Inference and Generalizability in Applied Linguistics
Multiple perspectives

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A conversation analytic perspective on the role of quantification and generalizability in second language acquisition

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This chapter develops a methodological critique of quantitative, experimental approaches to input and interaction in mainstream, cognitive SLA from the qualitative perspective of ethnomethodological conversation-analysis-for-second-language-acquisition (CA-for-SLA). The chapter illustrates the substantive and methodological insights that may be gained from using a single, deviant case analysis approach to understand how language learning behavior is organized. This analysis also highlights issues such as the role of inferencing in the interpretation of data and problematizes the extent to which mainstream SLA studies are in a position to make valid generalizations about the function and organization of repair in language learning.

Introduction

I begin by reviewing the literature on the Interaction Hypothesis in second language acquisition (SLA) studies and then develop a methodological critique of experimental approaches to SLA on the basis of insights drawn from the field of conversation analysis (CA). The empirical analysis that follows of a learner's use of a rare, possibly unique, example of a particular type of Counter-Question in SL classroom talk highlights some of the substantive and methodological insights that may be gained from using a single case analysis approach to "conversation-analysis-for-second-language-acquisition" (CA-for-SLA) (Markee 2005). This analysis also highlights issues such as the role of inferencing in the interpretation of data and problematizes the extent to which SLA studies are in a position to make valid generalizations about the function and organization of repair in language learning. I conclude by outlining
what the prospects are for a grounded experimental approach to the study of repair in SLA.

A conversation analytic perspective

The interactionist hypothesis: An overview

This chapter aims to offer a social constructivist (and hopefully constructive) critique of how we conceptualize, and do, SLA research on social interaction. Let me first acknowledge the depth, breadth, and dynamism of what – for want of a better description – I will call "mainstream" SLA studies during the past 25 years. For present purposes, the story begins with Hatch (1978), who argued that "one learns how to do conversation, one learns how to interact verbally and out of this interaction syntactic structures are developed" (p. 404). This remarkable statement of the Discourse Hypothesis (see also the work of Peck 1978, 1980; Sato 1986, 1988) continues to influence SLA studies to this day. More specifically, drawing on Hatch's ideas, Krashen (1980, 1981, 1982, 1985) developed the first theory of SLA (Monitor Theory), whose most important and enduring tenet was the Input Hypothesis. That is, Krashen suggested that learners learn SLs by being exposed to language that is slightly beyond their current level of competence – so called "comprehensible input" or "I+1".

In Krashen's work, I+1 is a static concept: it washes over learners, who pick up new language from contextual clues. However, in Long's work on the Interaction Hypothesis, comprehensible input is something that learners actively have to get for themselves (1980, 1981, 1983a, 1983b, 1985a). They do this by initiating a variety of conversational repairs with their native speaker (NS) or non-native speaker (NNS) interlocutors (Long 1983a; Long 1983b; Varonis & Gass 1985a, 1985b). Repair categories include comprehension checks, clarification requests, confirmation checks, and a variety of less commonly used categories, such as verifications of meaning, definition requests, and expressions of lexical uncertainty (Porter 1986). The function of repairs is to make initially incomprehensible talk progressively more understandable to learners as they attempt to negotiate meaning (Pica, Doughty, & Young 1986).

Repairs occur more frequently in NS-NNS talk than in native speaker-native speaker (NS-NS) interaction (Ellis 1985; Long 1980, 1981b, 1983b; Pica & Doughty 1985) and more frequently still in non-native speaker- non-native speaker (NNS-NNS) talk (Long & Porter 1985). Furthermore, two-way tasks promote more repairs than one-way tasks (Doughty & Pica 1986; Long 1980; Pica 1987). Convergent tasks also trigger more repairs than divergent tasks (Duff 1986). Moreover, unfamiliar tasks promote more repairs than familiar tasks, and unfamiliar interlocutors repair their talk more often than familiar conversational partners do (Gass & Varonis 1984). In addition, more repairs occur in groups made up of people from different L1 backgrounds (Varonis & Gass 1985b). Mixed-gender groups engage in more repairs than same-gender groups (Gass & Varonis 1986; Pica, Holliday, Lewis, & Morgenthaler 1989. See also Long 1989, 1990; Long & Porter 1985; Pica 1992 for reviews). And more repairs occur in groups made up of mixed proficiency levels as opposed to groups in which learners are of the same proficiency (Yule & McDonald 1990). Note also that classroom-oriented research by Foster (1998) suggests that the occurrence of repairs may not be a function of task type so much as whether learners are put into pairs rather than small groups. According to this latter scenario, there is a great deal of variation at the individual level on whether repairs are initiated at all. When repair initiations do occur, they seem to occur more frequently in dyads than in small groups.

The opportunity to plan also seems to lead to greater negotiation (Crookes 1989; Foster & Skehan 1996; Mehnert 1998). Furthermore, task complexity, structure and processing load all have an impact on learners' performance (P. Robinson 1995; Skehan & Foster 1997). This body of research, combined with related work on language produced during small group work as opposed to lockstep work (Bygate 1988; Pica & Doughty 1985; Long, Adams, McLean, & Castaños 1977) has culminated in various empirically-based proposals for task-based language teaching (Long 1985b, 1989, 1991; Long & Crookes 1992, 1993; Nunan 1993; Pica, Kanagy, & Falodun 1993).

A key extension of the Input Hypothesis has been proposed by Swain (1985), who argues that learners also need to produce comprehensible output in order to move on from merely getting the semantic gist of what is being said to producing new language that is syntactically analyzed. Krashen's rebuttal of the output hypothesis notwithstanding (Krashen 1989), this position has received considerable empirical support in recent years (see Carroll & Swain 1993; Gass & Varonis 1994; Kowal & Swain 1994; Pica 1987, 1992; Pica, Holliday, Lewis, & Morgenthaler 1989; Shehadeh 1999; Swain & Lapkin 1995). Comprehensible output is currently thought to serve three main functions: (1) it promotes the "noticing" of new linguistic forms by learners; (2) it enables learners to test hypotheses about how the SL works; and (3) it also serves the metalinguistic function of allowing learners to control and internalize linguistic knowledge (Swain 1995).

In its latest version, the Interaction Hypothesis (IH) focuses on the role of attention, awareness, a focus on form, and the function of negative feedback in SLA:
It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner's developing L2 processing capacity, and that these resources are brought together most usefully, though not exclusively, during *negotiation for meaning*. Negative feedback obtained through negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language-specific syntax, and essential for learning certain specifiable L1-L2 contrasts. (Long 1996:414, emphasis in the original) More specifically, contrary to the position adopted by Krashen (1985, 1989) and VanPatten (1988) that learning is a sub-conscious process, Kormos (2001), Schmidt (1990, 1993, 1994), and Schmidt and Frota (1986) suggest that adult SL learners must consciously notice or “appceive” (Gass 1988, 1997) new language forms in the input in order for it to become available for learning. Support for this position is provided by theoretical and empirical studies on enhanced input (Doughty 1991; Sharwood-Smith 1991, 1993). This work suggests that subjects who focus on both form and meaning do better than learners who focus on isolated grammatical forms. Support for this position is also provided by classroom research (see, for example, Harley 1989; Lightbown & Spada 1990; Tomasello & Herron 1988; White, Spada Lightbown, & Ranta 1991) on the relative merits of what Long (1988, 1991) has called a focus on *form* (= learners paying attention to linguistic form in the process of engaging in meaning-oriented talk) rather than *forms* (= learners working on language as a decontextualized system; see also Doughty & Williams 1998; Murano 2000; Spada 1997; Williams 1999).

The role of negative feedback as a possible factor in second language (SL) learning has also become an important issue in SLA studies. Arguing from a Universal Grammar (UG) perspective, Gregg (1984, 1993, 1996) and White (1987, 1989, 1991) have cast doubt on the theoretical importance of *i+1* in SLA. Indeed, White suggests that what learners need is not so much comprehensible input as *incomprehensible input*, and that positive evidence alone cannot serve as the sole means of destabilizing learner’s interlanguage. Citing the example of different adverb placement rules in French and English, respectively, White (1991) argues that NSs of French learning English as a SL will not encounter any input in English that specifically prohibits verb-adverb-direct object strings (for example, “Je bois toujours du café” = translation: “I drink always coffee” = translation into standard English: “I always drink coffee”). SL learners thus need negative evidence to tell them that such a construction does not work in English (see also Birdsong 1989).

Research on the function and efficacy of negative feedback began with work on the effects of error correction on learner output (Brock, Crookes, Day, & Long 1986; Chaudron 1977, 1987, 1988; Crookes & Rulon 1988; Lightbown & Spada 1990; Salice 1981; Spada & Lightbown 1993; White 1991; White, Spada, Lightbown, & Ranta 1991). Later work has tended to focus on the relative effectiveness of different types of implicit and explicit negative feedback, particularly recasts and reformulations of the input (Doughty & Varela 1998; Gass 1997; Long, Inagaki, & Ortega 1998; Lyster 1998; Lyster & Ranta 1997; Mackey & Philp 1998; Nicholas, Lightbown, & Spada 2001; Oliver 1995, 1998, 2000). While the jury is still out on the precise role played by negative feedback in SLA, it is likely that such feedback facilitates SL learning, and may also be necessary for learning some L2 structures (Long 1996).

**A critique of mainstream work on SLA**

As I have already noted, the body of research spawned by the IH is impressive. And yet... there are various epistemological, methodological and substantive issues that remain unanswered. For present purposes, I couch my discussion of the issues in terms of Schegloff’s (1993) critique of attempts to quantify social interaction.

Despite the noteworthy contributions of Hawkins (1985) and Swain and her associates to the formulation of the IH, qualitative research is dramatically under-represented in SLA studies. The scarcity of CA studies is especially noticeable here, because the concept of repair is borrowed from CA (see Jefferson 1987; Schegloff 1979, 1991, 1992, 1997a, 1997b, 2000; Schegloff, Jefferson, & Sacks 1977). However, this situation is now beginning to change. Two early studies by Gaskill (1980) and Schwartz (1980) on SL repair have been followed up in the last few years by a spate of CA-for-SLA work (see Firth & Wagner 1997; Kasper 2002; Kasper & Ross 2001; Markee 1994, 1995, 2000, 2003, 2004a, 2004b, 2005a, 2005b; Mori 2002; Seedhouse 1997, 1999; Wagner 1996; Willey 2001). Other writers have also used CA techniques—for example, van Lier (1988), or, more recently, Lazaraton (2003, 2004), who labels her work “microanalysis” — but do not claim to be doing CA per se. CA techniques have also been used by researchers who frame their work in terms of sociocultural theory (Ohta 2001a, 2001b), systemic grammar (Young & Nguyen 2002), or, potentially, variationist approaches to SLA (Tarone & Liu 1995). Finally, the work of Koshik (2002a, 2002b, 2003); Lerner (1995), McHoul (1978, 1990) and Olsher (2001) on the structure of classroom discourse is also relevant to CA-for-SLA research.
These developments are an encouraging step in the right direction. But this body of research is still dwarfed, both in size and influence, by a longer, better established and, above all, a predominantly experimental, tradition in mainstream SLA. Now, CA-for-SLA does not have an inalienable right to have a seat at the SLA table: it has to demonstrate that its insights are relevant and useful to SLA studies. Some of the pertinent issues have already been vigorously debated (see the exchanges between Firth & Wagner 1997 on the one hand, and Gass 1998, 2001; Kasper 1997 and Long 1997, 1998 on the other). Here, I review the issues in terms of the numerator, denominator, significance, and domain problems identified by Schegloff (1993), which all affect the possibility of meaningful quantification of social interaction in SLA studies.

The domain problem

It is a fundamental tenet of the IH that "free conversation is notoriously poor as a context for driving interlanguage development ... in contrast, tasks that orient participants to shared goals and involve them in some work or activity produce more negotiation work" (Long 1996:448). Let me now restate this claim in CA-for-SLA terms to highlight certain problems: (1) Ordinary conversation and institutional talk (specifically, classroom talk) are observably different speech exchange systems; (2) classroom talk provides better structural opportunities for SLA to occur than ordinary conversation because the repair practices that participants orient to as they do classroom talk provide qualitatively better opportunities for learners to notice new forms and to negotiate meaning; (3) classroom talk provides a greater number of opportunities than ordinary conversation does for learners to engage in such noticing and negotiation. I fully agree with the first of these propositions and have called for just such a research agenda (Markee 2000). CA originally focused on the study of ordinary conversation, which may be glossed as "casual, social talk that routinely occurs between friends and acquaintances, either face-to-face or on the telephone" (Markee 2000:24). Over time, it has also come to encompass the study of institutional talk such as news, medical, courtroom and classroom talk (see, for example, Boden & Zimmerman 1991; Button 1991; Clayman & Heritage 2002; Drew & Heritage 1992; Heath 1989; Heritage & Roth 1995; McHoul 1978, 1990; J. D. Robinson 1998; Stivers 2001). CA clearly possesses both the methodological tools and the expertise that are necessary to explicate how speech exchange systems differ one from another.

I am also fascinated by Propositions 2 and 3. However, mainstream SLA and CA-for-SLA both have to confront seven unresolved problems if the implications of these three propositions are to be sustained: (1) Despite the vast amount of experimental research that has been done on the role and function of negotiation in mainstream SLA, few benchmark qualitative studies exist that systematically compare and contrast the sequential, turn-taking and repair practices of (SL) ordinary conversation with those of (SL) classroom talk (Liddicoat 1997; however, see also Kasper 2002). (2) This lack of benchmarks is highly problematic for mainstream SLA, because Proposition 1 is the theoretical foundation on which Propositions 2 and 3 rest. (3) At the moment, mainstream SLA research does not adequately distinguish between ordinary conversation and institutional talk, nor among different institutional varieties of talk (see, for example, Varonis & Gass 1985b). (4) Mainstream SLA studies seem curiously uninterested in documenting and analyzing the observable learning consequences of specific conversational acts by learners. Thus, while the theoretical construct of i+1 may eventually yield interesting insights about SLA as an abstract, aggregated, group phenomenon, we are still rarely offered analyses that show how individual learners actually do comprehensible input in real time, and how such input leads first to understanding and then to learning that is instantiated as comprehensible output, if only in the short term (for an example of such research, Markee 1994, 2000). (5) Until we have a better qualitative understanding of how these speech exchange systems (i.e., domains) are organized, continuing attempts to quantify talk-in-interaction and to generalize from these data will inevitably be premature. To be valid and reliable, experimental work must be properly grounded in prior analyses that explicate how that particular piece of talk was produced at that particular moment in that particular speech event to achieve that particular action. (6) Whatever results of the IH are eventually sustained, current claims concerning the role of repair in language learning posited are likely only generalizable to the domain of instructed SLA, not SLA as a whole. Finally, note that the idea encapsulated in Proposition 1 goes far beyond issues of quantification. It also involves one of the most vexing controversies in SLA studies today.

I am referring, of course, to the question of how psycholinguistic questions of language learning intersect with sociolinguistic aspects of language use. As Long (1997, 1998) correctly notes in his response to Firth and Wagner (1997), social cognitive researchers working within the framework of the IH have conducted a great deal of research on the role of conversational repair in facilitating negotiation. However, in the face of radical, sociolinguistically-inspired critiques of their work by Firth and Wagner (1997) and others, there seems to be a tendency among some prominent social cognitivists to backpedal...
from the logical implications of their earlier work and to retreat into a world of psycholinguistic isolationism. For example, Gass asserts that:

... it is true that in order to examine [changes in linguistic knowledge], one must consider language use in context. But in some sense this is trivial; the emphasis in input and interaction studies is on the language used and not on the act of communication. (Gass 1998:84; emphasis in the original)

This position maintains an untenable distinction between psycholinguistic and sociolinguistic views of language. Of course, Gass is sensitive to such a criticism and softens her position by saying that "views of language that consider language as a social phenomenon and views of language that consider language to reside in the individual do not necessarily have to be incompatible" (Gass 1998:88). Unfortunately, this turns out to be little more than a pro forma disclaimer, because Gass specifies the relationship between studies in SLA and SL use as shown in Figure 1.

Gass finds some of Firth and Wagner’s arguments regarding the scope of SLA puzzling, but her attempts to compartmentalize issues of language use and language acquisition illustrated in Figure 1 are equally odd. An empirically grounded understanding of how learners’ interlanguage knowledge (as this is reflected in and through their talk-in-interaction) progresses from A to B, and what “events promote or hinder such progress” (Kasper 1997:310) cannot be dismissed as a “trivial” issue. It is a crucial foundation for the IH. If this means that advocates of the IH have to accept that language acquisition and use are indivisible components of the SLA enterprise, then this is not to be seen as a threat to the disciplinary integrity of SLA studies. It is a consequence of the IH’s own theoretical interests in social interaction as a resource for SLA. I return to these issues in the empirical and concluding sections of this chapter.

The significance problem

A key assumption of experimental research is that the nature or strength of relationships or claimed differences between treatment effects, etc. must be significant, in the technical, statistical sense of this word. That is, in order to develop a viable mathematical model of hypothesized relationships between independent and dependent variables, we must be able to find enough aggregated instances of a given behavior to be confident that a finding is robust. However as Schegloff (1993) points out, this etic, or researcher’s, perspective on knowledge construction is not the only way of conceptualizing the relevance of analytical findings. As Schegloff (1993:101) memorably declares, “one is also a number” (emphasis in the original). What he means by this is that, from an emic, or participant’s, perspective:

The best evidence that some practice of talk-in-interaction does, or can do, some claimed action, for example, is that some recipient on some occasion shows himself or herself to have understood it, most commonly by so treating it in the ensuing moments of the interaction, and most commonly of all, next. Even if no quantitative evidence can be mustered for a linkage between that practice and that resultant “effect,” the treatment of the linkage as relevant—by the parties on that occasion, on which it was manifested—remains. (Schegloff 1993:101, emphasis in the original)

This position has at least two profound implications for the way in which CA research is carried out. First, the warrant for any analytic claims that are made about how ordinary conversation and institutional talk are organized must be located in the local context of participants’ talk, and explicated in terms of what members understand each other to be doing at the time that they are doing it. Thus, CA work is always based in the first instance on the exhaustive, micro-analysis of single cases of interaction. Second, analyses of collections (= “aggregates of single instances” of, say, second position repairs; see Schegloff 1993:102) may also be carried out. However, since the goal of analysts is to develop a member’s understanding of participants’ behaviors, there can be no such thing as an “outlier,” which may be discarded as unrepresentative of group norms. In order to account for apparently deviant behaviors, deviant case analysis is used to provide a complete account of a phenomenon. The most well known example of this technique is Schegloff’s (1968) analysis of sequencing in conversational openings on the telephone. His first analysis accounted for 499 out of 500 cases in the collection. However, Schegloff reanalyzed the entire corpus to yield all 500 cases of this phenomenon. I return to these issues in the empirical section of this chapter.
These issues are generally not well understood in mainstream SLA. For example, the fact that most CA research does not attempt to present data in a quantified form is seen as an annoying, almost irrational quirk by some writers (see Long 1997), rather than as the product of a principled epistemological stance. Furthermore, in the rush to quantify data that has characterized mainstream SLA studies from its inception, the fact that experimental research in SLA is not without its own problems has largely been ignored (see Markee 2000:Chapter 2).

First, the functional categories of repair used by mainstream SLA research (comprehension checks, clarification requests, confirmation checks, recasts, etc.) are frequently so ambiguous or decontextualized that it is often not clear whether a particular fragment of talk actually constitutes, say, a comprehension check, or a completely different category of repair (Ohta 2001b). The ambiguous nature of these categories is problematic from an emic perspective because it is not clear that members orient to these categories as distinct constructs. And from an etic perspective, the decontextualization of these categories is even more problematic, since experimentation requires that categories used for coding be discrete in order for the subsequent analysis to be meaningful. Varonis and Gass (1985b) have acknowledged this problem (see also how Oliver 1998, 2000 deals with double-coding issues) but this admission does not seem to have dampened the enthusiasm with which these categories are still employed in experimental studies.

Second, mainstream SLAs preoccupation with quantifying SL data as the default mode of analysis has prompted Aston (1986) to point out that a quantitative, “more the merrier” approach to investigating SL repair fails to acknowledge that there may be considerable negative social consequences for members who engage in excessive repair of their interlocutors’ talk.

The denominator problem

Schegloff (1993) explains what the denominator problem is by critiquing a quasi-experimental study that sought to quantify the notion of sociability in terms of how many times per minute subjects laughed during the experiment. After noting that laughter in naturally occurring talk-in-interaction is always a responsive phenomenon, whose quality and placement in the ongoing talk therefore matter in terms of members’ assessments of whether such laughter is affectively appropriate or not, he points out:

If one wants to assess how much someone laughed, to compare it with other laughter by that person or by others, then a denominator will be needed that is analytically relevant to what is to be counted because it is organizationally related to it in the conduct of interaction. And minutes are not.

(Schegloff 1993:104, emphasis in the original)

This suggests that work on repair in SLA that quantifies how often repairs occur without specifying a relevant denominator (for example, the number of repairs that occur per task type) are likely to be premature. This is because the specification of task as a denominator requires prior grounded research to establish whether, for example, one-way and two-way tasks constitute distinct domains. To date, this research has not been carried out in mainstream SLA studies. I return to this issue in the conclusion to this chapter.

The numerator problem

The numerator problem has to do with the raw frequency of a particular behavior in talk. So, to continue our repair example, quantifying the number of repairs that occur in a speech event or aggregation of speech events to find out whether this number reaches statistical significance does not tell us anything about how repair is achieved by participants in and through talk. If quantified data are to be meaningful, we need to understand that the observable absence or rarity of specific types of repair is as pertinent to a comprehensive analysis of repair as their expected presence or frequency in talk. We are in fact required to develop the notion of an “environment of relevant possible occurrence” (Schegloff 1993:106). So, we must have a detailed sequential understanding of where and when an analytic warrant exists for saying that a repair is present, absent, frequent, or rare in a given piece of talk. Again, we can only do this by grounding our analyses of an individual case in the practices that distinguish one speech exchange system from another. I illustrate how to do this in the following section.

Conversation analysis: An empirical example

In the empirical analysis that follows, as required by Kasper (1997), I propose to show that CA can explicate how certain events in classroom talk can hinder or at least delay acquisitionally relevant talk. Furthermore, to connect again with the theme of CA’s stance on quantification and generalizability examined
earlier in this paper, I make this argument by using deviant case analysis to interpret one student’s use of a rare, possibly unique, example of a Counter-Question — that is, a type of question that is inserted, normally by teachers but in this case by the student — between the first and second pair parts of a Question-Answer adjacency pair. Of course, from an experimental perspective, such data would never be used to make generalizations about SLA. But from a CA point of view, it is the very rarity of the example that allows us to develop a deeper strategic understanding of the different rights and responsibilities of members in teacher-student speech exchange systems. It is these deeper strategic insights about the structural organization of talk that are potentially generalizable, not the specific tactics of individual participants in a particular conversation.

Fragment 1 below (see Markee 1995 for a full analysis) comes from a 50 minute undergraduate university ESL class that was video- and audio-taped in 1990. The class, which was discussing the issue of German reunification, was taught by an experienced NS English teacher. The methodology used by the teacher involved task-based interactions mediated through small group work, which provided learners with opportunities to focus on form on an as-needed basis.

During dyadic talk between L9 and L11 that occurred before the interaction reproduced below, L11 had had trouble on two separate occasions trying to work out what the phrase “you pretend to pay us and we pretend to work” means. Note that this prior talk was constructed as a speech exchange system that approximated in many ways the locally organized turn-taking and repair practices of ordinary conversation (Sacks, Schegloff, & Jefferson 1974). That is, although the topics of L9’s and L11’s talk were preset by comprehension questions in the materials, neither participant had a pre-allocated right to take or assign turns or to initiate repairs. However, when we join the interaction at line 09 of Fragment 1, where L9 seeks the teacher’s (= Jane’s) help, we are witnessing the beginning of L9 and L11’s third attempt to resolve this problem (see Appendix 1 for transcription conventions).

Fragment 1

(((L9 and L11 are looking down at their reading materials. L9 is holding the pages of his materials in his right hand, and L11 is leaning his head on his left hand.)))

01 L9: (((L9 leans toward L11)))
02 L9: can [we call jane maybe, ((unintelligible)).
03 L9: X_____________________X
04 (0.3)
05 L11: myeah.
is potentially some trouble at line 43, where she pauses for a full second. She then does a CQ turn of her own at line 44 that rhetorically demands recognition of her status as a NS teacher as the preferred response (note T's use of the heavy contrastive stress on the word "T", the rising intonation through the turn at line 44, and the accompanying, highly emphatic, visual deixis of the hand gesture at line 45). At line 50, L11 begins by reiterating his question by saying "yeah" (a dispreferred, or marked, response). However, after some initial perturbations (note the cut-offs in the first part of this turn), he displays a new understanding of what the teacher is doing in her previous turn and begins to repair his social relationship with T. His first attempt still comes out rather garbled: "I-I-I [dawt]" is not only marked by hesitations and cut-offs, but the word phonetically transcribed as [dawt] may be a first attempt to say "I don't know that", which seems to "come out wrong" under the communicative stress of the moment. In the completion of this turn at line 54, L11 repairs this first attempt by saying "I don't know that see" and achieves the preferred response of acknowledging that he does not know what the word "pretend" means and that he therefore needs T's expert help.

At line 56, T first acknowledges her new understanding and acceptance of L11's clarification by using the change of state token "oh ok" (Heritage 1984) and then, as in lines 31 and 33, moves on in the second part of her turn to redirect the question to other interlocutors, in this case, the rest of the class. This Q turn is again done as a D question, and the rest of the of the talk (not reproduced here) runs off in the canonical QAC order. The actual trajectory of Fragment I can thus be diagrammed as follows:

<table>
<thead>
<tr>
<th>Owner of the turn:</th>
<th>L T L T L T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn type</td>
<td>Q CQ(D) CQ CQ A Q(D)</td>
</tr>
</tbody>
</table>

Figure 3. Trajectory of Excerpt I

From a CA-for-SLA perspective, this excerpt is of considerable analytical interest. Although L11's behavior is unique in the eight classes and approximately 26 hours of classroom recordings that form my database, the analysis summarized in Figure 3 is not a counter-example to the analysis of the underlying practices that govern the speech exchange system extrapolated from the prototypical sequential trajectory shown in Figure 2. In fact, this deviant case analysis demonstrates that teachers have pre-allocated rights to doing specific turns (Q, CQ(D) and A) in QAC sequences and that learners do not have the right to do turns that may be interpreted as CQ(D) talk. Furthermore, if
a student unexpectedly fails to orient to the sequentially located turn-taking
conventions and repair practices of classroom talk, this transgression is an act
which the teacher may censure through the use of a rhetorical CQ(D) turn that
other-initiates repair.

Note also that how participants resolve the ambiguity of which speech ex-
change system they are orienting to at that particular moment in time as they
negotiate that particular repair is a complex issue. For example, the use of
the change of state token “oh ok” by T at line 56 is notable because we know
that this conversational object is characteristic of ordinary conversation, not
institutional talk (Heritage 1984). This is because teachers rarely ask learners
true information questions (Long & Sato 1983). Furthermore, learners tend
to ask teachers very few questions compared to the number of questions
that instructors ask students (Dillon 1981, 1988; White & Lightbown 1984).

Here, T asks L.11 at line 44 a question that is fishing for the preferred answer
that T does know what the word “pretend” means. But the way L.11 actually
does this at lines 50 and 54 is by formulating his answer in terms of his igno-
rance concerning what “pretend” means, not the teacher’s. T then responds at
line 56 by saying “oh ok”, thus exploiting a practice of ordinary conversation
that hearably treats L.11’s answer as new information that she had not under-
stood before. This verbal tactic enables T to end the confrontation and to align
with L.11’s attempt to repair his social relationship with her.

Conclusion

I conclude this chapter with the following six observations. First, we should
note that the disciplinary preference for explanation over interpretation and in-
ference that has characterized applied linguistic and SLA research over the last
30 years is in the process of changing. For example, in their influential call for
a re-opening of the research agenda on SL motivation, Crookes and Schmidt
(1991) issued a call for more qualitative as well as quantitative research on the
issues. Dörnyei (2000) and Dörnyei and Csízér (in press), whose own work
is heavily experimental, have issued similar calls for more situated, process-
oriented accounts of motivation. And McGoorty (1998) has gone even further,
claiming that social constructivist approaches to theory building about lan-
guage learning and use may provide the most interesting sources of insight for
future applied linguistic research. Thus, the issues discussed here are embedded
in a larger discussion of the potential value of quantification in such research.

Second, the empirical analysis of Fragment 1 responds to Kasper’s (1997)
call for CA-for-SLA to show how social events promote or, as in this case, hin-
der the possibility of interlanguage development from occurring. As we have
seen, the social relationship between T and L.11 had to be repaired before fur-
ther language learning-oriented talk could continue. The tactical face-saving
work done in Fragment 1 illustrates the larger strategic fact that classrooms are
social environments as much as they are learning places. This conclusion also
demonstrates how CA-for-SLA can empirically confront Gass’ (1998) theore-
tical claim that language acquisition and language use are distinct aspects of
second language studies. The clear implication of this analysis is that they are
so closely intertwined as to be theoretically inseparable.

Third, despite the great importance that CA attaches to single case analy-
sis, it is important to understand that CA does not a priori deny the value of
a quantitative approach to social interaction. What I have argued in this chas-
ter is that we must develop a rigorous, qualitative understanding of how SL
learning and use are done by participants in order to motivate grounded quan-
titative research (for recent examples of such grounded empirical work in
CA, see Heritage & Stivers 1999; Stivers 2001).

Fourth, in an ideal world, this grounding work would have been done prior
to embarking on a significant program of experimental research. From a purely
pragmatic point of view, we are clearly well beyond the point of being able to
observe any so-called canonical order of doing qualitative research first and
then following up with quantitative research (see also Crookes & Schmidt 1991
on this point). Thus, under present circumstances, CA-for-SLA research has to
take on the unusual epistemological function of confirming, not just generating
hypotheses about SL learning and use (Markee 2000).

Fifth, we must ultimately develop both interpretive and predictive expla-
ations of SLA processes that are coherent in their own terms and that are
also properly informed by each other. Indeed, as Schegloff (1993) suggests,
the social construction of repair is a type of behavior that could in the long
term potentially benefit from follow up experimental studies that have been
properly grounded in qualitative CA work. But we are not there yet and, in
terms of what the future holds for SLA studies, mainstream SLA researchers
who use quantified data can expect to be asked with increasing insistence – as
should qualitative researchers also: see Edge and Richards (1998) – to “show
their warrant” for making claims X, Y or Z.

Finally, I accept that the development of a CA-for SLA agenda is con-
troversial, in that it broadens the scope of mainstream SLA research, challenges
conventional notions of the “proper” relationships between qualitative and
quantitative approaches to scholarship, and also forces us to rethink what and how we generalize from data. At the same time, I wish to argue that the results of such a re-specification of our field will ultimately strengthen SLA studies, not weaken their fundamental disciplinary integrity. Proponents of different versions of SLA should certainly continue to engage in vigorous debate about the strengths and limitations of the research traditions within which we work. Ultimately, however, we are all concerned with explicating the same complex phenomenon of how and why SLs are learned, and it is in this cooperative spirit that the arguments developed in this paper have been offered.

Notes

1. In other words, this is a problem that cannot be solved by better inter-rater/coder reliability procedures.

2. Duff (personal communication, January 31, 2005), suggests that this is perhaps too strong a statement. While the use of true information questions was certainly rare in the early 1980s, there is increasing evidence that language teachers now do ask many more such questions today than they did 25 years ago.

Appendix 1: Transcription conventions

CA transcription conventions (based on Atkinson & Heritage 1984b).

Identity of speakers
T: teacher
L1: identified learner (Learner 1)
L: unidentified learner
L3: probably Learner 3
LL: several or all learners simultaneously

Simultaneous utterances
L1: [huh? [oh] I see] simultaneous, overlapping talk by three (or more) speakers
L2: [what]
L3: [I don't get it]

Contiguous utterances
= (a) turn continues at the next identical symbol on the next line
(b) if inserted at the end of one speaker’s turn and the beginning of the next speaker’s adjacent turn, it indicates that there is no gap at all between the two turns

Intervals within and between utterances
(0.3) (1) = (0.3) = a pause of 0.3 second;
(1.0) = a pause of one second.

Characteristics of speech delivery
? rising intonation, not necessarily a question
! strong emphasis, with falling intonation
yes a period indicates falling (final) intonation
so, a comma indicates low-rising intonation suggesting continuation
go: one or more colons indicate lengthening of the preceding sound; each additional colon represents a lengthening of one beat
no a hyphen indicates an abrupt cut-off, with level pitch
because underlined type indicates marked stress
SYLVIA capitals indicate increased volume
"the next thing" degree sign indicates decreased volume
hmm in-drawn breath
huh laughter tokens

Commentary in the transcript
((coughs)) verbal description of actions noted in the transcript, including non-verbal actions
((unintelligible)) indicates a stretch of talk that is unintelligible to the analyst
..... (radio) single parentheses indicate unclear or probable item

Eye gaze phenomena
The moment at which eye gaze is coordinated with speech is marked by an X and the duration of the eye gaze is indicated by a continuous line. Thus in the example below, the moment at which L1’s eye gaze falls on L9 in line 412 coincides with the beginning of his turn at line 413

412 L1: → X (((L1’s eye gaze is now directed at L9))
413 L9: → X

Eye gaze transition is shown by commas

[X_______,]

The moment at which there ceases to be eye contact (as when a participant looks down or away from his/her interlocutor) is shown by periods

[X_______, . . .]

Other transcription symbols
co[(l)]al brackets indicate phonetic transcription
→ an arrow in the margin of a transcript draws attention to a particular phenomenon the analyst wishes to discuss.
References


