Lang. Teach. (2011), **44.2**, 225–236 © Cambridge University Press 2010
doi:10.1017/S0261444810000224 First published online 13 July 2010

Beyond form-focused instruction: Reflections on past, present and future research

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In 1997 I published a paper in Language Teaching entitled 'Form-focused instruction and second language acquisition: A review of classroom and laboratory research'. The paper reviewed the results of studies investigating the effects of form-focused instruction (FFI) on second language (L2) learning. It was organized around seven questions, including: whether FFI is beneficial to L2 learning; whether particular types of FFI are more beneficial; whether there is an optimal time to provide FFI; and whether different language features benefit more from FFI. In this paper I revisit these questions and reflect on how research on FFI and L2 learning has evolved over the past twelve years.

In 1997 *Language Teaching* published an article I had written entitled 'Form-focused instruction and second language acquisition: A review of classroom and laboratory research'. It was organized around seven research questions and my goal was to review the results of studies that had investigated the questions to determine if we had any firm answers to them. The research questions were:

1. Does second language instruction make a difference?
2. Does type of instruction make a difference?
3. Is form-focused instruction beneficial to second language acquisition (SLA)?
4. Are particular types of form-focused instruction more beneficial than others?
5. Is there an optimal time to provide form-focused instruction?
6. Are particular language features more affected by form-focused instruction than others?
7. Do particular learners benefit more from form-focused instruction?

When I was invited to give a plenary at the Canadian Association of Applied Linguistics 2009 conference it was suggested that I take a look back at that review paper in order to reflect on the research that had been done at that time, how it has evolved since and what the future holds for research in instructed SLA. Initially I had enthusiastically embraced this

Revised version of a plenary paper presented on 27 May 2010 at the Canadian Association for Applied Linguistics conference, Ottawa, Ontario, Canada.

https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press

idea, but when I read my paper I realized that most of these questions remained unanswered twelve years later, making it seem like there had been no progress in the intervening years! Yet I knew this was not quite right – that there had in fact been quite a bit of progress. I also reminded myself that the research undertaking is a long and complex process and that it can take many years (more often decades) of systematic research to obtain answers to questions. But not only does it take time to get answers, it also takes time to ask the right questions. In fact, the subtle questions often only become apparent when you work with a problem over a long period, and eventually realize that the questions you started off asking may not have been the ones to ask at all. As Paul Meara writes in his recent book describing the process of doing research on vocabulary acquisition, 'the longer you work in an area, and the more you worry its basic assumptions, the more likely you are to find the critical questions that are really worth answering' (Meara 2009: xiv).

So I would like to begin by taking a closer look at the research questions posed in my 1997 paper. Perhaps the first thing to notice is that there is tendency for them to move from the more general to the more specific. For example, question 1, 'Does second language instruction make a difference?', leads to question 2, 'Does type of instruction make a difference?', and question 3, 'Is form-focused instruction beneficial to SLA?', leads to question 4, 'Are particular types of form-focused instruction more beneficial than others?'. Sometimes when I consider these questions I am reminded of Russian nesting dolls – the big doll opening up to reveal a smaller one and the smaller doll opening up to reveal an even smaller one, and so on. This image is useful when thinking about how research questions about the role of instruction in SLA have become increasingly precise and finely-tuned over the years, and how this has enabled researchers to undertake more focused research in their investigations of them. For the purpose of my presentation today, I have decided to focus only on the last five questions listed above (i.e. 3–7). I will also refer to one or two other questions that have emerged as important ones and are motivating current research in instructed SLA.

First, it is important to state how I defined form-focused instruction (FFI) in my 1997 article: 'FFI is any pedagogical effort which is used to draw the learners' attention to form either implicitly or explicitly . . . within meaning-based approaches to L2 instruction [and] in which a focus on language is provided in either spontaneous or predetermined ways' (Spada 1997: 73). This definition differs from Long's (1991) conceptualization of FOCUS ON FORM, which is restricted to spontaneous language use. It also differs from Ellis' (2001) definition of form-focused instruction – which is broader in scope – to include instruction that focuses exclusively on forms (i.e. FOCUS ON FORMS). Now, let's begin with the first question.

Is form-focused instruction beneficial to SLA?

In my 1997 review of research on FFI, I identified 30 studies that had been conducted either in the classroom or the laboratory setting. Of these, 23 were relevant to the first question. Eighteen of the studies were experimental/quasi-experimental and five were descriptive in nature. In all studies, the comparison was between classes/groups in which FFI was provided and classes/groups in which it was not. That is, all classes/groups had received communicative instruction but some of them received exclusively meaning-based teaching (i.e. no FFI) and

https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press

others received attention to language form(s) in their communicative instruction (i.e. FFI). In 1997 the findings related to the first question revealed mixed results. Some studies indicated benefits for FFI (White et al. 1991; Spada & Lightbown 1993; Lyster 1994) while others did not (White 1998). Also, some studies revealed benefits for FFI in the short term but not in the long term (Harley 1989; White 1991). Others indicated benefits for FFI on written but not oral tasks (Day & Shapson 1991). At that time, the best explanation for these mixed results appeared to be related to the TYPE of instruction provided in the classes. Subsequent research (e.g. Norris & Ortega 2000) provided additional support for this interpretation, which leads me to the second question.

Are particular types of form-focused instruction more beneficial than others?

A closer analysis of the instructional input provided in the studies revealed that the FFI was more explicit in some studies, that is, teachers provided overt instruction and corrective feedback, including the use of meta-language and clear signals to the learners that there was a right and a wrong way to say/write something. In other studies, however, the FFI was provided in more subtle ways: for example, by providing learners with high frequency exposure to a particular language feature but not drawing their attention to it in any explicit way (Trahey & White 1993; Trahey 1996) or by drawing learners' attention to a target form through typographical enhancement but not providing any explicit instruction or corrective feedback (White 1998). When I examined these studies more closely for type of instruction and compared those that had provided more or less explicit FFI, I concluded that explicit FFI was more effective than implicit FFI in communicative and content-based classrooms.

While I was fairly confident with the conclusion I had drawn based on my review of the studies at that time, I was acutely aware of the pitfalls of the methodology that I had used to arrive at this conclusion. My 1997 article is an example of what is referred to as a narrative synthesis – a review which is carried out by examining the findings of the existing literature focused on the same research question and comparing them to see if the findings are similar or different. There are several problems associated with narrative syntheses, however. First, there is a tendency to select the studies under consideration (i.e. primary studies) somewhat unsystematically and idiosyncratically. The process I used in 1997 was to select papers that I was aware of and those that my students were reading about in FFI and L2 learning. I also consulted the references in those papers and tracked down additional studies. This process is considered to be incomplete and biased, however, because of the observed tendency for researchers to give more attention to studies that report results that are similar to their own and to ignore or understate the findings from articles reporting different results. This is related to the third problem associated with narrative syntheses: that conclusions are often made on the basis of theoretical orientation rather than inspection of the evidence that is compiled systematically across studies (Norris & Ortega 2006a).

While I was aware of these problems in 1997, I was not familiar with other procedures that could be used to carry out a more complete, systematic and unbiased review until the publication of the Norris & Ortega (2000) meta-analysis of the effects of instruction on L2 learning. As most of you know, a meta-analysis allows for cross-study comparisons of

https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press

quantitative research even when the methodologies differ widely. This is accomplished by using a statistic referred to as an effect size (e.g. Cohen's *d*): a standard statistical measurement of the magnitude of a treatment effect. Effect sizes are calculated for individual studies and because they are a standardized measurement, they can be combined to find the average effect size for many studies investigating the same question. Therefore, the results are more precise and, most importantly, replicable and verifiable. In the Norris & Ortega (2000) meta-analysis, 49 studies of instructed SLA provided enough data for effect sizes to be calculated and compared. This more than doubled the number of studies that I compared in my 1997 review. The overall results of their meta-analysis indicated that explicit instruction is more effective than implicit instruction and that the effects of instruction are durable. Thus, their results were compatible with my results, albeit obtained in a much more systematic and rigorous manner. Later in my presentation I will refer to studies that have been carried out since the Norris & Ortega meta-analysis and discuss how type of instruction has been examined in interaction with other variables including learner factors and type of language features.

There were also other questions that emerged from the Norris & Ortega meta-analysis which are critical, and which have helped to lay the groundwork for current FFI research. These questions are related to the observation that the advantages of explicit instruction may be due to the fact that the majority of tests to measure learners' progress in instructed SLA research are tests of explicit knowledge. In fact, 90% of the outcome measures in the primary studies included in the Norris & Ortega meta-analysis used highly constrained, discrete-focus linguistic tasks, whereas only 10% required extended communicative use of the L2. This creates an obvious bias and has opened up a long-standing question: 'What type of knowledge results from L2 instruction?'. Some argue that instruction contributes only to explicit knowledge – the kind of knowledge that serves L2 learners well on grammar tests – but not to implicit knowledge – the kind of spontaneous fluent ability that serves L2 learners well on communicative language tasks (Schwartz 1993; Krashen 1994; Ellis 2005). As it happens, this question was not included in the long list that I posed in my 1997 article, but it has since become one of the central questions occupying the efforts of many instructed SLA researchers, and I will return to it later on in my presentation. But let's move now to the next question addressed in my 1997 paper.

Is there an optimal time to provide FFI?

According to Lightbown (1998) there are at least two ways in which we can think about the timing of form-focused instruction. One is psycholinguistic – the right time in a learner's development – and the other is pedagogic – the right time in the instructional sequence. In 1997 I was able to compare only six studies that had investigated the psycholinguistic timing question, and the findings were mixed. While there was some support for the claim that targeting the next stage in a learner's development was effective (Pienemann 1989; Spada & Lightbown 1993; Mackey & Philp 1998), this research also revealed that learners' first language and L2 proficiency level interacted with developmental readiness to produce varying results. Furthermore, other research revealed just the opposite: that it is not necessary

https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press

to target instruction to the next stage in a learners' development. Instead, instruction can lead to learner progress even when it is targeted to language that is several stages beyond the learner's current level of development (Gass 1982; Eckman, Bell & Nelson 1988; Hamilton 1994). Again, the L1 background of learners has proved to be an influential variable in this research (Ammar & Lightbown 2005). Since the late 1990s there have been, to my knowledge, no published studies that have directly investigated the psycholinguistic timing issue. This may be related to some of the challenges associated with this line of research, particularly with reference to questions as to how one might usefully apply these findings in classrooms with learners who are typically at different stages of L2 development.

Let's now turn our attention to the pedagogical aspect of the timing question – whether there is a better time in the instructional sequence to draw learners' attention to form. No research had directly investigated this question when I wrote my 1997 review, despite lots of lively debate about this question in the pedagogical literature. Since then a few studies have been done that are related to this issue (e.g. Gass & Alvarez Torres 2005; Hondo 2009), but to my knowledge no research has been carried out in which the timing of FFI has been manipulated in instructional materials and its effects examined in relation to L2 learning. Recently, Patsy Lightbown and I conceptualized two types of FFI that are directly related to the pedagogical timing issue: integrated and isolated FFI (Spada & Lightbown 2008). Both types of instruction assume a primary focus on meaning with the inclusion of attention to form, but they differ in terms of WHEN attention to form is provided. In integrated FFI, the learner's attention is always drawn to form within communicative practice and activities. In isolated FFI, the learner's attention is always drawn to form separately from communicative practice and activities.[1] Over the past two years I have carried out research on the effects of integrated and isolated FFI on L2 learning with my research group at the University of Toronto. One of the central questions motivating our research is whether isolated and integrated FFI contribute to different types of L2 knowledge. For example, if teachers/textbooks draw learners' attention to a particular language form separately from communicative practice, does this mean that learners will be more likely to accurately recognize and use the target form on isolated grammar tests but not on communicative tasks? Similarly, will learners whose teachers/textbooks draw their attention to a specific form within meaning-based practice be more likely to use that form accurately and spontaneously on communicative tasks, but not do as well on discrete-point grammar tests? These questions are related to a cognitive theory of learning referred to as TRANSFER APPROPRIATE PROCESSING, which claims that we retrieve knowledge best in contexts that are similar to those in which we originally acquired it. The greater the similarity between the processing types that were activated when we learned something and those engaged in our later attempts to retrieve it, the greater the likelihood of quick and accurate retrieval (Morris, Bransford & Franks 1977; Blaxton 1989).

We investigated the effects of isolated and integrated FFI in a quasi-experimental study with adult ESL learners (Spada et al. 2010). The target structure was the passive construction, and learners were pre-tested on their knowledge of the structure before instruction,

[1] Isolated and integrated FFI differ from Long's (1991) definition of 'focus on form' because both include pre-determined attention to form, whereas 'focus on form' is defined as unplanned, spontaneous attention to form. Since both isolated and integrated FFI provide attention to form and meaning (albeit in different ways), they differ from 'focus on formS' which is defined as exclusive attention to form.

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post-tested immediately after instruction and again three weeks later. The tests included two written measures (error correction task and cloze task) that were considered to be measures of learners' conscious, analyzed L2 knowledge, and one oral measure (picture-cued description task) that was considered to be a measure of learners' spontaneous, non-analyzed L2 ability. Consistent with transfer appropriate processing theory, our predictions were that learners who received integrated FFI would perform better on the oral task and that learners who received isolated FFI would perform better on the error correction task. Using multi-leveling modeling (Raudenbush & Bryk 2002), the analyses indicated that learners in both groups improved on all three language measures over time. Furthermore, there appeared to be no advantage for the learners who received isolated FFI on the error correction test. However, there were marginal advantages for learners who received integrated FFI on the oral production task. This latter finding is consistent with our hypothesis, but because the differences are not great, no firm conclusions can be drawn. One of the questions that emerged from this research is whether the target feature itself may play a role in whether one type of instruction is more effective than another. This was the next question that I addressed in my 1997 review.

Are particular language features more affected by FFI than others?

This question is of considerable interest to L2 classroom researchers and teachers, yet little research has been done to compare the effects of type of instruction on type of language form. Some researchers have argued that simple features can be taught but that complex ones are probably best learned implicitly (Krashen 1982; Reber 1989), via exposure to language. Others have claimed the opposite, arguing that complex features are difficult to notice in naturally occurring input and therefore explicit instruction is necessary (Hulstijn & de Graaff 1994). In 1997, four studies had directly examined this question – three in the laboratory setting (DeKeyser 1995; Robinson 1996; de Graaff 1997) and one in the classroom (Williams & Evans 1998). Since then, only a few studies have investigated this question (e.g. Housen, Pierrard & Van Daele 2005) and the overall results have been mixed. One explanation is that COMPLEX/SIMPLE and EASY/HARD have been defined differently across studies and often refer to different things, for example, characteristics of the language feature versus aspects of the learning process (see DeKeyser 2005 and Spada & Tomita 2010 for more details). In my research group there has been quite a bit of interest in this question, particularly as we try to make decisions about what language features to focus on in our instructed SLA studies. This led to a meta-analysis in which we used the same criteria to define simple and complex features across a large number of studies and compared the effects of type of instruction on type of language feature (Spada & Tomita 2010). We were able to include 41 studies in our meta-analysis, and while many of these were the same ones used in the Norris & Ortega (2000) meta-analysis, several of the studies were different because our meta-analysis was conducted eight years later. In conducting our meta-analysis the most challenging task was deciding on a definition for 'simple' and 'complex' to categorize the target features investigated in the primary studies. After much reading and discussion, we decided to go with the theoretical definition provided by Hulstijn and de Graaff (1994), which is based on the number of transformations applied to arrive at the correct form. Table 1 presents two

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Table 1 *Number of transformations – complex and simple rules.*

Complex rule: *Wh*-question as object of preposition Example: Who did you talk to?	Simple rule: Regular past tense Example: *walked*
1. *Wh*-replacement: *You* [past] *talk to who* 2. *Wh*-fronting: *Who you* [past] *talk to* 3. *Do*-support: *Who you* [past] *do talk to* 4. Subject/auxiliary inversion: *Who* [past] *do you talk to* 5. Affix attachment: *Who* [DO + past] *you talk to* 6. Morphological rules: *Who did you talk to?* 7. Fronting/leaving behind: *To whom did you talk?/Who did you talk to?*	1. [Past tense] + Verb [Past tense] + *walk* = *walked*

forms: '*Wh*-questions as object of preposition' and the 'Past tense' to illustrate why one is considered complex and the other simple. To produce the example sentence *Who did you talk to?* one must apply seven criteria, whereas the formation of the past tense of regular verbs requires only one transformation. To distinguish between the features in the primary studies we decided that at least four transformations were required for a feature to be considered complex; anything below that was coded as simple. Our categorization of explicit and implicit teaching followed Norris & Ortega (2000), in that instruction was considered to be explicit if it included linguistic rule explanation, and the learners' attention was mainly on forms. Instruction was coded as implicit if there was no rule explanation or if students were not asked to directly draw their attention to forms (see Spada & Tomita 2010 for details about the coding and analyses).

The research questions explored in our meta-analysis were: (i) Do the effects of explicit and implicit instruction vary with simple and complex features? (ii) Do the effects of explicit and implicit instruction lead to similar types of language knowledge for complex and simple features? The findings revealed that explicit FFI is more effective than implicit FFI on simple and complex features in both the short and long term. But some of you may be thinking: could the same bias be at play in these results as with previous research syntheses? That is, was there an advantage for explicit instruction because the tests used to measure learners' progress were explicit measures of L2 knowledge (i.e. grammar tests)? Interestingly, this does not appear to be the case. As I mentioned earlier, even though many of the studies examined in our meta-analysis were the same as those used in Norris & Ortega (2000), we included twelve new studies that were published after their cut-off point (i.e.1998). Of these, eight included free outcome measures to examine learners' progress, such as picture-cued story-telling and description tasks. Furthermore, the results from our meta-analysis indicated that explicit FFI contributed not only to learners' conscious knowledge of the target forms but to their ability to use the forms in unanalyzed spontaneous ways. But to return to the main finding of this meta-analysis: type of instruction does not interact with type of language feature. However, an important caveat is in order: if we had used a different definition of 'simple' and 'complex', would the results have been the same? For example, we could have used a psycholinguistic definition and categorized easy forms as ones learned early in the learners' development

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and difficult ones as learned late. Alternatively, we could have used salience as a criterion, and described forms that are difficult to perceive in the input (e.g. third person singular *-s* in English) as complex, compared with forms that are easier to perceive in the stream of speech (i.e. progressive *-ing*, which we would describe as simple). Another approach could have included L1 influence as a distinguishing characteristic, categorizing forms that are more similar to learners' L1 as simple and those that operate differently from learners' L1 as complex. While the use of other criteria might lead to different results, this would not take care of another issue raised by DeKeyser (2005), which is that objective measures of difficulty do not take into consideration characteristics of the learner, and the fact that what may be difficult for one learner may not be difficult for another learner. This is related to such factors as language learning aptitude and language learning experience, which lead me to the final question I addressed in my 1997 paper.

Do particular learners benefit more from FFI?

Of all the questions I posed in my 1997 paper, this was the most under-investigated, and it remains so today. While there has been extensive research on individual differences and SLA on the one hand, and considerable research on the effects of instruction on SLA on the other, there has been little research on the interaction between individual and instructional variables and their combined effects on learning outcomes. In 1997 there were just a few studies that had examined individual learner factors in relation to different learning/teaching conditions, all focused on aptitude and taking place in laboratory settings. They include two studies that investigated learner aptitude under different learning conditions (e.g. explicit and implicit), with both reporting benefits for aptitude in different learning contexts (Robinson 1995; de Graaff 1997). More recently, learner aptitude has been investigated within the context of communicative and content-based instruction (Harley & Hart 1997; Ranta 2002) and found to be as relevant a factor in these contexts as in more traditional approaches to L2 teaching. Some of this research has revealed that different components of aptitude play a varying role in L2 learning success, depending on the learners' age. For example, in the Harley & Hart (1997) study, learners in early French immersion programs depended more on memory components of aptitude to be successful learners, whereas learners in late French immersion programs depended more on analytic ability.

One of the earliest classroom studies to investigate the interaction between individual differences and L2 teaching approaches was carried out by Wesche (1981). She investigated whether matching learners' individual learning styles (including aptitude) with compatible instructional approaches would enhance L2 learning. She found that it did. More recent studies include Erlam (2005) and Sheen (2007), which also report that aptitude is a predictor of L2 learning in most (not all) instructional contexts. However, the limited number of studies that have investigated aptitude/instruction interactions prevent instructed SLA researchers from drawing any firm conclusions. There is a clear need for more research exploring relationships between aptitude (and other individual differences), type of instructional approach and SLA. Theoretical and empirical work in this area has the potential to provide L2 teachers with useful information about designing effective L2 curricula and instructional materials.

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As I stated at the beginning of my presentation, the definition of FFI used in my 1997 article included instruction and corrective feedback, and most of the research reviewed in that paper included studies that examined the combined effects of both. I did not examine in detail studies that had investigated the sole effects of corrective feedback on L2 learning. Since then there has been a proliferation of studies, most of them in the laboratory setting, inquiring whether corrective feedback benefits L2 learning and if different types of corrective feedback are more effective than others. Space limitations do not permit me to review that research in any detail, but the overall findings indicate that corrective feedback (CF) is beneficial for L2 learning (Russell & Spada 2006), that explicit CF is more beneficial than implicit CF, particularly in communicative and content-based L2 classrooms (Lyster & Saito 2010), and that the usefulness of different types of CF depends on contextual, linguistic, and learner variables (Nicholas, Lightbown & Spada 2001; Sheen 2007)[2]. I will now conclude by responding to the questions posed in my 1997 paper, after re-examining them twelve years later.

Conclusion

In response to the first two questions – 'Is form-focused instruction beneficial to SLA?' and 'Are particular types of form-focused instruction more beneficial than others?' – I think we can answer 'yes' to both. Three research syntheses have produced evidence to support this: my 1997 narrative review and two subsequent meta-analyses (Norris & Ortega 2000; Spada & Tomita 2010). While more work is needed to further investigate the question as to what type of knowledge results from instruction, there is increasing evidence that instruction, including explicit FFI, can positively contribute to unanalyzed spontaneous production, its benefits not being restricted to controlled/analyzed L2 knowledge. Regarding the third question – 'Is there an optimal time to provide form-focused instruction?' – we know that providing instruction at the 'right time' in a learner's development can be effective. We also know that other factors including the learner's first language and L2 proficiency play important roles in this process. More research on psycholinguistic readiness is needed to explore this question further. Whether there is a better time in the instructional sequence to draw the learner's attention to form is a question that has not been directly or sufficiently investigated as yet, making it premature to respond to this question in any precise way. In response to the question 'Are particular features more affected by form-focused instruction?' the results of the Spada & Tomita (2010) meta-analysis suggest that explicit instruction is equally beneficial for different language forms. Nonetheless, it will be important to explore whether different definitions and operationalizations of 'simple' and 'complex' lead to similar findings in future research. Regarding the last question, 'Do particular learners benefit more from form-focused instruction?', as I indicated earlier, this was the most under-researched area when I wrote my 1997 review and it still is; much more research is needed to investigate interactions between learner differences, instructional type and SLA.

[2] I described more of this research in my plenary presentation but have not included it here because of space limitations. Instead I have included references to overviews of this research.

https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press

Regarding one of the questions that has come to the forefront in the intervening thirteen years – 'What kind of knowledge results from form-focused instruction?' – we won't have an answer to this until more instructed SLA studies include L2 tests that measure spontaneous, unanalyzed (i.e. implicit), L2 knowledge. Fortunately, an increasing number of studies are including such tests and more efforts to validate measures of implicit knowledge are under way (e.g. Erlam 2006). Another question that has recently captured the interest of instructed SLA researchers is 'What do we know about learner's awareness of form-focused instruction and corrective feedback?'. That is, do they notice what we want them to and if not, what do they notice in the instructional input? One of the rather naive assumptions of much of the instructed SLA research is that if we (i.e. teachers and researchers) provide learners with FFI they will notice the attention to form – but it does not always work that way. In fact, often when learners are asked about the focus of instruction, they report having noticed something completely different. Current research on learner attention and noticing should provide more insightful responses to these questions in the future (e.g. Leow 1997, 1998; Mackey 2006).

In conclusion, even though we do not have answers to all the questions posed in my 1997 paper, we do have answers to some of them, and we have gained substantial knowledge about all of them as we continue to make steady progress in research on the role of instruction in SLA.

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https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press

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https://doi.org/10.1017/S0261444810000224 Published online by Cambridge University Press