9

Methodological Options in Grammar Teaching Materials

Rod Ellis
University of Auckland, New Zealand

INTRODUCTION

Teachers have a large number of published grammar practice books from which to select. Key questions are as follows: What methodology for teaching grammar do these books employ? What is the empirical/theoretical basis for the chosen methodology?[1] The first question can be answered by undertaking a careful analysis of the methodological features of a selection of the available books. The second can be answered by examining the explicit comments of the authors of the books (e.g., in the introductory sections) or by inferring the guiding principles from the types of activities employed. In this chapter I address both questions.

There have been relatively few attempts to conduct a methodological analysis of the instructional options incorporated into grammar practice books. Fortune (1998), in a survey review of six widely used grammar books for English as a foreign language (EFL), identifies a number of primary features. He refers to the gang of three: (1) isolated, uncontextualized sentences; (2) sentence completion involving the adaptation of an unmarked

[1]There are, of course, other important questions concerning grammar teaching—in particular, what grammar points should be taught? However, my concern in this chapter is entirely with the methodology of grammar teaching, not with its content.

lexical item (often a verb) presented in brackets; and (3) gap filling. He then discusses a number of significant developments in pedagogy, in particular consciousness-raising activities directed at "noticing" how specific grammatical structures are used and understanding how the structures work. Fortune's features provide a basis for carrying out a methodological analysis. It will be elaborated on in the following section.

There have been rather more attempts to address the question how grammar should be taught, both from an empirical and a theoretical standpoint. For example, a number of recent studies have investigated the effectiveness of "implicit" as opposed to "explicit" grammar teaching (e.g., DeKeyser, 1995; Robinson, 1996) and also, more relevant to my concerns here, of production-based as opposed to input-based grammar teaching (e.g., Salaberry, 1997; VanPatten & Cadierno, 1993). There is, of course, no shortage of theorizing about grammar teaching on the basis of models of second language (L2) acquisition (e.g., Ellis, N., 1993; Krashen, 1982; Long, 1998).

The main purpose of this chapter is to develop a framework that can be used to describe and design materials for teaching grammar. I proceed as follows. First, I examine the instructional options typically selected by authors of some popular grammar teaching books. This provides a picture of how grammar teaching is currently conceptualized. Second, I review theoretical and empirical research that has addressed a number of options that have been neglected in grammar teaching. Third, I consider some materials for teaching grammar that incorporate these options.

AN ANALYSIS OF METHODOLOGICAL OPTIONS IN GRAMMAR PRACTICE BOOKS

Elsewhere I have outlined a system of options for teaching grammar based on a psycholinguistic model of language acquisition (see, e.g., Ellis, R., 1997, chap. 3). Here I would like to try to develop a parallel system of options based on a sampling of grammar practice teaching materials. These options differ from the psycholinguistic options in that they are *methodological* in nature, reflecting the practice of grammar teaching as this is represented in published textbooks. As might be expected, the two sets of options do not match exactly, although, as we will see, there are some noteworthy correspondences.

The methodological options described in following sections were derived from inspecting a number of English as a second language (ESL)/EFL grammar practice books (see Table 9.1 for a list). I looked at one unit from each book, choosing the unit dealing with the present

TABLE 9.1
Analysis of Methodological Features in Six Grammar Practice Books

	Grammar Books[a]						
Feature	*1*	*2*	*3*	*4*	*5*	*6*	*Totals*
Explicit description							
Supplied	•	•	•		•	•	5
Discover				•			2
Data							
Source							
Authentic							0
Contrived			•			•	2
Text size							
Discrete sentences							0
Continuous			•			•	2
Medium							
Oral						•	1
Written			•			•	2
Operations							
Production							
Controlled	•	•	•	•	•	•	6
Free	•		•	•		•	4
Reception							
Controlled	•					•	2
Automatic						•	1
Judgments							
Judge only							
Correct	•					•	2
Total features per book	5	2	6	3	2	11	

[a]Key: 1. Badalamenti and Henner-Stanchina (1993); 2. Eastwood (1992); 3. Elbaum (1996); 4. Jones (1992); 5. Murphy (1994); 6. Schoenberg (1994).

continuous tense as this grammar point figured in all the books.[2] I read through each unit making a note of the options that were used. I then attempted to codify the options (to build a system) by classifying them into general categories with subdivisions. The system that I arrived at is shown in Figure 9.1. The terms used in this system are intended to be entirely descriptive (i.e., not evaluative). For example, the terms *authentic* or *contrived* are not intended to convey either positive or negative views about their value in grammar teaching.

[2]There was no unit dealing with the present continuous tense in Jones (1992). However, as my aim was to include a representative sample of current grammar practice books, I felt it important to include Jones' book, as it represented a more "functional" approach to grammar teaching than the other books. I selected the unit dealing with past continuous and present perfect continuous.

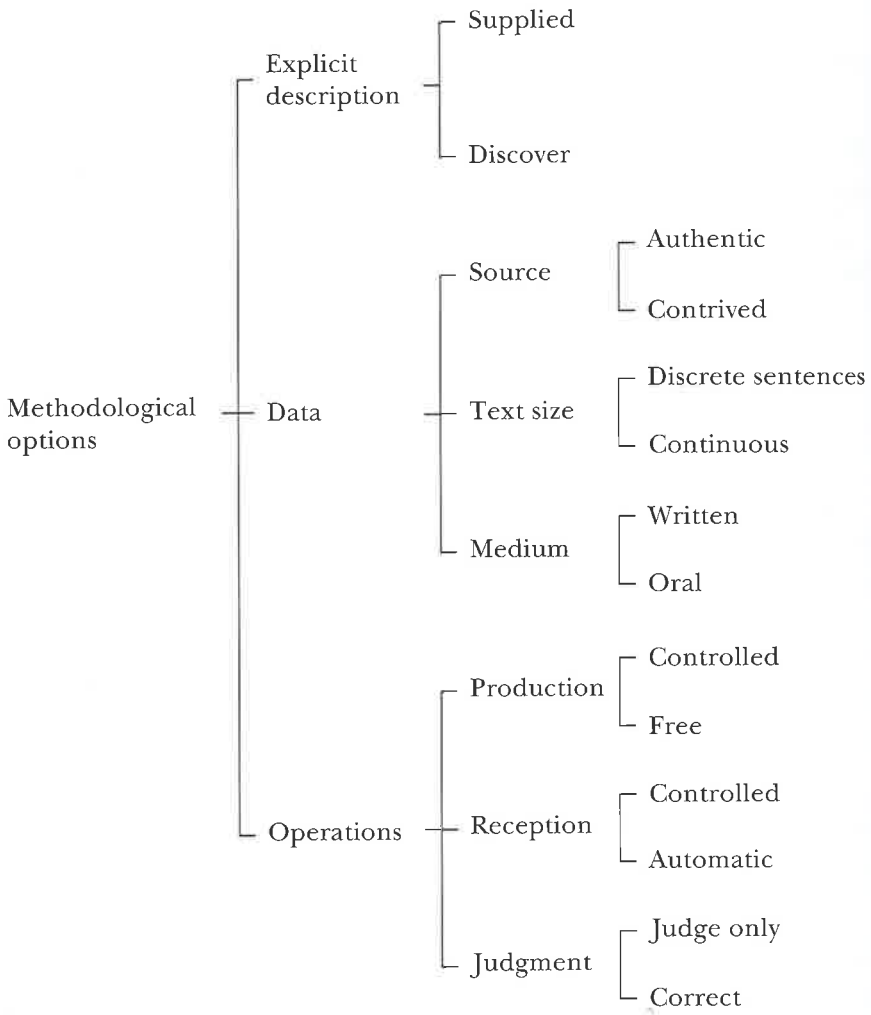


FIG. 9.1 A system of methodological options employed in grammar practice books.

Three sets of options were identified related to general aspects of the materials: *explicit description*, *data*, and *operations*. These aspects may or may not all be present in any one grammar practice book. As we will see, all the books I examined used options relating to explicit description and operations, but only some included a data option. It is also possible to envisage a grammar practice book that does not include any explicit description (i.e., one based on audiolingual principles). The only obligatory options, it would seem, are those concerning operations as these relate to the *practice* function of the books. A grammar *reference* book, in contrast, would

obligatorily provide explicit descriptions but probably not offer any operations for the reader to perform.

Explicit description refers to whether the materials either provide learners with an explanation of the grammar point (i.e., *supplied*) or whether they require learners to develop their own explanation (*discover*). Other more detailed methodological options relating to this general distinction can be identified but are not included in Figure 9.1. For example, in the case of explicit descriptions that are supplied, a distinction might be drawn between "verbal" and "diagrammatic" descriptions.

The data options involve the provision of text containing exemplars of the target structure. To count as "data" this text must be independent of any text associated with operations. For example, complete dialogues illustrating the target structure constitute "data," but gapped dialogues requiring students to fill in the missing words were classified under "operations." Data options were subdivided in terms of *source*, *text size*, and *medium*. Source refers to whether the data provided consisted of *authentic* materials (i.e., texts for which there was a real-life and not just a pedagogic context) or *contrived* materials (i.e., the author of the grammar practice book had devised the sentences him or herself to illustrate the grammar point). Text size concerns whether the text comprising the data consists of *discrete sentences* (one of Fortune's gang of three) or is *continuous*. Finally, the text comprising the data can be written or oral. There is the potential for these options to combine in different ways. For example, the data could consist of text that was authentic, discrete sentences, and oral or contrived, continuous and written. As we will see, the actual combinations evident in the materials were very restricted.

The operations evident in the materials were classified according to whether they involved *production* (i.e., the students were required to produce sentences containing the target structure), *reception* (i.e., the students were required to perform some activity to demonstrate they had understood sentences containing the target structure), or *judgment* (i.e., the students were required to identify whether sentences containing the target structure were grammatical or ungrammatical). Each of these options is further broken down. Production can be *controlled* or *free*. This distinction reflects a continuum rather than a dichotomy. That is, production activities can be more or less controlled/free. Controlled activities provide students with a text of some sort (usually discrete sentences) and require them to operate on it in a way that involves producing the target form. Free activities give the students the opportunity to construct their own sentences using the target structure. Again, both the controlled and free options could be broken down further. There are many different types of controlled grammar activities (e.g., substitution, gap-filling, sentence completion, transformation, insertion, jumbled sentences), although a potentially important distinction within free production activities concerns whether

the text produced is representational or more personal in function. Reception can be *controlled* (i.e., students are able to control the speed at which they have to process the sentences containing the target structure) or *automatic* (i.e., students are required to process the sentences in real time). Finally, judgment tasks can involve *judgment only* (i.e., simply stating whether a sentence is or is not grammatical) or *correct* (i.e., trying to correct the sentences judged to be ungrammatical).

What options, then, are utilized by the authors of the textbooks I sampled? Are there some options that appear to be underutilized? What does the author's choice of options suggest about their underlying philosophy of grammar teaching? To answer these questions, one unit of the six grammar practice books (dealing with the present continuous tense) was analyzed using the system of options shown in Figure 9.1. No attempt was made to determine the frequency with which each author used the different options. Instead, I sought to simply ascertain whether a particular option was evident at any point in a unit. The results of the analysis are shown in Table 9.1.

It is clear that two features are predominant: explicit description supplied and controlled production. Only one of the grammar practice books (Jones, 1992) failed to provide any grammatical explanation; all the books provided opportunities for controlled production practice. In this respect then, the grammar practice books of today are probably not so different from those of previous decades. Grammar teaching is still characterized as (1) explaining/describing grammar points and (2) providing opportunities for controlled production practice. However, most of the books also cater for free production practice. Usually, this takes the form of contextualized grammar activities (sometimes rather misleadingly labeled "communicative"), but occasionally there are also information-gap activities.

It is also revealing to note which features are not common in these books. Only two of the books, Jones (1992) and Schoenberg (1994), provide any opportunity for students to discover how a grammar point works for themselves. In fact, even these two books provide very few grammar discovery tasks and the actual tasks themselves are very restricted, offering little guidance to the student. Also rather rare are data options. Of course, most of the other books do provide examples of usage as part of the explicit description and all the books provide examples in the context of the production activities. However, only Elbaum (1996) and Schoenberg (1994) offer the learners independent data illustrating the use of the present continuous tense. In both cases the data are contrived rather than authentic and involve continuous text. In Schoenberg, the data are provided in both an oral and a written form. This is the only book to be accompanied with an audiocassette. Finally, there is conspicuous paucity of receptive practice

activities or activities involving grammatical judgments. Students have little opportunity to practice processing these structures in oral or written texts without some form of accompanying production activity.

The books also vary in the number of different features they incorporate. Two of the books, Eastwood (1992) and Murphy (1994), both best-sellers, are most limited in this respect; they make use of only 2 features—supplied explicit description and controlled production practice. Such materials have the virtue of simplicity but they offer a rather impoverished view of grammar teaching. In contrast, Schoenberg (1994) manifests 11 different methodological features. This book provides a rich and varied approach to grammar teaching. One of the "costs," however, is that each unit is rather long, the one on the present continuous tense running to 22 pages (compared with 2 pages in Eastwood or Murphy).

The predominant "theory" of grammar teaching that emerges from this analysis is a very traditional one. Grammar constitutes a "content" that can be transmitted to students via explicit descriptions and a "skill" that is developed through controlled practice—an amalgamation of the beliefs underlying the grammar translation and audiolingual methods. However, there are also signs that this predominant philosophy is being rethought by some authors. In particular, the need to encourage learners to discover grammar rules for themselves, to provide them with data where they can "notice" how grammatical features are used, and to teach grammar through input-processing rather than through production practice are evident in some of the materials. In the sections that follow we will examine the theoretical rationale for such options and also consider some of the empirical research that has investigated them.

DISCOVERING ABOUT GRAMMAR

The first neglected option I would like to consider is discovering about grammar—enabling the students to build their own minigrammars by helping them investigate how specific points of grammar work. In effect, this requires students to function in much the same way as field linguists[3] do when they set about constructing descriptions of languages (see Bloomfield, 1933). There are two key theoretical issues that relate to this option: the role of explicit knowledge in second language (L2) acquisition and the value of discovery as a general method of learning.

[3]This is not a new idea. Jesperson (1904) advocated what he called "Inventional Grammar," which was created by students themselves as they gained insight into the grammar of the language they were studying.

Current theories of L2 acquisition distinguish implicit and explicit knowledge. Implicit knowledge is knowledge of grammar. It refers to that knowledge that is intuitive and automatic (i.e., it can be rapidly accessed for use in unplanned language use). For example, native speakers of English "know" that a nonsence form like *flacate* is a verb that does not permit dative alternation (i.e., cannot be used in sentences such as **Mary flacated John the cake*). However, they would be unable to tell you why (i.e., their knowledge of the underlying rule is entirely implicit).[4] Probably the bulk of a native speaker's grammatical competence is comprised of implicit knowledge. Explicit knowledge is knowledge about grammar. It refers to knowledge that is conscious and can be accessed only slowly. It is typically used in what I have elsewhere termed "secondary processes" of language use (e.g., monitoring output derived initially from implicit knowledge or translating sentences constructed in the learner's first language; see R. Ellis [1984]). Explicit knowledge is, therefore, analyzed. However, it exists independently of learners' ability to verbalize it and thus cannot be equated with metalanguage. Native speakers draw on explicit knowledge in certain contexts, especially those that call for a careful style. This distinction between implicit and explicit knowledge is widely recognized in both cognitive psychology (e.g., Paradis, 1994; Reber, 1989) and in SLA (e.g., Bialystok, 1991; Schmidt, 1990). As Schmidt (1994) points out, it is separate from and should not be confused with the distinction between implicit and explicit learning. That is, whether a person is able to learn a language without consciousness, a matter of controversy, needs to be considered independently of the kind of knowledge they develop.

It would seem reasonable that writers of grammar practice materials should make clear what kind of grammatical knowledge they are aiming at. In fact, though, they rarely do so. Eastwood (1992), for example, says in the introduction that "special attention is given to those points which are often a problem for learners" (p. 8) but does not explain what he means by "problem." Does he mean a problem in understanding (i.e., explicit knowledge) or a problem in using a grammatical structure in unplanned language use (i.e., implicit knowledge)? Probably the latter, but there is no way of being sure. Murphy (1994) is a little clearer. He tells us the book "concentrates on those structures which intermediate students want to use but which often cause difficulty" (p. viii). Presumably, then, Murphy has implicit knowledge in mind. This would seem to be also the case with the other books listed in Table 9.1.

[4]Roughly speaking, the rule is that if the verb is two syllables or longer, as in the case of verbs of Latin origin, they do not permit dative alternation, but if the verb is one syllable and of Anglo-Saxon origin it does.

There is, however, a major problem in trying to teach implicit knowledge. This is that learners have been shown to acquire grammatical structures in a particular order and also to learn each structure very gradually, manifesting sequences of acquisition that include transitional structures (see R. Ellis, 1994a, chap. 3, for an account of the natural order and sequence of acquisition). This has led to what Pienemann (1986) calls the teachability hypothesis, which predicts that "instruction can only promote language acquisition if the interlanguage is close to the point when the structure to be taught is acquired in the natural setting" (p. 37). In other words, learners have their own "inbuilt syllabus" (Corder, 1967), which they follow no matter what order grammatical structures are taught in. Mostly, writers of grammar practice books simply ignore this problem. That is, they present and practice grammatical structures in accordance with notions of difficulty that have been passed down from one generation of writers to another without bothering about whether these notions have any psycholinguistic basis. Where writers do recognize the problem of teaching learners grammatical structures for unplanned language use (i.e., implicit knowledge), the solution is to ensure that "students practice new structures in a variety of contexts to help them internalize and master them" (Schoenberg, 1994, p. xii) and, in particular, to ensure that there are plenty of opportunities to use the structure in communicative activities (see Larsen-Freeman's introduction to Badalamenti & Henner-Stanchina, 1993). This faith in production practice seems to reflect an unacknowledged adherence to behaviorist theories of language learning, now discredited. In fact, the available evidence is clear; grammar practice, even when it is "communicative," does not allow learners to sidestep the natural processes of grammar learning (see R. Ellis, 1988, for a review of studies that have investigated the effects of grammar practice). In short, then, teaching implicit knowledge through production practice is unlikely to work unless it so happens that the instruction coincides with the learner's state of readiness—a condition that is virtually impossible to meet.[5]

One solution to this problem is to make explicit knowledge rather than implicit knowledge of grammar the target of the teaching materials. This is what I have proposed in a series of publications (e.g., Ellis, R., 1993, 1994b, 1997). This solution is based on three assumptions. The first is that the constraints that govern the teaching of implicit knowledge do not apply to

[5]The impracticality of basing grammar syllabuses on the natural order and sequence of acquisition derives primarily from the fact that grammar structures cannot be taught as "accumulated entities" (Rutherford, 1987) but rather need to be integrated into highly complex interlanguage systems. This involves not just the "addition" of new features but also the "restructuring" of existing knowledge (McLaughlin, 1990), a process that is highly complex and necessarily gradual.

the teaching of explicit knowledge. That is, the notions of order and sequence do not apply where explicit knowledge is concerned. In this respect, I would argue that explicit knowledge of grammar is not dissimilar to explicit knowledge of dates in history; it can be learned in any order, and one piece of information can be added to another incrementally. The second is that L2 learners (at least adolescent and adult learners) are capable of mastering quite sophisticated explicit knowledge. In this respect, I differ from Krashen (1982), who believes that learners are able to learn only simple and portable rules like the third person *-s* rule, and follow instead Green and Hecht (1992), who have demonstrated empirically that the learners in their study (high school and university level German learners of English) could demonstrate a good understanding of complex rules. The third assumption is that explicit knowledge assists the processes involved in the use and acquisition of implicit knowledge. I have argued that this occurs because explicit knowledge serves to (1) monitor language use and, thereby, to improve accuracy in output; (2) facilitate noticing of new forms and new form-function mappings in the input; and (3) make possible "noticing the gap" (i.e., comparing what is noticed in the input with what learners are producing themselves). In other words, teachers may be able to facilitate the development of implicit knowledge indirectly by helping learners develop explicit knowledge. The fourth assumption is that grammar teaching, directed at explicit knowledge, should not seek to have an immediate effect on learners' ability to use a grammatical structure accurately in communication. Instead, it should accept that any effect is likely to be delayed.

If it is accepted that explicit knowledge constitutes a valid instructional goal, the next question concerns how such knowledge can best be taught. There are two basic options here. It can be taught directly or indirectly (see Ellis, R., 1997). Direct instruction takes the form of explicit descriptions/explanations of grammar points given to the learners. As we have seen, this is the preferred approach in the grammar practice books analyzed in Table 9.1. Indirect instruction involves helping learners discover grammatical rules for themselves. It implies a problem-solving approach in which students are given data illustrating a specific grammatical structure, which they are then helped to analyze in order to extract the underlying rule. As we have seen, this approach was rare in the grammar practice books we examined.[6]

A discovery-based approach to teaching explicit knowledge has much to recommend it. First, it is potentially more motivating than simply being

[6]There are some books that adopt a discovery-based approach to grammar, notably Bolitho and Tomlinson's *Discover Grammar* (1995), designed for trainee teachers of a second/foreign language who need to develop an explicit knowledge of grammar.

told a grammatical rule and, for this reason, students may be more likely to remember what they learn. Second, it can encourage students to form and test hypotheses about the grammar of the L2, processes that are believed to be central to ultimate acquisition (Corder, 1967). Third, it can lead to powerful insights about the grammar of a language that cannot be found in any published descriptions. As Hawkins (1984) points out, there is a great deal that linguists do not know about the grammar of a language and an exploratory approach can lead students to insights not to be found in any published description. Related to this point, a discovery-based approach enables learners to recognize that grammar is conventional rather than logical. As Faerch (1985) puts it, "students have to learn that grammar and vocabulary do not always operate on the basis of what they consider to be normal, relative to their knowledge of other languages (primarily L1 [first language]), nor on the basis of what appears to be logical" (p. 190). In contrast, a direct approach may foster the false belief in learners that grammar is inherently logical. Fourth, and perhaps most important, discovery grammar tasks have a learning-training function. They help to develop the skills learners need to investigate language autonomously—to become field linguists. Armed with these skills, students can carry out their own analyses of how the L2 grammar works, an activity that studies of the good language learner (e.g., Naiman, Frolich, Stern, & Todesco, 1978) suggest may be important for successful language learning. Finally, if students carry out the discovery tasks by talking in the L2, they are in fact "communicating;" grammar can serve as a content for talk. For some learners at least, talking about grammar may be more meaningful than talking about the kinds of general topics often found in communicative language courses.

Of course, to justify an indirect approach it is necessary to demonstrate that it is at least as effective as a direct approach in developing accurate explicit knowledge of L2 grammar in students. This is what Fotos set out to investigate. Fotos and Ellis (1991) reported a study designed to investigate the relative effectiveness of direct and indirect explicit grammar instruction. They found that both options resulted in statistically significant gains in understanding the rule for dative alternation in two groups of college-level Japanese students. In one group, direct explicit instruction resulted in higher scores on a grammaticality judgment test[7] but in the other indirect explicit instruction proved equally effective. In a more elaborate follow-up

[7]The explanation that Fotos and Ellis (1991) offer for the superiority of the direct instruction with one of the groups they studied was that the instructor did not ensure that the discovery grammar task was carried out properly. This, of course, may reflect an inherent limitation of such tasks—namely, that they require considerable expertise and care on the part of the instructor to ensure that they work.

study, Fotos (1994) found indirect instruction worked as well as direct instruction in teaching explicit knowledge of three different structures (adverb-placement, dative alternation, and relative clauses). Fotos (1993) also demonstrated that the explicit knowledge that the learners gained from the discovery tasks helped to promote noticing of the target structures in subsequent message-oriented input. Caution must be exercised in generalizing from these studies as they investigated only one type of learner (Japanese university-level students taking general English classes), but they suggest that at least in some teaching contexts indirect teaching of explicit knowledge can work as well as direct.

NOTICING GRAMMATICAL FEATURES

The data options were also poorly represented in the grammar practice books analyzed in Table 9.1. That is, there were relatively few activities exposing students to what Sharwood Smith (1993) has called "enhanced input" and requiring them to pay attention to the specific grammatical structure(s) targeted in this input. The exception was Schoenberg (1994), which typically begins each section with a dialogue specially written to contain many examples of the target structure (e.g., present continuous tense). The students are asked "to listen and read" this text and then to answer some surface comprehension questions of a general nature.

A computational model of L2 acquisition, of the kind advocated by Krashen (1985) or R. Ellis (1994b), views acquisition as originating in input.[8] Learners acquire new grammatical structures when they encounter them in input, take them in, and incorporate them into their existing interlanguage system. Such a model lends theoretical support to activities that expose learners to input rich in specific grammatical structures. However, exposure alone may not be enough for acquisition to take place. Learners may also need to pay conscious attention (i.e., to notice) the grammatical structures in the input (Schmidt, 1990, 1994). Noticing may be the necessary condition for input to become intake. There are a number of ways in which such noticing can be brought about. One is by requesting students to identify the examples of the target structure in the data (e.g., "Underline all the verbs in the present continuous tense"). Another is to highlight the examples in some way, for instance, by italicizing them. A question of some importance, then, is which type of input data is most effective in promoting noticing and acquisition.

[8]In some versions of the computational model of L2 acquisition, output also has a role to play (see, e.g., Swain, 1995, and Skehan, 1998). However, even in these versions, output works primarily in terms of either securing quality input or creating the psycholinguistic conditions that promote input.

In fact, there have been relatively few studies examining what effect different ways of enriching input has on noticing and acquisition. Jourdenais, Ota, Stauffer, Boyson, and Doughty (1995) found that learners exposed to texts in which the preterit and imperfect verb forms in Spanish were typographically highlighted in texts were more likely to subsequently use these past tense forms than learners who read texts where the same verbs forms were not highlighted. Trahey and White (1993) and Trahey (1996) showed that input that is enriched but not enhanced (i.e., no attempt was made to focus learners' attention on the target feature) resulted in the learners acquiring a new rule for adverb positioning in English but not for eliminating a nontarget rule that was part of the learners' current interlanguage. Leeman, Arteagotia, Fridman, and Doughty (1995) found that instruction consisting of highlighting Spanish preterit and imperfect verb forms in written input, telling the students to pay special attention to them, and correcting learner errors led to students supplying the target forms more frequently in comparison to students who received no such instruction. However, it is not possible in this study to distinguish what effect each of these different options had. Two other studies have reported that enriched input has little effect on acquisition. White (1995) failed to find any effect for either enriched input or explicit instruction on Japanese and francophone learners' ability to master reflexive binding in English, although this may have been because of problems with the test used in this study. Alanen (1995) also found that enriched input had little effect on beginner learners' acquisition of Finnish locative expressions and consonant gradation, although he did note that input containing typographically enhanced forms led to the learners using a greater a variety of suffix forms, albeit ungrammatical. The amount of enriched input in this study was very small.

It is likely that we will see further research directed at identifying the kinds of enriched input that work best for noticing and acquisition. Ideally, such studies should be theoretically based (i.e., there should be some principled selection of the input features that are chosen for investigation). Also, there is a need to find ways of measuring the effects on noticing and acquisition separately. Research investigating the data options shown in Table 9.1 is desirable. Various claims have been made for using authentic data in language teaching materials (see, e.g., Harmer, 1983, p. 150) but, to my knowledge, there has been no research testing whether such data enhances acquisition. Indeed, there are strong arguments to be found in both SLA (e.g., Krashen, 1981) and language pedagogy (e.g., Tickoo, 1993) in support of simplified texts. Also, a number of studies have found that simplified input aids comprehension (Parker & Chaudron, 1987) and some (e.g., Ellis, R., 1995) that it also facilitates acquisition. There is also widespread support in

language pedagogy for the use of continuous text as opposed to discrete sentences, but research investigating this belief is completely absent. Neither has there been any research examining the relative advantages of presenting data in oral or written form. Oral data require learners to process the target structure "online" (i.e., as the input is received); in contrast, written data typically allow learners the opportunity to process the data more slowly and deliberately.[9] This difference may be important. The development of implicit knowledge may require opportunities for online processing of input. In contrast, controlled processing may be more likely to result in explicit knowledge. It is possible, therefore, that oral data are more likely to promote real interlanguage change than written data. Such an argument suggests that teaching grammar through listening may prove especially effective, but, like the other options, it has not been empirically tested.[10]

Several studies have compared two instructional options—enriched input and direct explicit instruction—on acquisition. These studies show a clear advantage for direct explicit instruction. Alanen (1995), for example, found that the group of learners receiving explicit instruction outperformed the groups receiving different kinds of enriched input. Robinson (1996) also found that learners given explicit instruction in both an easy grammatical rule (adverbial preposing as in *Into the house ran John*) and a difficult rule (pseudoclefting as in *Where Mary and John live is Chicago*) outperformed learners who just received input (referred to as the implicit condition by Robinson) on a grammaticality judgment test. Studies by DeKeyser (1995) and N. Ellis (1993) have also found in favor of explicit instruction. However, the method of testing in these studies (usually a grammaticality judgment test) favored the explicit group. It is possible that enriched input will work better than explicit instruction if acquisition is measured by means of a test that requires online processing of the target structures.

Also, from a materials development point of view, it may make little sense to juxtapose data options and explicit instruction options in this way, as they can be easily combined, both contributing to the development of awareness in learners. Explicit instruction based on discovery tasks of the kind discussed above involve both data options and explicit rule formation.

[9]Of course, it would is possible to induce rapid, less controlled processing of written data if the learners are required to read the texts at speed, as in faster reading exercises.

[10]A body of research that could be interpreted as lending support to teaching grammar through listening is that conducted by Asher and his associates (see Asher, 1982) comparing Total Physical Response (TPR) and other language teaching methods (e.g., grammar translation and audiolingualism). TPR is a method that teaches grammatical structures through oral commands. Asher's research regularly found that this method proved superior to other methods for beginner-level learners. However, Asher did not compare the relative advantages of using oral or written commands, as in TPR the commands are primarily oral.

Students are presented with structured data, which they analyze to extract the underlying rule for the target structure. The relationship between the two options, then, is as follows:

data (analyzing) → explicit rule

An alternative arrangement might be to begin by providing an explicit rule and then to follow up with noticing activities, where students are asked to identify the target structure in data:

explicit rule → data (noticing)

A more complicated sequence might consist of:

data (analyzing) → explicit rule → data (noticing)

as in Fotos (1994). Materials illustrating this type of sequence are discussed in a later section.

INPUT–PROCESSING INSTRUCTION

Closely connected to the data options associated with noticing are the reception-based options referred to under Operations in Table 9.1. Although it is technically feasible to envisage an approach to grammar teaching based solely on exposing learners to data rich in the targeted structures (sometimes referred to as input-flooding), a more likely approach is one that combines data options with some kind of task designed to promote input processing.

VanPatten (1996) defines input-processing instruction as "a type of grammar instruction whose purpose is to affect the ways in which learners attend to input data" (p. 2). He emphasizes that "it does not mean that any old input activity is viable" (p. 8) but involves attempts to alter the way learners actually process input. In other words, VanPatten pays attention to form in the input. Such training is intended to help students move from the default strategies that they typically employ and that give rise to the transitional constructions found in interlanguage. For example, learners typically operate a "first-noun strategy" according to which they assign the role of subject or agent to the first noun in an input string. Such a strategy leads to incorrect processing of strings in which the first noun phrase is not the agent, as for example in passive sentences in English:

The committee was given a prize by Marcia.

As part of input-processing instruction, students can be told to pay careful attention to the first noun to see whether it really is functioning as agent/subject and to look for linguistic clues (such as passive verb forms) to help them decide. Another example involves morphological marking of verbs. L2 learners frequently ignore these, relying instead on adverbial markers of time and aspect. In such a case, strategy training consists of pointing out to students the necessity of attending to tense/aspect markers in sentences that do not contain an adverbial. Such training, then, is designed to overcome the natural processes of simplification found in L2 acquisition.

Input processing also involves eliciting nonverbal (or, perhaps, minimally verbal) responses from learners that show whether they have been successful in processing the target structure in the input. This can be achieved in a variety of ways: performing an action (as in TPR), matching sentences with pictures, indicating whether statements are true or false, filling in the gaps in a written text by listening to an oral version of the text, choosing the correct L1 translation of an L2 sentence, agreeing/disagreeing with statements, and so forth. The kinds of input-processing responses required by such tasks depend on the learners having comprehended the input, but they involve more than just comprehension; they entail processing the specific linguistic forms they have noticed for meaning. In this respect, input-processing instruction differs from general listening/reading instruction, which encourages learners to make extensive use of contextual information and background knowledge (i.e., to engage in top-down processing). Input-processing instruction induces learners to attend to linguistic form (i.e., it forces bottom-up processing).

Both VanPatten (1996) and myself (Ellis, R., 1995) have suggested guidelines for developing input-processing teaching materials. VanPatten suggests the following principles:

1. Teach only one thing at a time.
2. Keep meaning in focus.
3. Learners must do something with the input.
4. Use both oral and written input.
5. Move from sentences to connected discourse.
6. Keep the psycholinguistic processing strategies in mind.

I have suggested that the activities in input-processing instruction might be usefully sequenced to require first attention to meaning (i.e., learners are invited to comprehend the message content of the input), then noticing the target form and the meaning it conveys in the input, and finally noticing the gap (i.e., spotting the kinds of typical errors that learners make when using the target structure). These guidelines are reflected in the materials discussed in the following section.

A number of studies (e.g., DeKeyser & Sokalski, 1996; Salaberry, 1996; Tanaka, 1996; VanPatten & Cadierno, 1993; VanPatten & Oikennon, 1996; VanPatten & Sanz, 1995) have investigated the effectiveness of input-processing instruction, usually in terms of a comparison with production-based instruction. In R. Ellis (1999), I have summarized the results and proposed the following conclusions. Input processing instruction in conjunction with explicit instruction leads to gains in learners' ability to comprehend the target structures. Furthermore, it works better in this respect than production-based instruction. Input-processing instruction also results in gains in learners' ability to produce the target structures, but in this respect it is not superior to production-based instruction. However, the gains in production that result from input-processing instruction appear to be more durable than those obtained from production-based instruction. That is, improvement in learners' ability to produce the target structures accurately tends to disappear in the case of production-based instruction but to persist in the case of input-processing instruction. However, research has failed to demonstrate that input-processing instruction results in learners' ability to immediately use the target structures in unplanned language use Thus, it remains to be seen, then, whether input-processing instruction affects interlanguage development (implicit knowledge) or whether it just serves to raise awareness (noticing and understanding). This is a key issue that needs to be studied further.

In general, the theoretical rationale and the results of research to date are sufficiently supportive of input-processing instruction for writers to incorporate tasks requiring reception-based operations in their materials. Input-processing operations, of course, can be combined with other options, including explicit instruction and production-practice. In the next section we discuss some materials that illustrate how this might be achieved.

SOME ILLUSTRATIVE TEACHING MATERIALS

The main thesis of this chapter is that materials writers have typically neglected a number of methodological options that SLA theory and research suggest may be effective in promoting L2 acquisition. What, then, might materials that incorporate these neglected options look like? We will briefly consider some examples from Rutherford (1987) and Ellis and Gaies (1998).

Rutherford suggests two kinds of instruments for raising learners' consciousness about grammar: (1) those involving learner judgment or discrimination and (2) those posing a task to be performed or a problem

to be solved. The examples below are taken from Rutherford (1987, pp. 160–167). The first type includes both conventional grammaticality judgment tasks, as in this example directed at helping learners recognize that English needs a formal subject:

(A) Decide whether each sentence is correct or incorrect. Identify the errors and correct them.

1. In Lake Maracaibo was discovered the oil.
2. After a few minutes the guests arrived.
3. In my country does not appear to exist any constraint on women's rights.

This type also includes semantic discrimination tasks that explore learners' ability to process particular grammatical constructions, such as complex noun phrases, as in this example:

(B) Which of the statements can be inferred from the text provided?

The passing of the bill has given rise to further bitterness among the various linguistic communities in the province.

1. The various linguistic communities are bitter.
2. Bitterness caused the bill to be passed.
3. The province is bitter at the linguistic community.

Task completion/problem-solving tasks also involve judgment on the part of the learner, but, in addition, they require learners to act on their intuitions (i.e., they involve a degree of production as well as reflection). Here is an example of a task that requires learners to use dummy *it* and the appropriate verb complementizer (e.g., *Many Canadians find it important to learn English).*

(C) Rewrite each of the sentences below incorporating the sentence in brackets into the main sentence.

1. Many French Canadians find [They learn English] important.
2. Quebec makes [Quebec preserves its French-speaking identity] a rule.
3. Quebec takes [French is to be given priority over English] for granted.

It should be noted that in such a production activity the aim is not so much to practice the target structure as to develop the learners' understanding of

it. As Rutherford's examples make clear, production tasks can serve a consciousness-raising function.

Like Rutherford's activities, the materials in Ellis and Gaies (1998) are remedial in nature; that is, they focus on grammatical problems that L2 learners are known to experience. The materials have already been described in chap. 1. Figure 9.2 provides an example of a complete unit. The activities are sequenced as suggested in R. Ellis (1995)—they begin with general comprehension of the text, then prompt noticing (and rule discovery), and finally address noticing the gap. There is also an opportunity for students to experiment with using the target structure in their own sentences. Table 9.2 provides a list of the methodological options used in this unit.

CONCLUSION

The design of grammar teaching materials needs to draw on the accumulated experience of teachers. By analyzing the methodological options in a number of popular grammar practice books, I have attempted to show that

TABLE 9.2
Analysis of methodological features in Ellis and Gaies (1998)

Feature	*Included*
Explicit description	
Supplied	•
Discover	•
Data	
Source	
Authentic	•
Contrived	•
Text size	
Discrete sentences	
Continuous	•
Medium	
Oral	•
Written	•
Operations	
Production	
Controlled	
Free	•
Reception	
Controlled	
Automatic	•
Judgments	
Judge only	•
Correct	•
Total features	10

4 Holiday Postcards

Where do you like to go on holiday?
What do you like to do?

ERROR BOX
✗ Every day I am sitting by the pool.
✗ At the moment I drink a glass of wine.

LISTENING TO COMPREHEND

Brad and Gloria are on holiday. Listen to them read their postcards.

1. Where is Brad?
   a. at a jazz festival
   b. on an island
   c. in California
2. Where is Gloria?
   a. in Paris
   b. in London
   c. by the sea

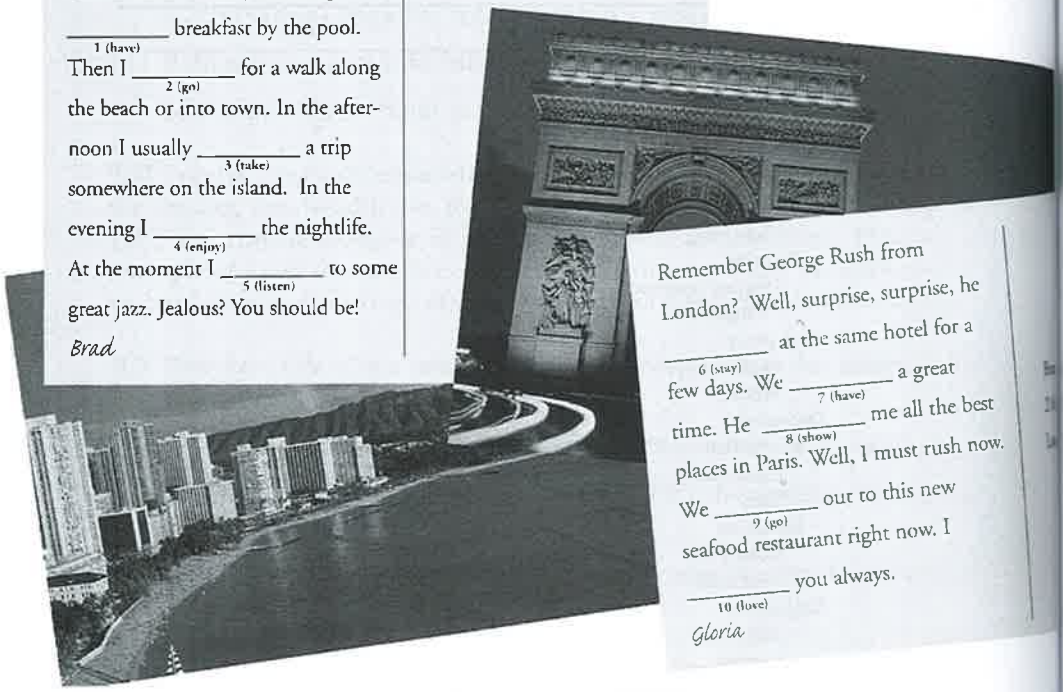
WORD BOX
*nightlife
*jealous
*rush
*seafood

LISTENING TO NOTICE

Listen again. Fill in the blanks with a form of the verb in parentheses ( ).

This is the life! Every morning I _____ (1 have) breakfast by the pool. Then I _____ (2 go) for a walk along the beach or into town. In the afternoon I usually _____ (3 take) a trip somewhere on the island. In the evening I _____ (4 enjoy) the nightlife. At the moment I _____ (5 listen) to some great jazz. Jealous? You should be!

Brad



Remember George Rush from London? Well, surprise, surprise, he _____ (6 stay) at the same hotel for a few days. We _____ (7 have) a great time. He _____ (8 show) me all the best places in Paris. Well, I must rush now. We _____ (9 go) out to this new seafood restaurant right now. I _____ (10 love) you always.

Gloria

FIG. 9.2 Holiday postcards.

For Grammar Explanation, See The Yellow Pages p. 121 ▶

UNDERSTANDING THE GRAMMAR POINT

1. Look at the postcards again.
   a. Circle all the verbs in the simple present tense. I have
   b. Underline all the verbs in the present continuous tense. I am listening.
2. Find these adverbials in the postcards.
   • every morning • in the afternoon • at the moment • usually
   • for a few days • in the evening • always • now
3. Write the adverbials in the correct column.

Simple Present	Present Continuous
every morning	
usually	

CHECKING

Can you correct the errors in this holiday postcard?

Dear Daniel,

At the moment I am sitting in a little restaurant in Copacabana. It is late and the sun *is just beginning* ~~just begins~~ to set. I am watch some teenagers. They playing volleyball on the beach. A middle-aged man is jogging past my table. Every day I am coming to the same restaurant. I am eating a light meal — just a salad or some fish — and drinking a glass of wine. Sometimes I chat with the waiter. He is telling me about his young boy and I tell him about you. Life is almost perfect, except, of course, you are not here!

Love always,
Laura

LANGUAGE NOTE
Use some of the adverbials (every morning, always, now) and the present continuous or simple present tenses.

TRYING IT

Imagine you are on holiday. Write a postcard to a friend. Tell your friend what you are doing at the moment and what you do every day. Try to make the person wish he or she was with you!

.....

.....

.....

The editors would like to thank Pearson Education for permission to reprint this figure.

there is a clear tradition evident in such materials. This emphasizes two predominant methodological features: the provision of descriptions of grammatical points and controlled production exercises.

Tradition, however, also needs to be challenged. One way of doing so is by drawing on SLA theory and research. Over the past 25 years this has been directed primarily at describing and explaining how learners acquire the grammar of an L2 and has led to a number of insights and possibilities that can be incorporated into teaching materials. In particular, SLA suggests that grammar practice materials might include discovery-type grammar tasks for raising learners' consciousness about grammar, data in the form of structured input to induce noticing of target structures and input-processing tasks. I have given examples of materials that include these options. I have tried to show in this chapter how SLA can guide the development of teaching materials.

Of course, I do not wish to claim that because such materials have the support of SLA theory and research they are more valid than materials based on teachers' accumulated experience. This would be not only presumptuous but also wrong. For a start, SLA researchers and theorists are not in total agreement as to what constitutes the optimal conditions for grammar acquisition.[11] Also, countless learners have successfully learned from traditional grammar teaching materials. Therefore, it would be very mistaken to argue that all such materials should include grammar discovery, noticing, and input-processing tasks. Rather, as I have argued elsewhere (see Ellis, R., 1997), SLA should be seen as one source of "provisional specifications" (Stenhouse, 1975) that teachers need to experiment with through their own day-to-day teaching and through "insider research" (Widdowson, 1990). Teaching materials have an important mediating role in this process. They constitute a means of operationalizing research or theory-based specifications about teaching. In this respect, grammar practice materials can serve as an important source of innovation in language teaching.

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[11]DeKeyser and Sokalski (1996), for example, argue on the basis of skill-learning theory that production and receptive activities are beneficial, contributing respectively to learners' ability to comprehend and produce the target structures.

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