Overview of SLA Studies

1.0. INTRODUCTION

This book is about using conversation analysis (CA) as a methodological resource for analyzing and understanding second language acquisition (SLA) behaviors. Its premise is that, although considerable progress has been made in understanding the big picture of how second language (L2) learners use talk to learn new language, not only has theory far outstripped empirical verification but the details of how learners actually deploy talk to learn on a moment-by-moment basis have largely been ignored. To develop a photographic analogy, many pictures that depict the vast sweep of the SLA landscape are available; but there are few photographs that depict the fine details of this landscape. In part, this situation is due to the difficulty of demonstrating how learning occurs. Language acquisition is a long drawn-out, multi stage process, whose products may only become accessible to researchers over periods of time lasting weeks, months, or even years. Furthermore, language-learning processes may not always be reflected as observable behaviors. However, researchers must recognize that this situation is also an artifact of the predominantly nomothetic epistemology that dominates the field of SLA studies.

The preference (whether esthetic or scientific) for a theory-driven, experimental, and quantitative approach to knowledge construction privileges the development of the big picture of SLA at the expense of a data-driven, microanalytic, and qualitative approach to knowledge construction. However, this is not to say that language-learning behaviors can never be observed in action nor analyzed on a moment-by-moment basis. The premise of this book is that CA represents one way of demonstrating how micro-moments of socially distributed cognition instantiated in conversational behavior contribute to observable changes in participants' states of knowing and using new

language. My purpose in writing this book, therefore, is to fill in some of the empirical gaps left by proponents of big picture SLA and also to demonstrate the potential of using the microanalytical power of CA as a methodological resource for SLA studies. In so doing, I not only confirm some of the proposals of mainstream SLA research concerning the role of conversation in SLA but also reconstitute the way in which SLA researchers have traditionally conceptualized notions such as understanding and learning new language.

The book is divided into three parts. Part I lays out the range of issues that are the subject of this book. In this preliminary chapter, I begin by briefly defining the field of SLA studies. I then review in some detail three influential hypotheses in the SLA literature, namely, the discourse hypothesis, the social interaction hypothesis, and the interactionist hypothesis. In chapter 2, I first sketch out when and how CA emerged and then define CA. Having set the theoretical stage in this fashion, I proceed to develop a methodological critique of current SLA studies from a conversation-analytic perspective. Finally, chapter 3 concludes Part I with a practical discussion of how to do CA.

Parts II and III lay out the insights into language use and language-learning behaviors that can be constructed by using CA as a methodological resource for doing SLA research. More specifically, in chapters 4, 5 and 6, which constitute Part II, I develop a model of interactional competence (Young, 1997) that provides an account of the sequential, turn-taking, and repair organizations to which participants orient in different speech exchange systems. In chapters 7 and 8, which constitute Part III, I then show empirically how members orient to these three types of conversational organization as potential resources for language learning. That is, in chapter 7, I provide a moment-by-moment microanalysis of the conversational behaviors one learner deploys to understand and learn (at least in the short term) the meaning of the word *coral*. In chapter 8, I use exactly the same methodology to show how another learner, interacting in a very similar environment and under very similar conditions, fails to understand and learn the meaning of the phrase "We cannot get by Auschwitz." Therefore, I end this book by arguing that because both learners use similar kinds of strategies to try to understand and learn these problem items, the empirical analysis in this final chapter problematizes current notions of what it means to understand and learn new language.

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the author, and therefore the publisher takes no re-
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Conversation Analysis

Numa Markee

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1.1. TOWARD A DEFINITION OF SLA STUDIES

SLA researchers have borrowed ideas from many different sources
(among others, linguistics, psychology, education, sociology).
Consequently, SLA studies may be understood as an interdisciplinary
field that seeks to explain how a broad range of psycholinguistic,
sociolinguistic, or neurobiological factors affect the acquisition of
second (and, indeed, subsequent) languages by child and adult learners.
The range of issues that potentially falls under the purview of SLA
research is consequently extremely large, encompassing the domains of
both linguistic and communicative competence (see, e.g., Gass, 1998;
Gass & Selinker, 1994; Hatch, Shirai, & Fantuzzi, 1990, for further
discussion and exemplification of this issue).

 This breadth not only reflects the inherently interdisciplinary
nature of the field but also its rapid intellectual growth in a compara-
tively short period of time. SLA research has grown from an initially
modest and exclusive concern with pedagogically related issues of
contrastive and error analysis into a theoretically motivated, arguably
independent field in its own right (Sharwood-Smith, 1991, cited in
Gass, 1993). This means that findings from SLA research may, but
need not necessarily, have direct pedagogical applications. For
example, Gregg (1996) viewed this discipline as a purely theoretical
field. In contrast, Foster (1998), Hatch (1978, 1979) and Hatch et al.
(1990), among others, argued that it is ultimately desirable for the
theoretical SLA literature to connect with pedagogical issues. As these
last authors remarked, "Since foreign and second language acquisition
includes formal and informal instruction, the effect of teaching — and
the different types of programs that promote particular types of
teaching — should be made explicit in any theory of SLA" (p. 698).

 For the purposes of this book, I align myself with this latter
position and argue that SLA studies can make important contributions
not only to theories of language learning but also to theories of
language teaching, which, as Richards (1990) argued, must be based on
empirical accounts of effective language teaching behaviors.

 I now discuss in more detail three SLA hypotheses that are
particularly relevant to this book: the discourse hypothesis, the social
interactionist hypothesis and the interactionist hypothesis.

1.2. THE DISCOURSE HYPOTHESIS

The discourse hypothesis (Hatch, 1978) initially emerged as a result of
Hatch's interest in establishing the kinds of relation that exist between
form and function in language use and describing the strategies that L2

learners use to differentiate between various functions of the same form. Hatch was also motivated to explore the possibilities offered by a discourse-analytic approach to SLA because she believed that "one learns how to do conversation, one learns how to interact verbally and out of this interaction syntactic structures are developed" (p. 404; see also Wagner-Gough & Hatch, 1975). That is, Hatch wanted to gain insights into the then little researched area of how learners learn second languages, not just what they learn.

How might a discoursal approach help SLA researchers make connections between the how and the what of SLA? Hatch cited the following piece of talk between H (an adult native speaker of English) and T (a 2 1/2- year-old L2 learner of English) to illustrate how such connections can be made (note that the transcription convention used in this excerpt is to align all of T's talk in the left-hand column, and all of H's talk in the right-hand column):

Excerpt 1.1

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1  T:     * this
2         * broken
3 H:      *                    broken
4 T:      * broken
5         * This /az/ broken
6         * broken
7 H:      *                    Upside down
8 T:      * upside down
9         * this broken
10        * upside down
11        * this broken
          (excerpt from Itoh, 1973, cited in Hatch, 1978, pp. 409–410)
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More specifically, this excerpt shows how the vertical constructions of T's and H's collaborative talk (see lines 1–2, 4–6) become elaborated and transformed into the horizontal constructions in T's talk (see lines 8–11) through a process of scaffolding (see line 3 and, in particular, line 7); (Slobin, 1982). In other words, one way in which syntactic structure may develop out of conversation, at least in children learning an L2, is through a collaborative process of incorporation of linguistic material by L2 novices from the previous, often adjacent, turns of native speakers.

However, Hatch was careful not to assume that the same kinds of insights would necessarily also hold for adult L2 learners. Indeed, she noted that, although the talk of children and adults is in some ways structurally quite similar — for example, both have difficulties in identifying or nominating discourse topics and developing ideas in syntactically acceptable ways — child–child, child–adult and

adult–adult discourse are also qualitatively quite different from each other in important ways (Hatch, 1978; Peck, 1978, 1980).

For example, the function of vertical and horizontal constructions is less clear in adult conversations than it is in child talk. Whereas children seem to use such constructions primarily as a means of constructing syntax, adults seem to use them either to get needed vocabulary or to orient to normal conventions of conversational politeness. Moreover, adult non–native speaker (NNS) learners make extensive strategic use of various repair strategies as a means of getting needed clarifications from native speaker (NS) interlocutors. These clarifications enable adult learners to get important content words they have missed and thus help them either to identify topics nominated by their NS interlocutors or nominate topics of their own. This behavior may be explained by the fact that, unlike conversations involving children, the talk that occurs during adult conversations is rarely about objects in the immediate environment. When adult NNSs attempt to nominate the complex topics typical of adult talk, therefore, it seems that they often have to expend a great deal of time and effort on trying to get the vocabulary they need from their NS interlocutors. For their part, NSs do a lot of paraphrasing in an attempt to confirm their understanding of the learner's topic nominations.

As Hatch (1978) suggested, these kinds of findings imply that adult talk-in-interaction may be particularly useful for the acquisition of L2 vocabulary. Furthermore, she also explicitly allowed the possibility that conversation may not be as useful a resource for the acquisition of L2 syntax by adults as it seems to be for children. This issue is, of course, ultimately an empirical question, which can therefore only be settled by empirical research (see Gass & Varonis, 1989; Mackey, 1999; Swain & Lapkin, 1998, for recent papers on this. See also Sato, 1986. This work, based on insights from Hatch, 1983, suggested that conversation may be an efficient resource for highlighting syntactic structures such as adverbs and lexical past verbs, but less efficient for highlighting verbal inflections).

1.3. THE SOCIAL INTERACTION HYPOTHESIS

Hatch's ideas on the role of input in SLA proved to be a seminal influence on the subsequent work of Krashen and Long and their respective associates. For example, Krashen (1980) suggested that exposure to comprehensible input (also known as "i+1") or input that is slightly beyond a learner's current level of competence in the L2 was both a necessary and sufficient mechanism for explaining SLA. In contrast, Long (1983b, 1983c, 1996) argued that although exposure to

comprehensible input is certainly necessary, it is not by itself sufficient to ensure acquisition. Arguing that NNSs cannot just be passive recipients of i+1 if they wish to acquire new language, Long suggested that learners must actively get the raw linguistic data they need from NSs by engaging their interlocutors in social interaction. Extending this hypothesis, Swain (1985, 1995) further argued that learners must also produce comprehensible output in order to move their interlanguage from a semantic to a syntactic analysis of the L2 input.

1.3.1. The Conversational Resources Used by Learners to Obtain Comprehensible Input

What conversational resources do L2 learners use in order to get comprehensible input from NS interlocutors? Long argued that NNSs induce conversational partners to provide comprehensible input by initiating a range of repairs, including comprehension checks, clarification requests, confirmation checks, verifications of meaning, definition requests, and expressions of lexical uncertainty (Porter, 1986). The idea that speakers' repair strategies function as a resource for SLA in both naturalistic and instructed contexts has since gained widespread currency in the SLA literature. Indeed, as Pica (1987) noted:

> what enables learners to move beyond their current interlanguage receptive and expressive capacities when they need to understand unfamiliar linguistic input or when required to produce a comprehensible message are opportunities to modify and restructure their interaction with their interlocutor until mutual comprehension is reached. Although there is no direct proof that the immediate comprehension and production gains experienced as a result of interactional restructuring generalize to the learner's interlanguage repertoire, i.e., lead directly to acquisition, there is a great deal of indirect evidence and convincing theoretical claims to support the contributions of interactional modification moves to the acquisition process and to encourage their use by classroom participants (p. 8).

Pica also provided some useful illustrations of what clarification requests, confirmation checks and comprehension checks actually look like. For example, there are two clarification requests in Excerpt 1.2 (see lines 2 and 5), one confirmation check in Excerpt 1.3 (see line 3) and one clarification request (see lines 7 and 8) and one comprehension check in Excerpt 1.4 (see line 11).

As Pica noted, these repair types can be initiated either by the NNS learner or by the NS interlocutor. Thus, whereas all the repairs in Excerpts 1.2 and 1.3 are initiated by the NS, both the NNS and the NS initiate one repair each in Excerpt 1.4. Note that similar conversational adjustments have also been observed in NNS–NNS interactions (Long & Porter, 1985; Pica & Doughty, 1985; Porter, 1986).

Excerpt 1.2

Learner (NNS English)	Interlocutor (NS English)
1 and they have the chwach there	
2 *	the what
3 the chwach ___ I know someone	
4 that-	
5 *	what does it mean
6 like um like American people they	
7 always go there every Sunday	
8	yes?
9 you know___every morning	
10 that there pr- that- the American	
11 people get dressed up to go to um	
12 chwach	
13	oh to church____I see

(Pica, 1987, p. 6).

Excerpt 1.3

Learner (NNS English)	Interlocutor (NS English)
1 like us three months ago that the	
2 SEPTA doft doft doft	
3 *	dropped?
4 No you lo- you lend me I am	
5 you	
6	oh owes____debt
7 debts okay they debt million of dollars	
8	oh yeah yeah

(Pica, 1987, p. 6).

Excerpt 1.4

Learner (NNS English)	Interlocutor (NS English)
1 ... so this young woman doctor	
2 hope this young man doctor drive	
3 car, go home ... Now this young	

4	woman boyfriend very angry ... he	
5	want have a very no- good idea for	
6	this girl	
7	*	which girl? the one who
8	*	can't speak?
9	can't speak girl. and why? because	
10	this this girl very angry also.	
11	* you know what I mean	
12		yes

(Pica, 1987, pp. 6–7).

The occurrence of such conversational adjustments are thought to promote communication and to fulfill an implicit teaching function (Hatch, 1983), provided that these adjustments address gaps in learners' knowledge structures and that learners assume responsibility for these gaps and do not blame their interlocutors for their occurrence (Faerch & Kasper, 1986). Based on these theoretical ideas and empirically based insights, psycholinguistically based rationales for task-based, small group-mediated teaching methodologies have begun to emerge (see Long 1985b, 1989, 1991, in press; Pica, 1987; Pica, Kanagy, & Falodun, 1993; Skehan, 1998) that complement previous pedagogical justifications for such activities. According to this perspective on SLA, then, it is the large number of repairs and other tokens of negative evidence that potentially make comprehensible talk that is initially too complex for NNSs to understand (Carroll & Swain, 1993; Gass, 1997; Gass & Varonis, 1985a; Long, 1983c, 1996; Oliver, 1995; Scarcella & Higa, 1981).

1.3.2. Familiarity

A related strand of research has focused on how the construct of familiarity, which has a number of different dimensions, may affect the comprehensibility of input. For example, it was shown that familiarity with one's interlocutor, with other speakers of the target language, and with non-native varieties of speech in general has a positive impact on comprehension (Gass & Varonis, 1984). In contrast, when NNS interlocutors do not share a linguistic or cultural background, little conversational restructuring occurs (Varonis & Gass, 1985). In addition, familiarity with the task that is to be completed may decrease the amount of restructuring that occurs in NNS–NNS conversation (Gass & Varonis, 1985a).

Continuing this line of research, Plough and Gass (1993) showed that there is a higher incidence of overlaps, sentence completions, confirmation checks and clarification requests in NNS dyads whose

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members are familiar with each other than in unfamiliar dyads, although unfamiliar partners used more echoes than familiar partners did. With reference to task familiarity, these researchers also found that whereas partners who were familiar with a task produced more confirmation checks and clarification requests than task-unfamiliar partners, task-unfamiliar dyads interrupted each other more often than conversationalists who were familiar with the task. Plough and Gass cautioned, however, that these results did not receive strong empirical support. They concluded that the optimal conditions for the negotiation of input are met when conversationalists are involved in the talk and interacting in a nonthreatening environment.

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Other research on input has focused on who plays the dominant role in restructuring both NS–NNS interaction and NNS–NNS talk in terms of different levels of communicative competence, that is, how familiar different participants are with the L2. Thus, early research on this topic found that NSs were responsible for initiating more confirmation checks, comprehension checks and clarification requests than NNSs. This behavior was explained in terms of NSs' higher levels of communicative competence in English (Beebe & Giles, 1984; Scarcella, 1983). But more recent research has shown that NNSs who possess specialist content knowledge become the dominant conversational partners with NSs who do not have such specialist knowledge (Woken & Swales, 1989; Zuengler 1989; Zuengler & Bent, 1991).

1.3.3. Task Types

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Also important is research on the technical attributes of task types. In this respect, not all tasks are equally good at generating acquisitionally useful varieties of talk. For example, free conversation is a notoriously unreliable tool for getting learners to negotiate their interlocutors' speech (Long, 1989). Some of the characteristics of tasks that seem to be most relevant include whether a task involves a one-way or two-way exchange of information; is convergent or divergent; is closed or open; is planned or unplanned.

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One-way (also frequently referred to as information gap) tasks involve only one party to a conversation possessing information that is necessary to the solution of a problem. In contrast, two-way (also known as jigsaw) tasks are structured in such a way that all participants possess information that is necessary to the ultimate solution of the problem. The crucial difference between these kinds of tasks is that two-way tasks are said to force all participants to contribute to the talk and thus to engage in conversational modifications of each others' talk. In contrast, one-way tasks only set up the possibility that all

parties will contribute to the talk and modify their conversational exchanges (Doughty & Pica, 1986; Long, 1980, 1989).

Convergent tasks involve learners reaching consensus on a mutually acceptable solution to a problem, while divergent tasks involve learners developing their own individual viewpoints on a problem, which they must defend against other learners' positions. Convergent tasks have been found to generate more conversationally modified talk than divergent tasks (Duff, 1986). Long (1989) has also suggested that closed tasks (i.e., tasks that require learners to arrive at a single correct solution or restricted set of solutions) yield a greater quantity and variety of negotiation than open tasks (i.e., tasks that have no single predetermined solution). However, this hypothesis has yet to be tested empirically. Finally, the amount of planning that learners do before they perform a task seems to be related to the syntactic complexity of the language that students ultimately produce (Crookes, 1989; Ortega, 1999). In a pedagogical context, this suggests that it is desirable for teachers not to insist that learners should produce language spontaneously at all times. Rather, teachers should provide learners with opportunities to work out what they are going to say and how they are going to say it.

Drawing on this body of research, Pica et al. (1993) argued that jigsaw tasks force interlocutors to exchange conversationally modified input slightly more efficiently than information gap tasks do. However, both these task types are much more efficient at ensuring this result than opinion gap tasks are. I examine the former comparison first.

Jigsaw and information gap tasks share several important characteristics. More specifically, both task types require conversationalists to exchange needed information, and both are convergent and closed. However, these tasks differ in one crucial respect: Whereas jigsaw tasks are necessarily two way, information gap tasks may be either two way or one way. This suggests that jigsaw tasks are slightly better than information gap tasks at ensuring that learners repair their speech during the course of solving a problem.

Moving on now to the comparison between jigsaw tasks and information gap tasks on the one hand and opinion gap tasks on the other, jigsaw tasks and information gap tasks are clearly qualitatively different from opinion gap tasks in that opinion gap tasks may be either one way or two way, do not require speakers to exchange information, and are highly divergent and open. Opinion gap tasks are therefore thought to be less likely to force interlocutors to modify their speech than jigsaw tasks and information gap tasks.

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Of course, as Pica et al. (1993) readily admitted, few studies have actually demonstrated that negotiated talk produced by learners engaged in jigsaw and information gap tasks demonstrably promotes SLA. Indeed, results from an empirical study of a "real" classroom (as opposed to students interacting in a laboratory setting) by Foster (1998) suggest that the situation is much more complicated than Pica et al. and others allow. More specifically, aggregate scores obtained by Foster provided general support for Pica's et al. position that tasks with the specific attributes discussed previously will yield more conversational modifications than tasks that do not possess these desirable characteristics. However, when individual scores were analyzed, considerable variation was observed in the extent to which individual students produced any significant amounts of language at all during the completion of either one-way or two-way tasks; negotiated meaning; or produced output that had been semantically, syntactically, morphologically, or phonologically modified. Interestingly, what seemed to be the most important factor in accounting for this variability was not so much whether tasks were constructed in a particular way as whether interlocutors were configured in pairs or small groups. By and large, a dyadic configuration resulted in more conversational modification of the input than did a small group configuration.

Finally, Foster and Skehan (1996) showed that there are different accuracy, complexity, and fluency effects for three different task types carried out under three different planning conditions. More specifically, Foster and Skehan devised three kinds of tasks for this study. Personal tasks involved pairs of learners in an exchange of personal information, during which students told their partners how to get to their house in order to turn off a gas oven that had inadvertently been left on. Narrative tasks involved dyads inventing a story on the basis of sets of pictures that did not suggest an obvious story line but shared common characters. And in the decision-making tasks, students had to role-play the decisions of a judge deciding how to punish different crimes appropriately.

The accuracy, complexity, and fluency effects for each task under the conditions of no planning, undetailed planning, and detailed planning were then measured. Accuracy effects were determined by dividing the total number of correct clauses by the number of clauses produced by each subject. The maximum value that could be achieved in this column was 1.00. Complexity effects were measured by dividing the total number of clauses by the total number of communication units (c-units) for all subjects, thus reflecting the number of clauses per c-unit. In this column, the minimum value students could

TABLE 1.1
Accuracy, complexity, and fluency for three tasks and three planning conditions

	Personal	Narration	Decision Making
Accuracy			
Unplanned	.64	.61	.63
Undetailed planning	.76	.66	.73
Detailed planning	.69	.58	.71
Average for task	.70	.62	.69
Complexity			
Unplanned	1.11	1.22	1.23
Undetailed planning	1.16	1.42	1.35
Detailed planning	1.26	1.68	1.52
Average for task	1.18	1.43	1.37
Fluency			
Unplanned	32	120	91
Undetailed planning	20	29	26
Detailed planning	15	14	30
Average for task	22	54	49

Note. From P. Foster & P. Skehan, 1996, cited in Skehan (1998, p. 109). Reprinted with the permission of Cambridge University Press.

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obtain was 1.00. Finally, fluency effects were measured by aggregating the total seconds of silence per subject for each 5-minute task. The results of this research are summarized in Table 1.1.

Table 1.1 shows that students produced more accurate language when they were engaged in personal and decision-making tasks than when they were telling a story. Furthermore, learners produced more complex language when they were telling a story or making decisions than when they were doing personal tasks. Finally, students were most fluent during the personal task and least fluent during the narration and decision-making tasks.

The planning conditions associated with each task type were also found to have different effects on the accuracy, complexity, or fluency with which each task was accomplished. Thus, the more planned a task was, the more complex and fluent the language that was produced. However, with respect to accuracy, it turned out that the most accurate performance was associated with the undetailed planning condition. Furthermore, whereas there was only a comparatively small increase in complexity and fluency as a result of planning for the personal task, there was a dramatic improvement on these two measures when students were able to plan how they would perform the decision-making and narrative tasks. It therefore seems that the technical attributes of tasks are not the only variables that are implicated in modifying the quality of interaction.

1.4. THE INTERACTIONIST HYPOTHESIS

Research on how the linguistic environment shapes the input that is available to learners has always been a particularly vibrant area in SLA studies. However, researchers working within a social interaction paradigm were quick to recognize that this research had to be related to other areas of SLA studies if satisfactory explanations for such a complex phenomenon as L2 learning were ever to be devised. Following Larsen-Freeman and Long (1991), I call all such proposals interactionist models of L2 learning.

1.4.1. A Metaphor for L2 Learning

Before I discuss what one of these models looks like, I stress that interactionist models are relatively "messy" representations of how L2 learning is constructed. Speaking to this issue, Hatch et al. (1990) suggested that although it is often conceptually necessary for researchers initially to develop theories of SLA that focus on a small part of the overall language acquisition picture, it is nonetheless

important to recognize that these theoretical modules overlap considerably. Given the current state of SLA studies, interactionist models of SLA are bound to be quite messy, because the modules involved are often based on very different theoretical assumptions that do not co-exist easily. Nonetheless, this is the best that can be done at the present time. To explain how interactionist models of SLA might work, therefore, Hatch et al. developed an overhead transparency metaphor that illustrates both the potential and the problems associated with interactionist accounts of language learning.

More specifically, because light can shine through several transparencies at once, transparencies representing different theoretical perspectives can be laid on top of each other to illuminate a particular problem from different points of view. In this way, it is possible to begin analyzing how people make complaints by using a conversation analysis transparency to analyze how participants open and close complaints sequences and how they orient to the practices of turn-taking and repair in order to do complaining. Another transparency (say a service encounter script transparency) can be added to highlight how participants constitute themselves as actors in this speech event, the roles they adopt, and the props they use in order to support their arguments. Other transparencies (e.g., a lexical transparency to deal with vocabulary issues, an intonation and stress transparency to deal with sentence-level and suprasegmental phonology, a syntactic transparency to deal with non-formulaic utterances, etc.) can be added on an as-needed basis.

This metaphor is obviously attractive in that it enables researchers to appeal to a broad range of perspectives in order to explain how SLA works. But the picture of SLA that is constructed in this way also clearly runs the risk of becoming unreadable because mutually incompatible transparencies are laid over each other. With these caveats in mind, I now draw on Gass' (1997) discussion of the interactionist model of L2 learning shown in Fig. 1.1 to illustrate how research on input, interaction, and L2 learners might be integrated into a single conceptual whole.

1.4.2. An Interactionist Model of L2 Learning

As Gass (1997) remarked, all the input to which learners are exposed does not automatically become available to them. Consequently, the dotted line in Fig. 1.1 represents the fact that only some of the data about an L2 actually filters through to learners at any given time. The first step in the acquisition process addresses the following issue: Learners must apperceive, or consciously notice, that there is a gap

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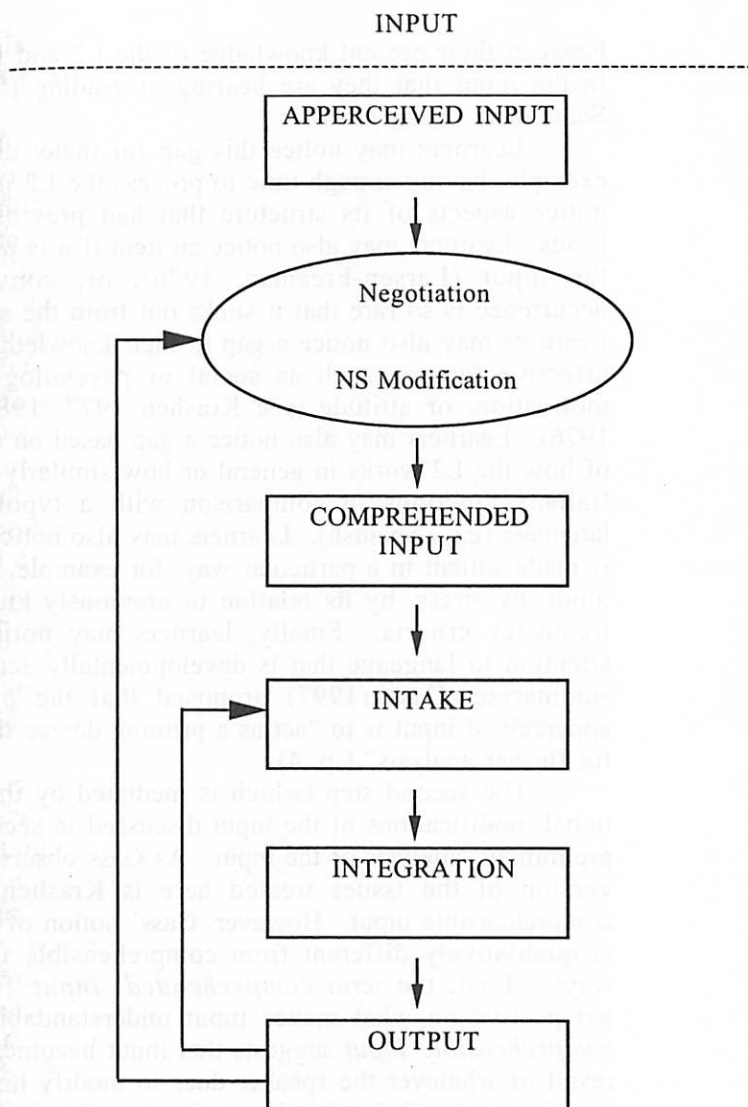
INTAKE

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OUTPUT

FIG 1.1 An interactionist model of second language acquisition (adapted from Gass, 1997). Reprinted with the permission of Lawrence Erlbaum Associates.

between the output knowledge in the L2 and information contain-
ing in the input that was receiving (reading) [?] Hands [?] 2002 [?]
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Learners may noticeably gap for many different reasons. For
example, learners might have to produce the L2 to simple learners
notice aspects of its structure that had previously stood them [?] [?]
breats. Learners may also notice an item it is as well and they been
the input of target.Freeman, 1976, or, conversely, they may be
construct in isolate that it stake out from the surrounding input.
Learners may also notice a gap if affectively primed to do so by
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1976). Learners may also notice a gap based on their prior knowl-
of how the L2 works in general or how similarly structured L2 cer-
that stimuli or by comparison with a typologically close native
language or dialect). Learners may also notice frequency patterns
in input which in a particular way, for example, by reaction an [?]
stimuli by notice by its relation to previously known items or
typology creates. Finally, learners may notice anomalies, items
aberrant in language that is developmentally accessible to them.
Schmidt [?] 1997) suggested that the critical function of
apperceived input is to "act as a priming device that prepares the
input for analysis" (p. 4).

The second step (which is mediated by the kinds of interac-
tional modifications of the input discussed in section 2.3) involves
prepared input [?] that [?] [?] class object [?] the transformation
version of the issues treated here is Krashen's (1981) notion of
comprehensible input. However class notion of comprehension itself
is qualitatively different from comprehensible input in that it
is one. First, the term comprehended data input is concerned prim-
arily with whether the input and understandably whereas compre-
hension places heavy importance on input becomes understand-
able. Further, whatever the speaker does normally his/her own [?]
though [?] at this point, given that CA is based on language's
(apperceived) on how talking about this as a single and significant
is (something) and this [?] comprehension that the learner of [?]
to the language (their (more)) [?] [?] comprehension covers a
continuum of possibilities ranging from semantics to detailed struct-
analysis. (Type 5) Consequently, comprehension is language output
from a comparatively shallow, semantically fired understanding
which learners are able to get the general gist of a message[?] but[?]
[?]

between their present knowledge of the L2 and information contained in the input that they are hearing or reading (Schmidt, 1990, 1993; Schmidt & Frota, 1986).

Learners may notice this gap for many different reasons. For example, having enough time to process the L2 may enable learners to notice aspects of its structure that had previously gone over their heads. Learners may also notice an item if it is particularly frequent in the input (Larsen-Freeman, 1976), or, conversely, because its occurrence is so rare that it sticks out from the surrounding language. Learners may also notice a gap in their knowledge due to a variety of affective factors, such as social or psychological distance, status, motivation, or attitude (see Krashen 1977, 1980, 1982; Schumann, 1976). Learners may also notice a gap based on their prior knowledge of how the L2 works in general or how similarly a particular L2 (e.g., Italian) functions in comparison with a typologically close third language (e.g., Spanish). Learners may also notice language because it is made salient in a particular way, for example, by its position in the input, by stress, by its relation to previously known language, or by frequency criteria. Finally, learners may notice gaps if they pay attention to language that is developmentally accessible to them. To summarize, Gass (1997) proposed that the principal function of apperceived input is to "act as a priming device that prepares the input for further analysis" (p. 4).

The second step (which is mediated by the kinds of conversational modifications of the input discussed in section 1.4.1) involves a preliminary analysis of the input. As Gass observed, the most familiar version of the issues treated here is Krashen's (1980) notion of comprehensible input. However, Gass' notion of comprehended input is qualitatively different from comprehensible input in at least two ways. First, the term *comprehended input* represents a hearer's perspective on what makes input understandable, whereas the term *comprehensible input* suggests that input becomes understandable as a result of whatever the speaker does to modify his or her speech. For the purposes of this book, given that CA is based on a hearer's perspective on how talk is done, this is a particularly significant difference. Second, the notion of comprehension is not an either-or construct. According to Gass (1997), "Comprehension represents a continuum of possibilities ranging from semantics to detailed structural analyses" (page 5). Consequently, comprehension is thought to range from a comparatively shallow, semantically based process, during which learners are able to get the general gist of a message, to a deeper,

syntactically based analysis of the structure of the language contained in the input.

The third step, intake, involves the assimilation of apperceived input into learners' preexisting frames of knowledge about the L2. It is at this stage of the model that psycholinguistic processing of apperceived data occurs. However, the nature of the underlying knowledge systems that enable learners to process new input is a matter of some debate. Indeed, the transition from comprehended input to intake is an example of the inherent messiness" of interactionist models of SLA to which I referred in section 1.4.1.

There are at least three theories that address the question of what language is and how it is organized: universal grammar (UG), the information-processing model, and connectionism. I discuss only the first two of these models. In UG, language is seen as an autonomous system of abstract knowledge about the rules of grammar that govern all possible human languages (Chomsky, 1975). These rules consist of so-called universal principles and variable parameters that constrain core grammar. An example of a universal principle is subjacency, which constrains how wh-elements may be moved across bounding nodes in different languages. Parameters, on the other hand, are principles that vary across languages. So, for example, whereas some languages (e.g., Spanish or Italian) are [+ pro-drop] languages (i.e., verbs do not need to have subjects explicitly stated), others (e.g., French or German) are [- pro-drop] languages (i.e., subjects must precede verbs). Furthermore, individual parameters seem to cluster together. Whereas Spanish or Italian allow subject–verb inversion in declarative sentences, French and German do not. Interestingly, this observation about Spanish and Italian and German and French may be generalized to a universalist statement that no [+ pro-drop] language ever allows subject–verb inversion in declarative sentences.

To summarize, from a first language (L1) acquisition perspective, these are very powerful claims. They provide a possible explanation for the relative ease and speed with which L1 acquisition occurs in all normal children. More specifically, it is claimed that all normal human beings are "pre-wired" at birth with an abstract knowledge of what language is and that the bulk of the work of language acquisition is automatically done for the child by a so-called language acquisition device (LAD). An important function of this LAD is to specify the child's innate knowledge of the universal constraints on what a possible grammar is for his or her native language. From this perspective, therefore, input is comparatively unimportant. All that is needed are a few samples of the L1, which then act as a catalyst for subsequent internal processing by the LAD.

Some researchers, notably Gass (1997), maintain that mentalist and social interactionist perspectives on the role and relative importance of input can be reconciled within an interactionist framework for SLA. The problem, however, is that some writers working within the UG tradition, in particular Gregg (1993, 1996), will have nothing to do with such a hybrid position. A potentially more promising alternative to UG, which might therefore be used to explain how apperceived input becomes intake, is the information processing perspective proposed by McLaughlin (1987), Skehan (1998), and others. According to this view, language may be as much memory-based as it is rule driven (Bolinger, 1975). Although NSs certainly have access to a rule-driven system to generate completely new sentences when they have to, they much more frequently access memorized chunks of language, particularly when they are under the normal communicative pressure of doing ordinary conversation. According to Skehan (1998), the differences between these two systems are as follows.

The rule-based system is probably quite compact in its organization. Furthermore, it is likely to be parsimoniously organized, generative, restructurable, and amenable to feedback. Consequently, this system is capable of great analytic precision. However, because the processing demands of this form-focused system are also quite high, NSs and, even more so, NNSs, will not always have the opportunity to use this system in order to encode or decode talk. For this reason, under normal communicative pressure, speaker-hearers may have to rely on an exemplar-based system in order to communicate.

This second system is likely to be highly redundant, to be meaning-focused, and to have limited generative potential. This means that it is not well suited to the expression of precise new meanings. In addition, it is probably not very efficient because learning can only proceed by accumulating context-bound chunks of language, which are unlikely to be amenable to feedback. However, the huge advantage of this system is that the processing demands on speaker-hearers and, in particular, on L2 learners, are comparatively quite low. In other words, it is principally designed to provide fast, easy access to large stocks of relatively fixed, prefabricated phrases.

Skehan suggested that in L1 acquisition, these two systems interact in this way: Initially, language learning is primarily lexical; that is, the child builds up a stock of unanalyzed chunks of language that are deployed in appropriate linguistic contexts. Subsequently, as the child matures, lexical knowledge becomes syntacticized. The child analyzes his or her stock of exemplars in order to express more

precise, personal meanings. Finally, in the last stage of language learning, analyzed language becomes relexicalized in order to make it easily deployable in everyday talk. This gives rise to a dual-mode system, which combines the advantages of both rule- and exemplar-based systems. More specifically, according to Pawley and Syder (1983), (cited in Skehan, 1998, p. 36), when speaker-hearers use expressions such as

I'm sorry to keep you waiting
I'm so sorry to have kept you waiting
Mr X is sorry to keep you waiting all this time

they are producing analyzed talk that nonetheless also incorporates significant amounts of lexicalized chunks of language. More specifically, these sentences may all be derived from a "base" lexicalized sentence stem (LSS), which may be represented as

NP be-TENSE sorry to keep-TENSE you waiting

Thus, according to an information processing account of language, L1 speaker-hearers are constantly accessing this dual system of representing language in order to express themselves fast as well as accurately. In an L2 learning situation, learners may fossilize if they are not pushed in some way to syntacticize initially lexicalized input. If they move on to analyze lexical chunks, L2 learners will also proceed to develop a dual system of language storage and use. It is by appealing to this dual processing system that learners turn apperceived input into intake (see chapter 7 for a possible example of a learner orienting to such a structure).

The fourth step in Gass' (1997) model, integration, interacts rather closely with intake. According to Gass, after apperceived input has been processed to become intake, this new knowledge may either become incorporated into the learner's interlanguage, or it may be put into storage for subsequent integration at a later date. More specifically, a learner may do one of four things. First, he or she may confirm or reject a hypothesis about how the L2 works during the intake phase and incorporate this new knowledge into his or her grammar in the subsequent step of integration. Second, the learner may seem not to use the input at all. This occurs when the information contained in the input has become intake and has thus already been integrated into the learner's grammar. What is important about this possibility is that this kind of input is useful for strengthening or reconfirming prior hypotheses. Furthermore, it enables learners to automatize retrieval

of L2 knowledge for production. Third, the learner may store incompletely processed input until an opportunity presents itself for further clarification. Last, the learner may not use a particular piece of input at all. That is, the input exits the system and is not used further, perhaps because the learner did not succeed in understanding the input in any personally meaningful way.

Finally, the fifth step in the model is output (Swain, 1985, 1995). Output is commonly understood to be an integral part of the acquisition process because learners can get feedback from interlocutors on the validity of the hypotheses they have formed during the intake step of the model (hence the feedback loop from output to intake in Fig. 1.1). In addition, output is thought to play an important role in forcing learners to switch from a semantic to a syntactic mode of L2 processing. That is, it may force learners to analyze the syntactic structure of the message they wish to express, thus ultimately contributing to the goal of speaking precisely, accurately, and appropriately. Thus, because production entails a knowledge of syntax (however preliminary), there is a feedback loop to the enabling factor of negotiation, which is what allows learners to obtain comprehended input in the first place.

1.5. CONCLUSION

In this chapter, I have outlined three important hypotheses in SLA studies. The discourse hypothesis and the social interaction hypothesis speak most directly to the themes of this book, whereas the interactionist hypothesis goes some way toward synthesizing different strands of SLA research into a greater whole. In the next chapter, I consider what CA is and examine how the use of CA might lead to reconceptualizing some of the basic assumptions about SLA processes that I have just discussed in this chapter.