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INTRODUCTION

Marjorie Wesche and T. Sima Paribakht
University of Ottawa

In the 12 years since *Studies in Second Language Acquisition* published its first thematic collection on L2 lexical issues, "The use and acquisition of the second language lexicon," edited by S. Gass (1987), the centrality of lexical development in second language acquisition has received ever increasing recognition from researchers (see, for example, volumes by Arnaud & Béjoint, 1992; Coady & Huckin, 1997; Haastrup, 1991; Haastrup & Viberg, 1998; Harley, 1995, 1996; Hatch & Brown, 1995; Huckin, Haynes, & Coady, 1993; Meara, 1992; Nation, 1990; Schmitt & McCarthy, 1997; Schreuder & Weltens, 1993; Tréville, 1993; Tréville & Duquette, 1996). The 1987 collection was a leading foray into new territory, following a period of relative neglect of the lexicon in SLA. The issues taken up by its authors were quite diverse, ranging from the organization and components of the L2 lexicon, to aspects of acquisition such as cross-linguistic influence, restructuring, and rate, to L2 lexical-use issues such as retrieval and access. Since that time, a large body of L2 research and theory has developed around these and other topics, and it has become possible to deal comprehensively with single core issues in L2 lexical acquisition from multiple perspectives. The current collection is one such attempt, offering a set of related papers on the topic of incidental L2 vocabulary acquisition. Unlike the 1987 collection, which argued for recognition of the importance of the lexicon in a field dominantly concerned with the acquisition of syntax, the authors of the present collection assume the central importance of lexical acquisition. Although this fact by no means detracts from the vital role of syntax and of the syntactic or lexical interface in SLA, it is nonetheless a notable reflection of the broadening scope of SLA concerns. Similarly, the fact that most authors in this collection have taken a cognitive processing approach to lexical acquisition—with attention by several to sociocultural theory (Brown, Sagers, & LaPorte; Ellis & He)—reflects a related acceptance of new theoretical perspectives in SLA.

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Address correspondence to Marjorie Wesche or T. Sima Paribakht, Second Language Institute, University of Ottawa, Ottawa, Ontario K1N 6N5, Canada; e-mail: mwesche@uottawa.ca or paribakh @aix1.uottawa.ca.

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Much—if not most—lexical development in both L1 and L2 appears to occur as learners attempt to comprehend new words they hear or read in context (see, for example, Ellis, 1994; Krashen, 1989; Nagy, 1997; Sternberg, 1987). An understanding of how this takes place is thus important to an adequate theory of second language lexical development. Such learning is often referred to as *incidental* in that learners are focused on comprehending meaning rather than on the explicit goal of learning new words. All the authors in this collection minimally subscribe to the meaning of the term as referring to new knowledge or competencies that learners acquire as a "by-product;" that is, when they do not specifically intend to learn them. Agreement on a more precise definition of incidental lexical acquisition is, however, elusive, as discussed in several papers in this volume (Gass; Huckin & Coady) and in the current literature (see below). The pedagogical usage of the term may be contrasted with its narrower meaning in experimental psychology, in which the critical factor distinguishing incidental from intentional learning conditions is that subjects in the "incidental condition" are not told they will be subsequently tested on given material or skills, whereas, in the "intentional condition," they are told (see, for example, Eysenck, 1982). Still, it has long been observed that learners may have their own intentions that belie the instructions they are given (for example, McGeoch, 1942, cited in Hulstijn, in press), and this is what causes difficulties with the incidental versus intentional distinction in pedagogy. Haynes (1998) sees *attention* rather than *intention* as the key to clarifying the construct, as well as a separation of teaching considerations from those of learning. She proposes two continua, one of them from "indirect teaching to direct teaching" and the other from "incidental learning" (involving the learner's peripheral attention while focal attention is elsewhere) to "attended learning" (involving focal attention.) Hulstijn (in press) takes a somewhat different approach in a synthesis of psychological research on incidental learning in experimental psychology. Noting the continuing significance of the incidental versus intentional distinction in pedagogy—as relevant to the definition of contexts and conditions that enhance learning—he highlights the view from cognitive psychology that what is critical to lexical acquisition and retention is the nature of the input processing activities carried out by the learner, regardless of intention. This includes the quality of processing (such as rehearsal and elaboration to establish word form-meaning links) and the quantity of processing (for example, repeated exposure) leading to the development of automatic access to different lexical features and fluent use capability. These examples, as well as other recent attempts to clarify the construct of incidental learning (including Gass; Huckin & Coady, this volume), like the empirical research reported here, serve together in helping to dissect an important and seemingly unitary construct into its component parts and, in so doing, lead to a clearer and more nuanced understanding of how lexical knowledge is developed in natural contexts.

Although lexical development through reading has received considerable attention from both L1 and L2 researchers (see Huckin & Coady, this volume),

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oral contexts are clearly vital for L1 learners and may also play an important role in L2 lexical development, complementing written input (see Brown, Sagers, & LaPorte; Ellis & Wode, this volume). The most frequent words in a language tend to be learned first and, in naturalistic contexts, largely from oral input. The first several thousand word families[1] in a language in fact cover the great majority of words used in most oral interaction and comprise an estimated 84% of words in most written texts (Nation & Hwang, 1995; see also Huckin & Coady, this volume). The most frequent words, although clearly the most important words for the great majority of learners, are also the most polysemous and collocationally complex (Nagy, 1998). This means that, even in L2 learning contexts in which explicit instruction supports the initial learning of word forms and core meanings, mastering them is necessarily an extended process requiring multiple exposures in diverse settings. The less varied vocabulary and greater redundancy of most oral (vs. written) discourse, as well as the availability of contextual cues to word meanings, may ensure particularly helpful natural input for this effort. Most new L2 word learning beyond the first few thousand words in common oral use, however, is thought to occur through reading, making written texts a vital input source for L2 learners at more advanced proficiency levels. At the same time, improvement in reading reciprocally requires ongoing vocabulary development. This is a particularly critical issue when the L2 is being learned for purposes of higher education. Estimates of the number of words that university students will need to be able to quickly recognize and understand in their language of study—even at the beginning of their studies—range as high as 10,000 (Hazenberg & Hulstijn, 1996). An understanding of factors that foster vocabulary learning through reading thus has important implications for L2 instructional programs aimed at both reading development and vocabulary building (see Fraser; Paribakht & Wesche, this volume).

The articles presented here address the process of L2 vocabulary learning from context both empirically and theoretically. They include an extensive review of recent research (Huckin & Coady), five empirical studies (Paribakht & Wesche; Fraser; Wode; Brown, Sagers, & LaPorte; Ellis & He), and two theoretical papers on the nature of lexical competence and its development (Henriksen; Gass). Collectively, the papers lead readers to an understanding of many of the conditions and processes through which L2 words and their meanings, encountered in reading or listening contexts, may over time become integrated into the learner's lexicon as mental representations.

The first paper (Huckin & Coady) provides a comprehensive review of current issues and recent research related to the notion of incidental vocabulary acquisition. How does it occur? What are the conditions and factors that promote such learning? Is it a natural process or should students be taught how to learn vocabulary from context? What are its limitations? This review synthesizes research findings on these and other issues, framing the subsequent empirical studies that focus on different aspects of lexical development in particular contexts.

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The first two empirical studies examine lexical acquisition from reading by ESL learners in university contexts. Paribakht and Wesche report on an introspective study of how L2 learners deal with unfamiliar words they encounter in written texts. From readers' think-aloud and retrospective verbal reports, they identify their lexical processing strategies and develop a taxonomy of learner knowledge sources and cues used in determining word meanings. Particular attention is given to inferencing, the main strategy used. The influence of factors that mediate the use of inferencing is examined, including word, text, and task features as well as learner background knowledge. Fraser's related experimental study, also with young adults in an English for academic purposes program, tracks learners' use of lexical processing strategies when reading. It employs a time-series design over a 5-month period. Strategy-use patterns are correlated with learners' initial learning and retention of new words from the reading texts. Fraser's research also demonstrates the positive influence of strategy training on lexical inferencing. Both studies establish the vital role of lexical inferencing in reading comprehension and vocabulary learning from context and, using both introspective and performance data, illuminate the patterned—yet unpredictable—word-learning outcomes of reading academic texts in an L2.

The other empirical studies take up incidental vocabulary acquisition from oral input. In the third empirical study, Wode considers the nature of the lexical knowledge acquired by learners in a secondary school foreign language immersion program versus outcomes from alternative instructional settings. In a detailed study of the lexical aspects of learner performance on a communicative task, he identifies probable input sources from which learners incidentally acquire new words for oral use. Measures include word tokens, types, their distribution according to varied criteria such as word class and semantic relations, and lexical errors. Although evidence for the same strategies for incidental learning are found for both immersion and nonimmersion students, the immersion students out-perform the nonimmersion students on various measures, with implications for the comparative effectiveness of different learning contexts for vocabulary acquisition. In the following paper, Brown, Sagers, and LaPorte examine the impact of differential lexical characteristics of oral and written input from student–teacher dialogue journal exchanges on advanced EFL learners' incidental vocabulary acquisition. Data collection over a semester was followed by quantitative text-processing analysis and qualitative analysis of the text segments containing "possibly acquired words." A number of corresponding patterns are identified between features of teacher and learner discourse in the two channels and learners' lexical development. In the fifth study, Ellis and He compare the comprehension and subsequent retention of unfamiliar words heard in oral task instructions under three experimental conditions: (a) a listening text premodified to ensure redundancy, (b) a nonmodified listening presentation allowing learner–teacher interaction for clarification, and (c) mutual presentation of simplified instructions between pairs of learners, allowing learner–learner interaction for clarification.

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Outcomes of the study suggest that giving learners the opportunity to produce new lexical items communicatively and to negotiate their meanings interactively with other learners is more effective in promoting both short-term and long-term retention of the new words than is simply exposing learners to the items in input, even when this input has been modified to facilitate acquisition.

Contributions to the present collection, although focused on the complex processes and multiple factors bearing upon naturalistic vocabulary acquisition, also seek research-based links with instructional practice and suggest ways that L2 instruction may be designed to build upon contextual learning. The research review (Huckin & Coady) and all the empirical studies suggest L2 instructional implications. They offer guidelines for enhancing vocabulary development that include: a rationale for thematic reading programs (Paribakht & Wesche), evidence for the effectiveness of lexical strategy training in improving inferencing success in reading (Fraser), evidence for the superiority of immersion over traditional foreign language instructional contexts for vocabulary acquisition (Wode), insight into the significance and differential effects for incidental vocabulary acquisition of student–teacher interactions in oral and written modes (Brown, Sagers, & LaPorte), and a demonstration of the superiority—for the comprehension and retention of new words—of tasks requiring interactive oral and written output to those limited to receptive or interactive listening during a similar time period (Ellis & He).

The remaining two papers elucidate current theoretical issues and demonstrate the need for clarification of key constructs underlying vocabulary acquisition research. Henriksen makes a convincing case for greater clarity and standardization in the descriptive frameworks and constructs used for lexical competence by L2 researchers in the design and instrumentation of their studies. She proposes three related continua for describing lexical development from (a) "partial to precise knowledge" of given words, (b) less to greater "depth of knowledge," and (c) receptive to productive use ability. In her view, longitudinal studies of individual learners are crucial to achieving an understanding of L2 lexical development. In the final paper, Gass provides a critical discussion of the theoretical issues raised in the preceding papers and relates them to theoretical perspectives on the acquisition of second language syntactic knowledge. She first discusses definitions for the key terms *incidental, vocabulary,* and *acquisition*. She then focuses on the acquisition process, in which she takes into account learner comprehension strategies as these interact with input processing in the acquisition of different kinds of lexical knowledge. In her view, the fact that inferencing for immediate comprehension in context is directed more at semantic than syntactic features may partially account for the apparent shortcomings of incidental learning for the acquisition of new L2 syntactic frames. Building on the evidence presented in the preceding papers, Gass emphasizes the need for a unified theory of lexical development covering all contexts. It is our belief that, together, the articles in this collection make a firm step toward this end.

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NOTE

1. A word family includes a base form with all its semantically regular derived and inflected forms. See also Huckin and Coady (this volume).

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