

## SECOND LANGUAGE ACQUISITION AND APPLIED LINGUISTICS

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### INTRODUCTION

Just as applied linguistics (AL) may be said to be an emerging discipline, so too is one of its sub-fields, second language acquisition (SLA). The parallelism may not be surprising; after all, a difference of only about twenty years separates the points at which the two were identified as autonomous fields of inquiry.<sup>1</sup> Then, too, the two share central defining concepts. AL draws on multidisciplinary theoretical and empirical perspectives to address real-world issues and problems in which language is central (Brumfit 1997). SLA draws on multidisciplinary theoretical and empirical perspectives to address the specific issue of how people acquire a second language and the specific problem of why everyone does not do so successfully. Furthermore, the two share something else: At this juncture in the evolution of AL and SLA, both are grappling with fundamental definitional issues, ones even extending to the nature of language itself. (See Larsen-Freeman 1997a for how this is true of AL.) Should AL and SLA deal successfully with these challenges, both will have much to contribute in the decade to come. Should they instead succumb to internecine feuding and fragmentation, the future will not be as bright.

In this chapter, I will first make some introductory remarks about the SLA process and the differential success of second language learners. Next, I will discuss the fundamental challenges that this characterization faces. Then I will say what contributions I think SLA is capable of in the coming decade; I will also note the main obstacles confronting it. I will conclude by nominating topics for a training and development curriculum for future applied linguists from an SLA perspective.

THEORETICAL FOUNDATIONS OF SLA: THE ISSUE OF ACQUISITION  
AND THE PROBLEM OF DIFFERENTIAL SUCCESS

The disciplines that SLA draws on, and potentially contributes to, are many. Some of the more prominent include: first language acquisition, linguistics (e.g., issues of language transfer, UG), psychology (e.g., information processing, skill-learning, connectionism), sociolinguistics (e.g., variation, pragmatics, sociocultural theory), and education (e.g., immersion, input-based teaching approaches). It would be impossible to review here the many recent research findings that have contributed to our understanding of SLA from these disciplines; thankfully, it is also unnecessary. The previous volume of the *Annual Review of Applied Linguistics* featured up-to-date summaries of each of these areas (Foster-Cohen for first language acquisition, N. Ellis and Segalowitz & Lightbown for psychology, Young and Kasper & Rose for sociolinguistics, R. Ellis and Segalowitz & Lightbown for education; see also Mitchell and Myles 1998 for a recent review of these varied perspectives). The only discipline that was not specifically addressed in a separate chapter in last year's volume was linguistics; however, as Grabe (as Editor of the volume) noted in the Foreword, almost all of the authors that dealt with SLA issues felt obliged to address UG in their work, whether or not they accepted its tenets.

In place of a multidisciplinary research review, then, I will review the theoretical foundations of what has been referred to as "mainstream" SLA (Breen 1985). I do so in order to provide a backdrop for my later comments. My rendition will be brief, its brevity hopefully excusable because by now it is very familiar. Although admonished by Thomas (1998) to avoid "programmatically ahistoricity," most SLA researchers would agree that the autonomous study of SLA arose in modern times approximately thirty years ago (Gass, Fleck, Leder and Svetics 1998), born of observations concerning the systematicity of learners' language, which were inspired by the revolution taking place in linguistics and cognitive psychology at the time. In light of the status quo view that successful SLA was a matter of overcoming the habits of the first language, what was striking to researchers in those early days was the degree to which diverse learners' linguistic performance converged. To be sure, there were obvious individual differences and native language effects, with later studies bringing to light more subtle, yet widespread, L1 transfer. Still, the discovery of common morpheme accuracy or acquisition orders and common developmental sequences for basic syntactic structures generated a great deal of excitement. Even those who may not have accepted an innate LAD in its Chomskyan sense were impressed with the learners' creative construction and sought explanations for the shared features of learners' interlanguage (IL) by pointing to the learning and communicative strategies they employed, such as imitation of formulaic utterances, relexification, and incorporation. Clearly, learner performance was not just a reflex of the L1.

Due to SLA's pedigree, it is not surprising that a great deal of attention was given to the learners' developing morphosyntactic system. Learners were

thought to be attempting to acquire the rules of the target language through an inductive hypothesis-formation process. Later, a more deductive process was proposed, one that was universal-grammar driven. Both processes were rendered possible when the input to learners was made comprehensible. This, in turn, was best accomplished when learners' negotiated meaning during communicative interactions. Understanding meaningful input and attempting to express meaning were hypothesized to stimulate interlanguage development.

However, learners needed to be at an appropriate developmental stage in order to benefit from any interaction. If they weren't able to process the input, interaction would not likely lead to IL restructuring. Even with favorable acquisition conditions, not all learners successfully traversed the IL continuum. L2 learners learned at different rates and ultimately attained different levels of proficiency. Many factors were posited to account for the differential success of L2 learners: motivation, attitude, aptitude, age, cognitive style, strategies, personality, hemisphericity, etc.

Recent research has centered on the role of input and interaction in SLA (see Gass 1997, Gass, Mackey and Pica 1998) and the facilitation of second language learning brought about by focusing learners' attention on linguistic form during communicative interactions (Doughty and Williams 1998, R. Ellis 1997, Spada 1997). Research on differential success has been extended recently by Schumann (1998) for neurobiology, Birdsong (1999) for the critical period hypothesis, and Breen (to appear) for other learner factors.

Of course, summarizing thirty years of SLA research, as I have done, is problematic for a number of reasons. First of all, I have omitted the names and individual contributions of many researchers. Second, it is a product of my own necessarily limited experience. Third, the coherence imposed by a retrospective perspective conceals disagreements along the way, many of which still exist, including at least the following:

- The extent of L1 influence on the L2,
- The role of formulaic utterances,
- The sufficiency of comprehensible input,
- The existence of free variation,
- The necessity of noticing,
- The value of explicit instruction,
- The feasibility of a non-interface position,
- The need for negative evidence,
- The existence of an age-related critical period,
- The teachability of "good language learner" learning strategies,
- The role of metalinguistic knowledge.

It is also common knowledge that, up to this point, SLA research has been rather limited. A great deal of the research has focused on the acquisition of European

languages, the acquisition of second languages (as opposed to third, fourth, etc.), and, as I said earlier, mainly, although certainly not exclusively, on the acquisition of morphosyntax.<sup>2</sup>

However, in hindsight, and perhaps only because it is hindsight, it has seemed that these disagreements and limitations could be accommodated within the prevailing SLA paradigm. The disagreements have not all been resolved, nor all the limitations addressed; however, in theory, doing so might, for many of these issues, only require mid-course corrections or expansions. In contrast, at this point in its emergence, the sub-discipline of SLA is facing far more fundamental challenges. New theoretical perspectives have been advanced in the field without displacing established ones. This is not necessarily a problem, of course: In fact, it could be taken as a sign of vitality of the field. However, there has been a crescendo of dissonance accompanying the new perspectives which does not allow easy accommodation within the prevailing paradigm. I turn now to considering the dissonant perspectives.

### CHALLENGES TO THE MAINSTREAM VIEW OF SLA

Challenges to the mainstream view have been issued concerning the language acquisition process, the language learner, and language itself. I will treat each of these in turn.

#### 1. The language acquisition process

The most trenchant criticism of the characterization of the language acquisition process as I have just depicted it is that it fails to take into account the social reality: Mainstream SLA research is seen to be asocial (Breen 1985). While acknowledging the value of certain of its constructs (i.e., the learner's interpretation of meaningful input and the effort to express meaning as catalysts for language learning, the creative construction of interlanguage, and the use of learning and communicative strategies), Breen (1998) criticizes SLA research for being decontextualized. As he puts it, "Mainstream SLA research, in focusing upon the relationship between the learner and the language data, is conducted and reported on in ways that appear to overlook the social reality in which the research is actually conducted" (1998:116). The erroneous assumption, according to Breen, is that the interaction between the learner's mental resources and the features of linguistic input will provide a sufficiently adequate explanation of language learning. Crookes (1997) also points to SLA's individualistic, asocial orientation.

Others have found the highly cognitivist view of language acquisition to date to be a fundamental weakness, but have not been as circumspect as Breen and Crookes in their criticism. Firth and Wagner (1997) have proposed a radical reconceptualization of SLA study, asserting that language should be seen and studied as a social, contextualized phenomenon (Liddicoat 1997). In their critique, they reject fundamental concepts upon which mainstream SLA is based. For

instance, they write, "...we are unable to accept the premises of 'interlanguage'—namely, that language learning is a transitional process that has a distinct and visible 'end'" (Firth and Wagner 1998:91). In the same vein, SLA researchers have been criticized for measuring learner performance against native speaker norms (Cook 1999, Klein 1998) so that learners are perceived as "failing" when they do not achieve them.

SLA researchers Lantolf and Appell (1994) and Hall (1997) have found in Vygotskian ideas a theoretical stance to counter what they perceive to be a reductive cognitivism in the field. Vygotsky saw learning as embedded within, and inseparable from, social activity. These researchers propose an extension of investigations into SLA to include a "sociocultural" perspective. As Lantolf and Pavlenko (1995) put it:

...[sociocultural theory] situates the locus of learning in the dialogic interactions that arise between socially constituted individuals engaged in activities which are co-constructed with other individuals rather than in the heads of solipsistic beings. Learning hinges not so much on richness of input, but crucially on the choices made by individuals as responsible agents with dispositions to think and act in certain ways rooted in their discursive histories. Because of its insistence on the embeddedness of human activity, SCT allows us to observe learning in all of its fuzziness as it emerges from dialogic activity. This perspective is quite distinct from waiting for learning to crystallize into transitory or permanent steady states of IL competence (1995:116).

Mainstream SLA researchers have not been left defenseless. As Gass (1998), Kasper (1997), and Poulisse (1997) counter, social interaction has been studied, but since the focus of SLA is on language acquisition, not language use, it is natural to attend more to psycholinguistic variables than sociolinguistic ones. Long (1997) also makes this point, suggesting that the matter of the influence of social variables should not be subjected to polemics, but rather left to the results of empirical research to determine. A review of research findings thus far has led him (Long 1996) to conclude that whether or not learner interactions have occurred in "laboratory" or "natural" settings, the results have been very similar, Breen's (1996; 1998; to appear) conviction about the impact of contextual differences notwithstanding (see also Foster 1998, Tarone 1997).

## 2. The language learner

As for constructs of the language learner, they too have come under attack. Traditionally, the learner has been seen from an etic perspective, one that has led researchers, it is alleged, to see learners as idealized, autonomous language acquirers (Pennycook 1997). Perhaps, as Firth (1996), Firth and Wagner (1997), and Rampton (1997) argue, learner language forms are different from the target language structures, not because of incomplete L2 competence, nor fossilizations of

IL forms, but rather because the marked or “deviant” forms are deployed by the learners for social purposes—they may be empathizing with their interlocutors, for example, or they may be reverting to earlier features of their interlanguage in order to signal that they are, in fact, learners (Rampton 1987). At the least, an emic perspective may sort out the motivation behind the use of such “deviant” forms. The position they seek to advance is that non-native speakers have multiple social identities, being a learner is just one of them.

The socioculturalists add that Activity Theory respects the agency of language learners, not depicting them as passive recipients of modified input, but as actively (co)constructing their own learning and identity in an L2 (Lantolf and Pavlenko 1995; to appear). In a similar vein, Norton and Toohey (to appear) challenge another long-standing concept of mainstream SLA by questioning the construct of “the good language learner” and the characteristics and behaviors associated with the concept by mainstream SLA researchers. Like Lantolf and Pavlenko, they argue that the construct fails to acknowledge the complex, social, cultural, and historical relationships and practices embedded in second language learning sites. The data they examine from two different contexts reveals how classroom practices and peer relationships shape the process and outcomes of learning for different learners.

Again, other SLA researchers have responded. Kasper (1997) points out that throughout social science, “...even disciplines such as anthropology that favor holistic and socially situated approaches to research, such as ethnography, construct their idealized agents by reducing away what seems trivial in terms of the adopted theory....” “The constructs ‘nonnative speaker’ and ‘learner,’ (rejected by Firth and Wagner [1997]) focus upon the aspect that is *common* to the studied agents, and relevant to the global research context (or discourse universe) of L2 generally and L2 acquisition (SLA) specifically” (1997:309). Long (1997) adds that Firth and Wagner’s complaint—that SLA makes a distinction between native and nonnative speakers or learners while underestimating the importance of other social identities (father, friend, business partner, etc.)—is true; whether this is justified is a matter best left to empirical resolution.

### 3. Language

An additional challenge to the mainstream view of SLA is the nature of the property theory—“what a domain of knowledge is and how it is represented” (N. Ellis 1999:23). Gregg (1993:278) makes his position perfectly clear. To him, “...the overall explanandum is the acquisition (or non-acquisition) of L2 competence in the Chomskyan sense.” Although not all SLA researchers would see explaining grammatical competence as the ultimate goal of SLA research, most SLA researchers have subscribed to the view, as I stated above, that language is a rule-governed phenomenon.

The theoretical underpinnings of the Chomskyan position are being increasingly challenged by empiricists who believe that language acquisition can be accounted for solely in terms of general learning and cognition, rather than a built-in UG (N. Segalowitz and Lightbown 1999; see also Robinson in press, Skehan 1998). Certain of them have looked to connectionist modeling of neural networks as representing a more plausible neural architecture than called for by an innate “language instinct” (Elman, *et al.* 1996, Quartz and Sejnowski 1997; cf. S. Segalowitz and Bernstein 1997). Significant for the prevailing SLA view, a connectionist explanation implies a non-rule, non-representation, activated node account of what is stored. Although connectionist networks exhibit behavior that could be described by rules, they are not rule-governed (N. Ellis 1998). Instead, artificial neurons extract regularities from masses of input data. Recent models have demonstrated that the acquisition of morphology (N. Ellis and Schmidt 1998) and syntax (MacWhinney 1997) may be accounted for by simple associative learning principles (N. Ellis 1998; 1999); in addition, such models have successfully simulated bilingual lexicons (Meara 1999b).

### CONTRIBUTIONS TO, AND OBSTACLES CONFRONTING, SLA/AL IN THE COMING DECADE

#### 1. Internal to the field

It seems to me that a major contribution that SLA/AL can make in the next decade will be to come to terms with these many challenges. How this mediation is to be accomplished remains to be worked out; however, it would be useful to consider certain alternative scenarios.

One option is to align oneself with one side of a debate and to adduce evidence (hopefully) to argue for its superiority. This approach is the normal *modus operandi* in science, of course—to subject disputes to empirical resolution. For instance, the debate over the goal of SLA research (to explain competence and/or performance) that ensued in 1990 (Gregg 1990, R. Ellis 1990, Tarone 1990; see also Brown, Malmkjær and Williams 1996) was one that would have had far-reaching consequences had one side triumphed. Upon subsequent review of the positions, however, Eckman (1994) concluded that the issue being debated was an empirical one and that more data were needed to adjudicate it. Eckman’s conclusion illustrates this first option: Each side would be encouraged to pursue its own research agenda apart from the other(s): the psycholinguists separate from the sociolinguists, the innatists separate from the cognitivists/connectionists. Such an option, however, does not by itself respond to the charge made by Firth and Wagner (1998) that certain researchers, emphasizing the centrality of language acquisition over language use, erect “barriers, sealing off the area of SLA as a kind of intellectual ‘private property’” (1998:91). In Firth and Wagner’s view, “...SLA seems to be dominated by Chomskian thinking to such a degree that others’ frames of reference for the understanding of language and cognition have become inconceivable” (1998:92).

It is important to note, however, that with any dualism, the hegemony can extend in either direction. As Kirshner and Whitson (1997) point out, “the Vygotskian tradition is similarly weighted toward a deterministic social plane. The source of this weighting is the central tenet that ‘...social relations or relations among people genetically underlie all higher [mental] functions and their relationships’” (Vygotsky 1981:163, in Kirshner and Whitson 1997:8). Since it is rather unlikely that empirical findings will resolve these debates once and for all, it seems the field will be subjected to repeated hegemonic pendulum swings. Givón (1999) quotes the eminent biologist Stephen Jay Gould with regard to the debate between an innate generative position and a input-driven emergent position: “...I doubt that such a controversy could have arisen unless both positions were valid (though incomplete)...” (Gould 1977:59). A better option, then, to breach the hegemony alleged by Firth and Wagner is to adopt a more complex, multifocal strategy.

A pluralistic stance might have it that both individual-cognitive and social-cultural perspectives have their place, as do innatist and empiricist positions. Both are necessary; both have something to contribute. Poulisse (1997), for example, though arguing for a psycholinguistic perspective, observes that there is room for both psycholinguistic and sociolinguistic research. And Firth and Wagner (1998) do acknowledge that Long and Kasper were right to point out the importance of acquisition. Certainly one reading of Firth and Wagner (1997) is that they are simply seeking balance: SLA is imbalanced in favor of cognitive-oriented theories and methodologies, they assert, at the expense of socially-oriented theories and methodologies.

Pienemann (1998) makes a reasonable case for this second option, and also suggests a way that it might be managed. Advocating for a modular approach to complicated issues such as the nature of SLA, he points out that a worthwhile research strategy is to break down the task of explaining SLA into discrete subtasks. Germane to the present discussion, Pienemann recommends separating the cognitive from the social as each “...have a degree of autonomy, each following its own logic” (1998:35). This would achieve more, in Pienemann’s view, than an attempt such as Towell and Hawkins’ (1994) to integrate a parametrization approach with a cognitive one, since such a synthesis does not permit tests of all of the issues. Pienemann is careful to add, however, that the modular approach he proposes works well “...as long as the different modules are able to communicate with each other and are theoretically consistent” (1998:33). In a related comment, Gass (1998) holds that few would disagree that it is a good thing for data to be considered from different perspectives; however, she adds that for this multifocal approach to be a tenable option, we have to be asking the same questions. It is not clear that we are.

Liddicoat (1997), for example, makes the case that rectifying the imbalance is not all it would take:



What F[irth] & W[agner] propose in their call for rebalancing the field of SLA requires not only a rebalancing of the theoretical stance of the field, but has far reaching implications for the ways in which research in the field is designed and carried out at practical levels. Reconceptualizing SLA to take into consideration language as a social and contextual phenomenon requires a concomitant reanalysis of the research methods used to collect the data used for SLA research to ensure that the adopted approaches do actually examine language in appropriate contexts (1997:316).

Without such a reconceptualization and a commitment to review and perhaps employ new research methodologies, then, it is not likely that we are going to meet Pienemann's conditions of communication and theoretical consistency. A third option, therefore, might be to reconceptualize the way we work—to deal with our differences by finding a way to transcend them. At the risk of overstating the need, I might even say that what is required is a paradigm shift (Gregg, Long, Jordan and Beretta 1997) or at least a shared epistemology.

It is my opinion that conceiving of language and its acquisition as complex, dynamical, nonlinear systems shows promise in this regard, providing a metaphorical lens through which diverse perspectives can be accommodated, indeed integrated (Larsen-Freeman 1997b; 1998; 1999). Innatism is reflected in such systems by the fact that they are very sensitive to their initial conditions, conditions following Chaos/Complexity Theory, which might be viewed as built-in fields of attraction. These systems can easily accommodate cognitive or connectionist perspectives as well as innatist views (MacWhinney 1998; 1999, Robinson in press). Computer implementations, at least, show that distributed dynamic systems with built-in attractors exhibit properties of adaptability, goal orientedness, self-repair, and efficient learning and recognition under noisy conditions (Mohan 1992). These systems are also nonentropic. They are self-organizing, creating order where none existed before. They accomplish this both through an emergent process whereby individuals create new linguistic patterns or engage in morphogenesis, while at the same time, through an adaptation process, internal changes in their linguistic systems are subject to the pressure to conform or to adapt to those of other members of the community. Indeed, a social-interactive view of language acquisition is clearly compatible with this theory. (See, for example, Cameron 1999, Snow 1999.)

Obviously there are disadvantages to using such a wide-angle lens. First, if such an interpretation is ever to move beyond the metaphorical level, we run into problems with falsifiability due to its elaborate and integrated nature. For instance, a critical tenet of Chaos/Complexity Theory is that the behavior of the whole system emerges (i.e., it is not reflected in any one part, nor directed by a central executive). Second, importing a theory from one discipline into another is a risky business, particularly as the borrowing in this case is from a physical science to a social science. Third, this interpretation must still be subject to the same empirical rigor as any of the other perspectives—through model-building (Meara 1999a),

laboratory-type research (Hulstijn and DeKeyser 1997), qualitative research (Edge and Richards 1998), etc. Nonetheless, I am convinced that a major contribution of SLA/AL over the next decade lies in coming to terms with our differences—not so that we all agree, but so that the field can become more inclusive, when justified, and so that the complexity of the SLA process and learners is duly respected. A coherent epistemology would be a remarkable contribution of the next decade. Should we fail to accomplish this, I fear that we will experience continued internecine feuding and fragmentation.

## 2. External to the field

Besides getting our own house in order, it should not be forgotten that SLA deals with real-world issues and problems. As indicated in the review of mainstream SLA, many researchers continue to seek optimal solutions to nettlesome pedagogical dilemmas of classroom instruction. In addition, SLA has not had much to say yet on the use of technology in second language learning (but see van Lier 1999). Questions that need addressing include, for example, whether computers encourage a different type of learning from what transpires in a classroom—what Papert (1980) called “syntonic” learning, for instance, or Noblett (personal communication) refers to as “relational learning.” There are many other real-life problems to contend with these days which cry out for an informed SLA/AL perspective. The controversy over the use of Ebonics for instructional purposes is one (e.g., Rickford 1999). The challenge bilingual education faces in California is another (Krashen 1999). A third is the recent situation at the City University of New York, in which the time given to non-native speakers of English for remediation was seriously curtailed.

An obstacle related to our external agenda is our relative inexperience in the political arena. We need to learn how to become more politically-savvy advocates for our constituents—language learners and teachers.

## THE TRAINING AND DEVELOPMENT OF FUTURE APPLIED LINGUISTS

It follows from this review, then, that from an SLA perspective, AL students should become well-versed in the extant paradigm, but should also be introduced to non-paradigmatic points of view. Varying proposals should be vetted, with their strengths and limitations discussed. In addition, the full spectrum of research methods, qualitative and quantitative, should be taught, with ample opportunity for first-hand, supervised application. Finally, a social-justice perspective should be cultivated. We might even consider some training in political activism, with the limited goal of encouraging future applied linguists to provide a rational voice when second language acquisition potential is threatened by political realities.

## NOTES

1. Howatt (1984) dates the first use of the term “applied linguistics” to the inauguration of the journal *Language Learning: A Journal of Applied Linguistics* in 1948. Most SLA researchers would claim that SLA was launched in 1967 with the publication of Corder’s “The significance of learners’ errors.”
2. For this reason, research investigating other languages is very welcome and seems to be growing (e.g., in 1998, a number of articles report on the acquisition of Japanese as a second language: Mori, Shirai and Kurono, Rounds and Kanagy). Also a good sign is the fact that entire volumes of leading journals have been devoted to other subsystems of language recently: for example phonology (Major 1998, Leather 1999) and vocabulary (Wesch and Paribakht 1999). In addition, the influence of second languages on third language acquisition has recently been examined by Williams and Hammarberg (1998) and Dewaele (1998).

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Breen, M. (ed.) To appear. *Learner contributions to language learning: New directions in research*. Harlow: Pearson Education.

The origin of this volume was the invited colloquium, “Constructions of the learner in second language acquisition research,” presented at the 1998 Annual Conference of the American Association for Applied Linguistics. This collection of papers addresses two themes: how learners are constructed by research(ers) or by the learning process, and how learners themselves construct language learning conceptually or through action. Issues addressed by the authors paint a picture of the learner’s contribution to SLA and how certain of these contributions appear to be related to success in language learning. It also reveals the diverse nature of learner conceptualizations. This book provides useful reviews of previous research in a wide range of aspects of SLA. More provocatively, it also challenges some of the “givens” in mainstream SLA research.

Gass, S. M. 1997. *Input, interaction and the second language learner*. Mahwah, NJ: L. Erlbaum.

The stated goal of the author is “...to provide a view of the relationship among input, interaction, and second language acquisition.” In other words, it provides a good review of many of the issues in mainstream SLA. In a balanced way, Gass presents the major issues in the field (e.g., the question of negative evidence, variability in the input, the functions of modified input) with treatments of different theoretical perspectives (e.g., UG, MacWhinney’s competition model, Krashen’s monitor model).

Kirshner, D. and J. Whitson (eds.) 1997. *Situated cognition: Social, semiotic, and psychological perspectives*. Mahwah, NJ: L. Erlbaum.

In their preface, the authors make the case that the shift within cognitive science to situated cognition theory is at least as profound as the shift from behaviorism to cognitivism some 35 years ago. They write that "...the opportunity to explore learning and knowledge as processes that occur in a local, subjective and socially constructed world is severely limited by behaviorist and cognitivist paradigms" (1997:vii). Situational cognitivists thus recognize the need for the integration of individual and social perspectives. Though there are no chapters on language acquisition, and only one chapter that deals with language (Gee's on reading), this book is relevant to mainstream SLA, which has, as I have indicated in this review, been accused of being asocial. There is also some interesting discussion on what new units of analysis would look like, a question I posed as an issue raised by a Chaos/Complexity Theory perspective (Larsen-Freeman 1997a).

MacWhinney, B. (ed.) 1999. *The emergence of language*. Mahwah, NJ: L. Erlbaum.

The chapters in this book were first delivered as papers in May 1997 at the 28th Carnegie Mellon Symposium on Cognition with the theme "Emergentist approaches to language acquisition." Although the papers mostly deal with first, not second, language acquisition, I like this volume for two reasons. First, although not all contributors subscribe to an explicit emergentist "party line," they are able to demonstrate the richness of seeing language and its acquisition from this perspective. Second, several of the chapters in this book walk the middle ground that I have here suggested might benefit SLA. As Editor, MacWhinney writes in his introduction: "Emergentism should not be interpreted as a radical rejection of either nativism or empiricism. On the contrary, emergentism views nativist and empiricist formulations as partial components of a more complete account. The traditional contrast between nativist and empiricism revolves around the fact that they describe developmental processes that operate across different time frames" (1999:xi). This is the same conclusion that I arrived at independently, which I applied to SLA in terms of discussing diachrony and synchrony in language, and acquisition and use in SLA (Larsen-Freeman 1999).

Mitchell, R. and F. Myles. 1998. *Second language learning theories*. London: Arnold.

The opening two chapters of this book introduce readers to key concepts in SLA and offer an account of its recent history. Six chapters follow, each surveying a different perspective on SLA: linguistic, cognitive, functional/pragmatic, input/interactional, sociocultural, and sociolinguistic. The authors include a balanced treatment of each, summarizing their strengths and weaknesses. They conclude by noting that grand synthesizing theories have not received much support in the field (although they do not mention which ones) and by emphasizing their impression that there is great diversity of perspectives. Writing a comprehensive account of the burgeoning SLA research at this point in time is a formidable undertaking, and so the authors probably chose wisely to approach it by discussing the various theoretical perspectives in the field. This is a valid and valuable way to make sense of the field. What is sacrificed in this representation, though, is much of the history and many of the details of the SLA research endeavor.

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