time to make use of negative input, and in the interim will continue to operate with old, as-yet-unmodified hypotheses.

A related phenomenon was observed by Nelson (1980) in a study of intervention input and first language acquisition of tag questions by children. During an observation session, one of the children, a 3-year-old, used a tag question for the first time "20 hours and 37 minutes after the child had last heard an experimenter's use of a tag question." Since the child's parents were reported virtually never to use tag questions with the child, Nelson assumed the original tag question formation occurred, after a considerable amount of elapsed time, as a result of the intervention input.

It is reasonable to assume that if a NNS repeats a supplied form correctly or incorrectly, or uses it in subsequent speech in a TL or non-TL manner, then that supplied form is part of a NNS's intake. On the other hand, it is not reasonable to say that if he or she does not use the supplied form in any way, then the corrective feedback is not part of the NNS intake. Thus, while we have been looking for observable effects of corrective feedback on NNS' ILs, and have not yet found much evidence of such effects, their absence in the short term does not necessarily mean that they do not exist over time.

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12

DEVELOPING BASIC CONVERSATIONAL ABILITY IN A SECOND LANGUAGE: A CASE STUDY OF AN ADULT LEARNER OF PORTUGUESE[1]

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This chapter is a descriptive, analytical study of the development of conversational ability in Portuguese by one subject during a 5-month stay in Rio de Janeiro, Brazil. The chapter attempts to deal with two basic issues: (1) the kind and amount of language that was learned in order to communicate with native speakers, and (2) the ways in which both instruction and conversational interaction contributed to learning the language.[2] The chapter is based on two data sources. The learner, the first coauthor of this paper, hereafter referred to as R, kept a journal throughout his 5 months of exposure to Portuguese, recording whatever seemed on a day-to-day basis the most salient aspects of his learning experience. As in numerous other diary studies, R recorded his experiences and observations only semisystematically, in greater or lesser detail at various times, and with varying time intervals between events and the journal entries reporting them. Some conversational exchanges were written down within seconds, while other events were recorded at the end of a day or even several days after the fact. Many of the entries deal with communication and learning

strategies, hypotheses being formulated concerning the target language, and the degree to which these seemed confirmed or disconfirmed in interaction, issues especially relevant to SLA theory.

Baltra has pointed out that only language learners themselves can be in a position to observe their experiences, but the fact that we cannot observe what goes on in another person's mind should not automatically lead us to assume that we necessarily do know what goes on in our own (Armando Baltra, personal communication). The weaknesses of diary studies are in general well recognized (Bailey and Ochsner 1983). In addition to being idiosyncratic and of dubious generalizability, what they report is subjective, already filtered through the perceptions and possibly the biases of the learner (especially important when the learner is a linguist professionally interested in SLA theory), and exceedingly difficult to verify. With respect to the processes of learning, these are important limitations, since those who believe that language acquisition goes on almost entirely below the level of conscious awareness might argue that one simply cannot observe oneself learning a language (Seliger 1983; Derek Bickerton, personal communication). McLaughlin, Rossman, and McLeod (1983) have argued that introspection and subjective reports are notoriously unreliable and easily mistaken, and as we shall see, R was not able to identify accurately some of the hypotheses and rules that define his Portuguese interlanguage. Even with regard to the products of language learning, there are important limitations to self-report data. Learners cannot say with assurance when their rules and outputs match those of native speakers, cannot be relied upon to identify their errors and areas of difficulty, and may not even be able to report accurately what they have said (still less, what was said by native speakers) on particular occasions.

In order to compensate partially for such weaknesses in the self-report data, the paper also draws upon the evidence from a second, more objective data source, a series of four tape-recorded conversations in Portuguese between the two coauthors, varying from 30 to 60 minutes per conversation, recorded at approximately 1-month intervals. These conversations were unstructured, and covered a range of topics dealing with biography, current activities, and future plans. The tapes were transcribed, errors were identified, and various aspects of the Portuguese noun phrase and verb phrase were analyzed by the second coauthor, a linguist who is a native speaker of Brazilian Portuguese. This analysis is complementary to that which emerges from R's journal, and in the development of the paper there has been an interplay between the data sources, a method recommended by Cohen (1984). Subjective reports in the journal have suggested things to look for in the recorded data, and phenomena initially identified from the conversational transcripts have often been illumintated by comments in the journal. When hypotheses and explanations are offered here, these represent the combined perspectives of the learner and the native speaker observer.

R's Language Learning History

R's previous personal language learning history, with self-assessments of his proficiency in each language, is summarized below. Languages are listed in descending order of proficiency.

Arabic Arabic is the only language other than English that I have ever been able to speak well. I first studied Arabic in a 6-month intensive audio-lingual course in the United States. This was followed by 8 years' residence (spread over a total of 12 years) in Egypt and Lebanon, during which I also studied intermittently with private tutors. I was evaluated and assigned official FSI ratings twice: after finishing the initial course, I was rated an FSI S-1+; after 2 years of exposure, I was rated an FSI S-3+. I'm not sure of my final level of attained proficiency, since while I was very comfortable in the language there were still things I had trouble expressing, especially in higher registers, and still gaps in my comprehension. I have always thought that the reason I learned Arabic quite well (which most English speakers I knew in the Arab world did not do) was that I made a point from the beginning of making friends who were monolinguals: whatever was to be said had to be said in Arabic. For the past 8 years, I have neither spoken nor heard Arabic except for a few brief encounters with native speakers.

French I studied French for 3 years in high school and a year in college, but my competence in French is almost entirely passive. I attribute this mainly to patterns of interaction developed in Lebanon. Many Lebanese are bilingual in Arabic and French and prefer to speak French with foreigners. I therefore heard a lot of French during the period in which I was committed to improving my Arabic, and it was not uncommon for me to have long and detailed conversations in which I spoke only Arabic and my interlocutor spoke only French, both of us unable or unwilling to switch. To this day, I am extremely inhibited about speaking French, and I'm not sure what kind of French I would produce if I had no way to avoid trying.

Japanese I have never studied Japanese, but I have lived with several native speakers and made four trips to Japan, varying between a week and a month. I know about 100 vocabulary items in Japanese and perhaps a dozen formulaic expressions, only one of which (subject-wa NP desu) is at all productive. My comprehension is poor, and I can only rarely get the gist of overheard conversations.

German I studied German for one semester in graduate school, with intensive cramming before taking a foreign language proficiency exam and almost zero retention thereafter.

Dutch, Italian, Greek, Hebrew, Farsi These are all languages I have been exposed to only as a tourist, in each case picking up a handful of expressions and vocabulary items for survival and temporary use.

Portuguese (predeparture exposure) I did not study Portuguese before going to Brazil, because my trip was not planned far in advance and final confirmation came less than 2 weeks before I boarded a plane. However, during the 6 weeks immediately preceding my departure, I was teaching a course in comparative grammar in which students worked in groups several times a week, each group eliciting facts about a particular language from a native speaker. One of the languages investigated was Portuguese, and my intention was to spend as much time as possible with the Portuguese group. For practical reasons, it did not work out that way, but I did spend approximately 3 hours listening to students elicit sentences for grammatical analysis from the Portuguese informant. What I got from that was an idea of the basic sentence structure of Portuguese, a handful of vocabulary items (which tended to be repeated over and over in various manipulations of sentences), and a general familiarity with the sounds of the language. Portuguese sounded familiar when I arrived in Brazil.

Instruction and Interaction in Portuguese

R arrived in Brazil with virtually no ability in Portuguese and was unofficially tested 20 weeks later at the S-2 level on the FSI scale.[3] In describing the development of R's command of Portuguese during his stay in Brazil, we have for convenience divided the period of exposure into three unequal stages, defined according to distinct patterns of interaction and instruction: stage 1, 3 weeks (–instruction) and (–interaction); stage 2, 5 weeks, (+instruction) and (+interaction); and stage 3, 14 weeks, (–instruction) and (+interaction). These three stages, which will be discussed first in terms of R's subjective reports in the journal, are indicated graphically in Figure 1, which indicates the period of instruction and the dates of the unofficial FSI exam and the conversational recordings. The amount of interaction at each stage is represented impressionistically, although the points at which increases in interaction are shown are keyed to specific changes mentioned in R's journal.

Stage 1 During the first 3 weeks in Brazil, R had no instruction and almost no interaction in Portuguese. R began his journal in the middle of the second week. The first entry summarizes his experiences up to that point:[4]

Journal entry, Week 2

P and I [R was accompanied by his teenaged son for the first 6 weeks in Brazil] arrived in Rio 10 days ago after an overnight flight from New York. We didn't see anyone to meet us, but had no difficulty getting through customs, into a cab, and across the city to the hotel . . . where we had reservations. After we checked in, D called . . . [and shortly after] arrived to take us to lunch with her family . . . It's a polyglot family . . but the only languages spoken that afternoon were English among the adults and Portuguese with the kids. Of course I didn't understand a word [of the Portuguese]. I noticed that when D talked to her son, she frequently asked *já?*, and he always replied *já*, but I don't know what that means. My dictionary [Berlitz 1982] says "adv., at once, immediately, already."

Week
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

T1 T2 T3 FSI T4

[–instruction] [–interaction]   [+instruction] [+interaction]   [–instruction] [+interaction]

– – – – – = instruction

[hatched box] = interaction

T1,2,3,4 = conversational tape recordings
FSI = FSI oral interview exam

FIGURE 1 Patterns of Instruction and Interaction Over a 22-week Period

Sunday we all got together again . . . and went to a soccer game at the Maracanã. Besides enjoying the game I tried to decipher the banners hung around the stadium. French gave me some clues, and I could figure out that they were advertising banks, insurance programs and government health clinics.

Monday . . . I went to the Consulate and met the folks who administer the Fulbright program. Got some information on Portuguese classes available and went immediately . . . to sign up . . . Unfortunately, we will have to wait [3 weeks] until classes begin. In the afternoon, I went to the university and met a few of the English staff I'll be working with . . . . I met a member of the French section, and she spoke to me in French and I spoke back in English, which gave me a vivid flashback to days in Beirut. I was really surprised a moment later when she was talking to D in Portuguese and mentioned *Senhor Fulano*, which must mean "Mr. so-and-so," a loan from Arabic. I also met J . . . [who is] in charge of an exchange program which brought about a dozen American undergraduates to the university a month or so ago. J suggested that I sit in on their classes. However, it turns out that they have all studied Portuguese for two or more semesters before coming to Brazil . . . The course I could sit in on is the tail-end of a rapid grammar review. I know that's not for me, although J said, "why not? You're a linguist."

Other than that, P and I have been alone almost all the time we're been here . . . We've been spending a lot of time at the beach, which requires no language, and exploring the neighborhood, which requires very little more. When we want to go somewhere, I ask at the hotel desk first, repeat whatever I was told to the cab driver, and read the meter to see how much it cost. Buying necessities and eating require a bit more. The night before we left Honolulu, X and Y gave me a dictionary and a phrase book [Figueiredo and Norman 1979], both pocket-sized, and I carry them everywhere. So when I went to a pharmacy the second day I could ask for *pasta de dente* instead of just pointing at the toothpaste. When a clerk says how much something costs, I try to understand the price (so far I cannot) before handing over a bill I've already calculated to be more than enough. . . Unfortunately, the phrase book is meant for Portugal, not Brazil . . . and I think that might turn out to be a major

problem. My solution in restaurants: order something I don't know, and I'll know what it is the next time. I've been frustrated at breakfast, though, because the waitress always brings my coffee with milk, which I detest. She always asks first: *café com leite?* and I've tried saying *leite não*, meaning that I want it black, but it still comes with milk or not at all.

So far I have noticed very little about the language. One of the first things P and I learned was our room number (202). One desk clerk pronounces "2" as [dois] and the other says [doish] . . . I wonder if that's geographical or social or free variation. I immediately noticed that Portuguese "r" is frequently [h], as in *rua* ("street"), *correio ("mail"), and the first one Arpoador,* the neighborhood where we are staying. It's satisfying being able to say those words, and very easy because Arabic also has post- and inter-vocalic [h], but I suspect that I'm probably not matching the phonetic value for Portuguese very closely.

I have the textbook for Portuguese 1 [Abrue and Rameh 1972] and I've been studying it in the evenings and at breakfast, reading through the dialogues and doing all the exercises . . . except for the greetings in Chapter 1, which P and I have practiced and use with everyone we encounter, so far I cannot make any connection between what I'm reading in the text and the noise I hear around me.

During the remainder of stage 1, virtually all of R's journal entries report noncomprehension of Portuguese and a strong sense of frustration at not being able to break into the language system:

Journal entry, Week 2
Even though I can't start class yet, I'm trying to find a way to get going on the language. Not much luck! There's a TV in the lobby. While that might be culturally interesting, I've been giving my students the line for years that you can't begin to learn a language from television, and I'm not going to waste my time sitting in front of it . . . P came up with something that might turn out a bit better. There is an FM station that plays two English songs every night . . . with translations into Portuguese after every phrase. The translator has a magnificent, resonanat voice . . . Portuguese is certainly a beautiful language. I'm going to stick with this show for a while, even though so far it hasn't taught me anything. The first problem is that I find it difficult to understand the English lyrics to songs. When I can understand the English, I can't hold even a phrase in memory if I'm trying to listen to the Portuguese at the same time.

Journal entry, Week 2
I *hate* the feeling of being unable to talk to people around me. I'm used to chatting with people all day long, and I don't like this silence. Language is the only barrier, since it is certainly easy to meet Brazilians. I've noticed that it is acceptable to ask anyone on the street for a cigarette. It . . . appears to have no relationship to age, sex or class. Last night an attractive and obviously respectable young woman, accompanied by her boyfriend, stopped me and bummed a cigarette. If I take a pack to the beach, it disappears within an hour, so that's 20 people I could have met. . . . Today P and I were at the beach, a guy came up for a cigarette, sat down and wanted to talk. He asked if I were an American and I said *sim*. He said something I didn't comprehend at all, so I didn't respond. He said, "well, obviously communication with you would be very difficult" (I *did* understand that, though I can't remember any of the words now), and left.

Journal entry, Week 3
The first department meeting was today . . . It started off well, and I actually got the gist of the first topic . . . about university personnel policies and changes in the requirements for appointment and promotion to various ranks (*níveis*, my word for the day). No doubt I understood that much because it's all too familiar in my own work, and the chairperson had a clear diagram on the blackboard. However, after that topic was closed, I did not understand another word for the remainder of the meeting, which dragged on to 9 p.m. I am totally exhausted. The only observation I can report is that turn-taking rules for meetings in Brazil are different from those in the U.S. There was a great deal of overlap among participants, and the general atmosphere was a lot rowdier than what I'm used to.

Journal entry, Week 3
Just came back from [a sidewalk café], where I finally had something close to a conversation with someone . . . another nonnative speaker . . . a linguist, half Chinese, half Spanish, who works on comparative Romance phonology somewhere in France. . . . I was amazed that I could understand a fair bit of what he said. He spoke slowly and with difficulty and it didn't sound like Portuguese, but French. . . .I said very little, and I guess it was about a third English, a third French and a third Portuguese, but words only. No Portuguese sentences I am sure . . . . Now I must break out of the trap I'm in. I want to be fluent in Portuguese by the time I leave here, and I want to get started. Krashen is absolutely right that native speakers are generally unable or unwilling to provide comprehensible input to beginning nonnative speakers. I wouldn't waste my time talking to someone who knew as little English as I know Portuguese. I know some people prefer to wait and get settled before tackling a language, but in my case this silent period has been maddening and against my will. I can't wait for class to start on Monday.

Stage 2, which we have characterized as (+instruction, +interaction), begins with R's starting formal lessons in Portuguese and, almost simultaneously, beginning to meet and interact with native speakers. R's first day in class was perceived by him as successful:

Journal entry, Week 4
P and I started class yesterday. There are 11 in the class (of various nationalities). The teacher is young and very good. She introduced herself to us (in Portuguese): I am X, my name is X, I am your teacher, I am a teacher, I am a teacher of Portuguese, I'm also a teacher of English, I'm from [place], I'm single, I'm not married, I don't have children, I have a degree in applied linguistics, etc. She went around the class, asking the same kinds of questions: what's your name?, where are you from?, what kind of work do you do?, do you have children?, etc. Most of the students could answer some of the questions, e.g., I know what my title is at the university. Everyone was rapidly picking up new things from the others' answers. For the rest of the class, we circulated, introducing ourselves to each other and talking until we exhausted the possibilities. At the end of the class, X put the paradigm for SER on the board, plus a few vocabulary items. Great! This is better than *bom dia* and then silence. . . . I'm sure I'll be asked all those questions thousands of times before I leave here. So I went out last night and talked to four people. It worked, and I'm invited to a party tomorrow night. Of course I quickly ran out of things to say and quickly stopped understanding what people said to me, but that just makes me eager to get back to class.

R's second class day was much less satisfying:

Journal entry, Week 4
A half hour into the class, X showed up and pulled me out. There's a new section of the intensive course that's just opened and if I want I can move. I said yes . . . and went to the new class, which was already in session . . . . When I sat down, a drill was in progress. SER again, which must be every teacher's lesson one. Teacher asks, student responds: *Você é americana?* ["Are you an American?"]; *Sou, sim* ["I am, yes"]. When it was my turn the question was *Você é casado?* ["Are you married?"], so I said *não*. L corrected me: *sou, sim*. I objected: *eu não sou casado*. L said [in English], "We are practicing affirmative answers." I objected again, I'm not married, and L said, "These questions have nothing to do with real life." My blood was boiling, but I shut up. The remainder of the class was choral repetition of the first conjugation verb FALAR: *falo, fala, falamos, falam*, over and over. I didn't like that much either, and when it was my turn to perform

individually I tried to put the forms in sentences: *eu falo português* ["I speak Portuguese:], *você fala inglês* ["you speak English"]. L did not appreciate that at all. What a sour start! But I think I will stick with it. There are only three students in the class, and the other two are as eager as I am. . . This class will give me almost twice as many hours a week as the other one, and L says we will cover about twice the material I would get in that course. So I guess I can remember that I am not the teacher here, try not to provoke L too much, and make the best use of the resources that I get.

Although R was never happy with the methodology and techniques used in the class, he found that it improved with time:

Journal entry, Week 6
L and I are still giving each other a hard time. Today in class, K's sentence in a substitution drill had a negative before the verb, followed by *nada*. I wanted to find out whether other double negatives are possible, so when it was my turn I said *eu não conhecia ninguèm* ["I didn't know anyone"]. This wasn't the sentence I was supposed to produce. I don't remember whether L corrected me to *alguém* or not. I only remember her annoyance that I was not performing the drill as I was supposed to, so I didn't find out what I was after. But in general, the class is OK now, even though much too structured. We start out every day with "what did you do yesterday?" and always end with "what are you going to do today after class?" In between, we have the structures of the day, each beginning with explanations and a few examples and far too many drills. I don't mind the drills as much as at first, but I will not say sentences which I don't understand, so I ask a lot of questions. This has not endeared me to L, but I think we are now getting to the point of grudging mutual respect. I have to admit that whenever we are doing anything except drills she does have a superb ability to monitor our conversations and adjust up or down as appropriate. . . Maybe that's possible if you are teaching a beginning class. Most of the native speakers I'm meeting outside of class don't come very close. I also like L's stories, most of which are quite clever. And she doesn't overburden us with rules. . . We have a text [Magro and DePaula 1981], but it's basically an exercise book, with very few explanations. We don't use the text much, and when we do, L skips around.

During stage 2, R started making Brazilian friends with whom he conversed only in Portuguese. At the beginning of this stage, he could converse for only a few minutes, but by the end of stage 2 he could carry on a conversation for several hours, although he depended on patient and helpful conversational partners to do so. There was also an important limitation in whom he would attempt Portuguese conversation with, which never completely disappeared. During this stage, he was comfortable only speaking Portuguese with monolingual native speakers:

Journal entry, Week 6
I also understand [P's] reluctance to speak to me in Portuguese, since I find it strange to speak Portuguese to English speakers also. . . . Night before last, J had a party for the American exchange group, my first chance to meet most of them. I was very impressed by the fact that they all spoke mostly Portuguese all evening, even though there was no one present who couldn't speak English. I tried to go along with it as far as I could, but I'm so limited in what I can say that I couldn't maintain it.

Journal entry, Week 7
S and I made the first recording today for our project. I felt very strange at first, because this was absolutely the first time we have ever talked to each other in Portuguese . . . . This is somewhat different from my difficulty in using Portuguese with native speakers of English. In that case, it's just so much easier to say it in English that it's hard to avoid switching. But with native speakers of Portuguese who are English teachers . . . I am ashamed to show my ignorance of their language when they speak mine so well. With monolinguals, it's different: we are equally ignorant of each other's language and I feel no embarrassment at all. So S and I talked in English right up to the moment she turned the tape-recorder on. Then it was fine. It was good to find that I wasn't as embarrassed as I expected to be, in fact quite comfortable.

In addition to going to class, R used several strategies to try to enhance his learning:

Journal entry, Week 7
Since we don't have a real grammar book . . . I've been organizing my own, mostly verb tables, vocabulary lists, and whatever comes up in class that's interesting. I review these every day on the bus. I've started reading the *Journal do Brasil*, but it's beyond me, so about half the time I buy the English paper instead . . . . A few times I've bought *Última Hora*, a tabloid, which I find I can read with better comprehension . . . . I still carry my dictionary, but it seldom answers my questions. Too many of the entries are just cognates with English, with no indication of how the meanings vary. This a.m., A came by and kept talking about the *cohenteza* at the beach. I knew from context that he must mean "undertow" or "riptide," but I didn't know which, so I tried to look it up. It took me a while to realize that the spelling must be *correnteza*. I have no trouble pronouncing a word with "rr" as [h], but I usually get fooled going from the pronunciation to the spelling. When I figured that out, I found that the dictionary only has *corrente*, "current," which was less informative than what I had already figured out.

Journal entry, Week 7
Last night we [the members of the Portuguese class] and L's other class went to a Japanese restaurant in Copacabana . . . an official exercise in communication outside of the class . . . . The event went well . . . . I was proud of myself because I managed to produce a couple of instances of *tão* + adj. and *mais do que* constructions [comparatives], which is what we practiced in class yesterday morning. K noticed it, and said she was impressed because she never remembers to use in conversation what we learn in class. I think it's easier for me because I've been making it a habit, and . . . simply because I have fewer resources [than K] to draw on. Whatever I can get, I need.

By the end of the course (50 hours of instruction in all), R was satisfied that he had gotten the foundation he was looking for:

Journal entry, Week 8
Today was the last day of class. X sat in, and she and L agreed that after the between-term break [of one month] I should register for Portuguese 3, not 2. I put less stock in X's evaluation, because I think she was influenced a lot by the joke I told in class . . . X didn't realize that I had written out the joke at home using my dictionary, memorized it and practiced my delivery. However, L knows my ability, and seems satisfied. I am also satisfied . . . . When I started the class I could hardly say anything to anyone. Now I am at least at the point where I can get conversations going and stay in the conversation if my interlocuter is patient enough. I've certainly met a lot of people in a short time, and although the communication breaks down with frustrating regularity the friends that I've been making have been helpful in getting things started up again. Some, like A, are quite sensitive to the problems I have in expressing myself, while some like H are pretty hopeless . . . . I'm confident that I can get along without class for a while.

Stage 3 R planned to reenroll in a Portuguese language class when the next term began, but after the first day of class decided to drop out and try to learn the language through interaction alone:

Journal entry, Week 12
Portuguese 3 met for the first time this morning. From my point of view, it's a disaster. The first sign that things were not going to be perfect was when I arrived and found 17–18 people outside a classroom that only holds 10. K was there and told me . . . Portuguese 4 had been cancelled and everyone is being put into one class. When we were re-located to another room, things started off with the obligatory introductions. The first student to speak was housewife, native speaker of Spanish, who has lived in Brazil for 8 years and wants to polish her grammar. I saw C . . . [who has] acted in Brazilian theater. For the group as a whole, the average length of residence in Brazil seemed to be about 4 years . . . I do not belong in this group. The class started off with a discussion of the imperfeito vs. perfeito . . . Then Y said we would do a communicative exercise. She got us into groups of three and passed out pictures. The exercise was for each of us to make up three sentences about our picture, using the present subjunctive. I have no idea how you make the present subjunctive or any other subjunctive . . . What really bothered me most was that Y speaks so rapidly that I didn't understand much of what she said at all. She apologized for it, said that everyone tells her she speaks much faster than most native speakers, but she can't control it. I don't know what to do about this situation. I have the option of going back to Portuguese 2, but I might be bored there . . . . I'm tempted to drop completely . . . I'm doing pretty well outside of class, meeting people constantly, speaking Portuguese 2–3 hours every day and I think learning something from almost every interaction . . . Even if I stick with this class, I'm going to miss at least a third of the meetings because of workshops I've got scheduled. That sounds like a rationalization to me. Am I going to feel guilty if I drop out? What are my goals? . . . . Would I rather get up early to go to class, or . . . stay out very late at night partying, with Brazilians, in Portuguese? An obvious choice. I have until Monday to change my mind, because that's when I have to pay my tuition.

During stage 3, R continually increased the circle of friends with whom he spoke only Portuguese. Throughout this stage, he continued to feel that he required interlocuters who were not only patient but also talented at communicating with native speakers, although on occasion he also felt that he needed less help than friends had become used to providing:

Journal entry, Week 11
H and I ate dinner at Caneco 70. He complained non-stop about his job. I tried to say "you don't seem comfortable" with the job: *sinto que você não está comfortável,* and his face showed complete non-comprehension. I grabbed my dictionary. "Comfortable" is *comfortável,* but it flashed through my mind that perhaps you can only say chairs are comfortable, not people. A few minutes later H said something with *não deve.* I was taught DEVER as "have to" or "must," and I've been thinking that *não deve* + Verb would mean "don't have to" and *deve não* + Verb would mean "must not," but H's remark obviously meant "should not." So I learned something, but in general H is a terrible conversationalist for me. He doesn't understand things I say that everyone else understands. When I don't understand him, all he can ever do is repeat.

Journal entry, Week 12
V and I were waiting for the bus when A spotted us and came over and talked for a few minutes. After he left, V complained that A speaks very simplified Portuguese to me and speaks much too slowly. I . . . protested that I have really needed slower than normal speech. However, it's true that I now understand almost everything A says to me . . . I need more challenge than this, new blood. Perhaps I should propose the vampire principle for SLA.

Journal entry, Week 18
Last night I was really up, self-confident, feeling fluent . . . At one point, M said to F that she should speak more slowly for me, but I said no, please don't, I don't need it anymore.

Although R was conscious that most Brazilians modified their speech for his benefit, he was also impressed by the fact that they did expect him to learn Portuguese. He was constantly encouraged by friends, but also frequently corrected and criticized for errors:

Journal entry, Week 10
X and Y, both Americans married to Brazilians, talked only in Portuguese. I remarked to X that this seemed quite unusual to me, but he commented that almost all foreigners living in Brazil learn Portuguese quickly and well. I find this a different attitude from what I've encountered in other countries. Perhaps it's because Brazil attracts many immigrants, not just expatriates who work a few years and move on.

Journal entry, Week 16
I had a conversation with Y, the manager, who said my Portuguese seems to be coming along. She then said that she learned Portuguese perfectly in three weeks after she arrived here from Italy 20 years ago.

Journal entry, Week 20
Last night I met X, who's just come back from Argentina. Before we were introduced, I overheard M and U talking to X about me at the other end of the table. X: *ele fala português?* ["Does he speak Portuguese?"]; U: *fala mal* ["He speaks poorly"]. M said I make lots of mistakes, and mentioned *marida* and *pais.* X saw me looking at them and said: *mas você entende tudo?* ["But you understand everything?"] I was annoyed and wanted to let them know I had been listening, so I replied: *entendo mal também* ["I also understand poorly"].

During the last few months of his stay in Brazil, R increased his use of Portuguese in spurts. In the fourth month, he made several trips to other cities with friends and spoke only Portuguese for 3 to 4 days at a time. During the last month, he shared an apartment with a monolingual native speaker. R felt that the most significant expansion of his interaction and ability in Portuguese came when he began spending most of his free time with an informal social group of Brazilians:

Journal entry, Week 17
Two weeks ago, M took me to a sidewalk restaurant in Copacabana to meet some friends. I've been back almost every night since . . . . Between 11 and 1 about 20 regulars show up for dinner. Everyone knows everyone, and there's lots of moving about and putting tables together. Later, smaller groups split off, either to party in someone's apartment nearby or to go dancing. I've seen a lot of sunrises, and I think I've found a place where I can really fit in. They have welcomed me, and there's a critical mass of very intelligent people whom I find very stimulating. The people I've met so far have been mostly writers (journalists, novelists) or theater people (actors, producers, directors). It's a big challenge. Part of the problem is cultural . . . . The language problem is severe. I frequently get so exhausted trying to keep up at least with the main topic of each conversation that I just drift off for a while. In spite of that, I've felt positively euphoric since I started to hang out there.

At the end of his stay in Brazil, R summed up what progress he thought he had made, and attributed a large part of his improvement in Portuguese to interaction with this group:

Journal entry, Week 22
The area where I think I've made the steadiest progress is comprehension. There are still plenty of things I cannot follow and even television is still difficult . . . but I am not so discouraged anymore. Even when my Arabic was at its best, I still couldn't follow NS-NS conversations a lot of the time. I think the biggest help has been interacting with lots of people regularly at Trattoria. There I don't restrict myself to highly negotiated one-on-one conversations, but really strain to understand what everyone is saying. When I do get lost, usually someone will notice and will negotiate me back in . . . Last night was my last there, and also M's birthday. Z had champagne sent to our table and N and E made short speeches. . . . U, who has been the harshest critic of my Portuguese, said I've improved a lot and my Portuguese is now almost as good as her English.

As time progressed, R was more able to carry on conversations in Portuguese even when English was available as a much easier means of communication:

Journal entry, Week 16
O and Q came by about 9 for the trip to a samba club out of town. V decided to come along, and while we were waiting for our ride she insisted that we speak only Portuguese all evening. I agreed. It was a strange feeling, because of the dozen in our group more than half were English teachers from [a language institute], but . . . with this group, maybe I can manage it so that it's English at work, Portuguese after dark.

Journal entry, Week 19
Z showed up with N and Y. His head was freshly shaved, because yesterday was the last shoot of the prison film he's acting in. I found out that he lived in New York for five years and has acted off Broadway. I'm glad I didn't know that before, or I probably would have spoken English with him. As it was, we did not switch to English even after I discovered his English is probably nearly perfect.

However, R's use of Portuguese throughout his stay in Brazil was exclusively for social, not professional purposes. He lectured on applied linguistics at a university in Rio de Janeiro and gave workshops at various institutions for language teachers, but always in English. He felt that he could not have carried out these functions in Portuguese, even at the end of his stay:

Journal entry, Week 11
Being simultaneously translated today was a new experience, but I'm glad I didn't attempt the paper in Portuguese . . . . I saw T before the conference and he was in a panic . . . told them he could do it in Portuguese and wished he hadn't. Shortly after my presentation, X gave her paper on Amerindian Linguistics. It was excellent, and I really admire her bravery and ability. I was surprised to find that I could understand her talk completely . . . the first clear example I've had of the superior comprehensibility of Portuguese spoken by another English-speaker. Almost made me feel I could have done it myself, though I know I could not have. I was even nervous fielding questions in Portuguese after my presentation (I replied in English), and I know I misinterpreted at least one of them.

Journal entry, Week 20
The last few meetings of the English section have been mostly in Portuguese . . . . D told me that before I arrived the meetings were always in Portuguese but some members of the staff thought they should not be, and my presence was a good excuse to switch. Now they think I know enough at least to follow. I do not . . . . I don't have the vocabulary for talking about academic subjects, and I still cannot follow conversations at full speed when Brazilians are talking to each other . . . in a group melee, I have to focus my full attention on the overall topic . . . if I once lose track of what's being talked about I'm lost.

WHAT WAS LEARNED? LINGUISTIC ANALYSIS

In describing the development of R's Portuguese from a linguistic point of view, we are hampered by the fact that there has been very little research describing other second or foreign language learners of Portuguese. We will identify some areas of ease and difficulty for R, but we do not know the extent to which he will have ultimately been seen to be typical of adult learners of Portuguese. Some of the grammatical features that were learned by R with difficulty may turn out to be problems for all learners; others may later be seen to have been idiosyncratic problems of just this one learner.

Table 1 presents accuracy data (percentages of correctly supplied forms in obligatory contexts) for 17 grammatical features of the Portuguese simple clause at two times. Conversation tape 1 was recorded during R's seventh week in Brazil (fourth week of instruction); conversation tape 4 was recorded during R's last week in Brazil (week 22), the end of a 14-week period of interaction only. While we are aware of the various objections raised against morpheme counting in second language acquisition research (Hatch 1983: 44–57) and agree that these numbers do not tell the whole story, an array such as that in Table 1 has several advantages. It allows us to succinctly characterize some of the most noticeable features of R's interlanguage. While Table 1 shows some improvement in grammatical correctness over time, R's interlanguage at both the earlier and later stages recorded was characterized by a strong tendency to make errors in the use of articles, the copula, and (to a lesser extent) prepositions. The accuracy figures presented in Table 1 also allow us to make some comparisons with a study by van Naerssen (1980) on the acquisition of grammatical constructions in Spanish (the constructions are similar, though not identical, in Spanish and Portuguese). Van Naerssen collected data on 15 first-year college students of Spanish as a foreign language whose native language was English and scored the following grammatical constructions: present indicative tense, perfect past tense, imperfect past tense, adjective/noun number agreement, and the copulas SER and ESTAR. We started with the same list of constructions but have broken down several of them into subcategories and have added categories for prepositions and articles, in order to give a slightly more comprehensive picture of the grammar of the Portuguese simple sentence.[5]

TABLE 1 Accuracy Ratings (Percentages of Correct Forms in Obligatory Contexts) for 19 Grammatical Features of the Portuguese Simple Sentence

	Tape 1	*Tape 4*
Noun-phrase features:		
Noun gender (phonological shape)	98% (182/186)	99% (132/134)
Gender agreement, articles	95% (105/111)	96% (184/191)
Gender agreement, premodifiers	79% (23/29)	92% (95/103)
Gender agreement, adjectives	78% (59/76)	94% (45/48)
Noun-adjective order	92% (36/39)	97% (38/39)
Adjectives, number agreement	95% (75/79)	92% (55/60)
Prepositions	70% (139/199)	77% (201/260)
Definite article	66% (91/137)	67% (122/181)
Indefinite article	40% (10/25)	56% (52/93)
Verb-phrase features:		
Regular verbs, correct conjugation	99% (89/90)	98% (162/165)
Irregular verbs, correct form (not regularized)	99% (74/75)	100% (294/294)
Number agreement, regular verbs	99% (89/90)	94% (155/165)
Number agreement, irregular verbs	99% (74/75)	99% (292/294)
Person, regular verbs	92% (83/90)	95% (156/165)
Person, irregular verbs	99% (74/75)	99% (290/294)
Choice of tense: present	99% (119/120)	97% (204/210)
Choice of tense: perfect past	80% (28/35)	92% (85/92)
Choice of tense: imperfect past	85% (11/13)	74% (34/46)
Copula	44% (39/88)	54% (60/111)

Noun Phrase Features

Gender In Portuguese and Spanish, articles, other premodifiers, and adjectives (which generally follow the noun) agree with nouns in both number and gender. For Spanish as a foreign language, van Naerssen reports that (1) students had little difficulty with initially choosing the gender of the noun to be modified, (2) gender agreement was more difficult than number agreement, and (3) students perceived the masculine form to be the basic form for adjectives. These three conclusions apply also to R's learning of Portuguese. R appears to have perceived the masculine form of adjectives to be basic, possibly because there are more O-nouns than A-nouns in Portuguese (Raymond Moody, personal communication): 19 of R's 20 adjective gender errors (on the two tapes combined) consisted of using a masculine adjective when a feminine one was required. R also showed better accuracy in inflecting adjectives for number than for gender (95 vs. 78 percent on tape 1).

R also showed little difficulty in initially choosing the gender of the noun to be modified, although a consideration of this issue has led us to examine some additional aspects of Portuguese gender and ultimately to view gender as a multidimensional rather than a unitary phenomenon. The gender of the noun in a Portuguese phrase such as *a comida brasileira* ("Brazilian food") is indicated in three ways, all realized by *-a* in this example: the choice of the feminine article

a, the phonological shape of the noun (the vast majority of nouns ending in *-a* are feminine), and the feminine singular adjective *brasileira* (the masculine form is *brasileiro*). In determining R's initial choice of noun gender, we found that the criteria of phonological shape and accompanying article both had to be considered. Both have been shown to be important in the first language acquisition of languages with grammatical gender (Slobin in press: 9, 41), but neither alone tells us unambiguously whether R acquired the gender of a noun. Reliance on articles alone as a criterion may underestimate the learner's knowledge, because R frequently omitted them but sometimes indicated elsewhere in the data (for example, by providing a correctly inflected adjective) that he indeed knew the gender of a particular noun. Phonological shape as a criterion may overestimate the learner's knowledge, because some nominal endings do not betray gender or may be misleading (for example, there are exceptions to the generalization that nouns ending in *-a* are feminine).

Table 1 suggests that phonological shape is the more important factor in R's acquisition of gender, consistent with the data from Romance language L1 studies. R almost always got the phonological shape correct, even at the beginning, and also identifies almost all the errors he did make as nouns that he had never heard in Portuguese but was simply guessing, attempting to transfer an English cognate, e.g.: *gramático comparativo* as an on-the-spot translation of English "comparative grammar" (Portuguese is *gramática comparativa*); *diária*, based on English "diary" (Portuguese has *diário*, though in context the correct word was *memórias*). The single error not of this type is identified by R as a performance slip, a momentary confusion between two nouns with different genders: *tango* (the dance) and *tanga* (Brazilian-style bikini).

Selection of an appropriate masculine or feminine article was only slightly more difficult for R than remembering the phonological shape of nouns. Both were much easier than adjective agreement. We do notice a difference over time in those article errors which R did make. On conversation tape 1, R showed some variation in article gender even when the phonological shape of the noun was fixed: tape 1 contains both *da guerra* (correct) and *o guerra* (incorrect), *a PUC* (correct) and *no PUC* (incorrect). By the time of tape 4, R was consistent in the articles he used with particular nouns and, possibly because the phonological rhyming pattern had gotten stronger, he was more likely to make errors when the phonological shape of the noun was misleading. Three of the seven errors on tape 4 were nouns ending in *-ema* or *-ama*, which are of Greek origin and always masculine in Portuguese. R misinterpreted them as feminine nouns, based on the final *-a* alone.

In addition to articles, other determiners and premodifiers in Portuguese must also agree with the noun in number and gender. We computed accuracy figures for gender in premodifiers other than articles separately, partly to see if there might be evidence suggesting whether the discrepancy between gender agreement of articles (relatively easy) and adjectives (relatively difficult) derives from the contrast between pre- and postmodification or possibly, as

suggested by Slobin (in press: 9), from the storage of nouns with co-occurring articles once these are learned. The latter suggestion seems more plausible in light of the accuracy figures presented in Table 1. Gender agreement with determiners such as *todo/a* ("every"), *muito/a* ("many"), etc., as well as with the possessive pronouns *meu/minha, seu/sua,* etc., was much more difficult than article agreement, and the numbers for gender agreement of premodifiers and adjectives are almost identical on both tapes.

Noun-adjective order Van Naerssen reports that learners of Spanish as a foreign language had virtually no problem learning the order of nouns and adjectives. R also had little difficulty producing Portuguese constructions in which adjectives follow the noun rather than precede as in English. R may have found this aspect of Portuguese syntax easy because in Arabic, his strongest L2, adjectives also follow the noun. However, if it turns out that second or foreign language learners of Portuguese in general have little difficulty with noun-adjective pairings, as we suspect is the case, this may be contrasted with the fact that Portuguese-speaking learners of English do have problems with the English order, producing constructions such as *sons and daughters adopteds*, on the Portuguese pattern. A handy explanation for this one-way transfer may be found in the suggestion of numerous SLA scholars that L1 patterns that are marked are unlikely to be transferred (Krashen 1983, Zobl 1980, Kellerman 1978). With regard to noun-adjective order, Portuguese is unmarked and English marked, since a consistent SVO language places nominal modifiers such as adjective, genitive, and relative clause after the noun, while OV languages do the opposite (Greenberg 1963, Lehmann 1978).

Examination of the errors that R did make in this category indicates one possible conditioning factor. Half of the errors were translations of proper nouns (adjective-noun compounds) in English, e.g., *média este* for "Middle East" (Portuguese is *Oriente Médio*); *festa de novo ano* for "New Year celebration" (Portuguese is *ano novo*).[6]

Prepositions Prepositions, which typically involve numerous lexical and syntactic complexities, are difficult in any language; so it is no surprise that prepositions were more difficult for R than any other feature of the noun phrase discussed so far, with accuracy figures of 70 percent for tape 1 and 77 percent for tape 4.

The error rates of 30 percent on tape 1 and 23 percent on tape 4 conflate two types of errors, omission and incorrect choice of preposition. (There are also a few "extra" prepositions on both tapes, which are not included in the figures in Table 1.) On tape 1, R omitted 18 percent (35/199) of all obligatory prepositions. There are a few cases in which transfer from English is the suspected culprit, since there are some verbs that are simple transitives in English but require prepositions before the object in Portuguese. One such verb is GOSTAR ("like"), which R used six times on tape 1, always without its required preposition *de*. Most omissions of prepositions are not susceptible to a transfer explanation, however, since in the majority of cases English and

Portuguese both require a preposition. When R did provide prepositions, another 15 percent (25/164) were incorrect. Again, some of these errors are susceptible to a transfer explanation, e.g., *ao fim de mês ("at the end of [the] month"),* where Portuguese requires *no* ("in"), but other errors occur when English would have been a reliable guide, e.g., *Hawaii é do Pacífico,* "Hawaii is of the Pacific," where both English and Portuguese require "in." Other errors arose when R simply had not mastered a distinction between two Portuguese prepositions (especially *a* vs. *para*) for which English has no parallel distinction.

By the time of tape 4, R showed greater control over Portuguese prepositions when he used them: 93 percent (201/206) of the prepositions he used were correct. But his tendency to omit prepositions altogether continued unabated. Although the verb GOSTAR was used another six times on tape 4, with the preposition *de* correctly supplied five of those six, R's overall rate of preposition omission of 17 percent (44/206) showed virtually no improvement from tape 1.

Articles Articles posed major problems for R in his acquisition of Portuguese. As indicated in Table 1, R's accuracy rates for definite and indefinite articles on tape 1 were only 66 and 40 percent, respectively, and showed only slight improvement on tape 4. In fact, if the figures for definite and indefinite articles are summed, R's overall accuracy rate increased only from 62 percent on tape 1 to 63 percent on tape 4.

Errors of omission and incorrect choice are again conflated in Table 1, but in the case of articles, omission was overwhelmingly the problem. Of the total of 161 article errors on the two tapes analyzed, 155 (96 percent) were errors of omission, while only six were incorrectly chosen articles (definite where indefinite was required in all cases).[7]

R deleted the definite article in all environments, including those in which an article is required in both English and Portuguese, e.g., *diretor de centro cultural americano* ("director of [the] American cultural center"), but as Table 2 indicates there are two respects in which the Portuguese definite article posed particular learning problems for R.

TABLE 2 Percentage of Definite Articles Supplied in Obligatory Contexts with All Nouns, Following Contracting Prepositions and Preceding Place Names

	Tape 1	*Tape 4*
Definite article, all nouns	66% (91/137)	67% (122/181)
After contracting prepositions	45% (21/47)	68% (63/93)
Before place names	28% (9/32)	66% (41/62)

Geographical names (neighborhoods, cities, states, countries) and some other proper nouns (such as names of institutions) cause difficulties because these usually do not require articles in English but usually do in Portuguese. The

information required is lexical in most cases; e.g., if one lives in the city of Rio de Janeiro (which takes a definite article, *o Rio*, though most cities do not), one must learn individually whether one lives *em Copacabana* ("in Copacabana," no article), *no Leblon* (masculine article), *na Barra da Tijuca* (two feminine articles), etc. In other cases, the rule is more general; e.g., all names of countries except for a half dozen exceptions do take an article.

On tape 1, R did not distribute the articles he used randomly but produced specific nouns consistently either with or without an article. Of all place names that appear more than once on tape 1, there are only two (*Egito, Japão*) that appear both with and without an article. There are four nouns (*o Brasil, o Rio, os Estados Unidos, a PUC*), all taught in class, which R invariably produced with their obligatory definite articles. All other place names (including *Hawaii*, which appears 12 times on tape 1) were consistently produced without any article.

The problem with articles that follow prepositions, on the other hand, is less a problem of lexical knowledge than one of automatizing a complex psycholinguistic procedure. In order to produce a simple Portuguese sentence such as *eu gosto do Brasil* ("I like [of the] Brazil"), a speaker/learner must: (1) realize that the verb GOSTAR requires the preposition *de*; (2) identify *Brasil* as a noun that must be preceded by the masculine definite article *o*; and (3) contract the preposition with the article (or re-retrieve the contracted form from memory). There are five common prepositions that contract with the article (*de, em, a, por, para*), and on tape 1 R seldom managed the contraction with any of them.

By the time of tape 4, R's particular difficulty with articles before place names seemed to have disappeared. Most nouns that R produced on tape 1 without an article showed some variation on tape 4 (e.g., *Hawaii* appeared again 16 times, 6 times with the required article and 10 times without), while most new place names and other proper nouns and other proper nouns had been learned with their accompanying articles, which were used consistently. There are a handful of new geographical nouns that R had learned without any article, e.g., [o] *Flamengo*, a neighborhood name about which R commented:

Journal entry, Week 22
S and I did our last taping today. I think it went very well, and it was fun to do. We were both relaxed and joking, but I was still aware of monitoring a lot (as she could tell), especially my articles. I know one I missed: Flamengo. I just asked M if it takes an article and he said yes, *você mora agora no bairro do Flamengo* [you live now in the Flamengo district].

R's specific difficulty with articles following contracting prepositions also seemed to have been resolved with time, except for the contraction *para* + *o* = *pro*, which he never produced correctly. The result of improvement in these two troublesome environments was not, however, a general improvement over time in supplying required definite articles. R continued to omit a third of all obligatory definite articles, but we are unable to identify any further conditioning factors that might explain this.

The case of the indefinite article, which R omitted even more frequently than the definite article on both tape 1 and tape 4, is even more puzzling. Although the Portuguese indefinite article is less regular in its use than the definite article (Thomas 1969: 35), a contrastive analysis between English and Portuguese would not predict wholescale omission of the indefinite article. Most of the striking differences between Portuguese and English involve cases where English requires the article and Portuguese omits it, e.g., before nouns denoting profession, religion, and nationality; before unmodified nouns in the predicate; and after negatives. Yet R never made L1 transfer errors such as *você tem um carro*? ("Do you have a car"), incorrectly supplying an indefinite article where Portuguese disallows it.[8] We find no apparent conditioning factors for R's omission of the indefinite article,[9] nor do we know if he is typical of second language learners of Portuguese in this regard. We do have two hypotheses to suggest, which might be resolved by comparisons with other learners with different backgrounds:

1. R was well aware that Portuguese speakers of English make errors in English constructions such as *she is doctor, he has car.* Observing that Portuguese sometimes omits articles that English requires, R may have unconsciously decided not to bother much with providing them. (This was not a conscious strategy.)

2. R's strongest L2, Arabic, has no indefinite article. R subjectively felt that his Portuguese was greatly affected by transfer from Arabic, and this would explain why R deleted the indefinite article more frequently than the definite. While we hesitate to claim syntactic transfer from a third language, R recorded several of his own errors that seem to have no reasonable explanation other than transfer from Arabic:[10]

Journal entry, Week 5
Today in class I talked about hanging out at Caneco 70, and L corrected my pronunciation to *setenta* ["70"]. I realized that I have been saying [sittenta]. That's from Arabic, a clang association. Portuguese *setenta* sounds closer to me to Arabic *sitta* ["six"] than it does to Portuguese [Rio] *sete* ["seven"], which is pronounced [seči].

Journal entry, Week 5
I'm beginning to wonder if I have English stored in one part of my brain and Arabic in another. If so, I'm putting Portuguese where the Arabic is. Or maybe I've got a translate-to-foreign-language program. Arabic words slip out of my mouth at the darndest times, not when I realize that I don't know a Portuguese word and am groping, but just automatically, fluently, unreflectingly. This morning in class I said *yimkin* [Arabic, "perhaps"] without realizing it wasn't Portuguese until L looked at me and signalled noncomprehension. Now I know the word: *talvez*. It even sounds Arabic, rhymes with *ma'leesh* [Arabic, "never mind"]. Weirder still, a few moments later we did a drill with nouns and adjectives and I said *as moças as bonitas* ["the women the [sic] beautifuls"]. L corrected me immediately, but I knew at that instant that it was from Arabic. I can see the logic in it. In Arabic and Portuguese adjectives follow the noun and agree in number and gender, so if Arabic reduplicates the article before the adjective then Portuguese must too. But I didn't think any of that *before* I said it. Maybe schema theory fits it best: top-down processing, filling in the Arabic schema once it's been activated by what I know so far about Portuguese.

Verb-phrase Features

Conjugation class, person, number Van Naerssen has discussed areas of difficulty in verb forms for college learners of Spanish and concluded that the choice of the appropriate tense was most difficult, followed by the use of correct person, while choice of the correct conjugation class caused relatively few problems (van Naerssen 1980:150). While van Naerssen presents no figures for precise comparison, these general conclusions also hold for R's learning of Portuguese.

As indicated in Table 1, R made few errors of conjugation class, and also seemed little tempted to regularize irregular verbs by assigning them to a regular conjugation. On tape 1, R made one error of each type, both of them in the same phrase: *no pensia* [PENSAR, first conjugation, should have been *pensava*] *que via* [irregular VIR, should have been *vinha*] *à América Latina* ("I didn't think that I would come to Latin America"). The single error of conjugation class that occurred on this tape was the same one that R had recorded having made one week earlier in class:

Journal entry, Week 6
The paradigm [the imperfect] is also straightforward, more regular and less confusing than the pretérito, although maybe not as easy as I first thought. In class I produced *pensia*, which is incorrect . . . . I treated a first conjugation verb as a 2nd/3rd.

On tape 4, R made a few more conjugation errors, but no errors of treating an irregular verb as a regular one. There is no apparent pattern to the substitutions of one conjugation for another; for the three errors recorded, the substitutions were first for third, third for first and third for second.

Correctly inflecting verbs for person (first vs. second/third[11]) was more difficult for R than either choosing the correct conjugation class or inflecting for number, at least for regular verbs. On tape 1, R made seven person errors on regular verbs (92 percent accuracy), as opposed to one each for number and conjugation class. We have two suggestions for why person inflections are more difficult than number inflections. First, in the singular, there is no stable correspondence among vowels of the personal inflections across tenses. For example, for first conjugation verbs, the singular inflections for the present and the perfect past are:

	Present	Perfect
First person	-o	-ei
Second/third person	-a	-ou

Second, there is a discourse-based difficulty in the learning of person markers on verbs. As we will discuss more fully in the following section, one normally

responds to a yes/no question in Portuguese by repeating the main verb or auxiliary of the question. When the question refers to the hearer (or speaker), the personal endings must be changed in the response:

1.386–387

S:	Você gosta de clube?	You like [second/third singular] clubs?
R:	Gosto, gosto.	Like [first singular], like.

One of R's typical strategies for answering questions was simply to repeat some part of the question with declarative intonation, without any other change. When first and second person subjects were involved, this led to error and, we suspect, to further confusion between verb forms.[12]

Choice of tense Choice of tense (only three are considered here: the present, the perfect past, and the imperfect past) caused more problems for R than person, number, or conjugation class. In her study of learners of Spanish as a foreign language, van Naerssen was able to conclude that the imperfect is easier than the perfect for foreign language learners (van Naerssen 1980:151–152). This conclusion does not seem warranted in the case of R's acquisition of Portuguese. On the first conversational tape, R had 85 percent accuracy for the choice of imperfect vs. 80 percent for the perfect, but on tape 4 this was reversed, with 92 percent on the perfect but only 74 percent for the imperfect.

There are several reasons that may account for the fact that our results are not the same as van Naerssen's. First, our scoring systems may have been different. Van Naerssen implies that errors of person and number as well as tense choice were counted in the scoring of the three tenses. We have not counted person and number errors (reported in the previous section) in this category. If we had done so, our figures would be shifted generally in the direction of van Naerssen's findings, since there are no person errors in the imperfect (the singular person endings for the imperfect are identical in the spoken Portuguese of Rio). Second, there appear to be discourse factors that affected R's use of the imperfect on tape 4 which might not have affected van Naerssen's subjects, who were responding to specific oral exam questions. Many of R's errors in the imperfect (cases where he should have used the imperfect but did not) were substitutions of the present tense in stories and descriptions, contexts that might elicit the historical present in English. Third, if we focus solely on the issue of choice of one of the two past tenses, perfect vs. imperfect (the distinction here is really aspect, not tense), we do not find as van Naerssen did that only the perfect replaces the imperfect. In R's Portuguese, either of the two past tenses may substitute for the other.

Looking more closely at the contrast between the imperfect and perfect past tenses, we have found that one of the assumptions of most morpheme acquisition studies (as well as displays such as that in Table 1), that grammatical morphemes are learned sequentially and apply generally to all relevant members of a category, does not hold. We assumed, on the basis of comments in R's journal, that he would probably vary his use of perfect and imperfect forms of

particular verbs, with the choice on specific occasions determined by some simplification of the complex semantics involved:

Journal entry, Week 6
This week we were introduced to and drilled on the imperfect. Very useful! The basic distinction [between perfect and imperfect] seems straightforward enough: *ontem eu fui ao clube* ["yesterday I went to the club"] vs. *antigamente eu ia ao clube* ["formerly I used to go to the club"].

Journal entry, Week 12
The class started off with a discussion of the imperfect vs. perfect, with C eliciting rules from the class. She ended up with more than a dozen rules on the board . . . which I am never going to remember when I need them. I'm just going to think of it as background and foreground and hope that I can get a feel for the rest of it.

Britto (1984) has called the Portuguese aspectual system wildly complicated and inconsistent. However, the basic distinction between perfective and imperfective is reasonably clear-cut. The imperfect indicates a nonpunctual structure (durative, iterative, or habitual), while the perfect is either punctual or indicates that none of the aspectual information given by any element in a structure is being taken into account. R's initial strategy for breaking into this system (in fact a very reasonable first approximation, although he had no conscious awareness of what he was doing) was, first of all, lexical. Verbs that appeared frequently in R's speech did not vary between the two past tenses. Instead, R settled on one of the two past tenses (i.e., one aspect in the past) for each individual verb, and used that form consistently. The figures are presented in Table 3.

TABLE 3 Distribution of Perfect and Imperfect Past Tenses among Lexical Verbs That Appear More Than Once per Conversation Tape

	Tape 1	*Tape 2*	*Tape 3*	*Tape 4*
Verbs in perfect only	5	6	8	17
Verbs in imperfect only	2	3	1	4
Verbs in both perfect and imperfect	1	2	1	1

As Table 3 shows, on tape 1, of eight verbs that R used more than once in one of the past tenses (frequencies range from 2 to 13 per conversational tape), seven (88 percent) appeared in only one of them, and only one showed variation. The figures are similar for the other three tapes, and also remarkably consistent over time. There were 29 verbs that R used more than once on the four tapes combined, with frequencies ranging from 2 to 38. Of these, 24 verbs (83 percent) occurred consistently in just one of the past tenses, and only five showed any alternation at all, either within a single tape or across the series.

There is the further question, of course, of why particular verbs were assigned to an aspectual category. We have considered two hypotheses, either of which might explain how a lexical strategy resulted in much better than random contextual accuracy: the semantics of individual verbs, and the

frequency of those verbs in input from native speakers. The distinction among semantic classes of lexical verbs fits the data better. The five verbs that appear exclusively in the imperfect (ESTAR, "Be"; PENSAR, "Think"; QUERER, "Want"; TER, "Have"; and SABER, "Know") are all statives, while of the 19 that appear exclusively in the perfect almost all are dynamic verbs (e.g., COMPRAR, "Buy"; CONVIDAR, "Invite"; FALAR, "Speak"; IR, "Go"). There are two verbs in the [+ perfective] category, VER ("See") and OUVIR ("Hear") which are statives, but these can be considered in past tense usage as punctual (nondurative), activity verbs.[13]

Copulas SER and ESTAR The copulas SER and ESTAR were difficult for R (44 percent accuracy on tape 1 and 54 percent accuracy on tape 4), as would be predicted by several models of second language acquisition. Since Portuguese obligatorily distinguishes between two verbs on semantic grounds while English has only one, a contrastive analysis such as that proposed by Stockwell, Bowen, and Martin (1965) identifies the choice as occupying the highest level of difficulty for the second language learner. On the other hand, children learning many different languages frequently omit linking verbs; so an SLA model that generally identifies L1 and L2 acquisition would predict errors of omission.

Van Naerssen found that students of Spanish as a foreign language had a moderately good command of the copulas SER and ESTAR (73.3 percent accuracy) and that there were only two omissions of the copula (total obligatory contexts not given). Once again, our figures are not directly comparable with van Naerssen's, who included tense, person, number, and the semantic distinctions between the two verbs in determining correct use of the copulas. As van Naerssen suggests, perhaps researchers should not try to determine when a copula is acquired as a whole in this way (van Naerssen 1980:150), and we have not. Our figures therefore include only errors of omission of the copula and incorrect choice of the two verbs. In Table 1, these two factors were combined, but they are broken down in Table 4.

TABLE 4 Errors of Omission and Commission in the Use of SER and ESTAR

	Tape 1	*Tape 4*
Correct copula:		
SER	46% (37/81)	55% (51/92)
ESTAR	29% (2/7)	47% (9/19)
SER + ESTAR	44% (39/88)	54% (60/111)
Omissions:		
SER	47% (38/81)	45% (41/92)
ESTAR	29% (2/7)	42% (8/19)
SER + ESTAR	45% (40/88)	44% (49/111)
Incorrect choice:		
SER required	7% (6/81)	0% (0/92)
ESTAR required	43% (3/7)	11% (2/19)
Combined	10% (9/88)	2% (2/111)

Table 4 indicates that R did choose the wrong copula 10 percent of the time on tape 1, but only 2 percent of the time on tape 4. The pattern was for SER to substitute for ESTAR in the present and for ESTAR to substitute for SER in the past. With regard to the basic distinction between the two verbs, R commented:

Journal entry, Week 4
We've started off with the contrast between SER and ESTAR, which I suppose I should expect to cause difficulties. It does not seem that hard, although there are some arbitrary aspects of the distinction. If it's raining outside, that's ESTAR because it's temporary. But if it's 12:15, which seems pretty temporary to me, it has to be SER. My status as a student in this class is certainly temporary, but it has to be SER. L explained that this moment in time will be forever frozen with the label 12:15 and the relationship between student and teacher is enduring. Nice rationalization, but I'm sure I'll do better just paying attention to what people say in specific situations.

While the temporary/permanent distinction does account for virtually all the examples of SER incorrect replacing ESTAR in the present in our data, the problem with SER vs. ESTAR in the past is quite different. As mentioned above in our discussion of perfect vs. imperfect, ESTAR was one of the verbs that R used frequently, always in the imperfect. SER, on the other hand, appeared very infrequently in R's speech in the past and seems to have assigned to neither aspectual category. R was aware of the problem:

Journal entry, Week 6
The last thing he corrected was *estava* [ESTAR + imperfect] *meu aluno* to *era* [SER + imperfect] *meu aluno*. I know I have problems with that. How does a permanent state of affairs become past tense?

Journal entry, Week 19
G told a joke about a former minister who had been fired after only a few days in office. He told the press *não era* [SER + imperfect] *ministro, estava* [ESTAR + imperfect] *ministro*. The joke is clear; he was emphasizing the extreme temporariness of his tenure. What I don't understand is why *era* would be the preferred form in the first place. If it's got to be a form of SER, why not *fui* [SER + perfect]? Would that imply that he was speaking from the dead?[14]

Journal entry, Week 22
In our session S told me she was robbed last week at knife-point. I just told M about that and said *ela tava assaltada*. But I think that should have been made with SER. *Ela foi assaltada? Era assaltada?* Probably not *foi*. I think the only time I've ever heard *foi* as the past of SER is in *foi um barato*.

The above excerpt from R's journal is factually incorrect on two points. *Foi* (perfect of SER, R's third guess), not *estava* or *era*, was the required form. And it is not true that he never heard native speakers say the past tense forms of SER. There are 40 instances of SER in the past (perfect and imperfect combined) in S's speech on the conversational tapes.

Recognizing that some of R's errors in using the Portuguese copula are attributable to confusion between the two verbs, gaps in the paradigms, or nonuse of some forms, omission was nevertheless a much greater problem, one

that did not diminish over the time of this study. R omitted the copula 45 percent of the time on tape 1 and 44 percent of the time on tape 4. We are not sure why R omitted the copula so frequently, while van Naerssen's learners of Spanish hardly did so at all, but suggest four possibilities:

Context of learning Future research might show copula deletion to be a problem affecting second language learners of Portuguese but not of Spanish (unlikely, we think) or possibly second as opposed to foreign language learning. Pica (1983) found that Spanish-speaking learners of English under different conditions of exposure (instruction only, naturalistic and mixed) used different language learning strategies, although treatment of the copula was not one of the areas in which differences were found among the groups.

Avoidance Since R made some errors of copula choice, copula omission could be a strategy to avoid error. We think this a rather implausible hypothesis, however, since (1) R had no conscious awareness of such an avoidance strategy (did not know he deleted copulas, in fact), (2) R improved his choices between the two copulas over time but did not stop omitting them, and (3) the environments in which he had difficulty in choosing the correct copula were not those in which he was especially likely to omit the copula. For example, there were contexts for ESTAR (as the auxiliary of the progressive, not counted in our copula statistics) where R never made an error between SER and ESTAR but still omitted ESTAR several times.

L3 influence Arabic does not have a present tense copula. When R was told that he tended to delete the copula in Portuguese, he was surprised and immediately suspected Arabic as the source of the error.

Journal entry, Week 9
I had no idea that I have been leaving out my copulas! Why haven't I been aware of it? Why hasn't anyone corrected me? Why am I forgetting them anyway? I suppose it's the influence of Arabic again. Damn it, why can't I keep these two languages apart?

We should note, as a counterargument to this hypothesis, that R's copula omissions in Portuguese did not follow the constraints of Arabic: R deleted SER and ESTAR in the perfect, imperfect, and future as well as in the present, the only environment in which Arabic has the zero copula.

Learning style Possibly the most promising hypothesis is that some learners, including R, begin language learning with a preference for a telegraphic style, concentrating on the big things (content words) and letting the details wait. R also omitted verbs other than the copula on occasion (12 times on tape 1; 11 times on tape 4). In some of these cases this may have been because R did not know the appropriate verb to use in a particular utterance, e.g., tape 1, *toda dia [contam] piadas, piadas, piadas* ("every day [they tell] jokes, jokes, jokes"), for which R did not know the appropriate verb CONTAR. In other cases, R did know the appropriate verb but omitted it anyway, e.g., tape 1, não, *[vou] a Nova Iorque primeiro* ("no, [I'll go] to New York first"); tape 4, *depois eu não sei, [vai ter uma] festa da Trattoria, acho* ("later I don't know, [there

will be a] party at Trattoria, I think"). In these cases, the verbs that were omitted resulted in little loss of meaning.

At the beginning of this section, we characterized R's Portuguese interlanguage in terms of difficulties in the use of the copula, articles, and prepositions. We have now seen that in each of these grammatical areas, R overwhelmingly tended to simply omit the required grammatical morphemes. We have also seen, in each of these categories, that while R improved his grammatical accuracy over time whenever he produced those morphemes (choices among alternatives), his rate of deletion remained virtually unchanged over the period of this study.

CONVERSATIONAL ABILITY

Without any target language vocabulary and without some rudiments of grammar, a nonnative speaker cannot begin to communicate with native speakers of the target language. At the same time, the ability to carry on conversations is not just a reflection of grammatical competence. The second language learner must also come to control the rules for turn taking and adjacency pairings in the new language, must nominate topics for conversation and recognize topics nominated by native speakers, respond relevantly, and so on. As Hatch (1978b, 1983) has frequently pointed out, topics in adult discourse cover an incredibly wide range when compared with those involved in child first and second language learning, and the conversational ambitions of adult learners are complex and abstract. In the case of adult second language learners, there is also pressure to respond in conversation intelligently, to say something coherent and reasonably interesting, both to protect one's own good image of oneself (face) and to minimize as much as possible the conversational burden that must be carried by native speakers.

When we compare R's conversational behavior in the early stages with that toward the end of his stay in Brazil, we find several ways in which R's communicative ability developed. On the first conversational tape, R spoke hesitantly and had a great deal of difficulty in expressing his intended messages, even when these were not very complex:

1.1–5

S:	Como é que você se sentiu quando você sabia, soube, que vinha pró Brasil? Qual era sua idéia do Brasil?	How did you feel when you knew, knew that you were coming to Brazil? What was your idea of Brazil?
R:	Um ... no pensia, no pensia nada, no pensia que via a América Latina mas uh ... porque eu sei e conheço Média Este e conheço também Asia ... uh, Japon.	Um ... I didn't think, I didn't think anything, didn't think I would go to Latin America but uh ... because I know the Middle East and I know also Asia ... uh, Japan.

Even ignoring the errors of pronunciation, lexis, and grammar in R's response, what he said did not adequately communicate what he intended to say: I had never really thought of going to Latin America before, since all my previous experience had been in the Middle East and a bit in Asia.

By the end of his stay in Brazil, R was able to express notions of similar complexity in a smoother and communicatively more effective manner:[15]

4.381–386

S:	É muito comum você ver um rapaz de 30 anos morando com pai e mãe.	It's very common for you to see a 30 year old guy living with father and mother.
R:	Ah, eu sei. Aos Estados Unidos se tem um rapaz de 25 anos ainda mora com os pais, ah... toda gente pensam que coisa estranha mas aqui, não, aqui talvez um cara de 25 anos mora sozinho a gente falam: uma coisa estranha.	Ah, I know. In the U.S. if there's a 25 year old guy [who] still lives with the parents, ah ... everybody thinks that strange thing, but here no, here maybe a 25 year old guy lives alone and people say: a strange thing.
S:	É o opos ...	It's the oppo-
R:	O oposto!	The opposite!

Nevertheless, there are still instances on the last tape in which R's style of delivery deteriorates and becomes very choppy, as well as less grammatical, especially when he is excited:

4.114–122

R:	Fomos lá ... mas foi, foi um barato! Sorte, sorte e ... fomos a Cabo Frio em rua muito longe da cidade. Fomos lá prá ver as praias bonitas, tem ilha também, esqueci nome rua, não tem pessoa nada. Ninguém, ninguém. Nós dirigimos, tudo bem, e vem polícia. Tudo fora, tudo fora.	We went there. But something fantastic happened! Luck, luck ... we were in Cabo Frio on a road far from town. We went there to see the beautiful beaches there's an island too. I forgot the name [of the] road. We drove, OK, and police comes. Everything out, Everything out.
S:	Meu Deus do Céu!	My God in Heaven!
R:	Temos em carro fitas, abriu: tem alguma coisa dentro lá? Todos corpo: tem alguma coisa. Bolsas, tudo ...	We have in car tapes, he opened: is there something inside there? All body: do you have something? Bags, everything ...

Misunderstandings

On the first conversational tape, there are numerous examples of minor or serious communicative breakdowns and misunderstandings:

1.188–193

S:	E a Havaí também é muito bonito o campus.	And at [the University of] Hawaii also the campus is beautiful.
R:	Mmm ...	Mmm ...
S:	Aqui é mais bonito, né?	Here is more beautiful, isn't it?
R:	Ah, sim, sim. A Hawaii?	Ah, yes, yes. In Hawaii?
S:	É.	Yes.
R:	Não. Campus?	No. The campus?

1.297–309

	Portuguese	English
S:	A tua mulher, a tua ex-mulher tem descendência oriental?	Is your wife, your ex-wife of oriental descent?
R:	Hum?	Huh?
S:	Qual é a descendência dela? É oriental ou inglesa ou noroeguesa ou é . . .	What is her descent? Is it oriental or English or Norwegian or is it . . .
R:	Não entendo.	I don't understand.
S:	Não entendeu?	You didn't understand?
R:	Não entendo.	I don't understand.
S:	A família dela é oriental? Como a minha, por exemplo, meu avô, minha avó . . .	Is her family oriental? Like mine, for example, my grandfather, my grandmother . . .
R:	Non, non. Minha ex-marida?	No, no. My ex-wife?
S:	É, isso.	That's it.
R:	Hum, americana de Boston, também.	Uh, American also from Boston.
S:	De Boston, mas digo os descendentes.	From Boston, but I'm talking about descendents.

In the last example above, the problem from the perspective of the native speaker, S, was that R did not understand the question ("is she of oriental descent?") even when rephrased into an or-choice type of question ("oriental or English or Norwegian or . . ."), and when he finally did seem to answer the question he still did not answer appropriately. From R's perspective the problem was quite different. He did not recognize S's question about *tua ex-mulher* as referring to his ex-wife. After the question had been paraphrased twice, he guessed whom it might be about, and asked for confirmation, using *ex-marida*, which is a nonoccurring word in Portuguese although formed according to a regular pattern ("husband" is *marido*). By the time the topic of the question had been clarified, he had forgotten exactly what the question had been.

There are still some (though fewer) examples of similar communicative difficulties on conversation tape 4:

4.196–202

	Portuguese	English
S:	. . . mas o americano não faz isso. Ele tá te icentivando.	. . . but the American doesn't do that. He encourages you.
R:	Porque os Americanos são famosos . . .	Because Americans are famous . . .
S:	Como assim?	What's that?
R:	Ah, os americanos não corrigem?	Ah, Americans don't correct?
S:	Não. Eles icentivam, falam que você fala bem inglês quando você não fala.	No. They encourage, say that you speak English well when you don't speak.

In this example, R wanted to say "Americans are famous for not correcting people," but the beginning of that utterance sounded strange to S, who thought R was off the topic. While the majority of the communicative breakdowns and misunderstandings on four tapes involve R's failure to comprehend S, there are a few additional cases on tape 4 where the opposite occurs:

4.485–492

	Portuguese	English
R:	Mas depois 30, começa a diminuir.	But after 30, it [your age] starts to decrease.
S:	Exatamente, não faço mais aniversário.	Exactly, I'm not going to have any more birthdays.
R:	Tenho agora só 18.	I'm only 18 now.
S:	18?	18?
R:	42, ahm?	[I'm] 42, right?
S:	43.	43.
R:	42.	42.
S:	Quando é teu aniversário?	When is your birthday?

In this case, S either did not get or was distracted from R's attempted joke: $30 + 12 = 42$, but $30 - 12 = 18$.

Analysis of Discourse

Because most of the differences over time in R's conversational ability and in the quality of interaction between R and S appear to be quantitative rather than qualitative in nature, we have carried out an analysis of the discourse contained in the first and last conversational tapes. For tapes 1 and 4, we analyzed the first 400 turns (200 turns by each speaker), categorizing utterances into the following discourse categories:

Statements. Following Hunt (1970), Loban (1976), and Beebe (1983), we have counted each independent grammatical predication as a statement. An utterance consisting of an independent clause and a dependent clause constitutes one such unit, while an utterance consisting of two independent clauses constitutes two units.[16]

Questions, further categorized into Wh-questions, yes/no questions (univerted in Portuguese), tag-questions, and or-choice questions (e.g., "did you go out last night or stay home?").

Imperatives, including both second singular and first plural forms.

Self-repetitions, in which a speaker repeats his or her own words, without significant additional information, either exactly or in an attempt (successful or unsuccessful) at self-correction.

Other-repetitions, in which a speaker repeats part of his or her interlocuter's speech, with declarative intonation, with or without correction.

Confirmation checks, in which a speaker repeats part of his or her interlocuter's speech with question intonation, with or without correction.

Comprehension checks, attempts by a speaker to establish that the interlocuter is following what he or she is saying, e.g., "right?" "do you understand?"

Clarification requests, in which the speaker attempts to clarify what the previous speaker meant to say or ask, but without repeating the exact words of the interlocuter, e.g., "huh?" "who, me?"

Requests for help. A speaker requests language assistance, by pronouncing a word or part of a word with question intonation, or by asking directly, "how do you say . . .?"

Minimal responses. Answers to questions consisting of "yes," "no," *sim, não,* etc.

Backchannel responses. Responses to statements, minimal comments such as "yeah," "uh-huh," *ah é? ah não?* and *pois é.*

Table 5 gives the number of occurrences of each coded feature and the extent to which the differences between the frequencies in the early and late recordings are significant, based on chi-squared scores.

Looking at R's conversational behavior as represented in Table 5, we find that virtually all the changes between tape 1 and tape 4 are in the direction that we would expect given increased conversational proficiency. On tape 4, R used fewer comprehension checks, confirmation checks, requests for help, etc. However, taking .025 as the level of significance, only 4 of the 15 categories coded for R and 5 of those codes for S show statistically significant change. For R, the significant decrease in the number of clarification requests used seems a reflection of generally improved comprehension, while the significant increase in the number of statements produced appears to be reflection of improved productive fluency. R had more that he was able to say. A general increase in productive fluency on R's part also seems reflected in two additional measures not included in Table 5: the number of words per turn produced by R increased from 6.9 on tape 1 to 12.13 on tape 4, and the rate of speech in words per minute of R and S combined increased from 72.55 on tape 1 to 80.33 on tape 4.[17] However, both of those measures are statistically nonsignificant.

Repetitions One of the more striking aspects of R's speech, as represented in Table 5, is the amount of self- and other-repetition that R did in comparison with S, the native speaker. Repetition was one of the more obvious characteristics of R's early conversational behavior in Portuguese:

1.483–490

R:	Nada, nada, nunca, nunca e . . . ele, ele gosta a comida italiano, italiano.	Nothing, nothing, never, never and . . . he likes, he likes Italian food, Italian.
S:	Massa?	Pasta?
R:	Massa, massa. Por isso agora, agora comendo, estamos, estamos comendo, estamos comendo ao restaurante italiano, toda noite.	Pasta, pasta. So now, now eating, we are, we are eating, we are eating at the Italian restaurant, every night.
S:	Toda noite?	Every night?
R:	Toda noite, toda noite.	Every night, every night.

We do not know the extent to which R may be typical of beginning adult language learners in this respect, on which the SLA literature has generally been silent. Such repetitions have been well documented in the literature on child L1 and L2 acquisition. Keenan (1977) cites extensive examples of repetition in L1 child-child discourse, to which she attributes various discourse functions. Peck (1978) and Itoh and Hatch (1978) have documented cases of "repeaters" in child L2 acquisition, using repetition for similar functions.

R's repetitions run the gamut of discourse functions identified for child L1 and L2 acquirers. Other-repetitions were used to answer questions:

TABLE 5 Comparison of 15 Discourse Features in R's and S's Speech at Different Times

	R's speech				*S's speech*			
Discoursal feature	*Tape 1*	*Tape 4*	χ^2 *(df=1)*	*p*	*Tape 1*	*Tape 4*	χ^2 *(df=1)*	*p*
Wh-questions	2	5	1.29	NS	42	40	0.05	NS
Yes/no questions	7	4	0.82	NS	68	44	5.14	.025
Tag questions	5	12	2.88	NS	27	23	0.32	NS
Or-choice questions	0	0	0.00	NS	7	0	7.00	.01
Total all questions	14	21	1.40	NS	144	107	5.45	.025
Statements	160	307	46.27	.01	79	165	30.31	.01
Imperatives	0	2	2.00	NS	5	4	0.11	NS
Self-repetitions	92	64	5.02	.025	10	10	0.00	NS
Other-repetitions	53	35	3.68	NS	11	13	0.17	NS
Confirmation checks	11	5	2.25	NS	24	9	6.82	.01
Comprehension checks	4	0	4.00	NS	4	0	4.00	NS
Clarification requests	16	4	7.20	.01	3	10	3.77	NS
Requests for help	5	2	1.28	NS	1	0	1.00	NS
Minimal responses	57	31	7.68	.01	16	22	0.95	NS
Backchannel responses	2	8	3.60	NS	14	12	0.15	NS

1.281–282

S:	Os dois registros?	The two registers?
R:	Dois, mas dois, très, quatro, continum.	Two, but two, three, four, [a] continuum.

to delay answering questions briefly:

1.44–45

S:	Por que?	Why?
R:	Porque, ah . . . Beirute è	Why, ah . . . Beirut is

to agree with statements:

1.206–208

R:	4%	4%
S:	É?, mais ou menos.	Yes? more or less.
R:	Mais ou menos, mais ou menos.	More or less, more or less.

to accept topics:

1.99–100

S:	E o Japão? Como è que è o Japão? Eu tenho muita curiosidade.	And Japan? How is Japan? I'm very curious.
R:	O Japon, Japon, se você . . .	Japan, Japan, if you . . .

to acknowledge corrections and feedback:

1.229–231

R:	Disse não.	I said no.
S:	Não vou.	I won't go.
R:	Não vou, não, não vou.	I won't go, no, I won't go.

and to acknowledge requested assistance:

1.329–331

R:	. . . muito feliz, "even though?"	. . . very happy, "even though?"
S:	apesar	even though
R:	apesar, apesar crises financial mas . . .	even though, even though financial crises, but . . .

Confirmation checks (other-repetitions with question intonation) were used by R in cases where he really was unsure of what was said or asked:

1.325–326

S:	Como è que è esse jeito brasileiro?	What is this Brazilian way?
R:	Jeito brasileiro?	Brazilian way? (R did not know the expression)

But just as frequently when there was no real comprehension problem:

1.439–440

S:	Já surfou alguma vez no Havai:	Have you ever surfed in Hawaii?
R:	Surfou? Não, body surf só.	Surfed? No, only body surf.

Self-repetitions were used sometimes to self-correct:

1.178

R:	. . . todos os alunos adaltos, são adultos.	. . . all the students adults, are adults.

or for emphasis:

1.402

R:	. . . na praia mas é bem longe, bem longe.	. . . at the beach, but it's very far, very far.

The role of repetition, especially other-repetition (imitation), as a learning and production device has been hotly debated in the L1 acquisition literature, with attitudes toward imitation strongly colored by theoretical disputes about the nature of language (Clark 1977). As Snow (1981) points out, the imitation of adult utterances by children has been viewed as an epiphenomenon of language acquisition that makes no contribution to development; a process that primarily supports vocabulary development; a process that makes a limited contribution to morphological and syntactic development for some children (those who do imitate); and a process of central importance in language acquisition. While much of the debate about the relevance of imitation has focused on the use of chunked or formulaic speech for comparison and factoring (a topic we will address below), Bloom et al. (1974) have suggested that selective imitation is a strategy that allows a child to encode a state of affairs with the perceptual support of a relevant message. Peters (1983) has suggested that both other-repetition and self-repetition (which she calls imitation and repetition, respectively) are important strategies for the formation and automatization of production routines.

Many of R's repetitions are of the type that Peters identifies in child language acquisition as "repetition and build-up":

1.123

R:	. . . não morei	. . . I didn't live
	não morei lá	I didn't live there

1.486

R:	agora	now
	agora comendo	now eating
	estamos	we are
	estamos comendo	we are eating
	estamos comendo ao restaurante italiano,	we are eating at the Italian restaurant,
	toda noite	every night

In fact, many of the examples in the discourse categories listed above also seem to serve an important encoding and production function. R used repetitions (both self- and other-) to hold the floor and gain planning time and, often, to say a second time more completely or more smoothly what he said first incompletely or hesitantly.

Repetitions did not disappear from R's discourse behavior by the time of tape 4, but the three categories of self- and other-repetitions and confirmation checks do show a combined 34 percent decrease from 156 instances to 104 ($\chi^2 = 10.40$, df = 1, p. < .01). Considered separately, only the category of self-repetitions shows a statistically significant decrease (see Table 5), and here we note as well a shift in the functions for which this conversational device was used. In the discourse on tape 1, the majority of instances of self-repetition fell into the rehearsal or stalling-for-time categories, or could be viewed as having those functions in addition to their other discourse functions. These types of self-repetition decreased on tape 4, while the number of self-repetitions for the purpose of self-correction increased:

4.350

R:	E aqui no Rio também é uma cidade de, da liberdade também.	And here in Rio, it's a city of, of (de + art.) liberty also.

4.288–289

R:	Não, estava fazendo mas quando, quando mudou, quando mudei prá Flamengo . . .	No, I was doing, but when, when you moved, when I moved to Flamengo . . .

4.88–90

S:	E as praias de Búzios? Que que cê achou?	And the beaches of Buzios? What did you think?
R:	Muito bonito! Muito bonitas, praias.	Very beautiful (m.sg.)! Very beautiful (f.pl.), beaches (f.pl.).
S:	"Monitoring" hein?	Monitoring, huh?

On tape 1, 17 self-repetitions (18 percent) contained corrections, while 75 did not; on tape 4, there were 24 self-repetitions containing corrections (38 percent) as opposed to 40 without correction ($\chi^2 = 7.05$, df = 1, p. < .01).

Questions and answers Discourse is more than simply individual utterances, fragments, repetitions, and the like, strung together like beads on a string. Conversation is organized at various levels, for example, in talk about topics. At the lowest level of organization, which we analyze here, discourse moves may be seen as linked together in terms of adjacency pairs such as greeting-greeting, compliment-acceptance, complaint-apology, and request-grant (Schegloff and Sacks 1973, Coulthard 1977, Richards and Schmidt 1983b). We deal here with only one adjacency pair type, question-answer, one of the most common types in our conversational data.

We turn our attention first to the distribution of statements and questions in the speech of S, the native speaker. In doing so, we are making two assumptions that we hope are justified by the results of the analysis. First, we assume that some aspects of foreigner talk discourse (the speech of native speakers addressed to nonnative speakers) identified in research on English interlanguage communication are not language-specific but will be found in Brazilian foreigner talk discourse as well.[18] Second, we assume that some of the interactional aspects of foreigner talk discourse are sensitive to the level of competence of the nonnative partner in the conversation.[19] In other words, we present here a partial analysis of S's conversational behavior as a reflection of R's developing conversational proficiency.

Long (1981) has reported that one of the most striking and significant aspects of foreigner talk discourse when compared with native-native discourse is the preponderance of questions in the former and statements in the latter. Analyzing 36 5-minute conversations between speakers of American English and Japanese young adults with elementary English proficiency, Long found that 66 percent of all t-units in the native speaker speech directed at those learners were questions, while in a comparable corpus of native-native discourse 83 percent of all t-units were statements. Moreover, the distribution of question types was different in the two corpora. While Wh-questions were the most favored type in the native-native discourse, closed questions (those in which the propositional content of the answer is encoded in the question, i.e., yes/no, tag, and or-choice questions) predominated in the foreigner talk discourse.

As can be seen from Table 5, S's conversational behavior when talking to R on tape 1 was remarkably similar to the way Long found native speakers of English behaving when talking to low-level Japanese speakers of English. On tape 1, S used 144 questions (63 percent), 79 statements (35 percent), and only 5 imperatives (2 percent). The figures are almost identical to those presented by Long (1981:Table 5). Yes/no questions (uninverted in Portuguese) were S's most favored type of question, followed by Wh-questions, tag questions, and or-choice questions.

Hatch (1978b) has noted that native speakers frequently repeat questions, shifting down what is required of the learner by rephrasing Wh-questions (open) as yes/no or or-choice questions. We find this phenomenon in S's speech to R on tape 1:

1.299

S:	Qual é a descendência dela? É oriental ou inglesa ou é norueguesa ou é . . .	What is her descent? Is it oriental or English, or is Norwegian or is it . . .

1.133

S:	Me diz uma coisa. E no Rio, Que que você tá achando da cidade. Tá achando ela bonita, tá achando interessante?	Tell me something. And Rio, what do you think of the city? Do you find it beautiful, do you find it interesting?

In fact, on tape 1, S frequently repeated her questions within the same turn without waiting to see if R had comprehended the question. Twenty-three percent of all questions on the first tape were immediately repeated. Not all these repeats involved shifting to a different question type, however; the majority of the questions that were repeated (57 percent) were repeated as the same type of question.

By the time of tape 4, S had significantly reduced her questions and increased her statements (X^2 values in Table 5). Assuming that the proportions of questions and statements in English and Brazilian Portuguese native-native discourse are roughly equal, an assumption that may not be justified and for which we have no baseline data,[20] S was presumably still not talking to R the way she would talk to a native speaker. Long found that native-native discourse contained 83 percent statements vs. 16 percent questions; S used 165 statements (60 percent) vs. 107 questions (39 percent) on tape 4. However, in general the picture is clear: on tape 1, S was talking to an elementary-level speaker; on tape 4, she was talking to someone she believed to be a more competent interlocutor, not limited to simply answering conveniently phrased questions.

We now turn our attention back to R's speech. R increased his statements significantly between tape 1 and tape 4 but did not increase his questions to S as she decreased hers to him. Most of the questions asked on the later tapes continue to be asked by S, and R therefore does a lot of answering. As mentioned briefly above, herein lies a tricky learning problem in Portuguese. Whereas in English and many other languages, one may answer yes/no questions simply with "yes" or "no," that is, lexically, in Portuguese questions may be answered negatively with *não* but are rarely answered affirmatively with *sim*. The use of *sim* alone as a response is restricted to emphatic agreement or disagreement (Thomas 1969):

1.411–412

R:	Mas onda aqui não é muito grande.	But wave here is not big.
S:	É sim R. Você acha que não?	Oh yes, R. You think not?

Sim, with ironic tone and "long" pronunciation, may also mean "no." The way in which yes/no questions are normally answered affirmatively in Portuguese is by repeating the verb of the question, or the auxiliary if there was one, changing the personal inflections on the verb or auxiliary as appropriate, or repeating one of a closed set of high-frequency adverbs (Tarallo and Kato 1984). If *sim* is used, it follows the repeated element.

4.214–243

R:	... sabe "98"? FM "good times," "good times 98"?	[Do you] know [second/third singular] 98? FM good times, good times 98?
S:	Sei	[I] know [first singular]

4.560–561

R:	12 quilos, mas acho que tem problema, huh?	12 kilos, but I think there's a problem, huh?
S:	É, tem sim. Nossa Senhora!	Is, there is. Our Lady!

The use of inappropriate affirmative responses is a characteristic of nonnative Brazilian Portuguese, previously identified for native speakers of

Spanish (Baltra 1981). R clearly had major problems in this regard. On tape 1, he answered questions inappropriately, with *sim* alone, 36 times, e.g.:

1.9–10

S:	Você morou no Egito? É?	You lived in Egypt? Yeah?
R:	Sim, 5 anos.	Yes, 5 years.

1.110–111

S:	Deve ser fascinante.	It must be fascinating.
R:	Sim.	Yes.

In the above two examples, appropriate responses would have been *morei* ("I lived") and *é* ("it is"), respectively. Besides responding with *sim*, R's next most common strategy was to simply repeat part of the question, but usually not the correct part (31 examples), e.g.:

1.446–447

S:	Tá gostando?	Are you enjoying [it]?
R:	Gostando.	Enjoying.

1.521–523

S:	Carne nos Estados Unidos é muito caro, né? A carne nos Estados Unidos?	Meat in the United States is very expensive, isn't it? Meat in the United States?
R:	Muito caro, muito caro ...	Very expensive, very expensive.

In only seven cases on tape 1 did R attempt to respond by repeating the verb. In three cases the interchange referred to third persons; so no change in the verb was required and R got it correct. But of the four cases in which R attempted to answer questions about himself, requiring a verb change, he failed to make the required changes in three of them, e.g.:

1.439–440

S:	Já surfou alguma vez no Havai?	Have you ever surfed in Hawaii?
R:	Surfou? Não, body surf só.	You surfed? No, only body surf.

1.513–515

S:	... você já comeu a comida brasileira mesmo, já comeu?	... have you eaten real Brazilian food yet, have you eaten?
R:	Comeu, comeu canja e ...	You ate, you ate chicken soup and ...

In these examples, the appropriate responses would have been *surfei* ("I surfed") and *comi* ("I ate"), or simply *já* ("already") in both cases. In only one case on tape 1 did R answer a question in the Brazilian way, repeating the verb and reinflecting it:

1.386–387

S:	Você gosta de clube?	Do you like clubs?
R:	Gosto, gosto.	I like, I like.

It seems to us that there are several possible reasons why this aspect of Portuguese discourse was difficult for R (and also is difficult for children learning Portuguese as their first language, Robert Blust, personal communication), in spite of the fact that as noted earlier in the diary notes he was drilled on affirmative answers on the second day of class and frequently thereafter. First, it is different from English. Second, answering questions in Portuguese involves an actual manipulation of the form of the verb. We view this as a transformation, not in the well-known sense of Chomsky (1965 and thereafter), a rule intervening between meaning and surface structure, but in the original sense of Harris (1952, 1957), who viewed transformations as relations among sentences in connected discourse. In order to answer Portuguese questions affirmatively, a speaker must (1) store the verb form of the question in memory; (2) analyze that form, identifying both the lexical verb and the person and number markers on the question form; and (3) reassemble the verb with the appropriate personal inflection for a reply. An alternative explanation (Richard Day, personal communication) would be simply to assume that question-and-answer forms of verbs are memorized as pairs. This seems plausible also, and we have no evidence on which to prefer one analysis to another, but the basic principle is the same: hear one form, produce another.

A final reason why affirmative answers involving changes in verbal inflections were difficult for R may be that such responses appear infrequent in input, at least in foreigner talk discourse. S produced only three examples of transformed verbs as affirmative answers on tape 4, and none at all on tape 1. This was not only because R asked relatively few questions for S to answer, but also because S generally used other strategies of affirmation and confirmation. On occasion, S repeated some part of the question other than the verb (one of R's most common strategies), e.g.:

1.380–381

R:	Há muitos libaneses lá?	Are there many Lebanese there?
S:	Muitos, muitos.	Many, many.

In the majority of cases, whether answering a question or agreeing with a statement, S simply responded with *é*:

1.126–128

S:	Já?	Have [you]?
R:	Eu?	Me?
S:	É. Você fala francês?	Yes [é]. Do you speak French?

1.367–368

R:	Interessante mas todas as pessoas lá são muito pobres.	Interesting, but all the people there are very poor.
S:	É, lá você vai ver o Brasil.	Yes [é], there you will see Brazil.

In both examples above, S's response form *é* can be analyzed as an appropriately inflected form if it is seen as an elliptical version of "[that] is [what I'm talking about]," although that interpretation is less plausible for the second example, which has a third plural verb form (*são*) in the question but gets a third singular form (*é*) in the response. Here, *é* seems to be just a lexicalized confirmation form. É is also the standard way of responding to questions whenever the question is an implied one or otherwise does not contain a verb (Thomas 1969:243).

By the end of his stay in Brazil, R had mastered some but by no means all aspects of answering in Portuguese. On tape 4, R answered affirmatively with *sim* alone (inappropriate) only twice, and there were five instances in which he responded by repeating the verb. In all five cases, the verb was properly inflected, e.g.:

4.318–319

S:	E você ligou?	And you called?
R:	Liguei, mas eu sabia antes também.	I called, but I knew before also.

What R did not do was answer with *é* when appropriate, nor did he use other available Portuguese response forms such as *claro, pois é* and *tá*. Instead, on six occasions, he used a typical English response form:

4.164–165

S:	É a Elba Ramalho, né?	That's Elba Ramalho, isn't it?
R:	Uh-huh.	Uh-huh.

Why R failed to learn the simple Brazilian Portuguese response *é* to questions is unclear to us. It was not taught in class, though it was presumably heard there and was certainly present in other output to R from the beginning. He recorded nothing about it in his diary and does not remember ever having noticed it, though he did notice the related form *é, isso*, meaning "that's it" or "correct":

Journal entry, Week 5

. . . and I notice that when we are doing our drills, L keeps saying something that sounds like ee-yes-u, sort of like a Japanese saying "yes" . . . . it obviously means "right."

It seems to R now, as an afterthought, that one possibility for his failure to learn and use *é* might be the fact that a similar or identical vocalic sound occurs in the languages he knows, with several different meanings: [e] means "yes" in Lebanese Arabic, "what?" in Egyptian Arabic, and is a question tag in Canadian English. Such thoughts are not represented in the journal, although R was aware that he used the form "uh-huh":

Journal entry, Week 16

I wish I could stop saying "uh-huh" everytime M asks me a question. I know this is totally un-Portuguese, but it just comes out. If I stop myself and try to think about it, I don't know what to say instead. Oh well, he and everyone else seem to understand me when I say it.[21]

Did Instruction Make a Difference?

As indicated by several of the journal entries already presented, instruction was perceived by R to make a great deal of difference. Before class started, R could not talk to speakers of Portuguese; as soon as class began, he could. The classroom provided resources that could immediately be put to use. In addition to comments from the journal already presented, the following are typical:

Journal entry, Week 5
The class is getting better, since L has started telling us some brief stories. The first one was about her elderly father. Once he was too tired to walk home from the park, so he told the police he was lost and got a ride. I got at least one useful expression from that: *você vai andando todo dia prá lá e prá cá*, "you walk there and back every day." Since I walk to and from the university, I've been able to use this several times already.

Journal entry, Week 6
I went back to the gym today and signed up. Amazing . . . three weeks ago I could not manage any interaction there at all in Portuguese, but today I not only registered but chatted with the instructor, who said, "what happened? You didn't speak and now you do."

Classroom instruction was also useful in providing quick answers to problems that R could not figure out from context:

Journal entry, Week 4
B called up last night. Talking on the phone is next to impossible! The long silences are stressful, and I have no idea at all how to get off the phone. I'm sure I cannot say *tchau* out of the blue and hang up, so I had to wait (and wait) for her to say it. I didn't understand the simplest things. I said *hoje praia* ["today beach"] and B said *foi?*, several times. I had no idea at all what that meant. Today in class I asked and learned that *foi* is the past of IR (also SER). B meant "did you go?" and I should have answered *fui*, "I went."

On the whole, the influence of instruction was clearly positive. At the same time, in our discussion of R's developing grammatical competence we identified numerous aspects of Portuguese that R was taught but did not learn to produce accurately. Other such phenomena have been identified in R's conversational behavior, such as R's failure to learn the pattern that was taught (and mentioned above in the entry about *foi?: fui*) for answering questions. In this section, we attempt to deal more directly with the effects of instruction on learning, by examining the relationship between what was taught and what was learned. The discussion is limited to Portuguese verbs, for convenience and because many of the more difficult points of Portuguese grammar are found in the forms and distribution of verbal inflections. Verbs are also the focus of most teaching.

Table 6 lists those aspects of the Portuguese verb presented in R's Portuguese class, in the order in which they were presented. The teacher's

TABLE 6 Portuguese Verb Forms. Order of Instruction, Presence in Input, Presence in Output

	Present in input?				*Present in output?*			
Verbal feature taught	*T1*	*T2*	*T3*	*T4*	*T1*	*T2*	*T3*	*T4*
Present of SER, ESTAR	+	+	+	+	+	+	+	+
Present, regular verbs ending in -ar, -er, -ir	+	+	+	+	+	+	+	+
Progressive (ESTAR + V-ndo)	+	I	+	+	I	–	R	R
Irregular verbs: VIR, IR, TER, VER, FAZER, SABER, DIZER, QUERER	+	+	+	+	+	+	+	+
Future with IR	I	I	+	+	I	I	I	I
Perfect past tense	+	+	+	+	+	+	+	+
Imperfect past tense	I	+	I	I	+	+	+	+
Imperfect of ESTAR + V-ndo	–	I	I	I	–	I	I	+
Compound present	–	I	–	I	–	–	–	–
Compound past perfect	–	–	I	–	–	–	–	–
Inflected future	I	I	–	–	–	–	–	I
Irregular verbs: FICAR, PODER, LER, SAIR, OUVIR, PEDIR, POR, DAR	+	I	+	+	I	–	I	+
Conditional	+	+	–	I	R	I	–	I
Reflexive	I	I	–	I	I	I	I	I

+ = present I = (< five instances per conversational tape)
– = absent R = present only as a repetition

lesson plans and order of presentation appear to be based on the order of presentation in Abreu and Rameh (1972, 1973), although this text was not used by the class. In contrast to our previous discussion of R's grammatical competence, we are concerned here primarily with whether and how frequently R produced forms in conversation, and only secondarily with the accuracy with which he produced the forms when these were attempted. We also include in Table 6 some information about the frequency of such forms in input. This is of course limited, based only on S's speech to R on the conversational tapes. We are assuming that S's speech to R was not bizaarely atypical, that if S used a form with very high frequency then probably others did also when interacting with R and that if S consistently avoided certain forms then probably other native speakers did also, regardless of how common such forms might be in native-native interaction.

As Table 6 indicates, it is clearly not the case that whatever was taught was learned and used by R, even leaving aside here the question of whether it was used correctly. It does not even seem to be true that the order of presentation in class determined whether or not R would use a form. This accounts for part of the data, for example, the fact that of two groupings of irregular verbs, R produced first and most frequently those which were introduced early, one by one, and individually drilled, while seldom producing any of the group 2 irregular verbs that were introduced late and only superficially drilled. The periphrastic future with IR, which shows up with low frequency in R's speech

although it was taught early, is probably not a substantial exception to a principle of first-taught-most-used, since it is clearly influenced by topic. The early conversational tapes deal primarily with biographic and current topics. Only the last conversational tape contains much talk about future plans, and for R this was mostly about travel (the verb IR, "to go," is used in the present to talk about the future)f. The low frequency in R's speech of the progressive (ESTAR + V-ndo) is more difficiult to explain. It was taught early, drilled often, is highly regular, and was topically relevant on all tapes. One possible reason for R's nonuse of this "easy" form may be the fact that the progressive is commonly used in Portuguese in utterances in which it is unlikely, or in a few cases (with statives) not permissible in English. While S's speech to R contains numerous examples of the progressive, many of them fall into this category, such as S's frequent formulaic utterance, *que que você tá achando de NP?* ("what do you think of NP?") where English would not permit a progressive form.[22]

The clearest example of the lack of good fit between what was taught and what was learned and used is R's nonuse of the compound present tense (very roughly equivalent to the English present perfect progressive) and the compound past perfect. Both of these tenses were drilled extensively. R produced no instances of either (there were obligatory contexts for both), although he did produce verb forms that were introduced later in the course and drilled less frequently.

A second generalization fits the data better: R learned and used what he was taught if he subsequently heard it; i.e., what was more frequent in input was more likely to be used. Although R's nonuse of the progressive remains an exception to this generalization also, R's nonuse of the compound present and the past perfect can now be related to the fact that these were seldom present in input. Again, there are some exceptions to the generalization. R overused the imperfect in comparison to S's speech. There is also a discrepancy in the frequency of input and output in the use of the reflexive that is not revealed by Table 6. While both S and R produced the reflexive infrequently, S used the reflexive productively with various different verbs, whereas all of R's examples of the reflexive are with a single verb, SE CHAMAR ("be called"). R recorded the following in his journal about this verb:[23]

Journal entry, Week 6
Today L told us a story in class about *o homem que decidiu suicidar-se,* the man who tried to commit suicide, but failed because he hadn't paid his gas bill . . . After the story, K asked about reflexive verbs. I already know one, *se chama*. That's because when X visited about 10 years ago, he was taking high school Spanish. We went to the zoo and he kept saying to all the animals *como se chama, llama?* He thought it was very clever. I thought it was extremely annoying, but the phrase has stuck to this day. L says that reflexive verbs are common in Portuguese, and there is often no difference in meaning between reflexive and nonreflexive verbs. She gave a few examples [not recorded].

The situation is similar with regard to the inflected future, which was present in input with several verbs but was used by R only with one verb, SER.[24]

A third generalization fits the data best: R learned and used what he was taught if he subsequently heard it and if he *noticed* it. R's journal entries contain references to all the verb forms listed in Table 6, with the exception of the conditional. As an afterthought, R now believes that he did indeed notice native speakers using the conditional, which he himself used only occasionally (but correctly), but recorded no observations about it in his journal. Each of the other forms listed in Table 6 is represented in the journal, minimally by being contained in native speaker utterances that R wrote down and in most cases with some additional discussion.

R noticed some verbs in input before they were taught (see previously quoted journal entry concerning *foi* as the past of IR/SER), but more commonly he noticed verb forms in input immediately after they were taught. Several journal entries deal with the imperfect, e.g.:

Journal entry, Week 6
This week we were introduced to and drilled on the imperfect. Very useful! The basic contrast seems straightforward enough: *ontem eu fui ao clube* ["yesterday I went to the club"] vs. *antigamente eu ia ao clube* ["formerly I used to go to the club"]. L gave us a third model: *ontem eu ia ao clube*, "yesterday I was going to the club . . . but I didn't", which L says is a common way of making excuses. The paradigm is also straightforward . . . though maybe not as easy as I first thought. . . . Wednesday night A came over to play cards, and the first thing he said was: *eu ia telefonar para você* ["I was going to call you"], exactly the kind of excuse L had said we could expect. I noticed that his speech was full of the imperfect, which I never heard (or understood) before, and during the evening I managed to produce quite a few myself, without hesitating much. Very satisfying!

Other verb forms were frequently noticed, but with a perception of difficulty:

Journal entry, Week 7
We went over IR, VER, and VIR again today. What a mess those verbs are. . . . On the bright side, A stopped by at 5 p.m. and in our conversation he said *quis*, which I guessed from context [correctly] to be the past of QUERER.

Journal entry, Week 20
Just now talking to N I wanted to contrast what I thought about Brazil before I came here and what I think now. I said: *eu sabia . . .* He responded: *e o que veio? Veio?* I'm sure I use *veio* to mean "did you come?", but have I mixed it up again with VER ["see"]? Did he mean "what do you see?" or "what came?", something like "how did it turn out?"? While I was thinking about this, N got fed up and said *esquece* ["forget it"]. I need about a year more to figure this language out.

However, not everything that was taught in class was noticed by R in the input. In some cases, this was because some standard Portuguese forms taught in class are seldom used in the Portuguese of Rio de Janeiro:

Journal entry, Week 6
There are some things in class that I know immediately are going to be difficult. Today we went over indirect object pronouns, changing sentences like *você comprou um livro prá ele* to *eu lhe comprei um livro*. Forget it! It's clear that I can always use the alternative form, with preposition and pronoun after the verb.

Journal entry, Week 9
Today in my SLA class I mentioned that some things I was taught I immediately heard all around me, like the imperfect, which I heard frequently from the day it was taught. The class agreed that this is common in L1 as well, that when you learn a new vocabulary item you often start hearing it, although it was being said around you all along. There are other things which I've been taught which I never hear anyone say, however, for example *lhe*, the indirect object pronoun. I suggested that perhaps I couldn't hear it because it's a marked structure, but the class said no, the reason I haven't heard it is that no one says it in Rio. . . .They suggested I should listen next week in Salvador, because it's used in that dialect.

But there are other cases in which a particular verb form did occur in the input, but R simply did not "hear," i.e., notice, it. As indicated in Table 6, two forms did occur in input (albeit infrequently) but were never produced by R, the compound present and compound past perfect. We have also indicated that the reflexive and the inflected future occurred with various verbs in input but were never produced by R except with one verb each. For all four of these verbal forms, R claimed in his journal that he did not hear native speakers producing them. The two perfect tenses were never noticed at all:

Journal entry, Week 15
Tonight M called and we decided to go to Trattoria. Just got back. On the bus going there, I wanted to ask him if he had been going there for a long time. I had time to think about it, and carefully composed my sentence: *há muito tempo você inha vido à Trattoria?* I immediately realized that I probably got the participle wrong, mixing IR, VER and VIR again. M answered: *eu vou lá há muito tempo* ["I go there it's a long time"]. So I didn't accomplish what I wanted: I wanted to try out a perfective verb, which I have never used and never heard anyone else use. Was what he gave me back foreigner talk?[25]

The remaining two verb forms, the inflected future and the reflexive, were noticed by R, but only very late in his stay in Brazil:

Journal entry, Week 16
I complained to N that the São Paulo trip is just talk and never comes off, and he said *faremos*. The first time I've heard that form. I figured it to be a form of FAZER, which one? Conditional, subjunctive, future? My books are at the office, but I really wanted to figure this one out. Is the trip on or off or what? N said he couldn't help, he doesn't know grammatical terminology. I asked him if it's equivalent to *vamos fazer*, and he said yes. Great. The inflected future, which L said was uncommon but very emphatic. N then said it's not uncommon and it's not emphatic, there's no difference in meaning. I conclude that the trip is on, but I'm not sure how emphatically.

Journal entry, Week 21
I've reached a new take-off point and I wish I weren't leaving in 10 days. The main thing that's happened is that I'm suddenly hearing things I never heard before, including things mentioned in class. Way back in the beginning, when we learned question words, we were told that there are alternate short and long forms like *o que* and *o que é que, quem* or *quem é que*. I have never heard the long forms, ever, and concluded that they were just another classroom fiction. But today, just before we left Cabo Frio, M said something to me that I didn't catch right away. It sounded like French *que'est-ce que c'est*, only much abbreviated, approximately [kekse], which must be *(o) que (é) que(vo)cê*. The other thing I just started hearing is reflexives. Maybe I just didn't pay attention to them before, but I really never noticed any. In print, I've seen signs like *aluga-se* ["for rent"] and

vende-se ["for sale"] which look like they have reflexive pronouns but also seem similar to passives. Suddenly I'm hearing those forms. E was just here and while she was talking to M she said *me lembra não*. Or possibly she said *me lembro não*. I'm not sure of the verb, but I'm sure the negative was after the verb, and I'm sure she used *me*, which I think is a reflexive. I've heard other examples too in the past few days. Last night on an FM 98 tape I heard: *você perdeu aquele adorado sentimeto, e agora se foi, foi, foi.* "You've lost that lovin' feeling, now it's gone (reflexive), gone, gone."

Journal entry, Week 22
I just said to N *o que é que você quer*, but quickly: [kekseker]. Previously I would have said just *o que*. N didn't blink, so I guess I got it right, except now I wonder if it should have been *quiser*. I can't believe that what I notice isn't crucial for what I can do.

It seems, then, that if R was to learn and use a particular type of verbal form, it was not enough for it to have been taught and drilled in class. It was also not enough for the form to occur in input, but R had to notice the form in the input. As indicated by the last journal entry above, R subjectively felt as he was going through the learning process that conscious awareness of what was present in the input was causal. One of the most important questions for current SLA theory is whether noticing features of the language consciously in this way is a necessary step in the process of acquisition or whether, as is commonly assumed on very weak evidence, this all goes on below the level of conscious awareness. We are not suggesting, however, that R was free to notice whatever features he chose in the input. Looking at specific instances of things that R did not notice, frequency in input was probably a factor in some cases, while in other cases the forms were frequent but phonologically reduced and perceptually nonsalient. *E que* variants of question words were used by S 43 percent of the time on the conversational tapes, but in virtually all instances these were pronounced in a phonologically reduced form. One reason R may have been slow to notice and identify the reflexive form *se* is that it is homophonous with *ĉe*, the shortened form of the second singular subject pronoun *você*, which may have been what R misperceived in utterances such as *mas pode se transferir?* ("But (you) can transfer (reflex.)?")

Did Interaction Help?

Instruction was helpful but did not guarantee grammaticality. Likewise, as we show in this section, interaction with native speakers provided input that sometimes led to language learning, but interaction guaranteed neither grammaticality nor idiomaticity. We have already reported that while R clearly became a more competent conversationalist as time progressed, there were some basic aspects of conversational behavior (e.g., how to say "yes" in Portuguese) that he never caught on to.

In trying to answer the question of whether and how interaction helped in the acquisiton of *grammar*, we have looked at the conversational tapes to see if there might be general grammatical rules or constructions that R was not taught in class but induced from input. Again, we have focused on Portuguese verbs, taking as our guide the syllabus of the course that R dropped out of. Had R continued with that course, he would have been taught: six tenses of the subjunctive (present, imperfect, future, compound present, compound imperfect, compound future), the personal infinitive, passive voice, and the future progressive. We have again followed the procedure of going through the conversational tapes to ascertain the frequency of each form in S's input and R's output. None of the forms just listed appear frequently (i.e., more than five times per tape) in the input. Four of them, the three compound tenses of the subjunctive and the personal infinitive, do not appear at all in the input available to us. None of these were ever produced by R. The passive also appears infrequently in the input, only on tape 4 and only three times in the context of one story, when discussing a mugging. S then asked R if he had ever been robbed, and he answered using a passive modeled on what S had just said:

4.33–34

S:	Cê foi alguma vez assaltado enquanto cê tava aqui?	Have you ever been mugged while you've been here?
R:	Não, aqui não, no Hawaii fui.	No, here no, in Hawaii I have.

There is also some indication from the journal notes that R had begun to notice the passive at the end of his stay:

Journal entry, Week 20
M said that his bookcase *é feito pelo Y.* Ah- hah, a passive.

Journal entry, Week 22
In our session S told me she was robbed last week at knife-point. I just told M about that and said *ela tava assaltada*. But I think that should have been made with SER.

The remaining verb forms, the present, imperfect, and future subjunctives, do occur in S's input to R, a dozen times on the four tapes. R did not attempt to produce any subjunctive forms until tape 2, and did not produce any correctly until tape 4. As noted earlier, the present subjunctive was tested in an exercise on the one day that R went to his second Portuguese course. He could not do the exercise but either picked up there or already had some information about when the subjunctive is required. This is reflected in the following exchange a few days later on conversation tape 2:

2.139–147

R:	. . . se eu, se eu vir . . . subjuntivo, huh? Subjuntivo eu não sei. Se eu vi aqui aqui no Brasil antes de vinte anos . . .	. . . if I, if I come (infinitive) . . . subjunctive, huh? Subjunctive I don't know. If I saw (intended as *vim*, "came") here in Brazil before twenty years . . .

S:	Se eu viesse, se eu viesse. Se eu viesse antes de vinte anos o que aconteceria?	If I came, if I came. If I came before twenty years what would have happened?
R:	Se eu viesse?	If I came?
S:	É. Que que acontecia antes de vinte anos, cê não ia mais embora? Que que você ia dizer? Se eu viesse prô Brasil antes de 20 anos . . .	Yes. What would have happened before twenty years, you wouldn't have left? What were you going to say? If I came to Brazil before 20 years . . .

S's part in the above exchange is a good example of foreigner talk, in four respects: (1) she was talking the way R talked, using one of R's more frequent self-created formulaic expressions, *antes de vinte anos,* instead of the correct form *há vinte anos atrás;* (2) she simplified the subjunctive, giving the imperfect form *viesse* instead of the correct and more natural compound form *tivesse vindo*; (3) she was speaking for R, using the first pronoun pronoun *eu* consistently, trying to get R only to repeat; and (4) the second time she used the verb ACONTECER (which R did not know the lexical meaning of) she used the imperfect instead of the conditional form. Nevertheless, she supplied the subjunctive form, labeled as such, which R repeated. A few turns later, R attempted to produce his own subjunctive:

2.224

R:	. . . se você vesse, visse, homem ou moça andando talvez você sabe de onde.	. . . if you see, see, a man or woman walking maybe you know where (they are) from.

In this case, *visse* happens to be the correct imperfect subjunctive form of VER, "see." However, R's reaction on seeing the transcript was that he got the form right purely by accident. He was frequently confused between the forms VIR and VER and was simply trying to remember the form *viesse* (which would have been incorrect) which S had modeled for him a few minutes previously.

The first subjunctive form that R began to use with any consistency at all (though it does not appear on the conversational tapes) was the future subjunctive of QUERER:

Journal entry, Week 14
V and I went to the clube de samba last night. When we were talking about whether to go by bus or cab, I said como você quer, "as you like," and she corrected me emphatically, *como você quiser.* It should be subjunctive.

Journal entry, Week 14
A was here and said *como você quer?* I asked him why he didn't say *quiser* and he said he knows I don't know the subjunctive and *quer* is OK. No matter, I have been saying *como você quiser* at every opportunity for the past three days.

R's knowledge of this subjunctive form was of course thoroughly formulaic. Even a slight modification of the frame made him unsure whether the subjunctive or the indicative was to be used:

Journal entry, Week 20
M needed a bus token, so I offered him mine, *eu tenho um se você quer, não, dois*. ("I have one if you want, no, two") He said *duas?* He may only have meant to confirm what I said, but I took it as a correction, so I replied *duas*, to let him know that I got it, that the number should agree with the understood *fichas* ("tokens") . . . But now I wonder if that *quer* should have been *quiser*.

The only occurence of any subjunctive form on tape is also formulaic, and R's use of the form was deliberate:

4.355

R: Acho que se eu tivesse nessa mesma experiência a Minas Gerais. . . .	I think that if I had this same experience in Minas Gerais . . . .

Journal entry, Week 22
S and I did our last taping today. . . . I also used *se eu tivesse*, but I'm not sure I managed a reasonable place to do it. It was semi-premeditated. It flashed through my mind that I could use it, even though I didn't have the rest of the sentence in mind.

R's subjunctive in this case was well formed, although not for the reason he thought it might be. S interpreted R's *tivesse* as a short form of *estivesse* (imperfect subjunctive of ESTAR) and his utterance as "if I were in this same experience." While R did use shortened, colloquial forms of ESTAR such as *tô, tá, tava*, he had no idea that *tivesse* could be a form of ESTAR but was producing what he thought of only a form of TER. Under R's interpretation, the utterance contains a preposition error, while under S's interpretation R's utterance was completely grammatical.

It seems, then, that none of the forms of the Portuguese verb that R would have been taught had he stayed in class were learned by him through interaction to the extent of permitting productive use, though he had begun to use a few of them in the formulaic frames in which he noticed the forms in input. We have looked for other aspects of Portuguese grammar that R was not taught but learned from interaction. We find only one clear case, the use of the verb TER to make existential sentences.

On conversation tape 1, R used existential TER once correctly, in a formula:

1.568

R: No, no há problema, não tem problema.	No, there's no problem, there's no problem.

In this utterance, R first used *há* to form the existential sentence, which is correct. *Há* is a form of HAVER ("have") but is the only really common form of that verb in colloquial Brazilian speech and has been called a "quasi-preposition" by Britto (1984). Then R self-corrected to the somewhat more idiomatic formula *não tem problema*. Elsewhere on tape 1, R correctly used *há* several times, but in five cases where an existential with TER would have been appropriate, R tried to figure out what to do, using both SER and ESTAR unsuccessfully.[26]

1.259

R: 73 queria voltar para os país árabes e não estava, não fui, não estava, não estava trabalho de linguística teoretical . . .	(In 19)73 I wanted to return to Arab countries and there wasn't (ESTAR), wasn't (SER), wasn't (ESTAR), wasn't (ESTAR) work in theoretical linguistics . .

Five weeks laters, on conversation tape 2, R produced existential sentences frequently and more or less correctly using TER:

2.245

R: Não, ruim por que? Tudo igual, ainda tem, tem cultura diferência	No, bad why? Everything('s) the same, still there's, there's cultural difference.

2.285

R: Mas você sabe, feriado, férias aqui, tem férias lá também.	But you know, holiday, vacation here, there's vacation there too.

In between tapes 1 and 2, R had made the following observations:

Journal entry, Week 10
Não tem problema is A's favorite expression, and I think he uses *tem* in lots of other sentences too. Tonight he said *tem aqui cartas de jogar?*, which might mean "do you have any playing cards here?", but I think it might also mean "are there any playing cards here?"

Journal entry, Week 10
I've been listening closely . . . and I'm pretty sure now that *tem* is "there is/are," in addition to "have." Reminds me of Hawaii creole English *no mo*, which means both "there aren't" and "don't have." So if it's *tem* in the present, should I say *tinha* in the past?

Having found a way to make existential sentences, R produced many of them on the later tapes. In a few cases, he clearly overused the construction:

4.622

R: . . . mas proibido, cheque não tem negócio no Brasil.	. . . but [it's] prohibited, check there isn't business [intended: cannot be negotiated] in Brazil.

There are some other cases in which formulaic expressions learned by R through interaction were made at least partially productive. The expression ESTAR + *morrendo* + NP is common in S's speech on the conversational tapes and was heard by R:

Journal entry, Week 18
M frequently says *vou morrer de fome* ["I'm going to die of hunger"] or *tô morrendo de fome* ["I'm dying of hunger"]. When he came back tonight he said *tô morrendo de calor* ["I'm dying of the heat"]. So a few minutes later I tried one, saying *tô morrendo de cansa*, meaning "I'm dying of exhaustion." It passed without notice. [Note: R's principle was correct, but he should have said *morrendo de cansado* or *de cansaço*.]

In other cases, R failed to extract relevant parts from formulaic utterance for productive use in other contexts.

Journal entry, Week 7
Last night I went to K's house for dinner and had my most successful conversation so far, talking to a helpful but also critical listener. It was a full 20 minutes before I said everything I can now say in Portuguese. I got a nice slang expression, *foi um barato*, which means "it was terrific." I know *barato* as "cheap," but X said this expression was originally drug culture jargon and now everyone uses it.

Although R used *foi um barato* frequently, he never derived from the expression any other use for *foi*, the perfective of SER.

In still other cases, R did extract material from formulas for productive use, but then proceeded to use the material in entirely inappropriate ways:

Journal entry, Week 5
D told me the expression *o que a gente vai fazer*, "what shall we do?", although *a gente* usually means "people."

Journal entry, Week 16
I noticed that N always orders from X using *a gente*, for example *cafê prá gente*, "coffee for the person," but meaning "coffee for *me*." Seems odd, but I've used it a few times.

Having discovered the form *a gente*, which seemed very colloquial to R, he began to use it frequently, but always incorrectly. In Brazilian Portuguese, *gente*, with no article, means "people." *A gente*, with the definite article, means "we/us." Thus, *gente como a gente* (the translation of the film title, "Ordinary People") means "people like us." Both *gente* and *a gente* are very frequent in informal speech. There are in addition some uses of *a gente* in which the identity of referents other than the speaker may be obscure or indefinite, some of which are parallel to similar uses of "we" in English (e.g., the editorial/imperial/poetic/pastoral or group representative "we"). Other cases in which *a gente* is used might be more likely to trigger the use of impersonal "one" or "you" in English, e.g., *quando a gente está apaixonada, a gente fica com vontade de morrer*, "when you're in love, you want to die," in which the speaker is talking about his or her current situation but is expressing feelings as though they were universally felt. A further complication is introduced by the fact that both *gente* and *a gente* are semantically plural (or collective) but syntactically both are third singular.

This is a case where direct explanation might have been very useful, as R was unable to infer the meanings of the two forms from context. First, he did not realize that there were two forms, missing the significance of the article entirely (note that in his prototype utterance *cafê prá gente* the article has been absorbed by the preposition). Second, misinterpreting some utterances (*cafê prá gente* means "coffee for us," not "coffee for me"), R concluded that *(a) gente* was a pro-form that could be used to refer vaguely to almost any person. He made two types of systematic errors. When using *gente* to mean "people" (semantically

correct), he used third plural verbs (grammatically incorrect). When he did use third singular verbs, it was because he intended a third singular referent (semantically incorrect). e.g.:

4.204

R: . . . eu falei uma hora ou mais com gente que estava sentando ao lado de mim . . .	I spoke for an hour or more with people [*gente*, but intended meaning was "someone," *uma pessoa*] sitting beside me . . .

R's ability to generalize accurately from formulaics to more productive use was therefore limited. However, we do not view the relevance of formulaic speech simply as a way "into the system" but also as a way *out* of the system. Pawley and Syder (1983) have argued that even when constructions are fully derivable by productive rules of the grammar, speakers do not utilize the creative power of syntactic rules to anything like their full extent, and "indeed, if they did so they would not be accepted as exhibiting nativelike control of the language" (Pawley and Syder 1983:193). The gist of Pawley and Syder's argument is that the ability of native speakers to routinely convey meanings fluently, in the face of limited human capacities for encoding novel speech, and in a way that is not only grammatical but also idiomatic and nativelike, rests to a great extent on prepackaged material: memorized sentences and phrases, lexicalized sentence stems (with open slots), familiar collocations, and the like. Such prepackaged items include true idioms with arbitrary construction and usage, but also regular form-meaning pairings, which Pawley and Syder claim must be known both holistically (as lexicalized units) and analytically (as products of syntactic rules). Pawley and Syder argue that the stock of lexicalized sentence stems alone must be in the hundreds of thousands for an ordinary mature speaker of a language.

In the speech of S on the conversational tapes, there are many examples of idiomatic "chunks," readily identifiable by the fact that they occur repeatedly, with minimal change, e.g.:

que que você tá achando de NP?	what do you think of NP? 7 examples on tape 1, no variation
me diz uma coisa	tell me something 6 examples on tape 1, no variation
quer dizer que	I mean, that is to say 5 examples on tape 1, no variation

Other examples that occur less frequently on tape are still recognizable as things frequently said, e.g.:

quem sabe seja isso mesmo	who knows if it's really that
te leva a pensar	it makes you think
aí é que é bom	then it's good
ia te falar	I was going to tell you
se você quiser	if you like/want

cada um na sua	everyone minds their own business
tem mania de NP	is crazy/compulsive about NP
pois é	indeed
é uma festa	it's a party (i.e., something terrific)
que sorte/bom/interessante	how lucky/good/interesting
seria bom/interessante	it would be good/interesting

An increase in idiomaticity, and particularly the use of idiomatic, prepackaged strings, might be one of the expected benefits of learning a language through interaction with native speakers. When we look at R's language on the conversational tapes, the evidence is mixed. We do find some examples of slang, for example, in R's speech, beginning with conversation tape 2 and increasing on the last two tapes, such as the formulaic *foi um barato*, lexical items such as *cara* ("guy"), *loucura* ("lunacy"), *baseado* ("joint"), and abbreviated (more colloquial) forms of the verb ESTAR such as *tô (estou), tá (está),* and *tava (estava).* In a few cases, slang was explained by native speakers:

Journal entry, Week 20
Q gave me some more slang: *tô na minha, tá na dele*, etc., meaning "I do it my way," "he does it his way," etc.

Other times, R figured out the meaning of slang expressions from context:

Journal entry, Week 12
During our first conversation, I noticed that N has a favorite expression, which sounded to me like [dehepentsh]. It seemed from context that it must mean "maybe," "perhaps," a hedge of some kind. So I started using it back.... Now I'm really embarrassed. I tried to look it up in my dictionary, but couldn't find it at first. Today I realized that it must be "r," not "h," and I found *repente, de*, "suddenly." If I misinterpreted what N said to me, that's pretty normal, but what stupidities have I produced by saying "suddenly" when I thought I was saying "perhaps"? Also, I just checked my class notes. We were given *de repente* in class.

Journal entry, Week 13
I mentioned the *de repente* example in class today, to illustrate the difficulties of figuring out the language through conversation with a monolingual native speaker. Everyone had a good laugh on me, until O piped up and said, "wait a minute, *de repente* also does mean "maybe"; it's very current slang and I use it constantly with that meaning. The rest of the class was skeptical, but O insisted. I just stopped by N's place and asked him. He said *de repente* is just a sign of reflection, automatic, doesn't mean anything. And he used it three or four times while we were talking, even as a filler in the midst of his explanation.

There are other cases in which R noticed idiomatic usage, including a few cases in which what he observed was accurate although it contradicted what he had been taught in class:

Journal entry, Week 11
We were taught that Brazilian Portuguese does not use the T-forms, but I hear them used. A always leaves saying *eu te ligo*, "I'll call you," and I also hear the possessives *teu* and *tua*, though never a subject T-form.

Journal entry, Week 20
N and M were just talking and N asked *tem não?* M answered *tem não.* N also said *vou não.* Ask S about the difference between não + V and V + *não.*

Journal entry, Week 21
I asked Y about *tem não.* She said I was mistaken. What I probably heard was *não tem não.* She conceded that the first negative might be indistinct, "but it's really there." Am I hearing incorrectly, or is Y being prescriptive?

Journal entry, Week 21
I listened carefully at the beach today, and I'm *sure* that I heard three different forms: *não vou, não vou não,* and simply *vou não.*

Of the forms that R noticed, *não* + V is standard Portuguese, *não* + V + *não* is typical of Rio de Janeiro, and V + *não* is generally considered to be typical of speakers from the northeast of Brazil. R was aware that some of his friends were originally nordestinos but does not know if the particular friends who produced those constructions were.

Looking through the conversational transcripts for idiomatic, prepackaged chunks, the evidence is more discouraging, although we do not know how much idiomaticity should be expected after 4 months of interaction with native speakers. It is clear that R did rely whenever possible on familiar material for communication, including language he had picked up verbatim from native speakers. There are several cases where R can identify his language on tape as things he heard people say to him in the context of the event reported. On tape 3, R reported having swum a long distance, from one beach to another, *duma até a outra* ["from one to the other"]. The phrase, which contains R's only correctly contracted preposition with an indefinite article on any tape, was exactly what one friend had said to another when describing R's swimming a few days previously. R also used, and often overused, common expressions like *tudo bem/bom/legal* ("everything's OK, fine"), *mais ou menos* ("more or less"), *são X horas* ("it's X o'clock"), chunks that virtually all nonnative learners of Portuguese quickly pick up and use. In other cases, R relied heavily on chunks that he himself had constructed. Some of these are reasonable Portuguese. On tape 4, R said what he always said when people asked him if he had studied Portuguese before arriving in Brazil:

4.246

R:	... e quando eu vi [intended: vim] aqui no Rio ... eu non sabia nenhuma palavra em portuguès.	... and when I say [intended: came] here to Rio ... I didn't know a single word of Portuguese.

The majority of R's familiar ways of saying things, however, are simply not idiomatic Portuguese. They are either Portuguese chunks used in noticeably

nonnativelike ways or, more commonly, nonnativelike chunks, R's own frozen interlanguage forms. Some of the more striking examples are:

antes de X anos	"Before X years" Occurs many times on tape. The correct form is *há X anos atrás*. Source of R's form unknown.
falamos X juntos	"We speak X together," presumably from English. Occurs on all four tapes. In Portuguese, the *juntos* is not used and is felt to be redundant.
a coisa de NP	This also appears as *a causa de NP* on a note which R wrote to a friend. Intended as "because of NP," which in Portuguese is *por causa de*.
companheiro da casa	"Housemate" Normally in Portuguese, one would say *moro com um amigo* ("I live with a friend"), although there is an expression *companheiro de quarto*, "roommate." R learned that expression from a native speaker and used it correctly on tape 3. Between tapes 3 and 4, he apparently reconstructed the form, and for a time did not remember ever having heard or used it with *quarto*.
V + com + pronoun	A possible construction, but overused and incorrectly used by R. R first learned the phrase *vou levar comigo* ("I'll take [it] with me"), used that phrase when CARREGAR ("carry") was required, and generalize the pattern incorrectly, e.g., *falou comigo que* ("talked to me that") instead of *me contou* ("told me").
preciso + V	"I must/need to/have to" On tape 1, R expressed this notion with DEVER + V, then used PRECISAR + V from tape 2 to the end of his stay in Brazil, although he constantly heard and understood the more common form *TER que + V*. R's forms were correct. The problem is partly one of register and partly semantic. PRECISAR has a connotation of personal responsibility, as opposed to the connotation of external forces in the case of *TER que* (comparable with the contrast between "must" (internal) and "have to" (external) in English).
alguma coisa *algumas vezes*	"something," "sometimes" The forms are correct, but R used these formulaics in semantic contexts in which they don't occur in native speech: *alguma coisa* was used when a native speaker would say *uma coisa* (cf. S's formulaic *me diz uma coisa*, "tell me a thing"); *algumas vezes* was used when a native speaker would say *várias vezes* ("several times").

Did Correction Help?

When nonnative speakers make errors, they are sometimes able to identify and self-correct their errors, and native speakers sometimes react to errors with corrective feedback. Both kinds of correction, self- and other-, are part of the phenomenon of repair, in which the parties to a conversation attempt to rectify conversational trouble (Day, Chenoweth, Chun, and Luppescu, 1984). But does repair help? Is an error that is repaired therefore less likely to recur? While the extensive literature on the subject of error treatment still provides no

conclusive evidence, current opinion on the meaning of errors and the desirability of correction ranges between two extremes. Hammerly (1982:274–280) views errors as failures that must be counteracted, urging that "we should not allow early free speaking, which results in linguistic monstrosities." Vigil and Oller (1976) argue that errors that do not receive negative cognitive feedback are likely to fossilize, and Schachter (1984) has suggested that "negative input," including but not limited to correction, may be a universal input condition for successful second language acquisition. Others have argued that errors are inevitable and that error correction is a mistake, since correction raised the "affective filter" and is of no direct benefit to language acquisition (Krashen 1982:74–76). Error correction in free conversation has been much less discussed. In the only study we know of to date that attempts to find out if such correction produces any results, Brock, Crookes, Day, and Long (this volume) found few if any observable effects of corrective feedback but do not argue that corrective feedback produces no results; they suggest that longitudinal research would help resolve the issue.

The issue of self-correction has been less discussed in the language learning literature, but there are various possibilities that have been proposed. Krashen (1982:104–112) has discussed self-correction in connection with the concept of monitor use, the application of learned rules as an editing device that may improve performance, but only slightly and under certain conditions. Krashen has also suggested frequently that learners may monitor by "feel" in addition but has not yet in his published writings suggested any place for self-correction in the acquisition process itself. Morrison and Low (1983) have raised this possibility. They suggest that it might be possible to show that the act of detecting and repairing certain mistakes has longitudinal repercussions. We might find that learners who monitor and self-correct their own speech make faster progress or progress further in language learning than those who do not monitor, or that those who monitor primarily at the level of phonology would show improvement in phonology while those who monitor their syntax would show improvement in syntax, etc.

When dealing with a single learner, we are limited in the ways in which we may look for possible effects of self- and other-correction. This is also an area in which we feel especially keenly the limitations of our data. Out of all the interactions in Portuguese in which R took part we have only a small sample on tape, which may or may not be typical in various ways. Other native speakers may have corrected R more or less than S; R may have monitored and self-corrected more in the taped conversations than in other interactions, and possibly less than in some other situations. R also took note of corrections of his Portuguese by various interlocuters, but these clearly represent only a small sample of the corrections that native speakers must have made in a 5-month period. Nevertheless, a few patterns emerge and there are a few cases in which errors and the attempts made to correct them are sufficiently documented in our data that we can give a sketchy natural history of their evolution.

First, it is clear that native speakers do indeed correct errors that their nonnative speaking friends make, even though they correct only a small percentage of the errors that are made (Chun, Day, Chenoweth, and Luppescu 1982). R reported in his journal being corrected by friends quite often. There is almost certainly some variation by personality: R reported that one friend "never" corrected him, while others did so frequently. It is also clear that correction does have potentially adverse effects on the quality of interaction. While R felt in principle that he would rather be corrected than not, there are several journal entries that show clearly his discomfort and ill feelings when native speakers overdid it:

Journal entry, Week 7
I'm glad I was wearing my sense of humor, because Y corrected me constantly. The ones I can remember now were *muitas problemas* (I know *problema* is masculine but made the error anyway), *nominal* to *substantivo, silència* to *silêncio* and *corpo diplomática* to *corpo diplomático*. I didn't want to take that one lying down, and objected that it was just a guess. I knew "foreign service" would not translate, but I figured CD would. Y said: guess better . . . He works for the Tax Ministry, so maybe that explains his authoritarian personality.

Journal entry, Week 20
X corrected me frequently throughout the exam. She corrected the stress on *níveis* (not the first time I've made that mistake), and corrected *confusando* to *confuso* (I think), pointing out that it's irregular. I don't know if she was giving me the word for "confused" or "confusing". . . . X also corrected *prefero* to *prefiro*, but I think I didn't make that mistake. . . . I think she just heard the error because she was expecting it. I didn't appreciate the correction.

Journal entry, Week 20
I'm feeling very discouraged by how little I've managed to learn. I had a great time last night until I said something about my trip today and I must have said *de mânha* again (stress error) . . . Y corrected me sharply. I wish I could learn with only one correction too, but I would also appreciate a softer touch in correction. I was so angry I didn't talk at all for a couple of hours.

Table 7 gives the frequency of self- and other-corrections, taken from the conversational transcripts and R's journal notes, and their distribution according to type of error repaired. Except for errors of pronunciation (which we will not deal with) and lexis (which we will deal with for only a few examples), the categories into which repairs have been sorted are roughly the same as those discussed on pages 249–261; so some comparisons between what was repaired and what improved are possible.

Self-correction If self-correction facilitates second language learning, we might expect to find various manifestations of this in the data. Looking across the series of tapes, we might find that those grammatical categories in which errors were most often self-corrected were those which showed the greatest improvement over time. Looking at the tapes one by one, we might find a pattern in which at one stage R did not self-correct an error type, a second stage at which errors continued to occur but were self-corrected, and a third stage in which the error did not occur. We do not find any of these patterns in our data, and we are

TABLE 7 Repair. Self-Correction and Other-Correction on Conversational Tapes, Other-Correction Noted in Journal

	Self-correct	*Other-correct*	*Noted in journal*	*Total*
Lexicon	5	7	7	19
Articles	8	4	2	14
Gender	9	1	5	15
Pronunciation	5	4	6	15
Copula	7		2	9
Perfect past	5	3		8
Prepositions	1	4	1	6
Person	4	1		5
Conjugation		1	2	3
Discourse		4		4
Subjunctive	1	1	2	4
Miscellaneous	16	10	6	32
Total	63	40	33	136

unable to discern any clear effect from self-correction to improved performance over time. Three areas in which R concentrated his self-corrections but which received relatively little other-correction illustrate the variety of patterns that we do find:

Gender As indicated in Table 7, gender errors were the most frequently self-corrected of any of our categories but do not show up with equivalent high rank in our tabulations of other-corrections. Gender seems to be a good candidate for something that R was working on by himself. However, if we refer back to Table 1, we see that the various aspects of gender in Portuguese were things that R was already good at in the beginning. Instead of self-correction being a precursor of improved performance, it seems here to be the reflection of already established good performance, an ability to detect and remedy those occasional (performance) errors that do occur. This interpretation is strengthened if we look at the distribution of self-corrections within the various aspects of gender. Twice as many of R's self-corrections repaired problems with article gender and phonological shape (those aspects of gender on which he performed best at the beginning) as repaired problems with pre- and postmodifiers, the categories in which he originally made the most errors but showed the most improvement over time.

Copula Copula errors were corrected relatively frequently by R (rank 3 in Table 7) but seldom by native speakers. Self-monitoring and correction seem to have had no effect here at all. Five of R's seven corrections of copula errors on tape consisted in restoring omitted copulas, but as discussed on pages 259–262 this was an area in which R did not improve at all during his stay in Brazil.

Person As noted above, R made errors confusing first and second/third person verb forms, especially in the perfect and on tape 1 especially when answering questions when the answer required changing the personal inflection.

Person errors are another area in which self-corrections were focused, and again there is little evidence that self-correction contributed to improved performance subsequently. The area in which improvement occurred over time was in answering questions, yet none of R's self-corrections were in answers to questions. All his self-corrections of verb person errors were in self-initiated utterances. In this case, R's self-corrections appear to be an attempt to control a part of the grammar that actually was showing a slight deterioration over time.

Gender, copula, and verb person are thus three areas on which self-corrections were focused, with no apparent effect on subsequent production. While our data are limited, they seem to us to support the Krashen position that the ability to monitor and self-correct in the midst of a communicatively meaningful interaction is a rather minor output control mechanism, not a significant part of the acquisition process. Two other categories listed in Table 7, articles and the perfect past tense, present a somewhat different picture. However, both of those areas of the grammar also received significant other-correction and joint work by the native and nonnative speaker, so we deal with them below under the category of apparent successes of other-correction.

In discussing the issue of whether instruction helped, we proposed that it was important that R noticed certain features of Portuguese, a type of metalinguistic awareness. Self-correction is another aspect of metalinguistic awareness, which seems this time to have had no effect. A study by Schlue (1977) suggests a possible reason why. Schlue recorded three university ESL students once a week for 10 weeks, and immediately after each recording had her subjects listen to the tapes of their conversations and try to identify and correct their own errors. Schlue found no clear indication that overall error sensitivity either increased or decreased for these subjects during the 10-week period, and she does not report any relationship between the ability to self-correct during the course of a conversation and progress in grammatical development. Schlue does report, however, that with one subject ("Dr. F"), there was a dramatic shift in the development of noun plurals, from an initial stage in which errors went unrecognized to a second stage of *belated* awareness of error (when listening to the tape being replayed) to a third stage of improved performance. We have no comparable data for R, who did not listen to the tapes of his own conversations and did not look at any of the transcripts until just before his departure from Brazil.

Other-correction While R recorded instances of corrective feedback in his journal, the 33 specific corrections recorded must represent only a small fraction of the error corrections that he must have received over a 5-month period. No doubt R failed to remember many corrections long enough to write them down, and negative feedback was frequently not the most salient aspect of the language learning experience on most occasions when R wrote in his journal. We believe there is also another reason for the small number of examples recorded: R frequently did not know that he was being corrected. In the transcripts of the conversational tapes there are numerous examples in which it is clear that while the native speaker provided corrective feedback, and intended

to do so, R did not recognize it as such. Some examples from tape 1, corroborated by discussion between S and R concerning what each one thought was going on, are the following:

1.124–128

S:	Você já estudou francês?	Have you studied French?
R:	Sim.	Yes.
S:	Já?	Have you? (lit: already?)
R:	Eu?	Me?
S:	É. Você fala francês?	Yes. Do you speak French?

1.251–254

S:	Foi com você pro Líbano?	Did she go with you to Lebanon?
R:	Sim.	Yes.
S:	Foi, né?	She went, huh?
R:	Sim, e . . .	Yes, and . . .

1.84–88

S:	Que que você tá achando do carioca em relação ao Egito?, aos egípcios?	What do you think of Cariocas (residents of Rio) compared with Egypt, with Egyptians?
R:	Ah . . . muito perto.	Ah . . . very close.
S:	Muito perto, né? Muito parecidos?	Very close, huh? Very similar?
R:	Sim, muito, muito.	Yes, very, very.

The first two examples above deal with R's inappropriate answers to questions in Portuguese, and in both cases S supplied what would have been a more appropriate response. However, these were heard by R not as error corrections but simply as confirmation checks. In the classification of Day et al. (1984), these are examples of off-record corrective feedback, corrections embedded in utterances with more than one function. The third examples treats a lexical error. *Perto* means "proximate in space," as does English "close," but cannot be extended to mean "proximate in relation." R's error was an overgeneralization of a Portuguese item along lines suggested by English. When R produced the error, S responded first by repeating the incorrect form, then providing the correction. The correction was not "heard" by R, who once again took the potentially corrective feedback as a confirmation check, and provided the confirmation that he thought had been requested. From R's point of view, *perto* was confirmed, not disconfirmed by this interaction, which might be part of the reason why he continued to produce the form with this meaning throughout his stay in Brazil. On tape 4 we find the following exchange. This time *perto* is not corrected by S:

4.370–372

R:	Mas não é confuson, é diferente.	But it's not "confusion". It's different.
S:	É, é diferente.	Yes, it's different.
R:	É perto, mas tem diferença.	It's close, but there's a difference.
S:	É.	Yes.

Cases like these, in which intended corrections were not noticed by R, are common on each tape. It is also possible that at least on some occasions, the opposite happened: something said by a native speaker and not intended as correction might be taken as correction. We doubt that this happened often, but there is one example on tape:

1.71–73, 84–85

R:	Uh, mas os egipitios?	Uh, but the "Egyptians"?
S:	Egipitos?	Egyptians?
R:	Os egipitos é, não son fanáticos . . .	The Egyptians is, are not fanatic.
	. . . .	. . . .
S:	Que que voce tá achando do carioca em relação ao Egito?, aos egipcios?	What do you think of Cariocas compared to Egypt, to Egyptians?

R did not know how to say "Egyptians" in Portuguese, so asked for help. S responded, but was not sure about the word the moment she said it. What she said was a native speaker performance error. She found an opportunity to say it again correctly, but in the meantime R had taken her initial response as a correction of his original pronunciation and had repeated it.

It may well be that in order for corrective feedback to have any effect, the nonnative speaker must, as a minimum, realize that he or she had been corrected. At least, we have not been able to find in our data any examples of cases where R made an error, was corrected, did not realize that he was being corrected, but nevertheless soon after improved his performance. On the other hand, being corrected is certainly no guarantee that one will not make the same error again, as every classroom teacher is fully aware.

In the remainder of this section we discuss some cases where correction apparently worked, and some others where it apparently did not work. We consider a correction to have worked if R did not make the same error again, a failure if he continued to make the same error. We must restrict our claims to *apparent* successes, since additional errors may have occurred of which we have no record, and improved performance may have other origins than error correction. Failures must also be identified tentatively, since the ultimate effects of some corrections might yet remain to be seen. We also restrict our discussion to examples of corrections for which we have enough documentation to look for positive effects. Many items that were corrected once on tape never occur again in our corpus and are never mentioned in the journal.

Apparent failures Several examples of correction that had no effect on R's subsequent performance have already been mentioned: the subjunctive, which was corrected several times (see pages 282–284 and Table 7), but except for the case of the formulaic *como você quiser* (which is mentioned in the journal but does not appear on tape) was not learned by R; the imperfect form of PENSAR, which R produced incorrectly in class and again a week later on tape 1 (page 256); *a causa de* NP, which R wrote on a note that a friend corrected and

later produced in conversation on tape 4 (page 290); *perto* in the sense of "similar," corrected although the correction was not perceived by R. Several journal entries report errors that persisted in spite of multiple corrections by friends, including three stress errors: *de mânha* instead of *de manhá* ("in the morning"); *errós* instead of *érros* ("mistakes"); and *païs* instead of *páis*, which resulted in a confusion between "parents" and "country."

There are other cases in which correction of an error that reflects a general grammatical problem seemed to have had a temporary effect but did not result in any general improvement in R's performance in the long run, e.g.:

3.209–211

R:	Fui a Hula's?	Did I go to Hula's?
S:	Foi? Não, não fui não, fui só ao cinema.	Did you go? No, I didn't go, I only went to the theater.
R:	Mas vi, viu Hula's?	But I saw, you saw Hula's?

R's error was with the personal inflection on the verb; his questions should have been *foi?* not *fui?* S's initial response, *foi*, can be seen as what-R-should-have-said, or as a confirmation check on what he did say (reversing person as appropriate when questioning). Her subsequent *não fui não* makes R's error clear. In his next turn, R made the same mistake again and, possibly under the influence of S's correction, he self-corrected the error. But there was no subsequent general improvement in R's performance on verb person by the time of the next tape.

4.90–99

R:	E sabe também, eu lembro agora, em árabe também eu tenho problema, uma, um problema: em árabe também tem concordância adjetivo substantivo mas eu lembro agora que o problema prá mim é como falar adjetivo mas eu não tenho subjuntivo.	And you know also, I remember now, in Arabic also I have a problem, a [feminine singular], a [masculine singular] problem: in Arabic also there is adjective-noun agreement but I remember now that the problem for me is how to speak adjective but I don't have subjunctive.
S:	Substantivo.	Noun.
R:	Substantivo, quando não tem substantivo, par exemplo, nós falamos sobre as ruas bonitas e depois eu falo . . .	Noun, when there is no noun, for example, we speak about the beautiful streets [feminine plural] and later I speak . . .
S:	Bonitos.	Beautiful [masculine plural]
R:	Bonitos. Sem, sem o subjuntivo, substantivo e também em português é problema, huh?	Beautiful. Without, without the subjunctive, noun, and also in Portuguese it's [a] problem, huh?

In the above example, R made an error confusing *substantivo* ("noun") and *subjuntivo* ("subjunctive"), S corrected the error, R repeated it but then just a few seconds later made the same error again and self-corrected himself. We have no data that indicate the *final* outcome of this and many similar corrections.

Apparent successes Two examples have been mentioned in passing of corrections that seemed to work immediately. *As moças as bonitas,* an article-noun-article-adjective construction that we have attributed to transfer from Arabic, was produced in class, corrected, and never produced again (page 255). *Corpo diplomática,* a guess by R on the basis on his knowledge of French *corps diplomatique,* was corrected in conversation to *diplomático* and appears in the corrected form on tape 1. It may (or may not) be significant that these errors were corrected the first time that R made them.

Articles Articles are an aspect of Portuguese grammar in which R made numerous errors (see pages 253–255), and as indicated in Table 7, article errors were among those most often other-corrected and self-corrected in conversation. There may be some relationship between the fact that 10 of the 14 self- and other-corrections on the conversational tapes were focused on R's specific problem of omitting the definite article between a contracting preposition and a place name or other proper noun and the fact that these were precisely the environments in which R's performance improved over time. There seems to be an especially significant repair sequence on the third conversational tape:

3.91–105

S:	Cê foi com quem?	Who did you go with?
R:	Com O, você conhece, huh? Que trabalha Cultura Inglesa e algumas pessoas, professores . . .	With O, you know [her], huh? Who works [at the] Cultura Inglesa and some people, teachers . . .
S:	*Da* Cultura.	*From the* Cultura.
R:	*Da* Cultura, agora "*da* Cultura," tudo com artigo.	*From the* Cultura, now "from the Cultura," everything with article.
S:	A tua palesta *na* Cultura eu achei que foi mais . . . foi mais bem concluida do que *no* IBEU.	Your lecture *at the* Cultura I think was more, finished better than [the one] *at the* IBEU.
R:	*Na* Cultura.	*At the* Cultura.
S:	É, *na* Cultura.	Yes, *at the* Cultura.
R:	Acho que sim. O grupo muito bom.	I think so. The group very good.
S:	A O me convidou prá dar aula *na* Cultura.	The O invited me to give classes *at the* Cultura.
R:	Eu ouvi.	I heard.
S:	Se você quiser vir morar *no* Brasil, cê já vai dar aula *na* Cultura, *no* IBEU.	If you want to live *in the* Brazil, you already are going to give classes *at the* Cultura, *at the* IBEU.
R:	*Na* Cultura, *no* IBEU.	*At the* Cultura, *at the* IBEU.
S:	*Na* PUC. E aqui *na* PUC.	*At the* PUC. And here *at the* PUC.

In this exchange, there are 15 occurrences of articles contracted with prepositions preceding proper nouns, and both S and R were aware and amused by the fact that they were producing so many of them while continuing to focus on the topic of conversation. Such repair sequences may have had something to do with the fact that on the next (final) conversational tape R no longer had a particular problem in supplying articles in those particular environments. While he continued to omit articles in general, his omissions after prepositions and

before proper nouns were no more frequent than any others. However, we must point out two other possibilities: (1) the improvement might have happened without either self- or other-correction, and (2) exchanges such as that cited above from tape 3 might have only accelerated, or perhaps been a reflection of, a change already in progress. Between tapes 1 and 2, R's performance on definite articles contracted with prepositions had already increased from 45 to 51 percent; his accuracy on definite articles before place names and other proper nouns had already increased from 28 to 44 percent.

Perfect vs. imperfect past tense On pages 257–259, we reported that the distribution of the two past tenses, perfect and imperfect, in R's speech was lexical: the great majority of verbs that R used repeatedly appeared either in the perfect or in the imperfect consistently, not both. We also reported that the underlying basis for R's assignment of specific verbs to the classes of [+ perfect] and [+ imperfect] was a semantic distinction between inherently stative and nonstative lexical verbs, rather than the frequency with which the verbs appeared in one of the two past tenses in input. Nevertheless, interesting questions remain concerning the roles of input and interaction, including correction, in the assignment of specific verbs to one of the past tenses.

Input frequency as a factor was suggested by the fact that although R used a lexical strategy for the distribution of the tenses he was still able to achieve a reasonable level of contextual accuracy. When either the perfect or the imperfect was required, R had a combined accuracy rate of 81 percent (39/48) on tape 1 and 86 percent (119/138) on tape 4. This suggested to us that while all Portuguese verbs have both perfect and imperfect past tense forms, native speakers of Portuguese might also strongly prefer one of the past tenses for particular verbs, or common conversational contexts might force particular choices, possibly to the extent that R might have heard only one past tense form for many verbs.

Table 8 lists all verbs used more than once by R in some past tense on the conversational tapes, and indicates the distribution by tense in both R's speech and the input provided by S.

In general, the frequency of the perfect in the input from S was much higher than the frequency of the imperfect. One result of this, as indicated in Table 8, is that there were indeed some verbs (COMPRAR, CONVIDAR, LER, NADAR, OUVIR, PAGAR, and VER) that R produced exclusively in the perfect and that were also present exclusively in the perfect in the sample of input available to us. On the other hand, the five verbs that R used exclusively in the imperfect past tense were not present in input either exclusively or overwhelmingly in the imperfect.

The pattern presented in Table 8, including discrepancies between the categories of [+ stative] and [+ imperfect] and the few cases of verbs that show variation can be accounted for if we adopt two sets of assumptions:

1. R operated under a (subconscious) hypothesis that stative (or durative) verbs would be [+ imperfect] in the past, while nonstative (or punctual) verbs would be [+ perfect] in the past.

TABLE 8 Lexical Verbs Used More Than Once by R; Distribution of Perfect and Imperfect Forms in Input and Output

		Output		Input	
Lexical verb	*Stative?*	*Perfect*	*Imperfect*	*Perfect*	*Imperfect*
ESTAR (Be)	+	—	23	2	5
PENSAR (Think)	+	—	2	4	—
QUERER (Want)	+	—	7	1	2
SABER (Know)	+	—	10	3	2
TER (Have)	+	—	11	3	3
COMPRAR (Buy)	—	7	—	8	—
CONVIDAR* (Invite)	—	2	—	1	—
DIZER (Say)	—	12	—	5	1
FALAR (Speak)	—	7	—	3	1
FAZER (do)	—	8	—	8	1
FICAR (Become)	—	2	—	—	—
IR (Go)	—	38	—	34	6
LER (Read)	—	2	—	2	—
MANDAR (Order)	—	2	—	—	—
MUDAR (Change)	—	2	—	—	—
NADAR (Swim)	—	5	—	5	—
OUVIR (Hear)	+	9	—	1	—
PAGAR (Pay)	—	2	—	1	—
PLANEJAR (Plan)	—	2	—	—	—
RECEBER (Receive)	—	6	—	—	—
VER (See)	+	11	—	12	—
VIR (Come)	—	3	—	—	1
VISITAR (Visit)	—	2	—	—	—
GOSTAR (Like)	+	11	1	23	—
JOGAR (Play)	—	1	1	2	—
MORAR (Live)	?	3	5	3	—
SER (Be)	+	4	2	30	10
TRABALHAR (Work)	?	2	4	1	—

*CONVIDAR also includes **envidar*, an incorrect form sometimes used by R.

2. Language learning is subject to the "easy confirmation principle." Learners look for verification of their hypotheses, not disconfirmation (Schachter 1983, 1984). Hypotheses can be disconfirmed, but if the learner has hypothesized that a particular form X is appropriate in some environment Y, then disconfirmation requires either that some other form Z occurs in environment Y either exclusively or with overwhelming frequency, or that the learner produces form X and is explicitly corrected to form Z.

An initial assumption that statives would be imperfect, combined with the easy confirmation principle, explains why R produced five stative verbs exclusively in the imperfect, even though he only heard them *sometimes* in the imperfect.[27] The principle that disconfirmation is difficult, but possible, will explain why two stative verbs, VER and GOSTAR, appeared exclusively in the perfect in R's speech: those two verbs were among the most frequent in the input to R, and in the data available to us appear exclusively in the perfect in the input. The other

stative verb that R used in the perfect, OUVIR, is not explained by this principle, since in our data it occurred only once in input, and we are not sure why R produced OUVIR in the perfect. It might be because OUVIR in the past is (relatively) punctual, or it might be that it occurred more frequently and always in the perfect in other input not available to us, or it might be that OUVIR was assigned to the perfect category under the influence of VER (the perfect of VER is *vi/viu;* that of OUVIR, *ouvi/ouviu*).

Four verbs on which R's performance was variable remain to be explained: JOGAR, SER, MORAR, and TRABALHAR. R produced the verb JOGAR twice in the past on tape, once in the perfect (as predicted, since "play" is nonstative) and once in the imperfect. R's use of JOGAR in the imperfect appears to have been triggered by the verb form of the question he was answering:

2.205–206

S;	Mas o que que ele fazia? Só cantava?	But what was he doing [imperfect]? Just singing [imperfect]?
R:	Só cantava, só cantava mas as moças também jogavam, jogavam com ele e brincavam, brincavam com ele . . .	Just singing [imperfect] just singing but the girls were playing [imperfect], playing with him and playing [imperfect] playing with him . . .

R's response to a question phrased in the imperfect contained not only the imperfect of JOGAR but also the imperfect of two other nonstatives, CANTAR (modeled by the question) and BRINCAR. In Table 8 we listed only those verbs that R used more than once in the past on tape. If we consider *all* verbs that R used in the past (including those which appear only once), then the occurrences of BRINCAR and CANTAR in this example constitute the only additional exceptions to the principle that nonstatives are in the perfect.

The verb SER appears in R's speech in the past four times on the tapes, twice in the imperfect (as predicted) and four times in the perfect (not predicted), which violates both the hypothesis that statives should be imperfect and the easy confirmation hypothesis, since there are 10 occurrences of SER in the perfect in the input on tape. However, it seems to us that R did not really have this verb assigned to either aspect. R seldom used SER in the past, preferring to use the imperfect of ESTAR. In addition, the four occurrences of SER in the perfect are each odd in some way: one was a bungled attempt at an existential sentence (see page 285); two were in the formula *foi um barato* (see page 286), the last was as the auxiliary of a passive, modeled on what S had said in the previous turn (see page 282).

The final two verbs that show variation between the two aspects of the past, MORAR and TRABALHAR, are interesting in a number of respects. First, it is unclear to us whether they should be classified as statives or nonstatives (grammarians we have consulted have not all agreed), though it is clear that they are both nonpunctual verbs. Second, these verbs indicate one of

the inadequacies of R's lexical solution to the problem of aspect. While the imperfect in Portuguese is used for nonpunctual structures, as Britto (1984) points out, there is no contradiction in Portuguese between a marker of perfectiveness and other markers of durativeness in the same sentence:

a.	João morava [imperfect] na Europa quando o conheci.	John lived in Europe when I met him.
b.	*João marou [perfect] no Europa quando o conheci.	
c.	João morou [perfect] na Europa muitos anos.	John lived in Europe for many years.
d.	*João morava [imperfect] na Europa muitos anos.	

Sentences a and b show that the imperfect must be used in Portuguese whenever reference is made to a point in time contained within the period indicated by MORAR. There is also in Portuguese, as in English, the alternative of using a past progessive construction in such sentences, a construction with which R had no problems. Sentences c and d, on the other hand, indicate that while both the adverbial and the lexical meaning of the verb itself make it clear that MORAR takes time, sometimes the perfect is required, whenever the segment of time is "seen from the outside."

Finally, this is a case where we think that explicit correction (in the case of MORAR) and modeling (in the case of TRABALHAR) may have played a significant role in destabilizing one of R's characteristic errors. The error here was R's producing sentences of type d, e.g.:

1.7–8

R:	... e vous sabe que eu é, eu morava no Egito e Lebanon, Líbano.	... and you know that, uh, I lived [imperfect] in Egypt and Lebanon, Lebanon.
S:	Você morou no Egito? É?	You lived [perfect] in Egypt? Yeah?

1.45

R:	Beirute é, é eu morava em Beirute de 75 até 79 e ...	Beirut, uh, I lived [imperfect] in Beirut from 75 to 79 and ...

.343

R:	Trabalhava, trabalhava cinco anos em Salvador ...	He worked [imperfect], worked five years in Salvador ...

On tape 1, R first produced the form *morava* [imperfect] and was corrected by S to the imperfect form *morei/morou,* in the first example above. R's reaction later when looking at the transcript of this conversation was that he had noticed the correction but had not understood it: since he had intended to convey the idea "used to live" ("used to" is a marker of nonpunctualness for English) and since he had been told to use the imperfect as an equivalent of "used to" (see

journal entry, page 258, what was wrong with this utterance? A minute or so later, R again produced the form *morava*, again incorrectly (second example above), and then, with a little help from S, produced the correct form *morei*:

1.119–122

S:	E me diz uma coisa R, você morou na França também?	Tell me something R, have you lived [perfect] in France too?
R:	Não.	No.
S:	Nunca?	Never?
R:	Nunca, nunca, visitei França 3 vezes ou 4 vezes mas não morei, não morei lá.	Never, never, I visited [perfect] France 3 times or 4 times, but I didn't live [perfect], didn't live there.

Looking for a longer-range outcome of a possible shift in R's interlanguage in the use of MORAR, we find no occurrences of that verb on tape 2 in either R's or S's speech, and only one on tape 3, where R used the imperfect in an utterance in which the perfect would have been more acceptable though not obligatory. On the last tape, R used the verb three more times: first correctly in the perfect, then correctly in the imperfect (*ano passado morava comigo no Havái*, "last year he lived with me in Hawaii," an utterance in which native speakers also prefer the imperfect), and one final time, correctly in the perfect.

The verb TRABALHAR occurs less frequently in both R's and S's speech on the tapes and was not corrected by S when R first used it incorrectly in the imperfect on the first tape. On the second tape, S modeled the form *trabalhou* [perfect] for R in a question. A few minutes later, R once again incorrectly used the imperfect form of the verb. Several turns later in the conversation, R again used the imperfect but immediately self-corrected to the perfect:

2.99

R:	Trabalhava, trabalhei lá, huh? e . . não, eles não pagaram ...	I worked [imperfect], worked [perfect], huh? and ... no, they didn't pay ...

Something had clearly made R aware that the imperfect was not the form to use, but we don't know if the crucial factor was S's use of the form earlier in the conversation or perhaps the correction he had received for MORAR, since MORAR and TRABALHAR were the only two verbs for which he thought he was using the imperfect to mean "used to." TRABALHAR does not appear on the last two tapes.

Marida The final example we discuss illustrates both the easy confirmation/difficult disconfirmation principle and the principle that correction can work, if you keep at it.

In Portuguese, *marido* is "husband," but there is no corresponding word *marida* for "wife." R made up the form, overgeneralizing the principle that there are masculine/feminine pairs ending in *o/a.* We do not know when R first

produced the form, but it appears on the first conversational tape. Although S was amused and was tempted to correct the error, she did not:

1.245–246

R:	. . . e minha ex-marida também professora de inglês.	. . . and my ex-wife also English teacher.
S:	Ah é?	Oh yeah?

A few turns later in the same conversation, S asked R a question about his ex-wife, using the normal form *mulher* (literally, "woman"), which R did not understand. In attempting to clarify the question S had asked him, R finally asked if she was talking about his *ex-marida*, and S replied "yes" (see page 264 for the entire exchange).

Two weeks later, when beginning to transcribe tape 1, S mentioned to R that she had immediately noticed some exciting things. Specifically, she mentioned that R was deleting many of his copulas, and that there was a classic overgeneralization in his creation of a word *marida* for "wife." R's reaction was the following:

Journal entry, Week 9
I saw S this afternoon. She has started to transcribe the tape and is excited about the project. She told me that I am omitting my copulas and I've created a word *marida* for wife, when it should be *esposa*. I responded as non-comittally as possible, but I was amazed. I had no idea that I have been leaving out my copulas. . . . The word I've apparently made up for "wife" astounds me even more. Now that the error is pointed out, I see that it is an overgeneralization . . . . I'm shocked because I did that tidy bit of analysis entirely without awareness. There are plenty of times when I don't know a word and consciously guess, but this is not one of them. I have the strongest feeling, in fact I'm ready to insist, that I have never heard the word *esposa*, but I have heard *marida* many times. I've been thinking about this all afternoon. S-san used to talk about his wife in class. Didn't he always refer to his wife as *minha marida*? I guess not, or L would have corrected him. I have a very weird feeling about all this.

Three weeks later on tape 2, R used the word to which he had been corrected, *esposa*:

2.265

R:	E a esposa de meu amigo lá trabalhava turistica . . .	And the wife of my friend there used to work in tourism . . .

This was not the end of the matter, however. While R did not use *marida* again on tape, he did so in conversation, frequently enough that friends not only corrected him frequently but also used the word to characterize his faulty interlanguage:

Journal entry, Week 19
Talking about X, I referred to Y as *a marida dele* ["his *marida*" Note: this refers to the same person R called *a esposa de meu amigo* on tape 2.] E gave me a big frown, and said that was at least the third

time I've said that to her. She's started to react as though I'm a real dummy. I can't blame her, but I also cannot shake the feeling that I didn't make it up, in spite of what everyone says . . . . Now I have a strong feeling that if it's not Portuguese it must be Arabic. But it isn't, I don't think. After suffering from such strong interference from Arabic in the beginning, now I find I've repressed that language so well that I can't think of Arabic words when I try.[28]

Journal entry, Week 20
M said I make lots of mistakes, and mentioned *marida* and *pais* [stress error].

Gradually, the balance seems to have shifted from *marida* to *esposa*:

Journal entry, Week 21
At the beach today I said *esposa*. I realized it after, not before I said it.

4.405–406 (Week 22)

R:	. . . eu vou lá, a Boston, e vou discutir com minha ex-esposa.	. . . I'm going there, to Boston, and I'll discuss it with my ex-wife.
S:	Tá acertando tudo hoje, hein?	You're getting everything right today, huh?
R:	Estava procurando oportunidade.	I was looking for a chance.

And then, three days before leaving Brazil, R finally noticed in input the word that Brazilians usually use for "wife":

Journal entry, Week 22
I'm watching TV and just saw a preview of a coming show entitled *Sozinho, marido e mulher*, which clearly means "alone, husband and wife." *Mulher!* No wonder it's been difficult to remember to say *esposa* instead of *marida*. People have not been saying *esposa* unless they were correcting me. But I can't remember having ever heard people say *mulher* before either, and I'm sure it's not the form people have said I should use. Five months to figure out such a simple thing!

But Brazilians had certainly been saying *mulher* to R. We have two occurrences in S's speech to R on tape. Although, as we have mentioned, R did not understand the word the first time S said it to him, the second time, on tape 3, R's response indicated that he did comprehend:

3.383–385

S:	Cê gosta da mulher dele? A mulher do Pepeu Gomes que também é cantora?	Do you like his wife? The wife of Pepeu Gomes who is also [a] singer?
R:	Mas . . . nunca junto.	But . . . never together.
S:	Não, cantam separados, é.	No, [they] sing separately, yes.

Note that R did not have to interpret the word *mulher* in order to understand who was the "X" of Pepeu Gomes, also a singer. He had already heard the story of the husband and wife who are both singers but never perform or record together. This looks like a good example of something just beyond R's current level of competence which was present in comprehensible input with the use of extralinguistic information but was not thereby learned. Instead, R continued to fluctuate between a self-created form and a form he was told to use.

CONCLUSIONS

Some of the findings that we have discussed in this report on the development of R's grammatical and conversational ability in Portuguese have been quite specific, in some cases possibly idiosyncratic to this single learner and in some cases probably generalizable only to other adult learners of Portuguese, with the distinction between the two categories to be settled by further research with other learners (Frota, in progress). In the realm of grammar, we have reported that some constructions were relatively easy for R to learn and others were relatively difficult. We found, for example, that gender is best viewed as a multifaceted phenomenon, with the phonological shape of nouns and article-agreement easier to master than agreement of determiners and adjectives. Between noun and adjective, we found number agreement easier than gender agreement. In the verb phrase, we found choice of the correct conjugation to be easier than number and person marking, which in turn were easier than tense/aspect choice. The most difficult dimension of verbs was mood (indicative vs. subjunctive), which R barely began to make progress on. We found that R had a very strong tendency to omit free (usually unstressed) grammatical morphemes, i.e., the articles, the copulas and prepositions, a tendency that did not diminish during the time of this study. We have not found a single grand explanatory principle for all these observations but have offered various explanations for various aspects of R's learning of Portuguese: markedness, morphological confusion, psycholinguistic and discourse-based processing difficulties, transfer from the L1 and in some cases from an L3 (Arabic), innate developmental patterns, and overgeneralizations of target language norms. In the realm of conversational abilities per se, we have observed what is likely to be a normal progression from an early stage in which native-nonnative conversation is characterized by native speaker topic control through the use of questions to a later stage in which the native and nonnative speakers carry on conversations through an exchange of statements, more nearly approximating native-native discourse. We have characterized R's personal conversational style in terms of a great deal of repetition, of himself and of what his interlocuters said, and we have traced R's incomplete learning of one specific speech act: answering questions affirmatively.

We have also examined the self-report and tape-recorded data in an effort to shed light on three questions of current interest and importance in SLA theory. In all three cases, the evidence was mixed. In asking whether and how instruction helped R's learning of Portuguese, we concluded that in many cases it was of great help, in providing comprehensible input that was not available in the wider environment, in providing resources and grammatical forms that could be immediately put to use in conversation outside the classroom, and in efficiently providing interpretations that could be derived only with difficulty through interaction alone. However, we have not argued that instruction played a necessary role in R's learning of Portuguese, and it clearly did not play a sufficient one. It was not true that whatever was taught was learned. It was also

not true that whatever was taught was learned if it also appeared in input to the learner, though presence in input seems to have been a necessary condition (for all the cases we have examined here) for the ultimate learning of taught forms. In examining the question of whether and how interaction with native speakers fostered R's learning of Portuguese, we found that some forms that were not taught but that were used by native speakers in interaction with R were learned by him, but others were not. Some formulaic expressions led to the extraction of material for productive use; some did not. We also found that just as instruction does not guarantee grammaticality, so interaction does not guarantee idiomaticity. Our third question was whether correction helped R's learning of Portuguese. We found that he was indeed corrected by native speaking friends, and also corrected himself. Self-corrections were found to have no detectable effect. Corrections by native speakers fell into two categories: those that seemed to have worked and those that seemed not to have worked.

One of the questions that originally motivated this study was whether an approach that combined the perspectives of both the "insider" (the learner) and the outside observer would produce interesting results. We believe that it has done so. There have been many cases in which only the learner himself could have been in a position to say what he meant to convey on a particular occasion, what he heard others saying to him, and what he thought was going on in particular interactions. At the same time, there have been clear instances in which what R thought was true (about what people said, about how he spoke Portuguese, etc.) was not correct and does not correspond to the harder evidence from the tape-recorded conversations. We believe that the approach used here has justified itself and could fruitfully be used by other researchers.

We remain aware of the problems inherent in the self-report data that form the basis for some of the arguments that follow, as well as the general limitations of case studies for both proposing and evaluating general theories and models. Each learner's biography is not only unique but also complex, so that the relative importance of variables hypothesized to be important in language learning cannot be completely unraveled. Nevertheless, in this concluding section we would like to suggest some hypotheses about the processes and products of adult language learning in general that are consistent with both the subjective and objective data available to us. We deal with three aspects of the puzzle of language learning: the creative and noncreative aspects of language and learning, the process by which a learner progresses from one stage or form to another in the course of learning, and the role of production in the learning of second languages. In all three cases, we challenge some widely held assumptions and hypotheses.

Creativity and Routine

For more than 20 years, the most basic assumption in linguistics has been that language is creative, not a set of learned responses to environmental stimuli but

a set of powerful, internalized rules that generate an infinite number of grammatical sentences of a language and that make it possible for speakers to regularly produce and understand sentences never heard before. In this sense, the ultimate state of the learner's linguistic knowledge exceeds the specific data (always finite) to which the learner has been exposed during the process of learning. Creativity in language learning also refers to learner independence from external factors such as the forms of utterances in input. Brown (1973) observed that the occurrence of systematic errors is "the best evidence we have that the child produces construction rules." The position is also almost universally accepted in SLA that learners' systematic use of novel construction rules is very strong evidence for the role of an internal cognitive organizer in learning (Dulay and Burt 1978:73).

We have provided abundant evidence, we think, of creativity, especially creative errors, in R's learning of Portuguese, but we do not intend to pursue the issue of creativity much further, for several reasons. First, one consequence of attributing a central or even all-subsuming role to the creative aspects of language learning is that the problem of language acquisition theory is often seen as the purely *logical* problem of how a child is able to internalize the complete system of productive rules, "from fairly restricted primary data, in a sufficiently quick time, with limited use of memory" (Wexler and Cullicover 1980:18). Much current work on "learnability" in linguistics is, in our opinion, less useful for language acquisition research than it might be, partly because of some obviously false assumptions that are adopted "so that serious inquiry may proceed" (Wexler and Cullicover 1980:11). The most serious of these, which may put the grammarian and the student of acquisition in separate fields (Matthews 1983), is the assumption that language learning is instantaneous (Chomsky 1965), that all the data are available to the language learner at one time and the learner selects a grammar at one fell swoop. This model, proposed with full knowledge that it contains false assumptions, may ultimately prove to have been useful, but at the present time the result has been to transform the problem of langauge learning into the question of what constitutes a possible language, and within linguistics has encouraged a continued preoccupation with extremely rare and complex sentences, not the kind of sentences that beginning second language learners (or children) are concerned with.[29]

Second, we will not focus further on creativity because we think it useful to look at the other side of the coin, which is that neither linguistic knowledge nor language use nor language learning is exclusively or even mostly creative. Creativity exists; we do not doubt it. But routine aspects of language also exist, and we think that considering the role of routine in language and learning may also lead to progress in explaining the puzzles we face in SLA theory.

The primary evidence for limitations on creativity in linguistic knowledge (competence) comes from recent work in linguistics on the degree to which grammatical constructions are lexically constrained. While it is common to view language as dichotomized between a dictionary (containing words and

frozen expressions) and productive rules, many linguists have suggested that some aspects of the grammar are best accounted for not by transformations but by rules relating lexical entries. First suggested by Chomsky with regard to derivational processes in English, which are "typically sporadic and only quasi-productive" (Chomsky 1965:184), lexical approaches have been extended to such phenomena as passive and dative, and there are a number of linguistic models that reject the use of any transformations whatsoever (e.g., Brame 1978, Bresnan 1978, Starosta 1984). While many other linguists still prefer to look for categorical rather than lexical explanations to identify the heart or "core" of grammar, Lakoff has argued that a continued focus on core grammar, that portion of the grammar that happens to work by fully productive general principles of compositionality, is unfortunate, since by his estimate the continuum between fully productive constructions and completely frozen expressions includes 95 to 98 percent of the constructions in English (Lakoff 1982: 157).

A lexicalist approach has been fruitfully applied to the study of first language acquisition by Bloom and her colleagues, who have found that the acquisition of verbal inflections (Bloom, Lifter, and Hafitz 1980), Wh-questions (Bloom, Merkin, and Wooton 1982), and complement constructions (Bloom, Tackeff, and Lahey 1984) are all highly constrained by the particular lexical verbs that children know and use, indicating that the development of the verb lexicon and of grammar are mutually dependent. Lexical approaches have been advanced recently in the field of SLA to account for patterns of acquisition and use of the dative (Mazurkewich 1984, LeCompagnon 1984) and the third person singular-*s* (Abraham 1984). Abraham analyzed correctly and incorrectly formed third person singular verbs produced by ESL learners, and found that subjects tended to cluster the *s*'s on a few verbs rather than randomly distributing them over all verbs. Factors that Abraham suggests may have influenced which verbs were acquired with the morpheme include the frequency with which they were heard and used by the learners, the perceptual saliency of the morpheme when attached to particular verbs, and the difficulty of pronouncing specific verbs with the morpheme. In this study we have identified two points at which R's learning of Portuguese grammatical constructions showed a strong lexical influence: the acquisition of the definite article (for which the adult native speaker grammar must also contain lexical information) and the distribution of perfect and imperfect past tenses to different verbs (for which an adult native speaker grammar could be defined lexically but need not be as a result of the linguistic facts alone).

Studies of language use, including both sociolinguistic work dealing with conversational routines and stereotypical expressions (e.g., Coulmas 1981) and psycholinguistic research on the role of productive syntactic rules in comprehension and production (e.g., Foss and Hakes 1978), also indicate that we seldom as native speakers utilize the full creative power of the grammar. Most sentences that one produces and hears during the course of a day are really not

creative or novel in any interesting sense. Moreover, there is very little evidence that when we utter familiar and ordinary sentences we are being creative "because the speaker generated such sentences from an internalized rule system" (Dulay and Burt 1978:67). Chomsky himself has repeatedly pointed out that his use of "generate" and "generative" in linguistics refers only to a formal algorithm for language, linguistic competence, and that "it would be tempting but quite absurd to regard it as a model of performance as well" (Chomsky 1967:435). When we actually produce language in ordinary conversation (and also in more "creative" activities such as scholarly writing), it seems much more reasonable to assume as the psychological basis of fluency that we alternate between two modes of production, one creative and hesitant, the other rehearsed, formulaic to varying degrees, and fluent (Goldman-Eisler 1968, Miller 1951, Pawley and Syder 1983).

For second language learning and production we propose the same alternation between creativity and consolidation.[30] We have found that R repeated himself almost constantly when beginning to learn Portuguese, not only within clauses and phrases but also by retelling stories in almost the same words and by relying repeatedly on the same constructions, some nativelike and some not. We suggest that only the first occurrence of each such construction represents the actual operation of the creative language faculty. When a language learner faces a novel communication problem, a creative solution is required. But the next time the learner faces essentially the "same" communication problem, we believe that in most cases the learner does not work through the problem again but simply remembers the solution. Especially when errors are idiosyncratic, it seems unlikely that the cognitive organizer has somehow repeatedly worked through a problem and repeatedly arrived at the same solution. When R said *antes de X anos* for the fifth time, we doubt that he had just created it for the fifth time. He simply remembered it.

Notice the Gap

Krashen has long argued that the only way in which a learner acquires a language is through understanding input (Krashen 1980, 1981, 1982, 1983). When a learner is at a particular stage of competence i with regard to a particular structure or set of structures, he or she will progress to the next stage ($i + 1$) if and only if he or she is exposed to and understands (with the help of extralinguistic cues) language that contains structures $i + 1$. While Krashen's basic position has been extremely influential, it has not met with universal acceptance among scholars, and until recently one of the major criticisms directed against the input hypothesis has been that Krashen fails to provide any explanation of how the step from understanding to acquisition is made (Gregg 1984:89). However, in a recent paper, Krashen has provided at least a sketch of the internal processes involved in moving from one form to another (Krashen 1983:138–140 and Figure 1, the "Krashen-Andersen schema"). Briefly, Krashen proposes that (1) New forms may be presented to the language learner in two ways, via input that is understood or through the creative construction process. Either of these two processes can present the acquirer with an $i + 1$, a potential new rule. (2) For acquisition to occur, acquirers need to notice a difference between their current form or competence i and the new form or structure $i + 1$. (3) If the comparison of i and $i + 1$ shows a gap, the $i + 1$ form becomes a candidate for acquisition. If it turns up in input with some minimum frequency, it can be confirmed and acquired. If it does not turn up, it is a transitional form and will eventually be discarded.

Although Chaudron (1984) has pointed out that this model is rather simplistic and relies on the very difficult task of identifying what constitutes $i + 1$, it seems to us that the process of comparative operations and the principle that learners must "notice the gap" are extremely important and potentially useful additions to the theory of second language acquisition that Krashen has been developing for more than 10 years. However, we propose to make a significant modification of the principle, with which Krashen would surely not agree. While Krashen proposes that both the product and the process of acquisition are subconscious, and specifically that differences between competing forms i and $i + 1$ are noticed at a subconsious level (Krashen 1983:140), we propose instead that in the particular case of a nontargetlike form i and a targetlike form $i + 1$ a second language learner will begin to acquire the targetlike form if and only if it is present in comprehended input and "noticed" in the normal sense of the word, that is, consciously.

We should make it clear that we are not claiming at all that the products and processes of language learning are readily accessible to consciousness. Indeed, one of the major findings of this study has been that although R was sometimes able to recognize accurately what was difficult about Portuguese grammar (e.g., the verbs IR, VIR, and VER, which he confused and knew he confused; the subjunctive, which he did not learn) and the cognitive strategies that affected his learning (e.g., the influence of Arabic, which would have been difficult for anyone else to identify), in many cases his subjective beliefs concerning how and what he was learning about Portuguese were incorrect. R was totally unaware that he had devised a lexical strategy to distribute Portuguese verbs between the two past tenses. He did not know that he deleted copulas and articles until he was told. When told that he had made up a lexical item *marida*, he was completely surprised and amazed. These are specific examples of what appears to be a general phenomenon: the operations of the cognitive organizer, the language-creating faculty, are not accessible to conscious awareness except (sometimes) in retrospect.

What we are hypothesizing is that Krashen may have identified a crucial point, perhaps the crucial point, at which awareness may play an important role in language learning: the comparison of nontarget forms produced by the learner with target forms that appear in input. We are not suggesting that any

particularly abstract generalization be made, only that the learner must notice the difference. Our hypothesis is similar to the position of Munsell and Carr, that

> acquisition takes place when the acquirer reaches a stage of *awareness* of a particular crucial feature of the tacit rule, but we agree that this most often does not require either explicit understanding of the whole rule, nor is it often the case that the acquirer can systematically state, after the fact, what had reached awareness, nor what its significance was. In other words, we hypothesize that if we looked at the right time and asked the right questions, we would get from the acquirer . . . responses that would in fact be quite specific and would in some general sense show a passing yet crucial "consciousness" of what was being acquired. (Munsell and Carr 1981:497–498)

The evidence we have presented in support of this hypothesis is the following:

1. Looking at 14 verbal constructions that R was taught in class, we found four (the compound present, the past perfect, the reflexive, and the inflected future) that were present in input at least occasionally but were never produced by R. What strikes us as being most significant about these cases is that, in contrast to 10 verbal construction types that he did use, R never noticed them in input. They were present, but R did not notice their presence.

2. Looking at additional aspects of the Portuguese verb phrase that R was not taught but that were present in the input to him from native speakers, we found only one clear example of something that was not taught but was learned. Existential sentences made with TER were not, however, an example of "acquisition" in the Krashen sense, i.e., subconscious learning, but were consciously noticed by R in the input.

3. Corrective feedback that was not noticed by R (embedded in ambiguous utterances such as confirmation checks) seems to have had no effect. In order for R to profit from correction by native speakers, it seems to have been a necessary (but not a sufficient) condition that he realize that he was being corrected.

One of the advantages of a conscious notice-the-gap principle is that it provides a way to include a role for correction, and instruction in general, in an integrated theory of second language learning.[31] We do not claim that correction is the only way in which learners come to notice the gap. Repeated exposure to input may also do the trick. While we have not found many examples of this in our data, we have one that seems clear:

> *Journal entry, Week 17*
> I often say *dois anos antes*, for "two years ago." I think it should be *anos atrás*. I have been hearing it that way in conversation, I *think* . . . [Later the same day] I asked M which is correct and he says both are OK, but I'm suspicious. Check with S tomorrow.[32]

However, there are some obvious difficulties with the ability of nonnative speakers to notice the gap between two forms or constructions simply by being exposed to more input. In many cases, the learner may not recognize that what

he or she says and what is heard are both "the same thing" (represent the same semantic intention) and also "not the same thing" (different form). Thus, R was unable for many months to realize that a verb that he often heard and didn't understand, ACONTECER, was "the same" as a verb he wanted, "to happen." Corrective feedback provides a potential solution to this problem, since it juxtaposes the learner's form i with a target language form $i + 1$ and the learner is put in an ideal position to notice the gap.

We recognize that the data on which we have based our arguments for a conscious notice-the-gap principle, as well as the principle itself, are open to question from a number of points of view. We anticipate at least the following objections, with which we include our responses:

1. This study does not count, because R has been trained as a linguist, and linguists have an edge in language learning and approach language learning differently from ordinary people. This is the most common objection we have encountered when discussing the general outlines of this study with various people, but we think it has very little validity. Granted that linguists may have more metalinguistic awareness of a particular type than most people, but all adults have some degree of such awareness. We know of no evidence showing that linguists are superior language learners (which, were it true, would support rather than detract from a position that conscious awareness counts), and R does not appear to be an exceptional learner of Portuguese. In addition, the observations that we think counted are not of a type that linguists alone make. We do not think it important at all that R identified sentences with the verb TER as "existentials," only that he noticed that this was a way in which Portuguese speakers expressed the concept of "there is/are," the sort of observation that anyone might make. We do think, even so, that not all learners are alike. Some notice more facts about a new language than do others. Our hypothesis is that those who notice most, learn most.

2. Experimenter bias. This derives not only from the fact that R was both subject and experimenter, a dual role with both advantages and disadvantages (Linton 1975), but also the fact that R had posed questions relating to the role of conscious awareness and induction in language learning in relation to another study (Schmidt 1983, 1984), and began keeping a language learner's journal in Brazil partly in order to shed light on this particular issue. Having set out to find evidence bearing on the question, he trained himself to notice his noticings and write them down, which might in itself have had some effect on the outcome. Ultimately, these questions as well as those raised under objection 1 can only be resolved through further research, preferably with linguistically naive subjects.

3. For some of our examples, it might be the case that what R did not learn was not a candidate because it was not presented in comprehensible input. While we agree that language that is not comprehensible will not lead to any significant learning, it is not the case that the particular examples we have used in our argument fit this situation. Looking at the conversations in which verb constructions used by native speakers were taught but not learned by R

(compound present, present perfect, etc.), we find only one example for which the discourse indicates that R did not understand what was said. This was an occurrence of a reflexive, in a question that R failed to understand not because he did not recognize the reflexive nature of the verb but because he did not know the lexical verb itself. All other cases of the four verb structures that were taught, heard (but not noticed), and not learned were embedded in utterances that R's responses indicate were not only comprehensible but comprehended.

4. It could also be argued that R failed to learn certain features of Portuguese grammar not because he did not notice them but because he was not ready to notice them or learn them; they were not yet $i + 1$, candidates for learning. This argument is a rather circular one. Given our present state of ignorance regarding a natural order for all second language learners of Portuguese, what was $i + 1$ for R at a particular time can only be determined by what he did learn next; so the argument is impossible to prove or falsify. Nevertheless, this line of argument contains the seeds of one that could be much more serious. We readily grant that R was not free to notice whatever he wished in the input. Noticing was contingent on perceptibility, itself apparently due to several factors. In general, it seems that learners have no alternative to noticing the "big" things first, gradually progressing to details. The point is that we may someday know enough about the linguistic structures that enter into the processes of learning, the innate perceptual filters that constrain which parts of the input are available to the language learning faculty at particular points, and the types of hypotheses that are and are not possible to ultimately view language learning as a maze through which there is only one path (Helmut Zobl, personal communication). This would of course be a very strong nativist position, but one that shared a point of view with its archrival, radical behaviorism, that what the creature is thinking while learning its way through the maze is really irrelevant to the process. R's subjective feeling that his active noticing was important might in the end turn out to have been a language learner's delusion.

We do not ourselves believe that the course of language learning is so completely determined. Miller and Johnson-Laird (1976) have proposed an information-processing model of language and perception that is relevant to this problem. Miller and Johnson-Laird point out that in order to talk about any information-processing system, it is necessary to identify basic predicates that correspond to inputs, outputs, and memory. For language, the basic predicates identified by Miller and Johnson-Laird are PERCEIVE, INTEND, and REMEMBER. What is interesting about these is that they are not instructions that are under voluntary control. We cannot ask someone to PERCEIVE something, because he or she will perceive whatever he can. We cannot ask someone to REMEMBER a specific item (we remember what we can), though we can ask someone to *search* in memory for any relevant stored information. Similarly, we can ask someone to try to *achieve* a goal, and a cooperative person may try, but we cannot instruct someone to INTEND to achieve that goal. In addition to the basic predicates of the system, Miller and Johnson-Laird also identify a set of "control instructions" (e.g., *find, test, store, generate, achieve,*

infer, utter) as another category, which the conceptual system uses to call on the perceptual system for information. With regard to instructions such as *notice* and *attend* (both special cases of the general instruction *find*), Miller and Johnson-Laird argue that there is a basic human ability to pay attention to different aspects of perceptual experiences. A person's ability to attend to some properties and ignore others is not unlimited, but we do have some control over the features we attend to, and can control to some extent which features are most salient.

In light of the above objections (and possibly others we have not anticipated), we do not claim to have produced conclusive evidence in support of a conscious notice-the-gap principle, but we believe that the principle is a viable hypothesis, at least as viable as the hypothesis that the process of language learning is in all respects subconscious. In particular, we know of no evidence supporting the opposing claim that language learning (or "acquisition") is almost exclusively incidental learning, best accomplished when we think we are doing something else, with our focus consistently on the message rather than on the form (Krashen 1983:136). Such a paradoxical claim, that we learn what we systematically ignore, requires evidence and explanation more than assertion, and in light of the tremendous consequences for language teaching methodology we urge that the supremacy of incidental learning not be taken as an established finding of research to date and that applications to language pedagogy be made with caution.

A final advantage of a conscious and voluntary notice-the-gap principle is that it permits a more common sense and intuitively satisfying conception of the "affective filter," which Krashen has proposed (following Dulay and Burt 1978) to incorporate motivational and affective variables into an overall theory of second language acquisition. The affective filter is hypothesized to be a device that prevents input from reaching "that part of the brain responsible for language acquisition, or the language acquisition device" (Krashen 1982:31). Various criticisms have been leveled against the affective filter hypothesis, including the observation that the function and operation of such a filter is not explained (Gregg 1984:95), that the filter is a purely metaphorical image (Schmidt 1984), and that it is strange to posit conscious factors such as desire to learn a language or affect toward native speakers as having an effect on unconscious processes (Michael Long, personal communication). However, if the notice-the-gap principle is taken to pertain (either exclusively or partly) to conscious and voluntary noticings, then affective factors may reasonably be assumed to play a role through the general mechanism of selective attention.

Autoinput in SLA

The principle of notice-the-gap provides a partial answer to the question of fossilization, one of the most significant characteristics of adult second language learning, which any SLA theory must attempt to explain. We have proposed

that the process of noticing the gap may be the crucial point at which affective variables, individual differences, conscious awareness, and "paying attention" enter into the language learning process.[33] We have proposed that negative input, in the form of overt correction by native speakers in conversation, also exists and can potentially have salutory effects on the learner's ability to notice the gap.

A major problem remains to be addressed. One reason why many learnability theorists have rejected a role for negative information in language learning is that while negative information is powerful and would (if it existed) greatly reduce the problem of learnability and require a much less powerful innate component, the evidence from child L1 research is that negative information is not systematically provided, and when it is provided it does not seem to have much effect (Wexler and Cullicover 1980). With the principles we have been proposing here, the major question is: why, if individual learners arrive at a point (either by themselves or with the assistance of native speakers) at which they notice a gap between their own and native speaker language, do they often continue to make the same errors and not profit from the comparisons made through the notice-the-gap process? Two easy answers are readily available. One could claim that while the learner has consciously adopted a new hypothesis, he or she has not done so subconsciously (this is not a possible resolution of the problem if one assumes that all hypotheses and all operations of the notice-the-gap principle are subconscious), or one could claim that old forms, structures, and rules do not disappear because they are habits, and habits take time to be extinguished. While both of these formulations have what we believe to be a grain of truth in them, we prefer a third formulation, the autoinput hypothesis. The autoinput hypothesis is a hypothesis that the learner's own input is a very significant part of his or her input, which affects the course of language learning.

The autoinput hypothesis is not original with us. Something like it has been proposed for second language learning by Sharwood-Smith (1981) and Gregg (1984). We have been most influenced, however, by the autoinstruction hypothesis as proposed for child L1 acquisition by Platt and MacWhinney (1983). Platt and MacWhinney have argued, as we have, that language learner errors are not *just* examples of creativity in language learning. While childlike forms like *foots* cannot have been produced initially by rote memorization (because such forms do not appear in the input to the child from adults), one possibility not usually considered is that having produced *foots* once by combination (i.e., creatively), the child may then have listened to his or her own error and then learned it as a whole by rote. Children may learn their own solutions to language structure problems, to such an extent that these errors dominate for a while over the correct forms to which the child is more frequently exposed via reception.

Platt and MacWhinney tested some predictions from this hypothesis, including the claim that the primary source of incorrect forms were the children

who produced them rather than other children, by eliciting grammaticality judgments from 4-year-old children to four types of sentences: sentences containing subject-generated errors; sentences with similar errors, exactly parallel syntactic structures with different lexical items; "baby errors," typical of much younger children; and correct sentences. They found significant differences in responses to the four sentence types, including a significant difference in the percentage corrected between the self-generated errors and the similar errors.

Applied to adult second language learning, the autoinput hypothesis can help explain why it is difficult to notice the gap and why errors persist even once the gap has been noticed. Specifically applied to this study, autoinput can explain the following about R's learning of Portuguese:

1. The lexical distribution of perfect and imperfect past tenses. According to the autoinput hypothesis, each time a new verb was used in a past tense, a creative decision had to be made. Every successive time that R wanted to use the same verb in a past tense, he simply retrieved the solution from memory.

2. The fact that structures containing errors as well as more nativelike structures attained the psycholinguistic status of formulaic speech, things often said, with varying degrees of lexicalization and openness in those structures.

3. The persistence of errors in the face of abundant evidence in input that what R said was not what native speakers said, even when errors were corrected by native speakers and R recognized and understood the corrections.

4. The fact that when R had to supply definite articles between contracting prepositions and place names, he did so invariably when he had produced an article with that noun from the beginning (as with *o Rio, o Brasil,* etc., except in cases when a "new" solution was required for the preposition *prá/pró*), but in those cases where he began producing the noun without an article (e.g., *Hawaii*) he improved but always performed variably.

5. R's subjective reaction when faced with his own errors, especially in the case of *marida*, that these could not be errors because he had certainly heard them before.

The subjective feeling of a learner that errors are not errors but correct productions (as opposed to simply a feeling of uncertainty about one's own speech) is also reflected in Schlue's finding that 65 percent of the errors committed by her subjects went unrecognized, with subjects putting utterances containing these errors into a category labeled "There is no error here; all parts of this sentence are easy for me now." In general, however, there is not a great deal of research reported in the literature that bears directly on the hypothesis. While there are quite a number of studies in the general area of error detection (see Chaudron 1983 for a review), most do not deal with errors that were produced by the same subjects who were later asked to judge them. For example, Schachter, Tyson, and Diffley (1976) presented ESL students with transfer errors identified as characteristic of particular groups, but not necessarily produced by the students in the study, while a study by Ioup and Kruse (1977)

looked at transfer errors that might be predicted on the basis of contrastive analysis, not errors that the subjects actually made. One study that did elicit students' reactions to their own errors was that by Gass (1983), which used errors gathered from individual students' own written compositions as well as from other students. The results were much less clear-cut than in the Platt and MacWhinney study of 4-year-olds. Gass's intermediate subjects had a better idea of when they were right than of when they were wrong, while the advanced subjects had about equal abilities in determining their own correctness and incorrectness; both groups were less willing to accept others' grammatical sentences than their own grammatical sentences; the intermediate group was more willing to accept others' ungrammatical sentences than their own, while the opposite was the case for the advanced group.

More research needs to be done in this area, but we would not in any case predict that learners would be unable to recognize their own errors when these are selected randomly from either speech or writing. Since the feeling of correctness probably derives from the strength of a particular form or structure in memory, and since all memories represent earlier processes (Neisser 1967), both those of comprehension and those of production, we would need in addition some information concerning both input and output frequencies before any predictions could be made. We also expect changes with time: at one point R had no idea at all that *marida* was an incorrect form; at a later time he realized fully that it was an error, although he continued to produce it.

In our discussion of the evidence for the autoinput hypothesis and its implications so far, we have dwelt primarily on the negative aspects, especially the persistence of errors and the constraints that the autoinput hypothesis puts on the principle of noticing the gap. We would like to conclude by considering some possible positive aspects of the autoinput hypothesis, and a positive role for production in language learning.

Sharwood Smith (1981) and Gregg (1984) have both suggested the same potentially positive role of output in language acquisition. Assuming that monitoring (in some sense, not necessarily that of applying learned, fully explicit rules to conversation) can increase the incidence of correct utterances of a given structure, then the results would presumably be available to the speaker as feedback (autoinput) into acquired knowledge. Krashen has considered this idea also (Krashen 1981:118) but rejected productions under the conscious control of the monitor as only a trivial source of help. Krashen argues that if a language learner consistently applied a learned rule to his own output, when the day came that such a learner was "ready" to acquire the already learned rule, his or her own performance of it would qualify as comprehensible input at $i + 1$ and he would acquire it. However, this is a trivial sense of a conscious rule helping acquisition, because such a learner would have acquired the rule at that time without it, on the basis of input from native speakers. We tend to agree with Krashen, but for different reasons. Under the principles we have proposed here, speaker productions, including, for example, self-corrections (whatever the

knowledge source underlying such productions), will count not only as input but as very significant input. Theoretically then, self-correction should lead to improved performance. However, we found no effect for self-correction in R's learning of Portuguese, and we think in general that the role of self-correction is limited, because it is simply too difficult to self-correct in any systematic fashion when engaged in real and meaningful conversation. Even in the case of definite articles between prepositions and place names, the focus of many of R's self-corrections, he never managed to self-correct more than 10 percent of his errors. And if one were able to self-correct a higher percentage of one's errors, say 50 percent, the frequency of correct forms in output (and subsequently in input) would be only 25 percent higher than if one had not produced the utterance at all. Considering in addition the fact that overmonitoring and excessive self-correction greatly interfere with meaningful communication, we believe that the primary source of correct forms must be input from native speaker models.

Yet we do see many positive aspects of the autoinput hypothesis and for the role of production in language learning. One obvious benefit of production is that it is through production, i.e., practice, that second language structures become more automatic and easily produced (McLaughlin, Rossman, and McLeod 1983). As second language learners produce (speak) more, we expect to find and do find a general increase in conversational fluency: faster speech, fewer pauses and hesitations, etc. On the level of conversational content, it is through rehearsal and production that we hone our ideas and our ways of expressing them in order to hold the attention and appeal to the sympathies of our conversational partners. Consider, for example, the ways in which we all tell and retell significant stories about our lives, adding, deleting, and modifying details until we have a formulation that will work with most audiences. On the level of grammatical expression, it is not only our errors and incorrect productions that we learn, but also our correct productions, which must (except for those cases in which we are being truly creative) be learned holistically if we are to speak natively and fluently. Errors themselves may not be all bad (it is possible that you cannot learn without making mistakes), especially in the case of transitional forms that may be necessary steppingstones to a more targetlike level of competence. Platt and MacWhinney point out for L1 acquisition that their findings suggest that children do receive and use negative data, by generating and learning their own negative instances, which they eventually come to know as incorrect.[34] Finally, from the point of view of SLA theory, there are two notable virtues to the autoinput hypothesis: (a) it is parsimonious, since something like it needs to be posited not only for second language learning but also for native language performance; and (2) it preserves the integrity of a view that holds (correctly, we think) that there is only one basic cause of language acquisition, understanding what is presented through input. The only difference here is that what is presented through input and learned is not produced by native speaker models but by the language learners themselves.

NOTES

1. We have benefited greatly from comments on an earlier draft of this paper by Armando Baltra, Mary Brown, Richard Day, Fred Genesee, Michael Long, Raymond Moody, Ann Peters, Charlene Sato, and Helmut Zobl, none of whom are responsible for flaws that may remain.

2. We use the terms *learning* and *acquisition* roughly synonymously throughout, using *acquisition* when we mean specifically unconscious or subconscious acquisition.

3. FSL S-2 means: "Can handle with confidence, but not with facility, most situations, including introductions and casual conversations about current events, as well as work, family, and autobiographical information. Can handle limited work requirements, needs help in handling any complications or difficulties; can get the gist of most conversations on non-technical subjects (for example, topics which require no specialized knowledge) and has a speaking vocabulary sufficient to be understood simply with some circumlocutions; accent, though often quite faulty, is intelligible; can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar." Memo, Post Language Officer, American Consulate General, Rio de Janeiro.

4. R rewrote his journal entries shortly after his departure from Brazil, eliminating highly personal material, revising the orthography (e.g., putting all citation forms of verbs in uppercase), and in some cases expanding elliptical or cryptic entries. Material added later to journal entries cited is enclosed in square brackets ([ ]). Names have been replaced by initials, which in most cases do not correspond to the real initials of the persons referred to. R and S do consistently refer to the coauthors of this paper. X and Y are variables, used to refer to a number of people, each of whom is mentioned only once in the journal materials included here.

5. In Table 1, the numbers for adjectives scored for word order, number agreement, and gender agreement are not equal because noun-adjective order is not relevant for predicative adjectives, and because more adjectives inflect for number than for gender. The figures for definite and indefinite articles supplied in obligatory contexts do not equal the figures for articles with correct gender agreement because both incorrectly selected and extra articles may be correctly inflected for gender (and were in most cases).

6. Not all adjectives follow the noun in Portuguese, and there are some semantic contrasts between N + Adj. and Adj. + N constructions, e.g., *boa mulher*, a (morally) good woman vs. *mulher boa*, a woman with an excellent figure. There is no evidence that R was aware of such contrasts.

7. Errors of gender, already discussed, were not counted when scoring the categories of definite and indefinite articles.

8. R did use some articles that are not allowed in Portuguese. All of these were definite articles, and none are explained by contrastive analysis. On tape 4, all his extra articles were either before place names or after prepositions (in most cases, both), an apparent case of hypercorrection.

9. Indefinite articles, like definite articles, seem especially difficult when they follow contracting prepositions, but we have too few obligatory cases to make a strong argument.

10. R's feeling that he had pronounced the Portuguese word for "seventy" under the influence of the Arabic stem for "six" is supported by the fact that on tape 1 he told S in Portuguese that he had lived in Beirut from 1975 to 1979. In fact, he lived there from 1965 to 1969.

11. In an earlier stage of the language, still preserved in formal usage and in some dialects in the north and south of Brazil, the second singular pronoun *tu* had its own distinctive set of verb inflections. In the dialect of Rio de Janeiro (and many other areas), *tu* was replaced by *você* (derived from the historical polite form *Vossa Mercê*), which takes a third singular verb. When *tu* is heard in Rio, it is also now used with third singular verb forms.

12. By the time of tape 4, there was no longer any difference between R's performance on verbal inflections for number and person, but it seems to us that person is still the problematic category. Seven of his ten errors of number agreement on the last tape involved the single lexical item *gente*, while person errors remained more general. Errors of person are also more likely to cause misunderstandings than are errors of number.

13. R's lexical approach to solving the problem of perfect vs. imperfect is similar to the strategies identified for children learning verbal inflections in various languages. Simões and Stoel-Gammon (1979) have reported that in Portuguese L1 acquisition perfect inflections occurred early, but only on some verbs, those expressing a completed action in the immediate past. Antinucci and Miller (1976) observed that past tense inflections appeared only with certain lexical verbs in the acquisition of Italian and English. Bloom, Lifter, and Hafitz (1980) report that in English the occurrence of different verbal inflections coincides with other differences in children's verbs that are lexical, and that the selective use of different morphemes is largely determined by the inherent aspectual meanings of the individual verbs, with the stative/nonstative opposition as the superordinate prime. Bickerton (1981) has argued that both the state-process distinction and the punctual-nonpunctual distinction are part of the innate bioprogram for language.

14. The anecdote reported by R is well known and much admired in Brazil. R's version of the story was incorrect on several points (e.g., the minister in question had been in office for 2 years, not a few days), but R's understanding of the point was essentially correct. The remark was intended both as a threat to resign and as a criticism of those who think power is forever.

15. These two examples are compared because in both cases these were concepts that R had expressed before in English (the content was rehearsed) but had never attempted to say in Portuguese before the conversational tapes in which they appear.

16. The analysis of statements into t-units or communication units also follows Beebe (1983) in allowing various kinds of ellipsis. While Loban (1976) counts as statements only those answers to questions that lack only the repetition of question elements to satisfy the criterion of independent predication, Beebe points out that nonnative speakers often omit much more than just the question elements, but such answers may still be usefully considered as communication units.

17. We did not attempt to measure the rate of speech of R and S separately, in order to avoid the problem of assigning time between turns to last or next speaker, but simply timed the tapes through the 400th turn, and divided by the total number of words.

18. Although we are aware of studies showing cultural differences in baby talk (e.g. Heath 1982), comparative studies of speech addressed to foreigners are rare. With respect to the specific issue examined here, the distribution of questions and statements, Long, Gambhiar, Gambhiar, and Nishimura (1983) have reported that Hindi-Urdu and Japanese, like English, exhibit a preponderance of questions over statements in foreigner talk, while Chan and Choy (1980) report the same for Mandarin. There is no discussion of the phenomenon in Portuguese that we know of, and no studies at all of foreigner talk in Brazilian Portuguese. In addition, we lack baseline data on the distribution of questions and statements in Portuguese native-native conversations.

19. There are a few studies that report that in some ways native speaker speech is sensitive to the general proficiency level of nonnative interlocuters (Henzl 1975, Henzl 1979, Gaies 1979). Ellis (1983), in the only longitudinal study we are aware of, reports that several (but not all) interactional features in teacher speech were sensitive to the developing competence of two Punjabi-speaking boys learning English. None of these studies deal with the distribution of questions and statements.

20. We suspect that tag questions may be more frequent in native-native speech in Portuguese than in English.

21. The irony here is that while not the most typical Brazilian response form, "uh-huh" really was not inappropriate, since the form has been borrowed from English and is used frequently by many Brazilians.

22. It is clear that R often failed to use the progessive when he should, but this was not included in our tallies of forms correctly supplied in obligatory contexts because of the high percentage of cases in which the present or progessive would have been more natural though not obligatory.

23. R's memory concerning *como se chama, llama* is incorrect. CHAMAR is only Portuguese, not Spanish; so what he heard must have been *como se llama, llama?*

24. R attributes his use of *será*, the future of SER, to the song "*Que será, será.*"

25. The participles of IR, VER, and VIR are *ido, visto,* and *vindo*, respectively. *Vido was R's invention. The native speaker's response was not foreigner talk at all, but a correction. R

attempted a past perfect, apparently thinking it was a compound present, in an environment in which the present perfect is required in English but its closest equivalent is prohibited in Portuguese.

26. Literary Portuguese uses HAVER, not TER, SER, or ESTAR, for existential sentences. R's attempts at using SER and ESTAR may have been prompted by a story he was told in class which begain *era uma vez um casal idoso sem filhos* . . . [remainder of line not recorded in class notes], which means "once upon a time an elderly couple without children . . . ," but which R interpreted as "once upon a time there was an elderly couple without children." *Era uma vez*, "once upon a time," is a frozen form.

27. As indicated by Table 8, PENSAR did not occur in the input on tape in the imperfect. However, we know that the form PENSAR + imperfect was confirmed for R because in class he produced an incorrectly derived imperfect form *pensia* and was corrected to the imperfect *pensava* (see page 256, Journal entry, Week 6).

28. There is an Arabic word [mariDa[, with an emphatic (pharyngealized) voiced stop, which is the feminine singular adjective "sick." To what extent this may have contributed to R's feeling that he had heard *marida* before is unclear.

29. The collection of papers edited by Hornstein and Lightfoot (1981) illustrates this aspect of current learnability theory. It is difficult to find there specific examples of what it is that children acquire from limited primary data, but when examples are found they turn out to be things such as the manifestations of the parameters of subjacency in various languages. Most of the sentences used for illustration are not sentences that any child could make sense of. As Matthews (1983) has pointed out, one of the most interesting papers in the collection is that by White on the responsibility of grammatical theory to acquisition data, which concludes in essence that there is no responsibility at all.

30. One difference between the newly created/rehearsed status of utterances in beginning second language learning as opposed to adult native speaker speech may be that for the beginning second language learner rate of speech may be a reflection of this, while experiments with native speakers show that speakers do not talk any faster after practice in particular description tasks but that the length of fluent, pause-free units increases significantly (Pawley and Syder 1983:222).

31. In Krashen's model, there is no advantage to being able to incorporate a role for correction in the language acquisition process, since correction is hypothesized to play a role in "learning," not "acquisition."

32. The form that appears on the conversational tapes is *antes de X anos*. We do not know if R's observation that he often said *X anos antes* is correct or, if so, at what point he may have made a transition between those two forms on the way to eventual recognition that *X anos atrás* was the form he wanted. Both *X anos atrás* ("X years ago") and *X anos antes* ("X years before") are correct, though they do not mean the same thing.

33. Peters (1984) argues, similarly, that children learning their first language are able to make selective use of the processes of discrimination and classification and that our observations of such selectivity allow us to account for individual differences in L1 acquisition. Wong-Fillmore (1976) reports that one of her 5-year-old learners, Nora, was not only especially adept at the social skills that encourage exposure and interaction but also attentive to the structural possibilities of language.

34. The psychological status of incorrect forms once they have been recognized as such is unclear to us, but it is clear that abandonment of a hypothesis does not mean that the relevant forms are purged from memory. For example, native speakers of English whose dialects do not contain such structures as "me and my boss are having an argument" can easily and fluently produce such structures (L1 transitional forms) if they want. In this sense, transitional forms that are not a part of current competence may be similar to dialectal variants.

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13

SEX DIFFERENCES IN NNS/NNS INTERACTIONS[1]

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The study of nonnative speaker (NNS) interactions has been approached from a number of perspectives. For example, researchers have considered ethnic differences as a variable contributing to conversational analysis involving NNSs (Sato 1982, Scarcella 1983, Varonis and Gass 1985a). Others (e.g., Zuengler 1985) have attempted to weight the effect of status differences on talk directed to NNSs. Still others (e.g., Long and Pica, this volume; Gass and Varonis 1984) have noted differences in speech based on proficiency level and degree of familiarity of the interlocutors or teachers with NNS discourse. Similarly, Beebe (1985) has noted differences in the input to which learners are sensitive, based largely on sociocultural factors. These studies have contributed to our understanding of some of the variables that influence the nature of what is called "foreigner talk" and foreigner talk discourse. However, one potentially crucial variable has not received attention in the NNS literature: that of male-female differences.

Differences between male and female speech have long been noted. Gauchat (1905) observes that women in Switzerland are instrumental in furthering linguistic change, an observation supported by the work of Labov in New York City (e.g., 1966), Wolfram in Detroit (1969), Trudgill in England (1972), Cedergren (1973) in Panama, and others. More recently, Labov (1984) has argued that sex differences in interaction with other variables is a crucial area for understanding the mechanism of linguistic change, pointing out that in