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Thinking Allowed

Research into practice: Grammar learning and teaching

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This selective review of the second language acquisition and applied linguistics research literature on grammar learning and teaching falls into three categories: where research has had little impact (the non-interface position), modest impact (form-focused instruction), and where it potentially can have a large impact (reconceiving grammar). Overall, I argue that not much second language acquisition or applied linguistics research on grammar has made its way into the classroom. At the conclusion of the discussion of each of the three categories, I speculate on why this is so. I also find misguided the notion that research should be applied to teaching in an unmediated manner. This is not to say that research should have no impact on pedagogy. In concluding, I offer some ways that I believe it could and should.

1. Introduction

Grammar instruction has been relatively unaltered by research findings. It remains traditional for the most part, with grammar teaching centered on accuracy of form and rule learning, and with mechanical exercises seen as the way to bring about the learning of grammar (Jean & Simard 2011). This traditional approach and these practices may seem surprising, given the amount of attention that grammar pedagogy has received from researchers. This is not to say that all research should have implications for instruction, or that it should do so in an unmediated manner. After all, a number of researchers themselves have warned against the direct application of research findings to language pedagogy (e.g., Hatch 1978) or even that deriving pedagogical implications should be the purpose for doing research. Besides, researchers and teachers often occupy two different worlds, with different goals and conditions of employment (Larsen-Freeman 2009a; Ellis 2010). Further, it would be a tremendous act of hubris to dismiss or belittle practices that have for centuries contributed to the successful learning of languages or, for that matter, to assume that change must be initiated from outside the classroom. Nevertheless, the intent of much second language acquisition (SLA) research on grammar instruction has been to improve practice; therefore, while it cannot be said that it has had no impact, it can reasonably be asked why it has not had more. Indeed, besides my

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own limited personal experience that leads me to infer little change in grammar teaching, survey research reveals that grammar is still being taught traditionally in most classrooms in a non-integrative manner. These results reveal that students see value in grammar study (Schulz 1996; Loewen et al. 2009), as do teachers (Burgess & Etherington 2002). Further, both teachers and students see rule learning as important or very important, and teachers also find written grammar exercises useful or very useful (Jean & Simard 2011). Indeed, Jean & Simard (2011: 479) conclude 'traditional teaching still seems to prevail . . . despite efforts to move away from it.' And Wong & VanPatten (2003: 407) remark on 'the ubiquity of drills and pattern practice.'

Common targets for inertia in teaching are the textbook publishing industry and the relative conservatism of educators and their resistance to innovation (Skehan 1998; Thornbury 1998). This criticism may be valid, but if so, one wonders why these factors do not affect all areas of instruction; yet, this certainly does not appear to be the case as, for example, Nation's (2011) discussion of vocabulary research suggests. Thus, I think that answers for the perpetuation of traditional grammar teaching lie elsewhere, and I offer them below following my research summaries. Due to the fact that grammar teaching has inspired a considerable amount of research activity,[1] I will review the research selectively and confine my remarks to three areas: where I feel that research has had little impact (the non-interface position), modest impact (form-focused instruction), and where it potentially can have a large impact (reconceiving grammar).

2. Research findings that have had little impact: The non-interface position

It is by now well known that early in the evolution of research on foreign/second language (L2) acquisition, there were calls to discontinue the teaching of grammar (Krashen 1981). Grammar teaching was said to have very little effect on the natural language acquisition process and that instead what learners needed was abundant 'comprehensible input'. Evidence in support of this position was based on SLA research which reported that learners adhered to a natural order of acquisition, at least for certain English grammatical morphemes, and a natural sequence of development for certain syntactic structures, such as question formation in English. These were fairly robust findings, adding weight to Corder's (1967) contention that humans possessed 'built-in syllabuses.' It was also the basis for Krashen's (1981, 1982) claim that conscious grammar instruction would not contribute to subconscious language acquisition because it would not develop learners' grammatical competence, a claim in keeping with a Chomskyan-inspired universal grammar perspective. In other words, Krashen maintained that there was a non-interface between what is taught and learned explicitly and the implicit knowledge necessary for fluent communication. Paradis (2004) bolstered the non-interface position by presenting evidence to suggest that implicit and explicit knowledge are neurolinguistically distinct.

[1] For summaries, see Nassaji & Fotos (2004), Ellis (2006), & Spada (2011). It should also be noted that my review is mostly informed by a cognitive, linguistic reading of the literature, not one informed by the social turn, important as it is.

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While Krashen's ideas were widely disseminated, and certainly seemed popular among teacher audiences, the ideas were criticized by researchers, who found fault with the unfalsifiability of his claims (McLaughlin 1978) and the failure to consider the importance of learners receiving feedback on their performance (White 1987). In addition, researchers studying the language production of students enrolled in Canadian French immersion programs pointed out that after years of the type of instruction Krashen recommended, fundamental errors of grammatical form persisted (Harley & Swain 1984). Since then, other researchers have pointed to the nature of classroom language and its lack of linguistic complexity and variety (e.g., Dalton-Puffer 2007; Lyster 2007). Swain (1985) built on her findings by making the case for comprehensible output, asserting that the value of learners' producing the language was unappreciated with Krashen's exclusive focus on comprehensible input (see also Morgan-Short & Bowden 2006; Toth 2006). Comprehensible input might be necessary, but it wasn't sufficient. One's comprehension of another language typically exceeds one's ability to speak it. Therefore, pushing learners to express themselves clearly would be beneficial in that it would mean that learners would have to learn to process language syntactically in addition to processing it for meaning.

Against these arguments, Krashen defended his original non-interface position (1993), and maintained that students' learning rules and practicing them are only of marginal value (Krashen 2011). Further, he stated that language can be acquired without learners producing any language and that opportunities for learner production in the classroom were scarce anyway (Shehadeh 2002).

What has been the impact of this research? Here is what Thornbury (1998: 19) has to say about the matter.

> You may have noticed that a number of recent books seem to be celebrating, in the words of one of them, 'the return of grammar to the centre stage of language teaching and learning' (Tonkyn 1994: 12). Yet, for as long as I have been teaching, grammar has never been anywhere BUT centre stage.

Many observers agree (Nunan 1987; Sato & Kleinsasser 1999). They report that despite teachers' adoption of communicative language teaching, much class time is still spent giving grammatical explanations and teaching rules (Gatbonton & Segalowitz 2005). So, while the research is certainly not unequivocal, it can be instructive to ask why it is that teachers have not abandoned explicit grammar instruction as they have been advised to do. Certainly, one explanation is the power that students' and teachers' attitudes and beliefs have, no doubt informed by their own learning experiences (Borg 1999). Schulz's (2001) and Jean & Simard's (2011) research, which surveyed attitudes about grammar teaching among students and teachers of a variety of languages, concur 'The main findings suggest that grammar instruction is perceived by both students and teachers as necessary and effective, but not something they enjoy doing' (Jean & Simard 2011: 467).

Especially given this negative affect, it is worth asking why teachers' views are seemingly entrenched. One explanation is that teachers are not autonomous agents. They are embedded in educational systems that in many cases are still in the grip of high-stakes grammar-based examinations which constrain to what degree teachers can reduce the attention that they give to grammar (Littlewood 2007).

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So, my first explanation for why the non-interface position has not had more of an impact is due to the strength of long-standing views on the importance of grammar teaching by teachers and by those who set educational policy. As Richards (2008: 173) notes, we tend to take for granted that our teacher education programs succeed in changing teachers' beliefs. 'However, research often confirms that there is often little immediate evidence for change in teachers' practices as a result of training (Waters & Vilches 2005).' And perhaps there shouldn't be change based on findings from SLA research, for SLA researchers often seek to define what is minimally necessary to explain language acquisition. What is minimally needed is not necessarily what is optimal for classroom instruction or what is optimal for all learners, especially for learners whose only contact with the target language is limited to what they receive in the classroom. One would hope that instruction would accelerate any natural acquisition process, not imitate it (Larsen-Freeman & Long 1991).

3. Research findings that have had modest impact: Form-focused instruction

It is fair to say that much of the research community does not endorse Krashen's stance on excluding grammar teaching from classroom instruction. A less extreme position was adopted by Long (1991), who argued that teaching grammar should not be banned, but that communication should be foregrounded; importantly, grammar instruction should be carried out in a manner that does not interfere with natural acquisition. He favors 'focus on form' teaching, which calls learners' attention to grammatical forms as they arise while learners are communicating, as opposed to a 'focus on forms' approach, which employs a traditional structural syllabus with its sequence of discrete pre-selected grammar structures.

In particular, Long advocated less use of explicit explanations of the grammar and more the use of input made comprehensible through interactional modifications, such as comprehension checks (e.g., 'you know what I mean'?), and through unobtrusive feedback, such as teachers correctly reformulating or recasting students' ungrammatical utterances. A great deal of research was conducted which attested to the value of tailored interactional modifications, both for enhancing learners' comprehension and their production (e.g., Gass & Varonis 1994), and maintaining them even after some time passes (Mackey & Goo 2007).

While Long's focus on form is primarily reactive, i.e., learners' attention is directed to the grammatical form once they have committed an error (Spada 1997), for some researchers, form-focused instruction includes a pre-emptive treatment of grammatical form, which is often initiated by students, and which can be integrated into meaningful language use (e.g., Ellis, Basturkmen & Loewen 2001). Both approaches accept that an important contribution of pedagogy is to help students notice (Schmidt 1990) structures that would otherwise escape students' attention. This is particularly important for structures that are vulnerable to fossilization, such as ones that are subject to cross-linguistic influence (e.g., Han & Odlin 2006). A variety of means for focusing learners on form has been investigated, far more than I have space to review. Here, I give only a few examples of research in four areas (see Larsen-Freeman & Tedick forthcoming, for others): giving learners explicit rules,

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inductive/deductive rule-getting, input-based instruction, and focused tasks.[2] Afterwards, I will discuss which, if any of these, have been taken up in practice.

3.1 Giving learners explicit rules

One strand of research has centered on the question of whether students should be given grammar rules or whether the rules should remain implicit, where learners are simply exposed to language by using the language in the classroom and where no explicit reference is made to structural regularities in the target language.[3]

Contrary to Krashen, some researchers insist that explicit knowledge can become implicit through practice (DeKeyser 1997), provided that the learner is developmentally ready to acquire it (Pienemann 1989). And still others have claimed that while most language acquisition takes place implicitly as learners use the language, explicit knowledge does have a role in affecting implicit knowledge by recruiting learners' consciousness, thereby enhancing their ability to recognize patterns while they are negotiating meaning (N. Ellis 2005; see also Leow 2001). Of course, even if learners are developmentally ready to acquire a given structure and they receive targeted explicit instruction on that structure, the learners may not immediately deploy the structure productively. One reason is that the explicit instruction may be disassociated from usage. If the conditions of learning and the conditions of use are not aligned, transfer appropriate processing may not ensue (Segalowitz 2003; Lightbown 2008). Another explanation for the lag is that learners are reluctant to give up their 'one form one meaning' (Andersen 1984) strategy, where they have adopted one form to meet their communicative needs. This explains why, for instance, learners use *will* to convey futurity in English for some time before they broaden their structural repertoire to include other means of doing so, *be going to*, the present progressive, etc. (Bardovi-Harlig 2004). Still another explanation resides in the fact that grammatical acquisition is a gradual process, which may involve learners' interlanguages progressing through transitional stages (Ellis 2008).

In an oft-cited meta-analysis based on a number of research studies, Norris & Ortega (2000) found a positive effect of explicit teaching; nevertheless, the outcomes in the various studies they surveyed tended to be ones where learners had to demonstrate explicit knowledge or answer discrete/decontextualized test items, measures that would presumably favor explicit knowledge (Norris & Ortega 2000: 501; Doughty 2003). However, there is increasing evidence that explicit attention to grammatical form can contribute to spontaneous production as well (Housen, Pierrard & Van Daele 2005; Sheen 2005; Pawlak 2007; Spada & Tomita 2010;

[2] Another important function of grammar pedagogy is, of course, corrective feedback (Lyster & Ranta 1997), but given that this journal has just featured two reviews, one on written corrective feedback (Lee 2013) and one on oral corrective feedback (Lyster, Saito & Sato 2013), and in the interest of space, I will not treat this function further. I also will not be able to deal with the management of grammatical practice opportunities (e.g., DeKeyser 2007).

[3] A somewhat different, but related, distinction is sometimes made between incidental and intentional learning (Hulstijn 2003). The question is whether learners can acquire form when the learners' attention is incidental, i.e., not intentionally drawn to it. Given the limited time available for intentional teaching of the target language, an answer to this question is important. Willams's (2010) research suggests that learners can acquire word order when they are focused on meaning, although the learning may be of a rather elementary sort, i.e., simple associative sequence learning. Whether or not what has been learned incidentally can generalize to new sequences is not clear (Robinson 2005).

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Scheffler 2012). Swain & Lapkin (1998) also found benefits when students made opportunities for themselves to discuss grammar explicitly in 'language related episodes,' where students talk together about the language they are using and discuss which correct form they should produce. Whatever the source, ultimately what is important is how much explicit knowledge learners have to proceduralize and automatize (DeKeyser & Prieto Botano 2014).

3.2 Deductive versus inductive rule getting

Another issue concerns the source of the rules. Do students learn rules best by being given them deductively by their teachers or in textbooks, or are students better off being given examples from which they work out the rules inductively themselves? A discovery learning approach would favor induction, with the added benefit that students learn how to figure out the rules on their own. However, not all rules may lend themselves to induction easily. For instance, participants in studies by DeKeyser (1995) and Robinson (1996) showed that students learned simple morphosyntactic rules better under conditions of explicit-deductive learning and more complex rules better under implicit-inductive conditions, presumably because the latter were difficult to articulate (Spada & Lightbown 2008).

A number of studies have examined the efficacy of inductive and deductive approaches (Ellis 2006). Perhaps because of the different designs or different populations on which the research has been conducted, the fact is that neither approach has been consistently favored (cf. Shaffer 1989; Erlam 2003). One approach for combining induction and deduction to promote students' awareness involves using a 'garden path' strategy (Tomasello & Herron 1988, 1989). Students are given partial information about a grammar structure, thus making it seem easier than it is, or in other words, students are 'led down the garden path.' For example, students might be given a rule without being told its exceptions. The reason for giving students only a partial explanation is that it is hypothesized that students are more likely to learn the exceptions to the rule if they are corrected at the moment they make an overgeneralization error than if they are given a long list of exceptions to the rule to memorize in advance.

Applying sociocultural theory to grammar instruction, Adair-Hauck, Donato & Cumo-Johanssen (2005) advocate a guided-participatory approach to rule formation. In their approach students receive assistance from the teacher in figuring out the rules rather than the teacher's providing the students with explanations, or the students' being left on their own to figure out the grammar explanations. Even so, perhaps understandably, research on learner preferences has shown that learners favor a deductive approach, where they are provided the rules (Haight 2008; Vogel, Herron, Cole & York 2011).

3.3 Input-based instruction

Rather than working on inducing or deducing grammatical rules, input-based instruction requires learners to attend to problematic grammatical form during structured input activities. Contending that learners have difficulty paying attention to form and meaning

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simultaneously, VanPatten (1990; VanPatten & Cardiero 1993) advocated pushing learners to actively process target forms and connect them to their meanings. For instance, learners may note temporality more readily in content words, such as adverbs of time, and less in the non-salient endings on verbs that mark tense; therefore, the contention is that learners need processing instruction that is focused on verb tenses in the input. Learners might, for example, be asked to choose between sentences containing different tenses in response to a verbal prompt (Marsden & Chen 2011). During the period of time set aside for processing the input, learners never produce the target form in question (VanPatten 2002); however, they may subsequently practice producing tensed verbs. Indeed, a meta-analysis of studies of the effectiveness of comprehension versus production-based instruction suggests that a combination of input processing and production activities may be most effective (Shintani, Li & Ellis 2013).

However, input processing is not without its detractors (DeKeyser, Salaberry, Robinson & Harrington 2002) who contend that it may help learners induce explicit knowledge (Marsden & Chen 2011), but there is no evidence that input processing contributes to implicit knowledge being acquired. Furthermore, DeKeyser and Botana (2014) claim that most processing instruction research is limited in that it is short-term, limited to only a few grammatical structures, and is typically limited to students who are college-aged. Nevertheless, VanPatten's efforts have been acknowledged by SLA researchers for highlighting the importance of providing students with activities that engage them in processing crucial form-meaning links in comprehension activities (DeKeyser, Salaberry, Robinson & Harrington 2002).

Research which presumably makes the input more salient has been tested through input enhancement (Sharwood Smith 1993; White 1998), for example by boldfacing or otherwise highlighting certain grammatical forms in a written passage or by making features of oral language more prominent. Trahey & White (1993) recommend 'flooding the input' with many uses of a particular grammar structures. While these are intuitively appealing measures that teachers can implement, research has yet to demonstrate decisively that any of these efforts pay off (e.g., Jensen & Vinther 2003; Wong 2003). One way to make sense of the current state of affairs is Spada & Lightbown's (2008: 195) generalization that more explicit enhancement appears to lead to more L2 learning progress than less explicit enhancement.

3.4 Focused tasks

The pros and cons of task-based language teaching, one direction in which communicative language teaching has evolved, has been much discussed in the language teaching literature, and I will not delve further into it here. What I do want to consider is the more circumscribed 'focused tasks' (Ellis 2003, 2009), tasks which call for students to use certain grammar structures in order to satisfy task demands (Larsen-Freeman 2003), such as when students are given a map and asked to direct a classmate to a particular location. Such a task is likely to elicit prepositions of position and direction. Loschky & Bley-Vroman (1993) suggested that tasks in which L2 forms are task essential, meaning that a task cannot be accomplished unless participants use a specific structure, are most helpful (Sanz & Morgan-Short 2004).

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Constructing tasks where certain grammar structures are essential is not easy, but when successfully accomplished, research has shown that students' performing tasks can assist the acquisition of grammar (e.g., Mackey 1999). Different tasks can be used to supply learners with input by listening or reading (Fotos 2002), or to make use of grammar structures productively in speaking or writing. An example of the latter is Samuda's (2001) focused 'things-in-pocket' task, designed to create opportunities for students to use epistemic modals. Pica, Kang & Sauro (2006) showed how different tasks, such as jigsaw listening, and spot-the-difference, featured attention-promoting designs that made them useful, drawing learners' attention to L2 structures and formulaic sequences (Nguyen 2014) that are difficult to notice through classroom interaction alone. Then, too, designing communicative tasks in which formulaic utterances are naturally repeated contributes to students' being able to use the utterances fluently without resorting to drills and pattern practice (Gatbonton & Segalowitz 2005).

3.5 In the classroom

For form-focused instruction, it would be fair to say that some of these research findings about pedagogical innovations have had a modest impact. They may have encouraged teachers to allocate more target language use to students, and while this is significant, surely SLA research would not have been the sole impetus for its increase. Given its nascence, perhaps it is asking too much of SLA research to have a substantial influence on teaching practice. As Johnstone (2004: 667) opines

> I would nonetheless be interested to see what happened if, for example, Van Patten & Cadierno's (1993) 'input-processing' approach or Swain's (1985) 'comprehensible output' approach were tried out. The actual language teaching which I have observed in Scotland and several other countries hardly ever contains these features, and so to some extent the gap between SLA research and LP [language pedagogy] persists because these invaluable research-based insights have been investigated in a relatively small number of small-scale classroom experiments designed for SLA research purposes. They do not generally appear to have been incorporated into the cluster of pedagogical principles and practices which successful teachers seem to have implicitly acquired and which reflective practice might help them evaluate in terms of their perceived effectiveness rather than as valid or invalid hypotheses about SLA.

Another reason that SLA has had limited influence, therefore, might be its small-scale decontextualized experimental approach. Indeed, DeKeyser (2003: 326) observes that surprisingly few studies have made a comparison between implicit and explicit focus on form in a classroom context. The lack of influence may also be attributed to the fact that there is far from unanimity with regard to many of these practices. For example, DeKeyser (1998), and Swan (2005) dispute the claim that the traditional pedagogical sequence of presentation, practice, produce (or PPP) has failed.

Then, too, some of the research underscores the value of traditional teaching practices, so one wouldn't expect such practices to change. For instance, Ammar, Lightbown & Spada (2010: 142–143) note the following with regard to contrasts between the L1 and L2: '. . . it would appear that there is crucial information students need to know and that this information may best be provided through explicit instruction.' Indeed, as Ellis (2003) has noted, one of the

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functions of research might be to scrutinize extant teaching practices, in this case, validating one.

Moreover, other practices discussed in my review for this section did not originate in research. For instance, while teachers would probably not have used the term 'promoting noticing,' it seems that teachers naturally spend a considerable amount of time drawing students' attention to form (Simard & Jean 2011) as they do recasting, for that matter. Then, too, the move to task-based language teaching was not fueled by seeking a better way to teach grammar. Instead, it was a consequence of the communicative approach. And while Krashen's call for students to receive comprehensible input may have been noteworthy at the time, would anyone really have wanted to argue that students didn't need to understand the language of instruction?

All in all, my summary so far does not reflect an impressive display of uptake from the research literature.[4] It would be worth trying to understand why research has been less consequential in affecting practice widely.

One reason could be, as we have seen, that there is not a great deal of consensus among researchers. Most would recommend some focus on form, but in which way this is to be implemented, there is considerable disagreement (see, for example, Batstone & Ellis 2009).

Second, knowing grammar rules confers a certain authority. Grammar invests teachers with transmittable knowledge (Thornbury 1998), and the temptation to display the knowledge may prove irresistible. Besides, as we saw with students' preference for being given explicit rules, students want the security of knowing what is right, which they believe rules give them. Learner security is one reason why Larsen-Freeman (2000) suggests giving students REASONS as an alternative to rules, which may seem arbitrary. Reasons allow learners to see why things are the way they are, reducing the arbitrariness of grammar explanations.

Then, there is the matter of individual differences among teachers as well. Basturkmen, Loewen & Ellis (2004) examined teachers' instructional practices in relation to incidental focus on form. Teachers did indeed engage students in focusing on form, but they did so in different ways, based on their personal teaching style or the language they teach (Simard & Jean 2011). This is to be expected. After all, teachers are not mere conveyor belts delivering instruction in a lockstep manner (Larsen-Freeman 1991).

Then, as all teachers and researchers know, there are differences among students, too. Indeed, the efficacy of certain practices may be determined by a host of factors, such as learners' literacy (Tarone & Bigelow 2005), their proficiency (Ammar & Spada 2006), or their goals (Larsen-Freeman 2006). Indeed, not all students want to or need to use the target language with complete accuracy. These days the acknowledgement that English is an international lingua franca that is more likely to be used among English second language speakers leaves many teachers wondering just what grammatical standards they should enforce. Frankly, teachers cannot afford to be purists. They have responsibility for

[4] My hunch is that those 'innovative practices' have been implemented in grammar teaching mostly due to their inclusion in textbooks and teaching materials. I am thinking of the Natural Approach (Krashen & Terrell 1983), input tasks (Ellis & Gaies 1999), Processing Instruction (Lee & VanPatten 2003), focused grammar tasks (Larsen-Freeman 2007), content-based grammar teaching (Sokolik 2007), and corpus-informed grammar teaching (McCarthy, McCarten & Sandiford 2006; Reppen 2012).

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working with diverse students, many of whom approach the learning of grammar from different standpoints and with different objectives.

Finally, teaching and learning are complex and situated endeavors. Simple un-nuanced and decontextualized pronouncements for the interface or non-interface stances, or for and against focusing on form, are likely to be wrong, or at least overstated.

Long's comments (2007: 114–115) about recasts most likely apply more broadly to all pedagogical interventions: '. . . there is some evidence that recasts, like instruction in general, are differentially frequent and effective, depending on setting, learner age, proficiency, and type of L2 structure . . . as well as developmental stage and task.' In short, as Larsen-Freeman & Anderson (2011) acknowledge, teaching is a contingent act. Decontextualized proscriptions and prescriptions are not likely to be universally applicable. This is not to say that teachers should not be encouraged to read the research and experiment for themselves with innovative practices, such as processing instruction and the garden path technique. Indeed, familiarizing oneself with research is one important way for teachers to challenge their 'sense of plausibility' (Prahbu 1987).

4. Where research has the potential to be more effective: Reconceiving grammar

In the category of applied linguistics research, attempts have been made to reconceive grammar, a potentially very significant undertaking. However, I cannot report much progress on this front either. Despite researchers' and theorists' attempts to broaden conceptions of grammar, most educators persist in seeing grammar as a set of rules that govern accurate form in language, most often at the sentence level. It is true, as VanPatten, Williams, Rott & Overstreet (2004) rightly point out, that establishing connections between form and meaning is a fundamental aspect of language acquisition. Nevertheless, I have been leading what seems at times to be a futile campaign to convince others that grammar actually has to do not only with form and meaning, but also with use in texts, which I define as knowing when to use a grammar structure where two or more structures convey more or less the same semantic meaning: when to use phrasal verbs rather than their single verb counterparts, for instance, or when to use the past tense instead of the present perfect to comment on prior experience. I have maintained that little attention has been given to the pragmatic use of grammar structures, and that it is in knowing when to use grammar structures where there remains a formidable challenge for even the most advanced of learners. Pragmatic 'failures' in grammar, of course, are not always as conspicuous as inaccuracy, but committing them sometimes has more serious consequences. I have long maintained that students need to know about the use of structures so that they understand the consequences of their choices (see, e.g., Larsen-Freeman 2014a).

Indeed, contrary to popular opinion, the grammatical system offers its users choices in how they wish to realize meanings and position themselves ideologically and socially (Larsen-Freeman 2002). Some of the research on grammatical options has been done using functional frames of analysis, for example, a concept-oriented approach (Bardovi-Harlig 2007) and a systemic functional linguistics (SFL) one (Halliday & Matthiessen (2004). SFL research on academic language has been particularly important in supporting the learning of

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language through content in content or theme-based language instruction (CBI) and Content and Language Integrated Learning (CLIL) language instruction (Schleppegrell, Achugar & Oteíza 2004), showing for example, how history as a subject is realized grammatically differently from science and of the importance of grammatical metaphor as a resource for making meaning in writing (Byrnes 2009). Also helpful in this regard has been research that investigates how grammar operates at the discourse level (Celce-Murcia & Olshtain 2000; Batstone 2002; Celce-Murcia & Larsen-Freeman forthcoming).

These days there is also a great deal of research being done in applied corpus linguistics. Although insights from corpus research have been slow to be incorporated into textbooks (Biber & Reppen 2002), corpus linguistics has been held to have potentially beneficial application for language teaching (McGarrell 2011; Römer 2011), especially with regard to making students aware of lexicogrammatical patterning (Liu & Jiang 2009) and the difference between oral grammar and written grammar (e.g., McCarthy & O'Keeffe 2014).

Then, too, L2 researchers have found cognitive linguistics (e.g., Tyler 2012), concept grammar (Strauss, Lee & Ahn 2006), integrational linguistics (Lantolf 2009), and construction grammar (e.g., Hinkel 2012) fruitful perspectives to inform pedagogy. Hinkel observes that high-frequency multi-word expressions can be learned and deployed holistically, instead of being assembled from grammatical and lexical forms amidst the exigencies of communication. In addition, in keeping with a sociocultural perspective (Johnson 2009), language can be conceived of as social practice. The implications of this are that the instructional point of departure is not the discrete form, but rather 'the conceptual meanings that are being expressed that denote ways of feeling, seeing, and being in the L2 world' (2009: 24).

In addition, these days, I have recommended seeing grammar in more dynamic terms ('grammaring') in order to ameliorate the inert knowledge problem. Whereas traditional approaches to teaching assume that grammar is a static, finite system and that practice leads in a linear way to increasing control of such a system, a grammaring approach fosters the ability of students to go beyond the input, for, after all, language learning is not about conformity to uniformity (Larsen-Freeman 2003). The grammar system is not closed, but is rather constantly evolving, due to the creativity of its users as they make new meanings, making it impossible to distinguish errors from linguistic innovations without an appeal to sociopolitical factors, such as who is doing the talking (Larsen-Freeman 2012a, 2014b).

Indeed, an important counterpoint to how grammar has been portrayed in much of this article is the question of whether grammar is helpfully viewed as a rule-governed system at all (Larsen-Freeman 2009b). No one denies that rules can describe a grammatical system, but is it rules that are acquired, or is it, instead, that students learn patterns from exemplars? Repeated exemplars might at some point lead students to induce a rule, but it is equally plausible that language-using patterns remain as instances in learners' memories, emerging as they do from the language that both language learners and fluent speakers of the language experience. Rather than applying a rule to produce a grammatical utterance, then, users of the language analogize from previous instances. After all, no rule-based description of a grammatical system is complete, and there is a great deal of conventional use of patterns that do not lend themselves to explication by rules. For instance, there are no rules of English grammar that would account for 'by and large,' a phrase made of a preposition, a

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conjunction, and an adjective (Larsen-Freeman & Cameron 2008; Ellis with Larsen-Freeman 2009).

Another important factor to consider is that grammar is a lexicogrammatical resource for making meaning. In other words, it is not autonomous from the meaning-making capacity of language more generally, but rather integral to how we make meaning in interaction with others (Liamkina & Ryshina-Pankova 2012). This interpretation of grammar suggests that students would be better served learning grammar through iteration, which modifies their grammatical resources rather than simple repetition that copies them exactly (Larsen-Freeman 2012b) and by teaching students how to adapt their language resources to ever more complex situations (Larsen-Freeman 2013).

I find promise in these contributions to redefining the subject matter and its teaching – though I believe that their influence is not widespread and is therefore mostly potential at this point.

5. Conclusion

One reason that research on grammar teaching has not been more influential is that there exists a chasm between this research and the practice of teachers. Researchers and teacher educators need to find the means to help teachers navigate the distance (Sharkey & Johnson 2003; Bartels 2005) if they want their research findings to be taken up. However, seeing research findings as 'applicable' to pedagogy might not be a helpful way to think of them. In my opinion, perhaps the most important contribution of research to practice is to challenge teachers to think differently, to experiment with new practices, and to help them make the tacit explicit by cultivating new ways of talking about their practice (Borg 2010; Pedrazzini & Nava 2012).

It would also no doubt help to realize these ends were researchers to move beyond process-product research (Larsen-Freeman 1990), which isolates a single variable, and instead, conduct more ecological research (Larsen-Freeman & Cameron 2008) that takes into account the complex reality of the classroom (Mitchell 2000); that seeks to combine teaching and researching when that is appropriate (Mercer, Smith & Ushioda 2012); that constructs a research agenda informed by teachers' questions; that communicates findings in a straightforward and respectful way to teachers; that fosters a relationship of reciprocity (Larsen-Freeman 2009a); and that persuades teachers of the relevance of research (Ortega 2012).

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