

Developments in SLA Research

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Second language acquisition (SLA) research has a history, albeit quite a short one. Gass and Selinker (2001), while recognizing that the field is both an old and a new one, suggest that “as it is now represented” it “only goes back about 40 years” (p. xiv). The starting point is generally held to be Corder’s (1967) seminal article “The significance of learner errors” together with Selinker’s (1969, 1972) work on language transfer and interlanguage as a linguistic system in its own right—both of which, in very similar ways, challenged the view prevailing at that time that second language (L2) acquisition was like any other learning, namely, just a matter of habit formation. These early position papers provided the impetus for a spate of empirical studies. These consisted of analyses of learner errors (e.g., Duscova, 1969; Richards, 1971), case studies of individual language learners (e.g., Huang, 1970; Ravem, 1968), and studies investigating the order of acquisition of a group of English morphemes (e.g., Dulay & Burt, 1973). In a sense, these early days established the tradition that SLA has followed ever since—that of a theoretical questioning of basic assumptions followed by empirical inquiry to establish whether the new claims have any foundation. As a new discipline, then, SLA bears substantial testimony to the Popperian view of how scientific inquiry should advance. But, as we shall see, there is increasing disagreement as to what the proper boundaries of the discipline are and how its development should proceed.

SLA is inherently an applied linguistic discipline. That is, it is problem oriented and it is eclectic in the bodies of knowledge it brings to bear in seeking solutions of the problems that it identifies. Much of the early work in SLA was oriented towards solving the problem of “language pedagogy”—namely, identifying an approach to teaching a L2 that would ensure that instruction “works” and that classroom learners are as successful at learning a second/foreign language as naturalistic learners were believed to be. As time has passed, however, SLA has increasingly addressed other problems, often of a more theoretical nature, although still with a potential practical payoff. Thus, although SLA has never lost its applied side, it has grown into an increasingly autonomous discipline. That is, the questions it has sought to address have been less motivated by the need to solve any real-world problems than by the wish to examine L2 acquisition in its own terms, explaining the conditions and factors that impact on how a L2 is acquired, how successfully it is acquired, and how it is used in different social contexts. In our universities, courses in SLA no longer figure just in programs for language teachers. They are also found in programs for linguists and for students studying the cognitive and social sciences. SLA researchers can be found in educational departments, in English departments, in foreign language departments, in linguistics departments, even in psychology and sociology departments, and, of course, where they exist, in applied linguistics departments.

This development is reflected in the source disciplines SLA has drawn on over time. In the early days, SLA was mainly informed by ongoing research into first language (L1) acquisition. This provided not only the research questions that researchers chose to address (e.g., “Do learners learn the grammatical properties of a L2 in a fixed order?”) but also the methodologies researchers used to investigate these questions, for example, obligatory occasion analysis. Subsequently, it has turned to linguistics to investigate to what extent Universal Grammar figures in L2 acquisition (e.g., White, 1989), to sociolinguistic accounts of linguistic variation (e.g., Tarone, 1988), to cognitive psychology to explain the roles of implicit and explicit learning in L2 development (e.g., N. Ellis, 1994), to postmodernist

theories of language use, social identity and gender as these play out in the complex multilingual societies of cities like London, Paris, and New York (e.g., Rampton, 1995; Norton, 2000), and to sociocultural theories that address how culture and language are interwoven as learners progress from other- to self-regulation in the L2 (e.g., Lantolf & Pavlenko, 1995). These developments have also entailed a broadening of the research agenda from a narrowly linguistic, principally morphosyntactic focus to the discursual and pragmatic aspects of L2 use and acquisition. Also, running in parallel with these developments but largely unconnected with them, has been a continuing interest in individual learner differences in language learning (Dornyei, 2005; Skehan, 1989). Finally, the availability of increasingly sophisticated means for examining the functioning of the human brain (e.g., magnetic resonance imaging) has allowed researchers to examine neurolinguistic aspects of L2 use and acquisition (e.g., Schumann, et al., 2004).

Drawing on this veritable cornucopia of theoretical perspectives, SLA researchers debate, sometimes acrimoniously, a range of issues, among which are the following:

- how “acquisition” should be defined and measured
- whether variability in learners’ use of the L2 reflects their competence or is just a performance phenomenon
- whether there is a critical period for acquiring a L2
- why most L2 learners fail to acquire full target-language competence
- the extent to which learner language is best conceived of in terms of “rules” or “formulaic sequences”
- the extent to which L2 acquisition is driven by innate, language-specific mechanisms or input interacting with general cognitive mechanisms
- the precise features of input/interaction that facilitate acquisition
- the extent to which L2 learning is best accounted for in terms of some version of a “computational model” or a theory of the social uses of language
- the precise conditions under which instructional intervention can succeed in influencing the course of L2 acquisition
- the relationship between the universal aspects of L2 acquisition and individual difference factors such as language aptitude and motivation

Whereas it would be misleading to suggest that controversy is only a feature of late-developing SLA (there was in fact plenty right from the beginning), it is probably true to say that SLA is currently characterized by controversy and by metacontroversy (i.e., what to do about the plenitude of theories). My focus in this talk, then, will be to examine this controversy (or rather one particular controversy that lies at the center of a number of other related controversies) and the metacontroversy that theoretical pluralism has given rise to. My aim is not to take up a personal position but rather, as far as this is possible, to present the various positions that have been advanced, leaving it to you to decide where you stand. In my concluding comments, however, I will jump off the fence and express my own viewpoint.

Controversy in SLA: Should it be a Psycholinguistic or Sociolinguistic Field of Study?

Tarone and Swain (1995) provide a neat characterization of the differences between a psycholinguistic and a sociolinguistic approach to investigating L2 acquisition, “where psycholinguists tend to treat individuals as isolated for the purposes of research, sociolinguists prefer to treat individuals as representative members of the speech communities in which they function” (p. 167). It should be noted, however, that sociolinguistics is a broad field of study, itself encompassing a number of different perspectives. Following Fasold (1984, 1990), I would like to distinguish two main branches

of sociolinguistics: (a) the sociolinguistics of society and (b) the sociolinguistics of language. The former, according to Fasold, deals with the societal end of the language and society spectrum; that is, it takes society as the starting point and treats language as a resource for investigating social issues. The latter is primarily concerned with language and linguistic theory but sees a need to examine social factors in order to account for these. This is an important distinction in trying to understand the debate that has taken place, for whereas the relationship between the sociolinguistics of language and psycholinguistic SLA is well-established—as reflected in the work of Tarone (1988) and Preston (1990, 2002)—it is less clear whether SLA researchers drawing on the traditions of the sociolinguistics of society and those working in psycholinguistic SLA have any common ground.

The controversy over whether SLA should proceed as primarily a psycholinguistic or sociolinguistic field of study came to the fore in a special issue of the *Modern Language Journal*, where Firth and Wagner (1997) presented their prolegomena for a sociolinguistics of society approach to investigating L2 acquisition and a number of psycholinguistic SLA researchers (e.g., Long and Gass) responded. The debate has raged ever since. A forthcoming issue of *Modern Language Journal* will review the earlier debate and consider recent developments.

With the partial exception of variability studies, which draws on the sociolinguistics of language tradition, early SLA research was predominantly psycholinguistic in nature. Later research, however, has increasingly adopted a sociolinguistics of society outlook, often stridently so by insisting on the narrowness and illegitimacy of what Block (2003) has termed the input-interaction-output model—for example, the model of L2 acquisition that informed mainstream work in SLA such as Gass (1997) and Long (1996). Firth and Wagner (1997) criticized this model on the grounds that it is “individualistic and mechanistic” and “fails to account for the interactional and sociolinguistic dimensions of language” (p. 285). They considered such an approach flawed and sought to reconceptualize SLA in order to afford an integrated account of the social and cognitive dimensions of L2 use and acquisition. Roberts (2001) noted that even sociocultural accounts of L2 acquisition and interlanguage pragmatics have failed to view language as “a discourse—a social process—into which members of a community are socialised” (p. 109). Atkinson (2002) noted that “our obsession with the decontextualized, autonomous learner has prevented us from conceptualizing SLA as a situated, integrated, *sociocognitive* process” (p. 526). These and other commentaries point to a concerted attempt on behalf of a growing number of researchers to expand the boundaries of SLA by recognizing that “just as surely as language is social, so is its acquisition” (Atkinson, 2002, p. 527).

What then are the differences between psycholinguistic and sociolinguistic SLA? I have tried to summarize these in Table 1—viewing sociolinguistic SLA from the sociolinguistics of society perspective. I will briefly consider each of the dimensions of SLA where differences are evident. Later I will return to the relationship between psycholinguistic and sociolinguistic SLA, this time from a sociolinguistics of language perspective.

The **focus of inquiry** in psycholinguistic SLA has been the acquisition of linguistic competence. The study of learner errors, of orders and sequences of acquisition, of variability in learner language, and even of interlanguage pragmatics has been mainly concerned with documenting how learners develop specific L2 linguistic resources. In contrast, as Mitchell and Myles (1998) pointed out, sociolinguistic SLA has had a broader focus, addressing learners’ pragmatic and discourse competence. This approach has also examined the relationship between socialization and language (i.e., how specific cultural forms influence the language that is learned and how language serves as the means by which these cultural forms are internalized). With a few exceptions, sociolinguistic SLA has also preferred to consider the rate and success of acquisition rather than the acquisition of specific features of

the L2 code.

The two approaches also adopt very different views of **social context**. Siegel (2003) distinguished a structural view of social context, in which social factors such as power and prestige are seen as determining social context, and an interactional view, in which social context is seen as created in each situation through an interplay of social factors. Psycholinguistic SLA predominantly adopts the structural view: The social context is seen as determining the types of input and interaction a learner is exposed to as well as the attitudes that the learner has towards the target language, the target language community, and language learning. It also tends to view social context very broadly—for example—in terms of the distinction between L2 and foreign language contexts, which, as Block (2003) pointed out, denies the enormous variation that exists within each of these contexts. In contrast, sociolinguistic SLA reflects the interactional view; that is, the social context is seen as a complex and constantly changing arena for learning that is constructed and reconstructed by all participants, including the learner. It involves “the whole set of relationships in which a phenomenon is situated” (Watson-Gegeo, 1992, p. 51), including both macro-dimensions such as the institutional, social, political, and cultural aspects of context, and the micro-dimensions of the immediate context of situation.

Differences in the two approaches are also evident in how they conceptualize **learner identity** and its role in acquisition. As Firth and Wagner (1997) noted, psycholinguistic SLA characterizes the learner as a nonnative speaker; it adopts a mindset that views learners as inherently defective communicators and typically characterizes interaction as occurring between native speakers and nonnative speakers. The native speaker of psycholinguistic studies is also often idealized as a standard language speaker. In contrast, sociolinguistic SLA acknowledges that learners possess many different identities other than that of learner and that these identities are dynamic. It also acknowledges that many of the interactions that learners take part in are with other learners rather than native speakers. It emphasizes that in many cases the so-called native speakers that learners come into contact with are not speakers of the standard variety but rather of some regional or community variety. Not surprisingly, then, sociolinguistic SLA challenges the terms typically used in psycholinguistic SLA. Leung, Harris, and Rampton (1997), for example, suggested that terms such as native speaker and nonnative speaker be replaced with language expertise (how proficient people are in a language), language inheritance (i.e., the ways in which individuals can be born into a language tradition whether or not they claim affiliation to that language), and language affiliation (i.e., the attachment or identification they feel for a language). Rampton (1997) proposed replacing the term L2 learner with additional language learner.

As Block (2003) pointed out, psycholinguistic research typically fails to provide rich descriptive accounts of the learners’ **linguistic background**. He notes that there is “a certain monolingual bias” (Block, 2003, p. 33) in the descriptions of learners; that is, there is an assumption that a learner has a single L1 and that this remains intact despite contact with the L2. In contrast, sociolinguistic SLA is likely to provide rich descriptions of learners and to acknowledge that in many cases they are multilingual and regularly engage in heteroglossic practices. Block, following Cook (2002), emphasized the multicompetence of many learners. Leung, Harris, and Rampton (1997) pointed out that in psycholinguistic SLA so-called bilingual learners are “frequently attributed a kind of romantic bilingualism and turned into reified speakers of a community language, and in the process their ethnicities are also reified” (p. 553). Sociolinguistic SLA, as this quotation indicates, has typically focused on learners in urban majority-language settings (e.g., Bangladeshi learners of English in the United Kingdom) rather than on learners in classroom foreign language settings (e.g., Japanese learners of English in Japan), and it is perhaps obvious that in such settings simplistic distinctions such as that between L1 and L2 speakers are not tenable.

Input and **interaction** are also viewed very differently in the two approaches. Psycholinguistic SLA views input as the linguistic “data” that learners can process internally in order to advance their interlanguages. Interaction serves as the means by which learners obtain input, especially the kinds of input hypothesized to promote acquisition. In contrast, in sociolinguistic SLA, there are few references to input. This is because no clear distinction is made between input and interaction. Rampton (1995) refers to interaction as “a sociohistorically sensitive area in which language learner identity is socially negotiated” (p. 293). It is seen as context-sensitive and is constructed dynamically by the participants on a moment by moment basis. Atkinson (2002) points out that input and interaction are integral aspects of a “sociocognitive whole” that includes nonlinguistic (e.g., facial expressions) as well as linguistic features.

Not surprisingly given the nature of these conceptual differences, the two approaches have typically employed very different **research methodologies**. Whereas psycholinguistic SLA has been typically atomistic, quantitative, and confirmatory, sociolinguistic SLA has been holistic, qualitative, and interpretative. Much of the early work in SLA was descriptive in nature, based on case studies of individual learners, but this work also attempted to quantify the accuracy with which learners performed specific linguistic features in order to detail orders and sequences of acquisition. More recent research in psycholinguistic SLA has typically been correlational or experimental in nature, seeking, for example, to identify relationships between measures of input/interaction and L2 acquisition. In contrast, sociolinguistic SLA has been conducted by means of ethnographic studies, focusing on individual learners and the rich description of small snippets of discourse with a view to providing rich descriptions of the learners’ backgrounds, the social contexts in which they participate, and the interaction they participate in. It has tended to eschew quantification in favor of looking at speech events in a holistic way. These differences are evident in the ways in which the two approaches have tackled input/interaction. Whereas psycholinguistic SLA has attempted to describe input and interaction in terms of taxonomic coding schemes, sociolinguistic SLA has preferred conversational analysis (Seedhouse, 2004) or microgenetic analysis (Aljaafreh & Lantolf, 1994) as the methodological tools for examining how acquisition-in-interaction takes place.

Underlying the differences in the two approaches is a fundamental distinction in the way in which the object of inquiry (L2 learning) is conceptualized. In psycholinguistic SLA, learning is viewed as something that takes place inside the mind of the learner. It can only be demonstrated by showing that a change in learners’ ability to comprehend or produce some specific linguistic feature has taken place. In sociolinguistic SLA, in contrast, no clear distinction between learning and language use is made. The assumption is often made that because learning necessarily entails language use, it is sufficient to simply examine how learners use language and how social factors shape and are shaped by this use. In sociocultural SLA, for example, there is a preference for talking about “participation” rather than “acquisition” (see Sfar, 1998) on the grounds that development is not so much the taking in and possession of linguistic knowledge as the taking part in social activity. This blurring of the difference between language use and learning has led to the criticism that sociolinguistic SLA has failed to demonstrate that social factors have any impact on the process of acquisition itself. Long (1998), responding to Firth and Wagner’s (1997) injunction to redress what they saw as an imbalance in perspectives and approaches in SLA by evolving a “bio-social SLA,” presented the following challenge:

Instead of dismissing all work as “narrow” and “flawed,” and simply asserting that SLA researchers should therefore change their database and analyses to take new elements into account, [critics] should offer at least some evidence that, e.g., a richer understanding of alternative social identities or people currently treated as “learners,”

or a broader view of social context, makes a difference, and a difference not just to the way this or that tiny stretch of discourse is interpretable, but to our understanding of acquisition. (p. 92)

Long went on to assert that changes in the social setting have not been shown to have any effect on the way in which the learner acquires a L2 (e.g., no differences in error types or developmental sequences are evident). This clash of perspectives is not easy to resolve because of the radically different conceptualizations of the object of inquiry.

Table 1: Psycholinguistic and Sociolinguistic SLA compared

See Table 1

As I pointed out, this discussion of the differences between psycholinguistic and sociolinguistic SLA is based on a particular view of sociolinguistics—what Fasold (1984) called the sociolinguistics of society. It is when sociolinguistics is viewed in this way that notable differences in opinion between the mainstream psycholinguistic camp and the postmodernist sociolinguistic camp become evident. This debate, however, masks the fact that socio- and psycholinguistic inquiry need not be viewed as inherently incompatible. There is a rich tradition in SLA of sociolinguistic inquiry and theorizing that draws on the alternate tradition in sociolinguistics—the sociolinguistics of language. This was the tradition that informed the earlier work in interlanguage variability and has carried on today. This approach shares with the sociolinguistics of society approach the conviction that “too much SLA research focuses on psycholinguistic processes in the abstract and does not consider the social context of L2 learning” (Tarone, 2000, p. 182). However, rather than eschewing attention to linguistic detail, it aims to study how specific contextual variables such as interlocutor, topic, and task influence learners’ choice of L2 forms and interlanguage development. Research in this sociolinguistic tradition has shown that the social context affects the way learners process input and even the sequence of acquisition (e.g., Tarone & Liu, 1995). It is premised on the claim that, like the native speaker, the learner possesses a variable competence and that this variability is intimately connected with how L2 acquisition takes place. Tarone (2007) suggests that in the long run this sociolinguistic tradition in SLA may have greater mileage than the sociolinguistic SLA of Firth and Wagner (1997) because it “adds something that Firth and Wagner’s approach risks losing—a focus on the linguistic outcomes of the process.”

A Meta-Controversy: How Should SLA Deal With its Multitude of Theories?

The controversies between and within the sociolinguistic and psycholinguistic SLA camps are reflected in the multiplicity of theories that characterize the field of SLA. In Ellis (1985) I reviewed seven theories, McLaughlin (1987) considered five, Larsen-Freeman and Long (1991) also examined five (although not the same five as McLaughlin), while Mitchell and Myles (1998) discussed six general theoretical perspectives. None of these surveys of the SLA field do full justice to the range of theories on offer. Nor is there any sign of this theoretical pluralism abating, for as Spolsky (1990) has observed, “new theories do not generally succeed in replacing their predecessors, but continue to coexist with them uncomfortably” (p. 609).

This theoretical pluralism has inevitably given rise to sharp divisions in opinion regarding the relative merits of the different theories. It has also given rise to controversy as to whether such multiplicity should be accepted as inevitable and even desirable in a complex field of inquiry such as SLA or whether there is a need to sift out the weaker theories.

On the one hand, there are the “relativists” who view SLA research as an “art” rather

than a “science” and argue that “in art perspectives are neither right or wrong; they are simply more or less appealing to various audiences” (Schumann, 1983, p. 66). On the other hand, there are those like Long (1993) and Beretta (1991), who see multiple theories as problematic for SLA research and consider the elimination of some theories in favor of others, a necessary goal if the field is to advance. Long pointed out that whereas some theories can be seen as complementary, others are clearly oppositional. He gives examples of rival claims in choice of domain (e.g., UG-based theories versus variabilist theories), within a single domain (e.g., the conflicting theories relating to the availability of UG in adult learners), and with regard to the specific variables considered important by mentalist, environmentalist, and interactionist theories. He argued that where opposition exists, culling needs to take place, pointing out that the history of science shows that successful sciences are those that are guided by a dominant theory. Clearly, if culling is to take place, it must involve the evaluation of theories.

Three approaches to theory evaluation can be identified. One consists of identifying a set of criteria that can be applied to all theories as a way of eliminating those that are unsatisfactory. This, according to Beretta (1991) and Long (1993), should be the goal of SLA research. The second approach is to abandon any attempt to evaluate theories on rational grounds and to turn instead to aesthetic criteria. The third approach is to accept that theoretical pluralism is not just a temporary feature of an immature discipline, but is here to stay, and to try to avoid the attendant problems of absolute relativism by evaluating theories in relation to their particular contexts and purposes. I will briefly consider these three approaches.

Table 2 shows the criteria for evaluating theories that have been proposed by a number of SLA researchers. Synthesizing these assessment frameworks, the following five general criteria can be identified:

1. **Scope of the theory.** There is general agreement that a theory with a broad scope is preferable to a theory with a narrow scope. McLaughlin (1987) proposed that a theory should fit the body of established knowledge about L2 acquisition. Both Mitchell and Myles (1998) and Jordan (2003) explicitly mention the need for a theory to be broad in scope. Towell and Hawkins (1994) are more specific, identifying five core areas that a theory should account for.

2. **Empirical support.** McLaughlin (1987), Long (1993), Mitchell and Myles (1998), and Jordan (2003) all recognize the importance of this criterion. A good theory must be compatible with what is known about L2 acquisition.

3. **Internal consistency.** Long (1993) and Jordan (2003) both consider that the extent to which the theory is internally consistent (i.e., coherent and cohesive) is important. Long sees internal consistency as a criterion that should be applied prior to empirical testing.

4. **External consistency.** A theory that is consistent with other recognized theories is better than one that is not. However, this does raise the question as to what theories the theory being evaluated should be compared with. McLaughlin (1987) refers to related theories and Long to accepted theories in other fields.

5. **Fruitfulness.** McLaughlin (1987), Long (1993), and Jordan (2003) all consider that an indicator of a strong theory is whether it motivates substantial research and is likely to continue to do so in the future.

In addition to these five general criteria, a number of other criteria are mentioned by individual researchers. Two of these—**simplicity** and **falsifiability**—warrant closer consideration.

In accordance with Occam’s razor, Jordan (2003) stated boldly that “theories should

be simple” and claimed that a theory “with the simplest formula, and the fewest number of basic types of entity postulated, is to be preferred for reasons of economy” (p. 97). However, Gregg (2003) considered simplicity a red herring, noting that while rationalists (such as Jordan) are happy to appeal to simplicity, empiricists are not. While acknowledging that he himself applied the simplicity criterion in dismissing Krashen’s Monitor Model (see Gregg 1984), he considered “such easy targets” rare. Nor is it always easy to determine what constitutes relative simplicity, given that an ambitious theory that is broad in scope is likely to be more complex than a theory that is limited to explaining a highly restricted domain of SLA. In short, the validity of simplicity as an evaluative criterion is questionable, and it is certainly difficult to apply.

Falsifiability (i.e., the extent to which the theory affords hypotheses that can be disconfirmed) is also controversial. Beretta (1991) argued that it is problematic because of the impossibility of obtaining neutral, objective data with which to test theoretical claims and, also, because L2 acquisition theories tend to be formulated in such a way that they allow for ad hoc or auxiliary hypotheses as a way of immunizing initial hypotheses against disconfirming evidence. Schumann (1993) made the same point when he pointed out that it is very difficult to test a hypothesis in isolation because every hypothesis is embedded in “a network of auxiliary assumptions” (p. 296). Thus, when the results fail to support the hypothesis, we cannot tell whether this is because the hypothesis is wrong or because one or more of the auxiliary hypotheses is wrong. Schumann argued that “falsification is ... extremely difficult, if not impossible to achieve” (1993, p. 296). However, other researchers have argued for falsifiability as a criterion. Long (1993), while acknowledging problems, saw merit in this criterion. Jordan (2003) mounted a robust defense of it, aligning himself with the Popperian view that falsifiability is “the hallmark of a scientific theory, and allows us to make a demarcation line between science and non-science” (p. 31). The essence of Popper’s position is that we can never confirm a theory as sometime or other evidence may be forthcoming to demonstrate that the theory is wrong. Therefore, all we can do is show that the theory is not compatible with the empirical facts. Like Long, Jordan argued that falsification and empirical adequacy are criteria that should be applied once the internal consistency of a theory has been established. In this sense, then, falsification can be considered an important second-order criterion.

There is no universally accepted set of criteria for evaluating theories.

Acknowledgement of this is a recurring refrain in the commentaries on SLA theory evaluation. Beretta (1991) concluded his discussion of the various evaluative criteria with the assertion that there are no foolproof, indispensable criteria available. Jordan (2003), some 12 years later, commented “there are no golden rules for theory assessment, no hard and fast rules, except the obvious requirement that a theory has empirical content” (p. 97). It is unlikely that any consensus will be reached in the years ahead given the philosophical disagreements about such fundamental issues as objective evidence.

Table 2: Criteria for evaluating SLA Theories

See Table 2

The second approach to theory evaluation acknowledges the inherent subjectivity involved. Schumann (1983) made much of the fact that scientists working in the physical sciences now acknowledge that there is no objective reality. The recognition that “we create the reality we study” leads to an acceptance of “philosophical flexibility” (Schumann, 1983, p. 51) and to treating science as “art.” Clearly, a very different set of criteria is called for if

this perspective is adopted. Schumann suggests that “innovation,” “tone of voice,” and “metaphor” can be used to evaluate theories, and goes on to apply these criteria to a number of L2 acquisition theories. This approach to theory evaluation is attractive, not least because it may reflect what many of us covertly do when we consider theories, but ultimately it is perhaps unsatisfactory because it denies any role for rationality in theory development. Ultimately a theory is good not only because it is beautiful but also because it makes sense.

In a later article, Schumann (1993) suggested that theory development should be seen as a process of exploration. This refers to “efforts to expand, revise, alter, and ultimately to understand and assess the validity of the construct” (Schumann, 1993, p. 301). Schumann suggests that one way in which exploration can take place is by trying to understand a phenomenon at a different level of organization or in relation to another field. For example, socio-affective theories, which are the main focus of his own research, can be explored in terms of social/psychological factors and through neurological inquiry. Schumann sees a reductionist approach that accommodates explanation at different levels as preferable to a closurist approach of the kind favored by Long (1993).

The third approach is to accept that multiple theories are inevitable and to abandon any attempt to evaluate and cull theories. Relativists argue that it is not possible to determine which theories are good and which bad on purely objective grounds, and therefore the existence of multiple theories should be accepted and welcomed. Such a view stands in clear opposition to the views of rationalists, who view evaluation as essential if SLA is to achieve maturity. The debate between the rationalists and the relativists in SLA is fierce and ongoing.

Lined up on the rationalist team are (among others) Long, Gregg, and Jordan. Long (1993) argued that even if there is no set of universally valid assessment criteria, researchers need to act as if there is. He suggested that different criteria may be important at different stages of theory development, and that the failure to identify a universal set of criteria may reflect a “problem in the timing of their application, not conflicts in principle” (Long, 1993, p. 242). He went on to suggest that criteria, like theories, should be subjected to empirical testing and adjusted when they are found to be “false.” Gregg (2000) staked out the standard rationalist position: Scientists test claims. They test them by making predictions about the world, which they try to confirm or disconfirm by experiment and observation. He dismissed the postmodernist and constructivist arguments that underlie relativism, concluding in his customary robust style that relativists need to “get real.” According to Gregg, most SLA researchers are advocates of scientism; that is, they recognize that the “goals of scientific inquiry include the discovery of objective empirical truths” (Fodor, 1998, p. 189). If such truths are discoverable, then, theories can be evaluated in terms of whether they match up to them. Theories that fail to do so (or do so less well than others) should be eliminated. Jordan (2003) pleaded for SLA researchers to unite into a broad rationalist community and to accept a rationalist approach to assessing theories. However, unlike Gregg, he acknowledged the need to question the objectivity of science and the role played by individual and social factors in theory construction. He is also in favor of “unlikely” theories being developed—SLA researchers should be encouraged “fly any kite” they like. But, like Long and Gregg, he argued that theories need to be evaluated. He saw contradictions among theories as problematic, to be resolved through rational discussion and the use of criteria such as those discussed above.

Lined up on the relativist team are Schumann, Block, and Lantolf (among others). Schumann’s (1993) views on theory evaluation were outlined above. They were relativistic in the sense that he disputed the possibility of identifying which theories were good or bad except on aesthetic grounds. Block (1996), responding to the series of articles published in *Applied Linguistics* by Long, and others took objection to what he saw as a ruling clique in

SLA. He challenged the assumptions that he saw as strangling SLA inquiry—namely, that there is any such thing as normal science, that there is an ample body of accepted findings and that replication studies are useful. He argued that the multiplicity of theories in SLA is not problematic. In his 2003 book, Block again confronted the “self-proclaimed authorities/gatekeepers of SLA” (i.e., Gass, Long, among others) and sought to “circumvent exclusionary stances” (p. 7). He argued for a broadening of SLA with regard to what is understood by the terms “second,” “language,” and “acquisition” and thus implicitly for a multiplicity of approaches. Lantolf (1996) most clearly set out the case for relativism in his aptly named article “SLA theory building: Letting all the flowers bloom!” Lantolf viewed theories as discourses, rejecting a readerly stance towards texts in favor of a writerly one on the grounds that texts do not have objective content. Theories are inherently metaphorical—“theories are metaphors that have achieved the status of acceptance by a group of people we refer to as scientists” (Lantolf, 1996, p. 721). It is thus a small step to the claim that “the greater the acceptance of an acquiescence to standard scientific language within a discipline, the greater the chances that the productivity of the scientific endeavour will diminish” (Lantolf, 1996, p. 723). To avoid this, SLA researchers need to create new metaphors to represent multiple realities. Lantolf explicitly favored a plurality of theories, seeing relativism as a defense against the hegemony of a dominant theory.

The rationalists have not been slow to respond to the attacks of the relativists. Gregg (2000), Long (2006), Jordan (2003), and Beretta (1997) responded to Block (1996). Gregg (2000) responded to Lantolf (1996). And the debate goes on. Lantolf (2002) offered “a commentary from the flower garden” in response to Gregg (2000), while Gregg (2002) was kindly given the last word by the editor of *Second Language Research*—“a garden ripe for weeding.” Long (2006) reviewed this exchange of views, concluding that “it is not true that a multiplicity of theories in a field is unproblematic” and arguing that to adopt such a position is “tantamount to a declaration of irresponsibility or else a belief that progress is unattainable” (p. 156). Long also weighed in against the editors of the journals who publish the “shoddily argued material” of the relativists and thereby provided evidence of the hegemonic tendency that relativists complain about.

To sum up, we can detect two poles, with many shades of opinion in between, regarding how SLA should deal with its multiplicity of theories. At one pole there is a healthy and unusually polite acceptance of the possibility of pluralism in the answers proposed, a willingness to concede that different models might be needed for different aspects of the problem, an acceptance that different points of view might lead to different theories (Spolsky, 1990, p. 613). At the other pole, there is the belief that research should follow the assumed methods of the hard sciences, with no or little room allowed for complementarity or personal preference.

Finally, I will offer my own view on the controversies and debates that have to come characterize SLA. It is simple. Such debates are inevitable given (a) the lack of agreement over what constitute the “facts” of L2 acquisition (e.g., whether there is such a thing as a critical period) and (b) the different purposes that SLA researchers have in investigating L2 acquisition. SLA, I would argue, is not so different from other disciplines in the social sciences in these respects.

Long (1990c) attempted to list what he called the “well-established findings” of SLA research, and argued that these constitute “the least that a second language acquisition theory needs to explain” (p. 656). Such an approach makes obvious sense but is also highly problematic as there is often no agreement about what constitutes the “well-established findings.” While it is often possible to agree on broad generalizations (e.g., “age differences systematically affect how fast learners learn”), it is less easy to reach agreement on more

specific statements (such as “the ‘critical period’ for the acquisition of a native-like phonology ends at the age of six”). Even apparently well-established facts come to be challenged (e.g., Lantolf’s [2005] rejection of acquisitional orders and sequences). A further problem lies in deciding how many of the well-established findings a theory needs to account for. Long (1990) stated that “a theory must account for at least *some* of the *major* accepted findings” (p. 660, emphasis added), inviting questions as to what “some” and “major” mean, questions for which, not surprisingly, no answers are provided. It is probably true to say that, to date, there is no agreement in SLA research about what facts or how many facts need to be accounted for. This is one reason for why the field is characterized by a multiplicity of theories.

The problem with theoretical relativism is that, taken to an extreme, it precludes any attempt at evaluation and this is clearly undesirable. However, this need not be the case. Lantolf (1996) distinguished judgmental relativism and epistemic relativism. Whereas the former views all knowledge as equally valid, the latter claims that theories can be distinguished “in terms of their relevance and adequacy for attaining particular goals” (p. 734). Epistemic relativism is the position I have adopted in the past and still favor (see Ellis, 1994, 1995). I have argued that theories should be evaluated in relation to the context in which they were developed and the purpose(s) they were intended to serve. A UG-based theory, for example, is to be understood in terms of the field of Chomskyan linguistics from which it was developed and needs to be evaluated with regard to the contributions that it makes to that field. It would be entirely inappropriate to try to understand and evaluate such a theory from the point of view of a foreign language teacher. In contrast, sociocultural SLA has been developed by researchers interested in language pedagogy, and constructs such as mediation and the zone of proximal development have obvious relevance to teachers. An approach to evaluation that acknowledges that theories are contextually determined allows for an acceptance of complementarity without a commitment to absolute relativism, for it can still be argued that among theories constructed for the same purpose and context, one does a better job than another because it is more complete, fits the facts better (as far as these are known), affords more interesting predictions, is more consistent with other theories, and so on. The important point here is that ultimately it is not the SLA theorist who will decide whether a particular theory is relevant to a particular purpose but the consumers of the theory. SLA is in essence an applied discipline and any attempt to evaluate its products without reference to their applications is mistaken and will fail.

From this perspective, we can welcome the ongoing controversy as to whether SLA should be predominantly psycholinguistic or sociolinguistic in orientation, as the debate will sharpen our understanding of what each perspective can offer and the purposes it can serve. If the goal is to understand how languages are used and acquired in the complex heteroglossic societies of industrialized cities, then clearly simplistic distinctions between native and second languages or between native and nonnative speakers will be unhelpful. But this should not preclude making use of such distinctions where they might be more relevant (e.g., in English language classrooms in Japan). We will doubtlessly continue to see research conducted within the psycholinguistic tradition and the two sociolinguistic traditions, with these different traditions informed by their own research questions and conducted in accordance with their own methodologies. What is perhaps unlikely is the emergence of a research tradition (or a theory) that effectively integrates these different approaches.

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Table 1

Psycholinguistic and Sociolinguistic SLA Compared

Dimensions	Psycholinguistic SLA	Sociolinguistic SLA
Focus of inquiry	Narrow focus on the universal aspects of how learners acquire an L2. Priority given to linguistic competence.	Rate and success of L2 acquisition with a focus on differential outcomes. Priority is given to pragmatic and discourse competence. Additionally, researchers have examined the relationship between socialization and the L2.
Social context	The structural view is dominant—the social context determines the L2 data made available to the learner and the learner’s attitudes to learning.	The interactional view is dominant—social context is seen as something that is jointly constructed by all participants (including the learner).
Learner identity	The learner is viewed as a nonnative speaker. Learner identity is static.	The learner is viewed as having multiple identities that afford different opportunities for language learning. Learner identity is dynamic.
Learner’s linguistic background	The learner has full linguistic competence in his or her L1.	Learners may be multilingual and may display varying degrees of proficiency in their ethnic language.
Input	Input is viewed as linguistic data that serves as a trigger of acquisition.	Input is viewed as contextually constructed; it is both linguistic and nonlinguistic.
Interaction	Interaction is viewed as a source of input.	Interaction is viewed as a socially negotiated event and a means by which learners are socialized into the L2 culture.
Research methodology	Quantitative and confirmatory.	Qualitative and interpretative.

Table 2

Criteria for Evaluating SLA Theories

Study	Criteria
McLaughlin (1987; 1990c)	<p>The following criteria are identified:</p> <ol style="list-style-type: none"> 1. Norms of correspondence: the extent to which the theory fits the facts that it seeks to explain 2. Norms of coherence: the extent to which the theory fits the body of knowledge that has already been established and is consistent with other related theories 3. Practicality: the extent to which a theory is heuristically rich in stimulating and guiding research (McLaughlin 1990c, p. 219) 4. Falsifiability: the extent to which the theory affords hypotheses that can be disconfirmed.
Long (1993)	<p>Five sets of assessment strategies are identified:</p> <ol style="list-style-type: none"> 1. Criteria applicable before the empirical testing of a theory (e.g., internal consistency) 2. Criteria for assessing the empirical adequacy of a theory (e.g., explanatory adequacy and generality) 3. Criteria for assessing a theory's future potential (e.g., fruitfulness) 4. Consistency with accepted theories in other fields 5. Metaphysical and methodological constraints (e.g., experimental testability).
Towell and Hawkins (1994)	<p>Theories are to be evaluated in terms of whether they account for "five core areas of observed L2 behaviour" (p. 5):</p> <ul style="list-style-type: none"> - language transfer - staged development - systematicity across L2 learners - variability - incompleteness
Mitchell and Myles (1998)	<p>Theories are to be evaluated with reference to:</p> <ul style="list-style-type: none"> - the claims and scope of the theory - the view of language - the view of the language learning process - the view of the learner - the nature and extent of empirical support

- Jordan (2003) Five criteria are given for assessing SLA theories:
1. Research hypotheses should be coherent, cohesive, and expressed in the clearest possible terms.
 2. Theories should have empirical content.
 3. Theories should be fruitful.
 4. Theories should be broad in scope.
 5. Theories should be simple.
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