds of production activities on the complexity of noun phrase construction by Japanese college students. One group (the control group) received a picture of a kitchen and practised labelling the different objects in it. One experimental group took part in a repetition drill and a blank-filling exercise (i.e. text-manipulation activities), both based on the same picture of the kitchen and designed to practise the use of adjectives and prepositional phrases in noun modification. A second experimental group received explicit information about the use of noun modifiers and then took part in an activity that called for them to work in pairs describing numbered items in the kitchen picture (a text-creation activity). Interestingly, the learners in the second experimental group outperformed both those in the control and the first experimental group in the complexity of the noun phrases they produced in a post-test. There was no difference between the control group and the first experimental group, however. Text-creation activities, combined with explicit instruction, then, may help to provide opportunities for the kind of 'pushed output' that Swain (1985) has argued are needed to develop more advanced levels of grammatical competence.

Conclusion

In this paper I have tried to explore a number of options relating to the methodology of teaching grammar. My aim has not been to argue that one kind of grammar instruction works better than another but rather to use the research heuristically to probe the pros and cons of different possibilities. Indeed, as I have argued elsewhere (Ellis, 1990), I do not believe that L2 acquisition research, even that focussed directly on the L2 classroom, should be used to stake out pedagogical positions, but should instead serve as one way of illuminating key issues.

I would like, however, to offer a few tentative conclusions. I offer the following list not as a set of proposals warranted by research but rather as a set of suggestions to be tried and tested through the actual practice of language teaching.

- (1) A programme of planned intervention ('focus on forms') that leads learners down the garden path by inducing 'natural' errors that are then corrected may be beneficial to language acquisition.
- (2) Explicit rule presentation supported by structured examples may facilitate the acquisition of new grammatical features more effectively than implicit rule presentation or explicit instruction without examples - at least in the case of learners with a more analytical learning style.
- (3) Comprehension-based grammar instruction in the form of both consciousness-raising activities and interpretation tasks may aid L2 acquisition by enabling learners to notice grammatical features in the input, so facilitating their intake. Such tasks may avoid the problem of 'learnability' which more traditional production tasks face.
- (4) It is difficult to lead a learner from controlled to automatic processing of specific grammatical features by having them perform a series of production-based exercises

and tasks that make increasing demands for text-creation. However, text creation tasks may help learners to gain communicative control over grammatical features that they have already acquired.

The importance of grammar teaching is once again becoming generally acknowledged by applied linguists - indeed for many it never ceased to be important. The challenge now facing us is how to teach grammar in a way that is compatible with what we know about how learners learn. This paper constitutes an attempt to address this challenge.

References

Abraham, R. 1985. Field independence-dependence and the teaching of grammar. *TESOL Quarterly*, 20:689-702.

Allwright, R. 1975. Problems in the study of language teacher's treatment of error. In M. Burt and H. Dulay (eds.), *On TESOL '75: New Directions in Second-Language Learning, Teaching and Bilingual Education*. Washington, D.C.: TESOL.

Allwright, R and Bailey, M. 1991. *Focus on the Language Classroom: An Introduction to Classroom Research for Language Teachers*.

Cambridge:Cambridge University Press.

Cancinco,H,Rosansky,E and Schumann,J. 1978. The acquisition of English negatives and interrogatives by native Spanish speakers. In E. Hatch (ed.),Second Language Acquisition. Rowley,Mass.:Newbury House.

Castagnaro,P. 1991. An experimental study of two interventional packages to improve student production for the notion of relative position. Unpublished paper, Temple University Japan.

Diller,K. 1971. The Language Teaching Controversy. Rowley,Mass.:Newbury House.

Eckman,F,Bell,L and Nelson,D. 1988. On the generalization of relative clause construction in the acquisition of English as a second language. Applied Linguistics,9:1-20.

Ellis,N. 1991. Rules and Instances in Foreign Language Learning:Interactions of Explicit and Implicit Knowledge. Unpublished paper,University College of North Wales,Bangor.

Ellis,R. 1985. Understanding Second Language Acquisition. Oxford:Oxford University Press.

Ellis,R. 1988. The role of practice in classroom language learning. Teanga,8:1-28.

Ellis,R. 1990. Instructed Second Language Acquisition. Oxford:Blackwell.

Ellis,R.1990. Researching classroom language learning. In C. Brumfit and R Mitchell (eds.),Research in the Language Classroom. Modern English Publications in Association with the British Council.

- Ellis,R. 1991. Second Language Acquisition and Second Language Pedagogy. Clevedon,Avon:Multilingual Matters.
- Ellis,R. Forthcoming. Grammar teaching and grammar learning. Applied Linguistics.
- Fotos,S. 1992. Grammar Consciousness-raising tasks:Negotiating Interaction while Focusing on Form. Doctor of Education dissertation, Temple University Japan.
- Fotos,S. and Ellis,R. 1992. Communicating about grammar:A task-based approach. TESOL Quarterly.
- Gick,M and Holyoak,K. 1983. Schema induction and analogical transfer. Cognitive Psychology,15:1-38.
- Hammerley,H. 1975. The deduction-induction controversy. Modern Language Journal,59:15-18.
- Hammerley,H. 1987. The immersion approach:Litmus test of second language acquisition through classroom communication. Modern Language Journal,71:395-401.
- Harley,B. 1989. Functional grammar in French immersion:A classroom experiment. Applied Linguistics,19:331-59.
- Horwitz,E.,Horwitz,M. and Cope,J. 1986. Foreign language classroom anxiety. Modern Language Journal,70:125-32.
- Krashen,S. 1977. Some issues relating to the Monitor Model. In H> Brown,C. Yorio and R Crymes (eds.),On TESOL '77,pp. 144-58,Washington D.C.:TESOL.
- Krashen,S. 1981. Second Language Acquisition and Second Language Learning. Oxford:Pergamon.

Johnson, K. 1988. Mistake correction. *ELTJ*, 2:89-96.

Lightbown, P. 1990. Getting quality input in the second/foreign language classroom. Talk given at the conference on Context in Foreign Language Learning, Ithaca, University of Cornell.

Lightbown, P and Spada, N. (1990). Focus-on-form and corrective feedback in language teaching: Effects on second language learning. *Studies in Second Language Acquisition*, 12:429-446.

Long, M. 1983. Does second language instruction make a difference. A review of the research? *TESOL Quarterly*, 17:359-82.

Long, M. 1985. A role for instruction in second language acquisition: Task-based language learning. In K. Hyldenstam and M. Pienemann (eds.), *Modelling and Assessing Second Language Acquisition*. Clevedon, Avon: Multilingual Matters.

Long, M. 1988. Instructed interlanguage development. In L. Beebe (ed.), *Issues in Second Language Acquisition: Multiple Perspectives*. Rowley, Mass.: Newbury House.

Loschky, L and Bley-Vroman, R. 1990. Creating structure-based communication tasks for second language development. *University of Hawaii Working Papers in ESL*, 9:161-209.

Pienemann, M. 1984. Psychological constraints on the teachability of languages. *Studies in Second Language Acquisition*, 6:186-214.

Pienemann, M. 1989. Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 10:52-79.

Prabhu, V. 1988. *Second Language Pedagogy*. Oxford: Oxford University Press.

Reber, A. 1976. Implicit learning of synthetic languages: The role of

instructional set. *Journal of Experimental Psychology, Human Learning and Memory*, 2:88-94.

Reber, A., Kassin, S, Lewis, S and Cantor, G. 1980. On the relationship between implicit and explicit modes in the learning of a complex rule structure. *Journal of Experimental Psychology, Human Learning and Memory*, 6:492-502.

Schachter, J. Three approaches to the study of input. *Language Learning*, 36:211-225.

Schmidt, R. 1990. The role of consciousness in second language learning. *Applied Linguistics* 11:

Schumann, J. 1978. *The Pidginization Hypothesis: A Model for Second Language Acquisition*. Rowley, Mass.: Newbury House.

Seliger, H. 1975. Inductive method and deductive method in language teaching: A Re-examination. *International Review of Applied Linguistics*, 13:1-18.

Seliger, H. 1979. On the nature and function of language rules in language teaching. *TESOL Quarterly*, 13:359-69.

Sharwood Smith, M. 1981. Consciousness-raising and the second language learner. *Applied Linguistics*, 2:159-69.

Smith, P. 1970. *A comparison of the Audiolingual and Cognitive Code Approaches to Foreign Language Instruction: The Pennsylvania Project*. Philadelphia: Center for Curriculum Development.

Swain, M. 1985. Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass and S. Madden (eds.), *Input in Second Language Acquisition*. Rowley, Mass.: Newbury House

Tomasello, M and Herron, C. 1988. Down the garden path: Inducing and correcting overgeneralization errors in the foreign language classroom. *Applied Psycholinguistics*, 9:237-246.

Tomasello, M and Herron, C, 1989. Feedback for language transfer errors: The garden path technique. *Studies in Second Language Acquisition*, 11:385-395.

Tuz, E. 1979. From controlled practice to communicative activity: Does training transfer? Unpublished paper, Temple University Japan.

Ur, P. 1988. *Grammar Practice Activities*. Cambridge: Cambridge University Press.

Van Patten, B and Cadierno, T. Forthcoming. *SLA as Input Processing: A Role for Instruction*.

Von Elek, R and Oscarsson, M. 1975. *Comparative Method Experiments in Foreign Language Teaching*. Department of Educational Research, Molndal (Gotheburg), School of Education, Sweden.

White, L, Spada, N, Lightbown, P and Ranta, L. Forthcoming. *Consciousness-raising and L2 question formation*. *Studies in Second Language Acquisition*.

Widdowson, H. 1978. *Teaching Language as Communication*. Oxford: Oxford University Press.

Widdowson, H. 1986. Design principles for a communicative grammar. In *ELT Documents 124: The Practice of Communicative Teaching*. Oxford: Pergamon in association with the British Council.