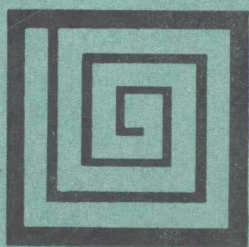


GRAMMAR and SECOND LANGUAGE TEACHING

A BOOK OF READINGS



WILLIAM RUTHERFORD
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Editors

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INTRODUCTION

This is a book of readings that explores the dimensions of what has often been called *pedagogical grammar* (PG), or the means by which acquisition of second or foreign language grammar may be expressly facilitated. As an area of academic interest, PG is not new; it has in a loose sense been with us for the entire two and a half millennia of attested foreign language teaching, although actual PGs written expressly for language learners probably date from no earlier than the eighteenth century.¹ If so much has already been done in and with PG, why do we need a book like this? One can begin to answer this question by noting that the long history of PG notwithstanding, only very recently have we begun to look at the discipline with any real seriousness—that is, to pose research questions having to do with the possible relationships among what formal properties may be “raised to consciousness,” how this step may effectively be accomplished, and how the learning of such properties proceeds—thus, to work toward articulation of a coherent theory of PG. We intend that this collection of readings should contribute to the development of such a theory.

One point that has often been made by language professionals of whatever theoretical stance, ideological camp, or disciplinary calling is that language, whatever else it may be, is rule-governed behavior. It would no doubt be difficult to find anyone who could quarrel with this concept. The notion that verbal and written communication among humans is made possible through a network of systems that can be expressed in terms of rules is a presupposition that underlies every language research endeavor from phonological analysis to the study of discourse, from dialectology to the examination of historical

change. And the concept of language as rule-governed behavior is no less presupposed by those engaged in research into how languages are acquired or learned and how they might best be taught.

Rules, then, figure prominently in any discussion of language. For many people the rules are the language—rules for how words are formed, rules for assembling words as syntactic constructs, and rules for how constructs serve the various purposes of language use. This way of thinking is perhaps most true of those professionally involved in some aspect of language pedagogy, theory as well as practice. And with the invocation of a rule, it is usually assumed that one knows what one is talking about. The assumption is that since a language has rules, they can be explicitly formulated. The rules therefore constitute a repertoire of target language facts to be communicated to the learner.

Is such an assumption justified? And is justification possible without (1) metalinguistic knowledge in a purely formal sense (i.e., a rule's formal properties); (2) metalinguistic knowledge in a psycholinguistic sense (i.e., a rule's potential for both teachability and learnability); and (3) knowledge of what kind of learner behavior one might expect as the result of having imparted such knowledge (e.g., Is the rule brought to bear in learner production?). And if there are different kinds of grammatical knowledge, are there also different senses of the concept "rule" that need to be agreed on? Asking such questions implies that much is often presumed in discussions of these matters that is open to challenge.

One convenient way of talking about rules in different senses would be to speak of three basic types—namely, *L-Rules*, *Psycho-Rules*, and *psycho-rules*. We define these terms as follows, using upper- and lowercase typography for partial differentiation:

1. *L-Rule*: A rule construct devised by the formulator-as-linguist (professional or amateur, general or applied) and set down on paper.
2. *Psycho-Rule*: The psychological correlate of a rule devised by the linguist as in (1) and deliberately learned. One example of a Psycho-Rule system would be represented by Krashen's "Monitor" (Dulay, Burt, & Krashen, 1982).
3. *psycho-rule*: The outcome of intuitive psycholinguistic processes (the nature of which is spelled by any particular psycholinguistic theory) whose existence we infer from the principled spontaneous linguistic behavior of those who seem to perform successfully (i.e., accurately and systematically). They do so without having consciously analyzed what they are doing and without having been given formulas—that is, Psycho-Rules. A good example of the development of psycho-rules is mother-tongue learning.

L-Rules can be found in books; Psycho-Rules and psycho-rules are mental representations. For example, an L-rule must at one time have been devised via some sort of conscious psychological process. We could therefore say that an L-Rule in a grammar is simply the outcome of a Psycho-Rule

created in the mind of a particular linguist at a particular time. To the extent that a collection of rules hangs together as a system, we may in the same way talk of *L-Grammars*, *Psycho-Grammars*, and *psycho-grammars*. We draw attention to this three-way division merely as a practical means of underscoring major issues that pedagogical grammarians will have to come to grips with when they search for ways in which to enhance grammatical representation in the minds of learners. Thus, given this complexity of the notion of rule, for general purposes we employ the cover term *rule* to designate a wide assortment of formal rules, schemata, formulas, principles, conditions, constraints, postulates, hierarchies, maxims, and algorithms—in short, whatever means, formal or informal, by which an account of language system might be rendered.

The issues we have been discussing can be raised as well with respect to those approaches that deny the value of attempting to impart explicit knowledge of language form in the classroom as an aid to learning. Often implied in such discussion are a view of language and its complex organizing principles that is considerably impoverished, a view of language learnability that is seriously wanting, and thus a view of the possible contributions of pedagogical consciousness raising (CR) that is quite misconceived. Language, so the reasoning would have it, is a hierarchic assemblage of language constructs—phonological units at the bottom, discourse units at the top; language learning would be tantamount to the cumulative “mastery” of these entities; and pedagogy would serve to “teach” the constructs in question. Perhaps the most serious aspect of these kinds of misconceptions is the implied assumption that the L2 (second language) learner [and by logical extension, of course, the L1 (first language) learner] comes to the learning experience with an acquisitional mechanism whose linguistic component is a *tabula rasa*. It then logically follows that the only conceivable task of PG would be to pump as many of the target language rules into the learner as possible to fill this L2 grammar “void.” Since the difference between what there is to know about the grammar and what the average language learner can possibly absorb is vast, however, the explicit rule-learning endeavor is futile, or so the reasoning would go. The seeming facetiousness of these remarks should not obscure the fact that the misapprehensions about PG already mentioned are quite widely held.

Since we have introduced the term consciousness raising (CR), we need to define it. CR is intended to embrace a continuum ranging from intensive promotion of conscious awareness through pedagogical role articulation on the one end, to the mere exposure of the learner to specific grammatical phenomena on the other. The matter of raising the grammatical consciousness of the learner in this broad sense is thus a highly complex one in which a number of nonlinguistic considerations are also involved. What is important, then, are possible answers to questions having to do with *what* we choose to bring to consciousness, what *motivates* the choice, *when* and *how* (i.e., by what means) we raise something to consciousness, *how often* we call attention to it, *how detailed* is the information revealed in the exemplars, and *what effect* on learner behavior the information is intended to have. More important, however, meaningful PG exploration of questions such as these carries the assump-

tion that grammatical CR is not an end in itself. Herein lies the crux of the fallacy represented by belief in the futility of trying to impart complex grammatical information to the learner. To quote from the Corder paper in this book, "pedagogical descriptions of the target language must be devised to help the learner learn whatever it is he learns, but are not necessarily *what* he learns. Pedagogical descriptions are *aids* to learning, not the *object* of learning; so long as we keep that firmly in our minds we shall not get confused by the ambiguity of the expression 'teaching grammar'" (p. 130).

The appeal for PG as the means to an end rather than the end itself is consistent with what little we know so far about how grammatical competence is actually acquired, at least where formal instruction is absent. One thing we do know, however, is that grammatical information tends to be assimilated in decomposed form rather than in the form of tidy and comprehensive rules. McCawley (1983), in fact, has noted with regard to native language development that "acquisition of the factors that figure in rules of grammar [e.g., lexical categories and meanings of the various lexical items and the correspondence between particular surface configurations and semantic structure] can be far in advance of acquisition of the rules themselves" (p. 372).

At issue is the question of how L2 grammatical competence is achieved and, more specifically, whether L2 grammatical CR serves to facilitate its acquisition.² The question has been articulated more formally as the *pedagogical grammar hypothesis*, or PGH, formulated in its earliest version in Sharwood Smith (1980), stated fully in the Rutherford and Sharwood Smith paper in part one, and repeated here:

Instructional strategies which draw the attention of the learner to specifically structural regularities of the language, as distinct from the message content, will under certain specified conditions significantly increase the rate of acquisition over and above the rate expected from learners acquiring that language under natural circumstances where attention to form may be minimal and sporadic. [p. 109]

The organization of this book—indeed, its very existence—is testimony to the nontriviality of the PGH. Most of the papers that appear here have adopted the hypothesis in principle, whether explicitly or implicitly. Another theme, however, is common to these papers, though not often stated as such. This is the assumption that hypothesis testing on the part of the learner is an integral part of the achievement of his or her L2 grammatical competence.² But the testing of hypotheses about the organization of the target language cannot, of course, take place without the learner's being exposed to the kinds of L2 data required for hypothesizing. The task for PG then becomes clear, as Corder points out in his paper (part two): "Teaching is a matter of providing the learner with the right data at the right time, and teaching him how to learn, that is, developing in him appropriate learning strategies and means of testing his hypotheses" (p. 133). And the role of the teacher in the activity of hypothesis testing becomes clear as well. Again Corder: "The minimal irreducible and

indispensable function of the teacher is to tell the learner what is or is not an acceptable utterance" (p. 143). Mackenzie, in his paper in part three, refers to hypothesis testing as a form of "original research" on the part of the learner, one way in which the learner can manage part of his or her learning.³ Rutherford's paper (part three) turns the learner's predilection for hypothesis testing into a proposal for a number of classroom activities designed to activate it. Finally, as revealed in a paper by Cook, there is a possible paradox in the previous claims for hypothesis testing and attempts to redefine the concept within the framework of Chomskyan Universal Grammar. As Cook points out:

Hypothesis-testing by feedback has usually been claimed to be the "natural" informal way of learning a second language, the provision of correction and explanation an "unnatural" formal way. If this argument is right, hypothesis-testing only works in the "unnatural" situation and cannot be used in the informal real world situation. Hence L2 learning research has to be cautious in its support of hypothesis-testing; in the sense of testing by feedback this is only possible in artificial situations where non-primary forms of evidence are available. Only in the sense that the learner checks positive evidence against his internal language principles can hypothesis-testing be acceptable. [Cook 1985, p. 13]

In fact, in the Rutherford and Sharwood Smith paper (part one) we find a recognition of hypothesis testing in precisely this sense of the term.

What emerges from this set of papers is evidence of a number of aspects of second language learning, formal linguistics, and PG that are consistent with one another and whose interrelationships are worth continued exploration as the PGH is subjected to more critical scrutiny. We list these aspects now in the form of questions addressed by various contributors to this book:

1. What is required of PG so that it is consistent with the notion that language acquisition is the development of cognition as well as the development of communicative resources?
2. What special implication for PG derives from the notion that learning is more effective to the extent that it can establish a link with, and build on, prior knowledge?
3. In what sense is PG best seen as a means (aid) to learning rather than the end (i.e., what is actually learned)?
4. What are the implications for the organization of PG of current views on language learnability?
5. To what extent is the distinction between language-universal and language-specific aspects of the target language related to implicit/intuitive knowledge and explicit/conscious knowledge, respectively?
6. How may PG be seen as consistent with the notion that a learner's increasing grammatical competence represents less an accumulation of knowledge than continued restructuring of prior knowledge?
7. Is it reasonable to suppose that one of the functions of PG is to provide the learner with appropriate and timely data for the testing of L2 hypotheses?

Discussion of PG is certainly not a new or even a recent phenomenon, as we mentioned at the outset. Attention to grammatical form has been perceived by at least some professionals as integral to pedagogy for as long as language instruction has been discussed. Through the years the large number of articles on this topic in the many journals devoted to matters of language teaching and learning has never really waned, the ebb and flow over time of novel methodologies notwithstanding. Does anything then distinguish this collection of papers from others that have preceded it, apart from the intrinsic interest and value of the papers themselves? We believe, as we earlier intimated, that there is such a distinction and that it is rooted in what constitutes the essence of modern scientific inquiry: the development of theoretical foundations upon which may be constructed testable hypotheses. For the first time, then, at least to our knowledge, we have the stringent proposal that research in PG subsumes a scientific framework within which the PGH can begin to undergo the crucial empirical testing that thus far has for all intents and purposes been missing. Only by proceeding in this fashion can pedagogical decisions concerning CR with respect to grammatical form be made on a principled basis, and we assume that all serious research on the subject will henceforth, explicitly or implicitly, constitute evidence bearing one way or the other on the PGH.

We find it no coincidence that the onset of serious work in PG should coincide with the emergence of second language acquisition research as a professional field. We will in fact go further and state that theoretical issues related to the PGH could not even be satisfactorily articulated, perhaps even conceived of, were it not for interesting research in second language acquisition bearing on these matters—for example, work reported on in collections such as Richards (1974), Hatch (1978), Gass and Selinker (1983), and Davies, Criper, and Howatt (1984), among others. From such research has come the formulation, among other things, of an important hypothesis that is subsumed in the PGH—namely, the *interface hypothesis* (IH). The IH is an essentially psycholinguistic claim about the accessibility of subconscious grammatical knowledge in the mind of the learner, and it suggests that the learner's metalinguistic perception of structural regularities in the language can affect the growth of such subconscious knowledge. This accessibility seems to have been assumed in some vague sense by generations of language teachers utilizing formal instruction within traditional methodologies. It has been seriously questioned by L2 acquisition researchers⁴ who claim that there is an unbridgeable gap between (1) the learner's inaccessible subconscious mental grammar and (2) his or her conscious mental disposition to focus on form, such that (2) cannot affect (1). The IH denies this unbridgeable gap by allowing the conscious aspect of linguistic knowledge to contribute to the unconscious, and the papers in part one offer general support for this claim.

Following from the interface position is an additional hypothesis (in a sense, an application of the IH): since the learner's metalinguistic awareness of the outer form of the target language may partly shape the developing mental representation of the target language, pedagogical intervention that boosts this

metalinguistic awareness may *ipso facto* affect the learner's subconscious grammar.

Again, one cannot overstress the fact that these are empirical questions. We pose them for the stimulation of rational inquiry and not for the purpose of pushing premature decisions about how to teach languages. It is in this spirit that we offer the readings that follow.

NOTES

1. See, for example, Kelly (1969).
2. Note that we are not referring here to L2 *communicative competence*. Our use of *grammatical competence* is more akin to the formal linguistic notion of *competence* (i.e., as distinct from *performance*) in the sense of what the speaker knows intuitively about his or her language. Grammatical competence serves functions other than (perhaps even more important than) communication (e.g., cognition), and communication can be accomplished by other than linguistic means.
3. In yet another approach, Landa (1980) views hypothesis testing as an algorithmic exercise wherein learners are led to think for themselves: "One of the shortcomings of conventional instruction consists in the fact that students are taught primarily *knowledge* about objects but are not taught (or taught inexplicitly, incompletely, unsystematically) cognitive *operations* that should be performed on *knowledge* in order to successfully solve certain classes of problems. In other words, they are taught knowledge but not how to think" (pp. 2-3).
4. For example, Krashen (1982).

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one

THEORETICAL CONSIDERATIONS

It is interesting to note that, for all but the past century and a half of the 2,500 years of documented language teaching, it has been assumed that the teaching of grammar is a necessary component of any language-teaching program. Indeed, in language pedagogy before the nineteenth century, grammar teaching was considered not only necessary but also sufficient. Until that time, in other words, language teaching and the study of grammar were virtually synonymous. It thus would have been impossible in earlier times to question the value of grammar focus in language pedagogy without questioning the value of language pedagogy itself.

Issues concerning the historical development of pedagogical grammar are the substance of the paper by Rutherford that begins this section. As he points out, challenges to the importance of grammatical focus did not come about until the emergence in the early nineteenth century of methodologies deriving from the first consideration of language as another form of human behavior rather than from the need for manifestation of literary skills. This, then, was the pedagogical climate in which appeared a century and a half ago the Direct Method and the Natural Method, both arising somewhat in consequence of the formal excesses of nineteenth-century grammar-translation methodology, which toward the end of that century had finally lost all relationship to the realities of language use.

Controversy surrounding the status of grammatical consciousness raising (CR) in language pedagogy is now more than 150 years old. To our knowledge, however, it is only since the late 1970s or so that claims advanced for or against a role for grammar have been based on the findings of empirical research. To

some extent, this rather late turning of attention to the scientific justification of grammatical CR could not really have come about until serious attention had also been turned to the question not just of how second languages should be taught but also of how they are learned. Thus, the comparatively new field of second language acquisition, infused with insights from an invigorated educational psychology and from a revolutionary linguistic theory, has made it possible to design the kind of research wherein the proper sorts of pedagogical questions can be asked and meaningful answers occasionally provided.

The question perhaps most fundamental for addressing these issues is whether or not language learning by a child is essentially different from language learning by an adult and, if it is, in what ways and to what extent. Some possible answers to these questions form the substance of the paper by Bley-Vroman early in this section. Bley-Vroman cites ten characteristics that serve to differentiate these two areas of language learning and concludes that adult language learning has more in common with other kinds of adult learning (i.e., where the task at hand can be represented as the solution to a problem) than it does with language learning by children. A conclusion of this kind has significant implications for what one does in the classroom.

Two of the characteristics tallied by Bley-Vroman are similar to two observations that have been made by a number of researchers: (1) that the provision of comprehensible input alone is not sufficient to ensure L2 grammatical accuracy and (2) that at appropriate times some form of grammatical CR is effective in improving such accuracy. The papers in Part II provide support, for the most part and to varying extents, for one or the other (or both) of these observations.

Before briefly discussing the theoretical support for CR in the other papers of Part II, we call attention to some research bearing on this issue that comes from another discipline—psychology. The paper by Reber et al., which does not appear in this book, is concerned with the learning of complex rule structures. Reber et al. (1980) report the results of several experiments designed to study the interaction between two learning modes termed *implicit* (in which organizational patterns and their underlying rules are to be discovered by the learner) and *explicit* (where the patterns to be observed are made salient). They found that the learning of patterned strings of symbols was enhanced to the extent that the symbols were arrayed to render salient the patterns in question, that the learner is made aware of the existence of such patterns, and that the learner is told to seek them out. These authors conclude that optimum learning occurs where the two modes are synthesized such that the imparting of (explicit) information precedes the display of (implicit) patterns represented in the exemplars. What makes this paper of some interest for discussion of the issues surrounding CR is that the structural information given to the learner is by definition correct (since the structures were created by the experimenters) and that the very nature of the experiment precludes any fuzziness in distinctions between *formal* and *informal* instruction of the kind that must inevitably characterize all classroom language learning. The authors' emphasis on the importance of an exploitation of the relationship between the

learner's code-breaking strategies and the underlying formal grammatical structure has echoes in two papers in this section, those of Bialystok and of Pienemann.

Bialystok effectively reveals the inadequacy of one-dimensional models of developing L2 proficiency and their failure to account for learner variability. Proficiency, in her view, can best be described ultimately by attempting to identify the underlying factors whose intersection results in performance variability. Bialystok's empirical findings lead her to conclude that, for a plausible accounting of second language learning, one needs to delineate two kinds of coordinates or dimensions along which language development may be plotted. One of these dimensions, termed *analyzed*, reflects the capacity of the learner at a given time to impose an unconscious structural analysis on received language data and thereby to render those data potentially usable in a commensurately wider grammatical context. The other dimension, termed *automatic*, reflects the extent to which the learner at that given time may have access to such analyzed data and thereby register gains in the attainment of fluency. Bialystok's view of learner development in terms of these two dimensions and in combination with other kinds of knowledge—linguistic, conceptual, and contextual—is thus a “componential” one, wherein the subtle interplay of the various components is what determines learner variability. One of the particular strategies of learning and communication that Bialystok's learner would ostensibly benefit from—the one that principally concerns us here—is Reber et al.'s (1980) code-breaking strategy, where CR might seem at first glance to have its broadest employment.

The thesis of the Pienemann paper, however, is that the effective utilization of CR is highly constrained, at least to the extent that it may be brought into play within a learning context characterized by the sequential deployment of interrelated syntactic movement operations. In examining the possible effect of formal instruction on the L2 learning of German subject-AUX inversion following fronted adverbials, Pienemann concludes first that the processing demands inherent in the learning of such inversion must have been prepared for through the prior learning of the less demanding “particle shift” and, second, that the effect that teaching may have on this natural learning progression is to be found rather in the speed of acquisition, in the frequency with which the rule in question is invoked, and in the variety of contexts in which it must be applied. The importance of Pienemann's contribution is thus to have shown that there may be a tight relationship between learning and teaching (his so-called teachability hypothesis) that is rooted in principles of cognition and that consequently we may have to re-examine all varieties of current language-teaching methodology in terms of their psychological validity.¹ One may make an additional point about the more specific claims in Pienemann's paper—namely, that not only are his claims theory-dependent (What theory or which principles of cognition are at issue?) but also that they are true of perhaps only a small subset of the grammar in question.

Pienemann's Teachability Hypothesis (TH) would seem to bear a systematic relationship to Sharwood Smith's Pedagogical Grammar Hypothesis

(PGH), as it is reformulated in the Rutherford and Sharwood Smith paper; that is, the more precisely conceived TH would serve as a constraint on the more broadly defined PGH, or the general claim of validity for the crucially important enterprise of CR in adult language learning. Rutherford and Sharwood Smith go on to suggest that for the necessarily principled decision making entailed in CR one might reasonably be informed by, among other things, relevant principles of Chomskyan Universal Grammar, though here again subject, as always, to pedagogical validation. Their approach focuses on the problem of deciding what evidence for the L2 grammar is available in the input in principle and what ways teachers and syllabus designers might have of making the relevant existing evidence salient and also of supplying that evidence that is in fact *not* normally present. The approach adopted here, in contradistinction to that advanced by others in this book such as Bley-Vroman and Pienemann, assumes that general principles of cognition are quite enough for the second language adult learner to make sense of the data and that he or she, like the child, may well have access in some useful sense to a specifically code-cracking device. The paper then considers what kind of instructional strategy might be adopted for investigation if this claim turns out to be valid.

The Sharwood Smith paper effectively describes the kind of variety that CR may manifest in terms of explicitness and elaboration. In a sense, this paper serves to relate more closely to CR the issues involving cognitive knowledge that are raised by Bialystok.

To the extent that the papers in Part II approach the question of CR, they do so in principled fashion. This is also true even of the one paper that comes out in favor of a functional approach to language teaching—namely, that by Canale and Swain. These authors probe the relationships between what have been termed *communicative approaches* to second language pedagogy and their theoretical underpinning or lack thereof. They argue that misconceptions about the nature of language have often resulted in an overemphasis on communicative function at the expense of grammatical accuracy, especially in the early part of the learning experience. Canale and Swain formulate a tripartite theory of communicative competence that incorporates three distinct competences: grammatical, sociolinguistic, and strategic, where the second is related to language appropriateness and the third to language utility. The kind of pedagogy that their theoretical framework leads them to favor (though cautiously) is one in which different kinds of knowledge figure prominently—knowledge of language in general, knowledge of the target language, knowledge of the target culture—but in which overall organization is articulated in terms of language function. Apart from the value of their insights, the Canale and Swain paper stands as a model of the kinds of questions one needs to ask for any serious consideration of the relationship of theory to practice.

NOTES

1. Other authors have said similar things. See, for example, McLaughlin et al. (1983).