From:
Gass, S. M. & L. Selinker ([3]2008): *Second Language Acquisition. An Introductory Course*. New York: Routledge.

INPUT, INTERACTION, AND OUTPUT

10.1 Introduction

It is commonly believed that learning a second language involves learning the rules of grammar of the second language (often in the form of memorization), along with vocabulary items and correct rules of pronunciation. Putting those rules to use in the context of conversation is then construed as a natural extension of grammar acquisition. This view implicitly assumes that language use does not vary from first language situations to various second language situations, for all that would be needed to successfully converse in a second language would be to plug in the correct forms to say the same thing as one does in one's native language. In this chapter, we show how this view is an overly simplistic one (see also chapter 1). We first deal with the nature of the input to second language learners. We then focus on the interrelationship of second language use (especially conversation) and language learning.

10.2 Input

As we discussed in chapter 4, earlier conceptualizations of second language learning were based on a behaviorist view in which the major driving force of language learning (at least for children) was the language to which learners were exposed (the input). Because, in that view, learning a language involved imitation as its primary mechanism, the language that surrounded learners was of crucial importance. However, as behaviorist theories fell into disfavor, so did research interest in the input to the learner.

Interest shifted to the internal mechanisms that a learner (child or adult) brings to the language-learning situation, with research focusing on innateness and the nature of the innate system. As has been discussed elsewhere in this book, learners were viewed as creators of language systems; and, at least in the case of children, the input they received was of minor importance. If learners only need to discover which of a limited

number of possibilities are represented in their language, then it is possible that only a few instances of exposure are sufficient to trigger the appropriate language forms. As a consequence of this view, the significance of the input was minimized.

Corder, in 1967, made an important distinction between what he called *input* and *intake*. Input refers to what is available to the learner, whereas intake refers to what is actually internalized (or, in Corder's terms, "taken in") by the learner. Anyone who has been in a situation of learning a second/foreign language is familiar with the situation in which the language one hears is totally incomprehensible, to the extent that it may not even be possible to separate the stream of speech into words. Whereas this is input, because it is available to the learner, it is not intake, because it "goes in one ear and out the other"; it is not integrated into the current learner-language system. This sort of input appears to serve no greater purpose for the learner than does that language that is never heard. Conceptually, one can think of the input as that language (in both spoken and written forms) to which the learner is exposed.

What is the nature of the input to a language learner? Ferguson (1971), in a study designed to look at issues of linguistic simplicity, noted that in language directed toward linguistically deficient individuals (young children, NNSs of a language), NSs make adjustments to their speech in the areas of pronunciation, grammar, and lexicon. Speech directed toward young children he called *baby talk* (now known variably as *motherese, caretaker speech*, or *child-directed speech*); speech directed toward linguistically deficient NNSs he called *foreigner talk*. His goal was to explore the similarities between these two speech varieties. Here we focus on foreigner talk examples, taken from Ferguson's original work (see Table 10.1).

We can see that there are various means of altering the speech that would normally be expected in situations in which only NSs are conversing. For example, in the Spanish example from Table 10.1, the subject pronoun *yo* is changed to the direct object pronoun *mi*, the first person singular verb *veo* is expressed by the infinitival form *ver*, and the

Table 10.1 Examples of speech to NSs and NNSs

	Speech to NSs	*Speech to NNSs*
SPANISH	yo veo al soldado I I see DO soldier (DO = direct object marker)	mi ver soldado me to see soldier
ARABIC	ya'rif he knows	ya'rif used to mean: he/she/I/you know

Source: Ferguson (1971).

direct object marker *al* is omitted. In the Arabic example, the form that expresses third person singular in standard Arabic is used for all persons.

Table 10.2 presents examples from English, and Table 10.3, adapted from Hatch (1983), presents a partial listing of characteristics of foreigner talk speech. In general, foreigner talk adjustments reveal speech patterns that would not ordinarily be used in conversations with NSs. Foreigner talk shares features in common with caretaker speech, the language spoken to young children. Some of the most salient features of

Table 10.2 Examples of foreigner talk

NS speech	*Foreigner talk*
D'yu wanna go?	Do you want to go?
No, I can't.	No, I cannot.

Table 10.3 Summary of foreigner talk features

SLOW RATE = clearer articulation
- Final stops are released
- Fewer reduced vowels
- Fewer contractions
- Longer pauses

VOCABULARY
- High frequency vocabulary
  - Less slang
  - Fewer idioms
- Fewer pronoun forms
- Definitions
  - Overtly marked (e.g., *This means* X)
  - Semantic feature information (e.g., *a cathedral usually means a church, that's a very high ceiling*)
  - Contextual information (e.g., *if you go for a job in a factory, they talk about a wage scale*)
- Gestures and pictures

SYNTAX
- Short and simple sentences
- Movement of topics to front of sentence
- Repetition and restatement
- New information at the end of the sentence
- NS grammatically repeats/modifies learners' incorrect utterances
- NS fills in the blank for learners' incomplete utterances

DISCOURSE
- NS gives reply within a question
- NS uses tag questions
- NS offers correction

Source: Adapted from Hatch (1983).

Table 10.4 A progression of foreigner talk

To an NS kindergarten class:
These are babysitters taking care of babies. Draw a line from *Q* to *q*. From *S* to *s* and then trace.
To a single NS:
Now, Johnny, you have to make a great big pointed hat.
To an intermediate level NS of Urdu:
Now her hat is big. Pointed.
To a low intermediate level NS of Arabic:
See hat? Hat is big. Big and tall.
To a beginning level NS of Japanese:
Big, big, big hat.
To a beginning level NS of Korean:
Baby sitter. Baby.

Source: Kleifgen (1985).

foreigner talk include: slow speech rate, loud speech, long pauses, simple vocabulary (e.g., few idioms, high frequency words), repetitions and elaborations, and paucity of slang. Additional examples are given in Table 10.4. In these examples, which come from a single kindergarten teacher's instructions to her students, there is a gradation from talk to NSs to nonproficient second language speakers. The teacher adjusts her speech as a function of the proficiency of her students.

Characteristics of foreigner talk are not always so obvious. Consider 10-1 and 10-2, which come from a survey on food and nutrition that NNSs conducted over the telephone (Gass and Varonis, 1985, p. 48):

(10-1) NNS: How have increasing food costs changed your eating habits?
NS: Well, we don't eat as much beef as we used to. We eat more chicken, and uh, pork, and uh, fish, things like that.
NNS: Pardon me?
NS: We don't eat as much beef as we used to. We eat more chicken and uh, uh pork and fish . . . We don't eat beef very often. We don't have steak like we used to.

(10-2) NNS: There has been a lot of talk lately about additives and preservatives in food. In what ways has this changed your eating habits?
NS: I try to stay away from nitrites.
NNS: Pardon me?
NS: Uh, from nitrites in uh like lunch meats and that sort of thing. I don't eat those.

In these two examples, there was little indication of modified speech in the initial responses to the NNSs' questions. This is perhaps because the questions were scripted and rehearsed, and despite the obvious non-nativeness of the caller (Spanish in the first example and Arabic in the second), there was an appearance of fluency. However, once the NNS said *Pardon me?*, the NS in all likelihood realized the difficulty involved in the conversation and made modifications. In this case, the modification was not syntactic or phonological, as one typically expects with foreigner talk. Rather, the NS restated, repeated, and elaborated on the responses, the implication being that, given more information, the NNS would have an easier time understanding.

There are still other ways of modifying speech. From the same database come the following two examples:

(10-3) NNS: How have increasing food costs changed your eating habits?
NS: Well, I don't know that it's changed THEM. I try to adjust.
NNS: Pardon me?
NS: I don't think it's changed MY EATING HABITS.

In 10-3, the NS specified the noun object more fully once the NNS indicated a lack of understanding.

In 10-4, implicit grammatical information is made more explicit by adding the subject and the auxiliary verb:

(10-4) NNS: How have increasing food costs changed your eating habits?
NS: Oh, rising costs we've cut back on the more expensive things. GONE to cheaper foods.
NNS: Pardon me?
NS: WE'VE GONE to cheaper foods.

In looking at a composite picture of these data, one finds that modification of one's speech when addressing NNSs is a variable matter, with NSs reassessing an NNS's linguistic ability during the course of a conversational interaction. That is, one might engage in a conversation assuming either fluency on the one hand or lack of fluency on the other. However, as a result of a continuing conversation, one's assessment of the language ability, or language proficiency, of an NNS is likely to change. This will often result in a change in the speech patterns during the conversation.

What are the functions of foreigner talk in terms of language learning? Generally, one can claim that by hearing speech that has been simplified in the ways just described the second language learner will be better able

to understand. It is a given that, without understanding the language, no learning can take place. Although understanding alone does not guarantee that learning will occur, it does set the scene for learning to take place. However, not all types of foreigner talk are created equal. In a review of the literature, Parker and Chaudron (1987) showed that simplifications resulting from discourse elaboration or modification of the conversational structure are more likely to aid comprehension than those simplifications which result from simplification at the linguistic level (i.e., foreigner talk).

We turn to the Input Hypothesis, developed by Krashen, as part of his overall Monitor Model and as part of his overall sketch of acquisition. It is a supplement to the Natural Order Hypothesis, which we discuss further in chapter 11. If there is a natural order of acquisition, how is it that learners move from one point to another? The Input Hypothesis provides the answer. Second languages are acquired "by understanding messages, or by receiving 'comprehensible input' " (Krashen, 1985, p. 2).

Krashen defined "comprehensible input" in a particular way. Essentially, comprehensible input is that bit of language that is heard/read and that is slightly ahead of a learner's current state of grammatical knowledge. Language containing structures a learner already knows essentially serves no purpose in acquisition. Similarly, language containing structures way ahead of a learner's current knowledge is not useful. A learner does not have the ability to "do" anything with those structures. Krashen defined a learner's current state of knowledge as i and the next stage as $i + 1$. Thus the input a learner is exposed to must be at the $i + 1$ level in order for it to be of use in terms of acquisition. "We move from i, our current level to $i + 1$, the next level along the natural order, by understanding input containing $i + 1$" (1985, p. 2).

Krashen assumed a Language Acquisition Device, that is, an innate mental structure capable of handling both first and second language acquisition. The input activates this innate structure. But only input of a very specific kind ($i + 1$) will be useful in altering a learner's grammar.

In Krashen's view, the Input Hypothesis is central to all of acquisition and also has implications for the classroom.

a Speaking is a result of acquisition and not its cause. Speech cannot be taught directly but "emerges" on its own as a result of building competence via comprehensible input.

b If input is understood, and there is enough of it, the necessary grammar is automatically provided. The language teacher need not attempt deliberately to teach the next structure along the natural order—it will be provided in just the right quantities and automatically reviewed if the student receives a sufficient amount of comprehensible input.

The teacher's main role, then, is to ensure that students receive comprehensible input. However, despite its attractiveness (and clearly no one would deny the importance and significance of input), there are numerous difficulties with the concept. First, the hypothesis itself is not specific as to how to define levels of knowledge. Thus, if we are to validate this hypothesis, we must know how to define a particular level (say, level 1904) so that we can know whether the input contains linguistic level 1905 and, if so, whether the learner, as a result, moves to level 1905. Krashen only stated that "We acquire by understanding language that contains structure a bit beyond our current level of competence ($i + 1$). This is done with the help of context or extralinguistic information" (1982, p. 21).

Second is the issue of quantity. Krashen states that there has to be sufficient quantity of the appropriate input. But what is sufficient quantity? How do we know whether the quantity is sufficient or not? One token, two tokens, 777 tokens? And, perhaps the quantity necessary for change depends on developmental level, or how ready the learner is to acquire a new form.

Third, how does extralinguistic information aid in actual acquisition, or internalization of a linguistic rule, if by "understanding" Krashen meant understanding at the level of meaning (see below and chapter 14 for a different interpretation of understanding)? We may be able to understand something that is beyond our grammatical knowledge, but how does that translate into grammatical acquisition? As Gregg (1984, p. 88) stated: "I find it difficult to imagine extra-linguistic information that would enable one to 'acquire' the third person singular *-s*, or *yes/no* questions, or indirect object placement, or passivization."

As mentioned in chapter 8, input also figures prominently in emergentist accounts of SLA where frequency of input is highly significant. Learners in this view are seen to extract regularities from the input as opposed to regularities being imposed by UG.

10.3 Comprehension

Crucial to the success of any conversation is the ability to understand and to be understood. Lack of comprehension is a characteristic of many conversations involving NNSs. What factors determine comprehensibility?

The first area of concern in a discussion of comprehension is the NS's ability to understand the NNS's pronunciation. However, this is clearly not the only factor; the NNS's ability to use the second language grammatically is yet another. In fact, in a study using a matched-guise format,[1] NS listeners were asked to judge sentences read by the same NNS (each of 14 NNSs read one pair of sentences, all of which were then

randomized). The sentences varied according to whether or not they were grammatical. One version was grammatical and the other was not. Given that one speaker read both versions, pronunciation remained constant. Examples of grammatical and ungrammatical pairs are given in 10-5 (from Varonis and Gass, 1982, p. 135):

(10-5)	Grammatical	It is unusual for him to have a new car.
	Ungrammatical	He is unusual to have a new car.
	Grammatical	He always spends his holidays at home.
	Ungrammatical	He does spend his holidays always at home.

When asked to judge the NNSs' pronunciation on a two-pronged scale ("good" and "not good"), NSs for the most part judged the grammatical sentences as being spoken by a speaker with good pronunciation and the ungrammatical sentences spoken by a speaker with bad pronunciation. Although grammaticality had an influence on the majority of the responses, there were some speakers for whom grammaticality had little effect on NS judgments. These were the speakers who were judged, on an independent rating, to have very good or very bad pronunciation; that is, the two extremes. Thus, understanding an NNS's speech is dependent on at least the grammaticality of the NNS's speech as well as the pronunciation.

An additional factor determining comprehensibility is the NNS's ability to contextualize the language by using appropriate vocabulary and linking devices. To exemplify this, we reproduce a letter written by an NNS to an NS (one of the authors of this book). As can be seen, this letter is, at best, difficult to understand. Given the written mode, pronunciation is not a factor. What is particularly interesting is that the sentences for the most part are syntactically well-formed. Yet, as a whole, the letter is unclear. The letter was apparently written in response to an advertisement from the addressee's home institution.

> Dear . . .
>
> I'm very glad to receive your good request about expending for linguage. I looked it hardly and found that late.
>
> I want to obtain publications which will help me to finish my formations in English or technological knowledge.
>
> Many times I wrote over without best answer was obtained. With that discriminate area, I have disjointed several forms.
>
> So, I ask a place to follow research learning, or, your useful publications.
>
> I prefer to change my present job, so, all you'll do must be wellcome.

I'm interesting in world food program, or, in a field where research, campaigns are useful.
Thanks.

The first paragraph is interesting in that it is grammatically correct, but semantically anomalous. What makes it semantically anomalous? The choice of vocabulary items, namely *expending, linguage, hardly*, make the paragraph difficult to understand. It seems, then, that vocabulary choice is much more central to assigning meaning than is correct grammar.

The third paragraph supports the centrality of vocabulary and the secondary role of grammar. In the first sentence, *Many times I wrote over without best answer was obtained*, even though the second clause is grammatically ill-formed, it is not difficult to understand that the writer meant *without receiving a good answer*. However, in the second sentence, *With that discriminate area, I have disjointed several forms*, the sentence is grammatically well-formed, but the vocabulary is inappropriate (particularly *discriminate* and *disjointed*). The significance of inappropriate vocabulary is clear when we try to attach meaning to the sentence.

From these studies, we can conclude that in interpreting NNS utterances, grammar is less important than pronunciation and vocabulary.[2] Assuming that these results are borne out, we can ask: Why should this be the case? The main explanation has to do with range of choices. There is a more limited number of grammatical possibilities (or grammar rules) in language than there are vocabulary items or possible pronunciations. That is, if a learner fails to mark agreement or puts items in the wrong order, there is a greater likelihood that an NS can fall back on his or her grammatical knowledge to make sense of what a learner is saying. However, if a learner uses an inappropriate or nonexistent vocabulary item, the NS may be sent down a comprehension path from which there is little possibility of return.

The second area of concern in a discussion of comprehension is the NNS's ability to understand. In conversation, indications of understanding are given in a number of ways. Most common are what are called backchannel cues. These are generally verbal messages, such as *uh huh* or *yeah*, which are said during the time another person is talking.[3] When a conversation is face to face, as opposed to over the telephone, head nods can also serve the same function. To understand how important these backchannel cues are in conversation, consider a telephone conversation in which you are talking to someone who is not giving frequent indication that he or she is listening. In other words, consider a conversation in which there is complete silence on the other end. It does not take long before you begin to wonder if anyone is there. Nonnative speakers of a language quickly learn how to give appropriate backchanneling cues without the concomitant ability to actually understand the conversation.

In the following conversation (from Varonis and Gass, 1985a, pp. 332–333) we see how the major NNS contribution to this conversation is the provision of backchannel cues. As we can see during the course of the conversation, the NNS in all likelihood has little understanding of what the NS is saying but uses backchannel cues as a way of keeping the conversation going.

The context for this conversation is as follows: A native speaker of Spanish, studying English in the United States, called a store to inquire about the price of a TV set. However, he did not realize that when he looked up the telephone number in the telephone book he had looked up numbers for TV repair shops. Following is a transcription of that telephone conversation.

(10-6) NNS	NS
	1. Hello.
2. Hello could you tell me about the price and size of Sylvania color TV?	
	3. Pardon?
4. Could you tell me about price and size of Sylvania TV color?	
	PAUSE 5. What did you want? A service call?
6. Uh 17 inch huh?	
	7. What did you want a service call? Or how much to repair a TV?
8. Yeah TV color.	
	9. 17 inch.
10. OK.	
	SILENCE 11. Is it a portable?
12. Uh huh.	
	13. What width is it? What is the brand name of the TV?
14. Ah Sony please.	
	15. We don't work on Sonys.
16. Or Sylvania.	
	17. Sylvania?
18. Uh huh.	
	19. Oh, Sylvania OK. That's American made.
20. OK.	
	21. All right. Portables have to be brought in.
22. Hm hm.	
	23. And there's no way I can tell you how much it'll cost until *he* looks at it.
24. Hm hm.	

25. And it's a $12.50 deposit.

26. OK.

27. And if he can fix it that applies to labor and if he can't he keeps the $12.50 for his time and effort.

28. Hm hm.

29. How old of a TV is it? Do you know off hand?

30. 19 inch.

31. How old of a TV is it? Is it a very old one or only a couple years old?

32. Oh, so so.

33. The only thing you can do is bring it in and let him look at it and go from there.

34. New television please.

35. Oh you want to know

SILENCE

how much a new television is?

36. Yeah I want buy one television.

37. Do we want to buy one?

38. Yeah.

39. Is it a Sylvania?

40. Sylvania TV color.

41. Well, you know even, even if we buy 'em, we don't give much more than $25 for 'em. By the time we fix 'em up and sell 'em, we can't get more than

42. Hm hm.

43. $100 out of 'em time we put our time and parts in it.

44. Is it 17 inch?

45. Well, I don't . . . the only thing I can tell you to do is you'd have to come to the shop. I'm on the extension at home. The shop's closed.

SILENCE

46. 19 inch? You don't have?

47. Do we have a 19 inch?

48. Yeah.

49. No, I've got a 17 inch new RCA.

50. OK. Thank you. Bye.

51. Bye.

If we look only at the NNS's speech, it is clear that it is dominated by *yeahs, uh huhs, hm hms*, and *OKs*. Yet, it is clear from the transcript that the NNS never realized that the NS was talking about repairing TVs. It is likely that this NNS's use of a large number of appropriately placed backchannel cues is what led the NS to continue the conversation

(see Hawkins, 1985, for a lengthier discussion of the role of signals of apparent understanding and actual understanding).

The more familiar NSs are with NNS speech, either through individual contact or through language background, the easier it is for NS comprehension to take place. In a study in which familiarity with NNS speech was the object of investigation (Gass and Varonis, 1984), it was found that the more experience NSs had in listening to NNS speech, the more they understood. In particular, comprehension appears to be facilitated by three factors: (a) familiarity with a particular NNS, (b) familiarity with nonnative speech in general, and (c) familiarity with the discourse topic. Experience with a particular NNS will result in ease of comprehension. This is not unlike what happens with child speech, as it is frequently the case that young children are only understood by their caregivers. General experience in conversations with NNSs also facilitates comprehension. A teacher of English to NNSs, for example, is more likely to understand other NNSs than someone who has had little or no interaction with NNSs. Finally, if the topic of the discourse is familiar, it is more likely that understanding is aided by an NS's ability to fill in with prior knowledge when individual words may not be understood. For example, now that you are familiar with the literature on SLA, if an NNS uttered sentence 10-7, you could probably fill in the words that you didn't understand just by what you know about SLA.

(10-7) An interlanguage is what is produced by nonnat______ ______of a language when learning a second language.

Why does this happen? Listeners bring with them to the listening task a set of beliefs about the world. These beliefs allow easy interpretation of utterances that have a readily accessible real-world context. Thus sentences such as *Although he studies hard, he doesn't do well in school* are easily understandable because they fit in with our real-world expectations; on the other hand, a sentence such as *The chair sat down on the dog* is a more difficult sentence to understand (especially when spoken by a person with a nonnative accent) because there are few discourse hooks on which to hang the information contained in that sentence. In other words, we have no discourse context. As Labov and Fanshel (1977, p. 82) stated (based on NS conversations), "most of the information needed to interpret actions is already to be found in the structure of shared knowledge and not in the utterances themselves." In the situation regarding NNSs, shared knowledge can refer not only to actual real-world knowledge, but also to linguistic knowledge, such as pronunciation, grammar, and vocabulary.

We have seen that problems between an NS and an NNS can occur for a variety of reasons, ranging from an NNS's pronunciation to an NS's

misreading of backchannel cues. However, in many instances when there is a lack of comprehension between speakers, they will stop the flow of conversation to question what is not understood. In other words, they will "negotiate the meaning" of an utterance. To better understand this and how it differs from what happens in NS speech, we next look at the nature of NS conversation.

It is commonly acknowledged that in most conversations the discourse progresses in a linear fashion. When participants in a conversation share a common background (social/cultural/language), the turn-taking sequence proceeds smoothly, with each speaker responding to what the previous speaker has said, while maintaining his or her own sense of direction in the discourse. In other words, barring loud noises, inattentiveness, and so forth, participants in a conversation have an understanding of what has been said, of what was intended, and of how their contribution to the conversation fits in with previous contributions (by them or by others).

The following example illustrates a typical NS conversation (Tannen, 1986, p. 119).

(10-8) *Context:* Mike makes yogurt dressing, tastes it, and makes a face.

Ken: Isn't it good?
Mike: I don't know how to make yogurt dressing.
Ken: Well, if you don't like it, throw it out.
Mike: Never mind.
Ken: What never mind? It's just a little yogurt.
Mike: You're making a big deal about nothing.
Ken: You are!

In the preceding example, each person takes a conversational turn understanding what has preceded. Both Ken and Mike know that they are talking about the yogurt dressing and that their comments refer first to its taste and second to whether or not the dressing should be retained. Had Mike not responded to Ken's first question by referring to the dressing but to a movie he had seen, Ken would perhaps have perceived this as somewhat out of place. This is not to say that all parts of NS conversation are grammatical, or complete, but it does suggest that the norm is for participants to be aware of where their contribution fits in to the emerging conversation.

In discourse where there is not shared background, or in which there is some acknowledged "incompetence" (e.g., incomplete knowledge of the language being spoken, or lack of knowledge of the topic), the conversational flow is marred by numerous interruptions, as in the following example from Gass and Varonis (1985, p. 41):

(10-9) NNS: There has been a lot of talk lately about additives and preservatives in food. How—
NS: —a a a lot, a lot of talk about what?
NNS: Uh. There has been a lot of talk lately about additives and preservatives in food.
NS: Now just a minute. I can hear you—everything except the important words. You say there's been a lot of talk lately about what [inaudible]
NNS: —additive, additive, and preservative, in food—
NS: Could you spell one of those words for me, please?
NNS: A D D I T I V E.
NS: Just a minute. This is strange to me.
NNS: H h.
NS: Uh—
NNS: 'n other word is P R E S E R V A
NS: —oh, preserves
NNS: Preservative and additive.
NS: —preservatives, yes, okay. And what was that—what was that first word I didn't understand?
NNS: OKAY in—
NS: —Additives?
NNS: OKAY.
NS: —Additives and preservatives
NNS: Yes.
NS: Ooh right . . .

10.4 Interaction

The interaction approach accounts for learning through input (exposure to language), production of language (output), and feedback that comes as a result of interaction (see summary by Gass and Mackey, 2006). Gass (2003) puts it this way: interaction research "takes as its starting point the assumption that language learning is stimulated by communicative pressure and examines the relationship between communication and acquisition and the mechanisms (e.g., noticing, attention) that mediate between them" (p. 224). Interaction involves a number of components including negotiation, recasts, and feedback. In what follows, we introduce the concept of negotiation of meaning. This is followed by a section on output within which we further discuss negotiation and focus on recasts, as parts of a broader concept of feedback.

When the flow of conversation is interrupted, as in 10-9, participants often compensate by questioning particular utterances (*You say there's been a lot of talk about what?*) and/or requesting conversational help (*could*

you spell one of those words for me?). In other words, they negotiate what was not understood. Negotiation of this sort allows participants to maintain as well as possible equal footing in the conversation. Negotiation provides the means for participants to respond appropriately to one another's utterance and to regain their places in a conversation after one or both have "slipped."

Reference was made earlier to negotiation of meaning. This refers to those instances in conversation when participants need to interrupt the flow of the conversation in order for both parties to understand what the conversation is about, as in example 10-10 (see also 10-9). In conversations involving NNSs, negotiations are frequent, at times occupying a major portion of the conversation. An example is given in 10-10 (Varonis and Gass, 1985b, pp. 78–79).

(10-10) J = NS of Japanese; S = NS of Spanish
J: And your what is your mm father's job?
S: My father now is retire.
J: Retire?
S: Yes.
J: Oh yeah.
S: But he work with uh uh institution.
J: Institution.
S: Do you know that? The name is . . . some thin like eh control of the state.
J: Aaaaaaaah.
S: Do you understand more or less?
J: State is uh . . . what what kind of state?
S: It is uhm.
J: Michigan State?
S: No, the all nation.
J: No, government?
S: All the nation, all the nation. Do you know for example is a the the institution mmm of the state mm of Venezuela.
J: Ah ah.
S: Had to declare declare? her ingress.
J: English?
S: No. English no (laugh) . . . ingress, her ingress.
J: Ingress?
S: Ingress. Yes. I N G R E S S more or less.
J: Ingless.
S: Yes. If for example, if you, when you work you had an ingress, you know?
J: Uh huh an ingless?

S: Yes.
J: Uh huh OK.
S: Yes, if for example, your homna, husband works, when finish, when end the month his job, his boss pay—mm—him something.
J: Aaaah.
S: And your family have some ingress.
J: Yes ah, OK OK.
S: More or less OK? And in this in this institution take care of all ingress of the company and review the accounts.
J: OK I got, I see.
S: OK my father work there, but now he is old.

In the preceding conversation, the speakers spend the majority of their time involved in straightening out the meaning of words, specifically, *retire*, *institution*, *state*, and *ingress* ("income"). In conversations involving nonproficient NNSs, exchanges of the sort exemplified in 10-10 are frequent, with considerable effort going into resolving nonunderstandings as opposed to exchanging ideas or opinions (the typical material of conversation).

As we have seen, not only is the form of the speech produced by NSs modified in conversations with NNSs, but also the structure of the conversation itself. Long (1980) was the first to point out that conversations involving NNSs exhibited forms that did not appear to any significant degree when only NSs were involved. For example, confirmation checks (*Is this what you mean?*), comprehension checks (*Do you understand? Do you follow me?*) and clarification requests (*What? Huh?*) are peppered throughout conversations in which there is a nonproficient NNS participant. Examples of each are given in 10-11 to 10-14.

(10-11) Comprehension check
NNS: I was born in Nagasaki. Do you know Nagasaki?
(10-12) Comprehension check
NNS1: And your family have some ingress.
NNS2: Yes ah, OK OK.
→ NNS1: More or less OK?
(10-13) Confirmation check
NNS1: When can you go to visit me?
→ NNS2: Visit?
(10-14) Clarification request
NNS1: . . . research.
NNS2: Research, I don't know the meaning.

Furthermore, different kinds of questions are asked, often with the answer being suggested by the NS immediately after the question is asked. Example 10-15 comes from two NSs of English; example 10-16 is from an NS and an NNS (Long, 1983, p. 180).

(10-15) NS1: What do you think of Michigan?
NS2: It's nice, but I haven't gotten used to the cold weather yet.

(10-16) NS: Do you like California?
NNS: Huh?
NS: Do you like Los Angeles?
NNS: Uhm . . .
NS: Do you like California?
NNS: Yeah, I like it.

In 10-15, the conversation proceeds in step-wise fashion; in 10-16, there is an indication of nonunderstanding (*Huh?*), with the result being a narrowing down of the topic (*California* → Los Angeles), followed by a final repetition of the original question. These conversational tactics provide the NNS with as much information as possible as she attempts to ascribe meaning to the NS's stream of sounds.

In 10-17 the NS asks an "or-choice" question. That is, the NS not only asks a question but provides the NNS with a range of possible answers. The example is from a personal observation made in an ESL classroom during the first class back after a long holiday break. The teacher had asked a student what he did over the break. He responded that he had just relaxed.

(10-17) NS: Where did you relax?
Silence
NS: Did you relax out of town or in East Lansing?
NNS: East Lansing.

A similar example is given in 10-18, from the play *Fully Committed* by Becky Mode (1995), in which the NS gives multiple choices when the NNS does not understand. The setting is a restaurant reservations office.

(10-18) Sam: . . . How can I help you?
Watanabe: My name is Watanabe. "W" as in Wisconsin, "A" as—
S: Okay. How can I help you?
W: I want to take a table.
S: Okay, when would you like to come in?
W: We are four people.

S: All right. When would you like to come in?
W: Four people.
S: Okay . . . What day of the week would you like to come in?
W: Four.
S: I'll be right with you ma'am. (*Puts her on hold, takes a deep breath, then returns.*) Sorry about that.
W: No have four?
S: No, no. (*Trying a new tactic.*). Four people on Monday? Tuesday? Wednesday?
W: Ohhh! Tuesday.
S: Okay, Tuesday. Would you like to come in for lunch or dinner?
W: Lunch!
S: Okay! Lunch on Tuesday. What time?
W: Seven P.M.
S: Ma'am. That's dinner.
W: Dinner?
S: Yes seven P.M. is dinner and we are fully committed for dinner on Tuesday.
W: Ful-ly?
S: We don't have any tables.
W: Oh, I call you back.

In this excerpt, Sam, the native speaker, clearly understands that this is a difficult conversation and offers choices (Monday? Tuesday?) and rephrases *fully committed* (*we don't have any tables*), when it is apparent that the NNS does not know that word.

There are other, perhaps more subtle, differences between conversations involving only NSs and those involving at least one nonproficient NNS. For example, in conversations with NNSs, there is frequently a willingness on the part of everyone to change topics, often abruptly.

(10-19) Topic shift
NNS1: Are you going to attend today's party?
NNS2: I don't know yet, but probably I'll attend. (long pause, with intermittent "hm"s). So when will you go back to Japan?

(10-20) (from Gass and Varonis, 1986, p. 340). Talking about a book.
NNS1: Did you read it?
NNS2: Yes, of cou—
NNS1: Yes, I read it too.
NNS2: Oh really? I decided . . .

NNS1: Well, you don't come from Kochi prefecture do you?

Topic shifts may also result from prolonged attempts to negotiate the meaning, as in 10-21 (from Hatch, 1978, pp. 420–421).

(10-21) NS: Who is the best player in Colombia?
NNS: Colombia?
NS: Does uh . . . who is *the* Colombian player?
NNS: Me?
NS: No, in Colombia, who is *the* player?
NNS: In Colombia plays. Yah.
NS: No, on your team. On the Millionarios.
NNS: Ah yah, Millionarios.
NS: No, on the Millionarios team.
NNS: Millionarios play in Colombia. In Sud America. In Europa.
NS: Do, do they have someone like Pele in Colombia?
NNS: Pele? In Colombia? Pele?
NS: In Colombia? Who is, who is "Pele" in Colombia? Do you have someone?
NNS: In Bogota?
NS: Yeah, who is the best player?
NNS: In Santo de Brazil?
NS: OK (gives up) and are you center forward?

In all of the examples provided in this section, the effect of NS and NNS modifications (whether intentional or not) is to aid the NNS in understanding. This reduces the burden for the NNS in that he or she is assisted by others in understanding and in producing language appropriate to the situation. However, one could also argue that outward signs of negotiation and resolution of that negotiation are only strategies to show solidarity, rather than true indications of meaning negotiation (Aston, 1986; Hawkins, 1985).

One should not be misled, however, into thinking that comprehension is the same as acquisition. Comprehension, in the usual sense of the word, refers to a single event, whereas acquisition refers to a permanent state. (Other ways of viewing the notion of comprehension will be discussed in chapter 14.)

In chapter 9 we discussed conversation analysis (section 9.4.1). We presented data from Mori (2004) with her conversation analytic (CA) interpretation and data from Kasper (2004) with her conversation analytic interpretation. Below we present the same snippets of conversation with an interpretation that would be given by someone within an

interactionist framework. We include the CA interpretation for purposes of comparison.

Lines 39–49	*Conversation analysis*	*Input–Interaction*
David: °nan da?° [°(wata-) .ss::° *What is it? [°(I–) .ss::°(39)* Alan: [ANO: watashi no uchi O::, aa:: abunaiku:: naritai toKI::, (0.4) d[onna:: *Uhm when I want my hou::se to be:: ah: dangerous ((incorrect)), (0.4) what ki::nd (40–41)*	Line 40—asks question about what David wants to say. Focus is on the lack of indication of appropriate ownership Lines 39→ use of Japanese suggests the importance of Japanese in classroom Lines 40–41—Alan formulates question that turns out to be basically a translation of English, but has the opposite meaning in Japanese	Line 39—request for assistance—probably for a word Line 40—serves as a trigger for feedback for teacher
Teacher: [abunaku naritai? *want to be dangerous? (42)* (0.4) (43)		Line 42—teacher provides feedback Line 43—pause possibly indicates "thinking" where Alan is attempting to process the feedback
Alan: aa[::: *aa::: (44)*	Lines 44–46—Alan reacts to repair and reflects on what he said	Line 44—Alan indicates an understanding of feedback
David: [uhe heh *uhe heh (45)*	Line 45—David points out that what Alan has said is not correct	Line 45—David also indicates an understanding of what was wrong with Alan's utterance (see Pica, 1992; Mackey, 1999; Ohta, 2001 about learning that can take place by nonparticipants)
Alan: abu- aa[:::::: *dan- aa::::: (46)*		
David: [>°ie ie ie [a ie°< *No no no oh no (47)*	Line 47—David points out that what Alan has said is not correct	Line 47—David indicates an understanding of what was wrong with Alan's utterance

Lines 39–49	Conversation analysis	Input–Interaction
Alan: [a! *yeah* abunaku naritai toki:: *oh! yeah when we want to be dangerous* (48)		Line 48—Alan accepts feedback recognizing a problem with his utterance.
	Summary: Focus is on the language used, who initiates the question and whose "original" language problem it was. Uses body language and gaze to support idea of ownership of language problem. Motivations are attributed to different participants a propos each one's desire to show the teacher how he is engaged in the task and engaged in learning.	*Summary*: Focus is on feedback that student receives and the perception of that feedback by both participants resulting in an apparent recognition of the correct form. Uses pauses as an indication of "thinking" time that precedes verbal recognition. No social motivations are attributed. Researchers search for evidence of learning (e.g., pauses, repetitions, verbal recognition of learning).

Kasper (2004)'s data, presented below, comes from a German classroom. We present two excerpts and the analyses from an interactionist perspective and from a CA perspective to make it easier to see how the difference in orientation leads to different foci of the analysis.

Interaction	Conversation analysis	Input–Interaction
NS: okay:, wie geht es d<u>i</u>r? *how are <u>you</u>?* NNS: es geht g<u>u</u>t, *I'm okay,* NS: ja? (.) warum? *are you? (.) why?* NNS: u::mm (.) ts uh i- °er° am <u>w</u>ochenende? It was lange? ( )= *at the weekend? it was long?*	The initial exchange is a routine adjacency pair. The NS questions the response by saying *warum* (why). This question (?)shows the NS's "orientation to the event as a learning activity whose main purpose it is to 'get the learner to talk,' and to her interactional charge as provider of environments for learner	An Input-Interaction analysis of this exchange would focus, if there were any comment at all on this exchange, on the learner and her reaction to the strange NS response. It would focus on the hesitation phenomena of the NNS and would "suggest" that this might be an indication of the fact that she was possibly

Interaction	Conversation analysis	Input–Interaction
	talk." The NS responds as if this were a normal conversation. Therefore, the participants co-construct this "hybrid interactional form" that reflects "normal" conversation' as well as an event for language practice. *Comment*: This is clearly an emic perspective that attempts to get inside the head of the participants.	thrown off by the unexpected response to a seemingly formulaic response. The Input–Interaction analysis would only look at surface facts and would not ascribe motivation to the NS as to why she responded in the way she did. Or, if such an interpretation were made, it would be bolstered by additional evidence, such as stimulated recall (Gass and Mackey, 2000). *Comment*: The need to bolster arguments from an interaction with the participants is, of course, antithetical to a CA analysis given the distance that the researcher keeps from the investigated parties and the need to interpret from "afar."

As can be seen from these two examples, the interactionist perspective does not include the same level of detail or elaboration as these aspects of conversation do not enter in to what might count as learning. Activities are not central to an interactionist framework and thus learning as increased accomplishment within an activity is not relevant (see also Gass, 2004).