1 The Scope of Inquiry and Goals of SLA

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1 The Scope of Inquiry

The scope of second language acquisition (SLA) is broad. It encompasses basic and applied work on the acquisition and loss of second (third, etc.) languages and dialects by children and adults, learning naturalistically and/or with the aid of formal instruction, as individuals or in groups, in foreign, second language, and lingua franca settings (see, e.g., R. Ellis, 1994; Gass and Selinker, 2001; Gregg, 1994; Jordens and Lalleman, 1988; W. Klein, 1986; Larsen-Freeman, 1991; Larsen-Freeman and Long, 1991; Ritchie and Bhatia, 1996; Towell and Hawkins, 1994). Research methods employed run the gamut from naturalistic observation in field settings, through descriptive and quasi-experimental studies of language learning in classrooms or via distance education, to experimental laboratory work and computer simulations.

Researchers enter SLA with graduate training in a variety of fields, including linguistics, applied linguistics, psychology, communication, foreign language education, educational psychology, and anthropology, as well as, increasingly, in SLA per se, and bring with them a wide range of theoretical and methodological allegiances. The 1980s and 1990s witnessed a steady increase in sophistication in the choice of data-collection procedures and analyses employed, some of them original to SLA researchers (see, e.g., Birdsong, 1989; Chaudron, this volume; Doughty and Long, 2000; Faerch and Kasper, 1987; Sorace, 1996; Tarone, Gass, and Cohen, 1994), and also in the ways SLA is measured (Bachman and Cohen, 1998; Norris and Ortega, this volume). However, longitudinal studies of children (e.g., Huebner, 1983a, 1983b; F. Klein, 1981; Sato, 1990; Watson-Gegeo, 1992) and adults (e.g., Iwashita, 2001; Liceras, Maxwell, Laguardia, Fernandez, Fernandez, and Diaz, 1997; Schmidt, 1983) are distressingly rare; the vast majority of SLA studies are cross-sectional, with serious resulting limitations on the conclusions that can be drawn on some important issues. Theory proliferation remains a weakness, too, but the experience of more mature disciplines in overcoming this and related teething problems is gradually being brought to bear (see, e.g., Beretta, 1991; Beretta and Crookes, 1993; Crookes, 1992; Gregg, 1993, 1996, 2000, this volume; Gregg, Long, Jordan, and Beretta, 1997; Jordan, 2002; Long, 1990a, 1993, forthcoming a).¹

As reflected in the contributions to this volume (see also Robinson, 2001), much current SLA research and theorizing shares a strongly cognitive orientation, while varying from nativist, both special (linguistic) and general, to various kinds of functional, emergentist, and connectionist positions. The focus is firmly on identifying the nature and sources of the underlying L2 knowledge system, and on explaining developmental success and failure. Performance data are inevitably the researchers' mainstay, but understanding underlying competence, not the external verbal behavior that depends on that competence, is the ultimate goal. Researchers recognize that SLA takes place in a social context, of course, and accept that it can be influenced by that context, both micro and macro. However, they also recognize that language learning, like any other learning, is ultimately a matter of change in an individual's internal mental state. As such, research on SLA is increasingly viewed as a branch of cognitive science.

2 The Goals: Why Study SLA?

Second language acquisition – naturalistic, instructed, or both – has long been a common activity for a majority of the human species and is becoming ever more vital as second languages themselves increase in importance. In many parts of the world, monolingualism, not bilingualism or multilingualism, is the marked case. The 300–400 million people whose native language is English, for example, are greatly outnumbered by the 1–2 billion people for whom it is an official second language. Countless children grow up in societies where they are exposed to one language in the home, sometimes two, another when they travel to a nearby town to attend primary or secondary school, and a third or fourth if they move to a larger city or another province for tertiary education or for work.

Where literacy training or even education altogether is simply unavailable in a group's native language, or where there are just too many languages to make it economically viable to offer either in all of them, as is the case in Papua New Guinea and elsewhere in the Pacific (Siegel, 1996, 1997, 1999, this volume), some federal and state governments and departments of education mandate use of a regional lingua franca or of an official national language as the medium of instruction. Such situations are sometimes recognized in state constitutions, and occasionally even in an official federal language policy, as in Australia (Lo Bianco, 1987); all mean that SLA is required of students, and often of their teachers, as well.

Elsewhere, a local *variety* of a language may be actively suppressed or stigmatized, sometimes even by people who speak it natively themselves, resulting

in a need for widespread second dialect acquisition (SDA) for educational, employment, and other purposes. Examples include Hawai'i Creole English (Reynolds, 1999; Sato, 1985, 1989; Wong, 1999), Aboriginal English in Australia (Eades, 1992; Haig, 2001; Malcolm, 1994), and African-American Vernacular English in the USA (Long, 1999; Morgan, 1999; Rickford, 2000). In such cases, a supposedly "standard" variety may be prescribed in educational settings, despite the difficulty of defining a spoken standard objectively, and despite the notorious track record of attempts to legislate language change. The prescribed varieties are second languages or dialects for the students, and as in part of the Solomon Islands (Watson-Gegeo, 1992; Watson-Gegeo and Nielsen, this volume), once again, sometimes for their teachers, too, with a predictably negative effect on educational achievement. In a more positive development, while language death throughout the world continues at an alarming pace, increasing numbers of children in some countries attend various kinds of additive bilingual, additive bidialectal, or immersion programs designed to promote first language maintenance, SLA, or cultural revitalization (see, e.g., Fishman, 2001; Huebner and Davis, 1999; Philipson, 2000; Sato, 1989; Warner, 2001).

SLA and SDA are not just common experiences for the world's children, of course. More and more adults are becoming second language or second dialect learners voluntarily for the purposes of international travel, higher education, and marriage. For increasing numbers of others, the experience is thrust upon them. Involuntary SLA may take the fairly harmless form of satisfying a school or university foreign language requirement, but regrettably often it has more sinister causes. Each year, tens of millions of people are obliged to learn a second language or another variety of their own language because they are members of an oppressed ethnolinguistic minority, because forced to migrate across linguistic borders in a desperate search for work, or worse, due to war, drought, famine, religious persecution, or ethnic cleansing. Whatever they are seeking or fleeing, almost all refugees and migrants need to reach at least a basic threshold proficiency level in a second language simply to survive in their new environment. Most require far more than that, however, if they wish to succeed in their new environment or to become members of the new culture. States and citizens, scholars and laypersons alike recognize that learning a society's language is a key part of both acculturation and socialization. Finally, less visibly, economic globalization and progressively more insidious cultural homogenization affect most people, knowingly or not, and each is transmitted through national languages within countries and through just a few languages, especially English at present, at the international level.

Any experience that touches so many people is worthy of serious study, especially when success or failure can so fundamentally affect life chances. However, the obvious *social* importance of second language acquisition (SLA) is by no means the only reason for researchers' interest, and for many, not the primary reason or not a reason at all. As a widespread, highly complex, uniquely human, cognitive process, language learning of all kinds merits careful study for what it can reveal about the nature of the human mind and intelligence. Thus, a good deal of what might be termed "basic research" goes on in SLA without regard for its potential applications or social utility.

In linguistics and psychology, for example, data on SLA are potentially useful for testing theories as different from one another as grammatical nativism (see, e.g., Eubank, 1991; Gregg, 1989; Liceras, 1986; Pankhurst, Sharwood-Smith, and Van Buren, 1988; Schwartz, 1992; White, 1989; and chapters by Gregg, Sorace, and White, this volume), general nativism (see, e.g., Eckman, 1996a; O'Grady, 2001a, 2001b, this volume; Wolfe-Quintero, 1996), various types of functionalism (see, e.g., Andersen, 1984; Eckman, 1996b; Mitchell and Miles, 1998, pp. 100-20; Rutherford, 1984; Sato, 1988, 1990; Tomlin, 1990), and emergentism and connectionism (see, e.g., Ellis, this volume; Gasser, 1990; MacWhinney, 2001). Research on basic processes in SLA draws upon and contributes to work on such core topics in cognitive psychology and linguistics as implicit and explicit learning (e.g., DeKeyser, this volume; N. Ellis, 1993, 1994; Robinson, 1997), incidental and intentional learning (e.g., Hulstijn, 2001, this volume; Robinson, 1996), automaticity (e.g., DeKeyser, 2001; Segalowitz, this volume), attention and memory (e.g., N. Ellis, 2001; Robinson, this volume; Schmidt, 1995; Tomlin and Villa, 1994), individual differences (e.g., Segalowitz, 1997; Dörnyei and Skehan, this volume), variation (e.g., Bayley and Preston, 1996; R. Ellis, 1999; Johnston, 1999; Preston, 1989, 1996; Romaine, this volume; Tarone, 1988; Williams, 1988; Young, 1990; Zobl, 1984), language processing (e.g., Clahsen, 1987; Doughty, this volume; Harrington, 2001; Pienemann, 1998, this volume), and the linguistic environment for language learning (e.g., Doughty, 2000; Gass, this volume; Hatch, 1978; Long, 1996; Pica, 1992), as well as at least two putative psychological processes claimed to distinguish first from second language acquisition, that is, cross-linguistic influence (see, e.g., Andersen, 1983a; Gass, 1996; Gass and Selinker, 1983; Jordens, 1994; Kasper, 1992; Kellerman, 1984; Kellerman and Sharwood-Smith, 1986; Odlin, 1989, this volume; Ringbom, 1987; Selinker, 1969) and fossilization (see, e.g., Kellerman, 1989; Long, this volume; Selinker, 1972; Selinker and Lakshmanan, 1992). SLA data are also potentially useful for explicating relationships between language and thought; for example, through exploring claims concerning semantic and cultural universals (see, e.g., Dietrich, Klein, and Noyau, 1995), or relationships between language development and cognitive development (Curtiss, 1982) - confounded in children, but not in SLA by adults. There is also a rich tradition of comparisons among SLA, pidginization, and creolization (see, e.g., Adamson, 1988; Andersen, 1983b; Andersen and Shirai, 1996; Bickerton, 1984; Meisel, 1983; Schumann, 1978; Valdman and Phillips, 1975).

In neuroscience, SLA data can help show where and how the brain stores and retrieves linguistic knowledge (see, e.g., Green, 2002; Obler and Hannigan, 1996; Ullman, 2002); which areas are implicated in acquisition (see, e.g., Schumann, 1998); how the brain adapts to additional burdens, such as bilingualism (see, e.g., Albert and Obler, 1978; Jacobs, 1988; Kroll, Michael, and Sankaranarayanan, 1998; Kroll and Sunderman, this volume), or trauma resulting in bilingual or multilingual aphasia (see, e.g., Galloway, 1981; Paradis,

1990); and whether the brain is progressively more limited in handling any of those tasks. In what has become one of the most active areas of work in recent years, SLA researchers seek to determine whether observed differences in the success of children and adults with second languages is because the brain is subject to maturational constraints in the form of sensitive periods for language learning (see, e.g., Birdsong, 1999; Bongaerts, Mennen, and van der Slik, 2000; DeKeyser, 2000; Flege, Yeni-Komshian, and Liu, 1999; Hyltenstam and Abrahamsson, this volume; Ioup, Boustagui, El Tigi, and Moselle, 1994; Long, 1990b, forthcoming b; Schachter, 1996).

Basic research sometimes yields unexpected practical applications, and that may turn out to be true of basic SLA research, too. Much work in SLA, however, has clear applications or potential applications from the start. The most obvious of these is second (including foreign) language teaching (see, e.g., Doughty, 1991, this volume; Doughty and Williams, 1998; N. Ellis and Laporte, 1997; R. Ellis, 1989; de Graaff, 1997; Lightbown and Spada, 1999; Long, 1988; Norris and Ortega, 2000; Pica, 1983; Pienemann, 1989; Sharwood-Smith, 1993), since SLA researchers study the process language teaching is designed to facilitate.² For bilingual, immersion, and second dialect education, second language literacy programs, and whole educational systems delivered through the medium of a second language, SLA research findings offer guidance on numerous issues. Examples include the optimal timing of L1 maintenance and L2 development programs, the linguistic modification of teaching materials, the role of implicit and explicit negative feedback on language error, and language and content achievement testing.

SLA research findings are also potentially very relevant for populations with special language-learning needs. These include certain abnormal populations, such as Alzheimer's patients (see, e.g., Hyltenstam and Stroud, 1993) and Down syndrome children, where research questions concerning socalled (first) "language intervention" programs are often quite similar to those of interest for (second) "language teaching" (see, e.g., Mahoney, 1975; Rosenberg, 1982). Other examples are groups, such as immigrant children, for whom it is crucial that educators not confuse second language problems with learning disabilities (see, e.g., Cummins, 1984); bilinguals undergoing primary language loss (Seliger, 1996; Seliger and Vago, 1991; Weltens, De Bot, and van Els, 1986); and deaf and hearing individuals learning a sign language, such as American Sign Language (ASL), as a first or second language, respectively (see, e.g., Berent, 1996; Mayberry, 1993; Strong, 1988). In all these cases, as Bley-Vroman (1990) pointed out, researchers are interested in explaining not only how success is achieved, but why - in stark contrast with almost uniformly successful child first language acquisition – at least partial failure is so common in SLA.

NOTES

- 1 A seminar on theory change in SLA, with readings from the history, philosophy, and sociology of science and the sociology of knowledge, is now regularly offered as an elective for M.A. and Ph.D. students in the University of Hawai'i's Department of Second Language Studies. The importance of such a "big picture" methodology course in basic training for SLA researchers arguably at least as great as that of the potentially endless series of "grassroots" courses in quantitative
- and qualitative research methods and statistics that are now routine – will likely become more widely recognized over time.
- 2 The utility of some work in SLA for this purpose does not mean that SLA is the only important source of information, and certainly not that a theory of SLA should be passed off as a theory of language teaching. Nor, conversely, does it mean, as has occasionally been suggested, that SLA theories should be evaluated by their relevance to the classroom.

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