

European Science Foundation team as: (a) immediate communicative need and (b) a longer-term and more variable desire for social integration with the target language community. Functionalists have conducted extensive comparative cross-language research, but have been mainly interested in the discovery of universal rather than language-specific characteristics of the learning process, for example the emergence of the basic variety, or the development from pragmatic to lexical and morphosyntactic means of expression.

Functionalist research on the emergence of second language morphology has, however, concerned itself with instructed learners (e.g. the various studies reported in Bardovi-Harlig, 2000). These learners are seen as more successful in acquiring second language morphology, though functionalists generally agree that instruction works by increasing the rate of acquisition and pushing at least some learners further along the acquisitional route, rather than by altering the route of acquisition in any significant way. It is not however very obvious from a functionalist perspective why classroom learners should be more successful than uninstructed learners, as classroom communicative needs are often very reduced or indirect. It is possible that classroom discourse forces second language learners to attend to the communicative value of formal items such as tense and aspect morphology, which are non-salient or communicatively redundant in everyday discourse. But this idea has not been followed up systematically by any of the research groups whose work has been surveyed in this chapter. We will meet this proposal again in our survey of input and interaction theories in Chapter 6.

6

Input and interaction in second language learning

6.1 Introduction

In earlier chapters of this book, we have reviewed a range of current perspectives on second language learning (SLL) that are concerned primarily with understanding language learners as autonomous individuals, rather than making sense of learners' engagement with their social and linguistic environments.

In the next three chapters, we progressively turn our attention to theorists who view language learning in more social terms, and who are more centrally concerned to explain the role of language use in interlanguage development. In this chapter, we examine research that focuses directly on the role of environmental language in promoting SLL, in the shape of second language input received by the language learner, second language output produced by the learner and second language interaction between the learner and some other conversational partner. For the most part, this 'interactionist' perspective does not challenge the concept of an autonomous language module or cognitive mechanisms at work within the individual learner, which develop the interlanguage system by analysing and processing environmental language in a variety of ways. In Chapters 7 and 8 we examine research that views the learning process itself as social, and integrates to a significant degree the categories of language use and language development, which have been conceptually separate in the approaches reviewed earlier.

The work reviewed in this chapter takes its original inspiration from the **Input hypothesis** advanced by Stephen Krashen since the 1980s (Krashen, 1982, 1985, 1998). In Chapter 2, we examined the basic claim of the input hypothesis: that the availability of input which is comprehensible to the learner is the only necessary condition for language learning to take

place – provided the learner is predisposed to pay attention to it (*see* the companion **Affective Filter** hypothesis). This claim sparked off a number of traditions of empirical research into the environmental conditions for learning, which are still highly active today.

In the early 1980s, the researcher Michael Long first advanced the argument that in order to understand more fully the nature and usefulness of input for SLL, greater attention should be paid to the interactions in which learners were engaged (Long, 1981, 1983a, 1983b). Long argued that these interactions should not be seen simply as a one-directional source of target language input, feeding into the learner's presumed internal acquisition device. Instead, when learners engaged with their interlocutors in negotiations around meaning, the nature of the input might be qualitatively changed. That is, the more the input was queried, recycled and paraphrased, to increase its comprehensibility, the greater its potential usefulness as input, because it should become increasingly well-targeted to the particular developmental needs of the individual learner. This view has become known as the **Interaction hypothesis** (Long 1981, 1983a, 1996).

A second challenge to Krashen was put forward by the researcher Merrill Swain, whose work with immersion students experiencing content-based second language French instruction in Canadian schools had led her to question the claim that comprehensible second language input was sufficient to ensure all-round interlanguage development. Swain advanced another set of claims about the relationship between language use and language learning, the so-called **Output hypothesis** (Swain, 1985, 1995). The immersion students studied by Swain and her colleagues were exposed to French-medium instruction for extended periods of time, and achieved comprehension abilities in French as a second language that were close to native speaker level. However their productive ability lagged behind, something which Swain attributed to the fact that their classroom involvement with French mostly involved reading and listening to second language input, without corresponding expectations that they themselves would speak or write in French at a high level. Swain argued that students could often succeed in comprehending second language texts, while only partly processing them, that is, concentrating on semantic processing. In her view, only second language production (i.e. output) really forces learners to undertake complete grammatical processing, and thus drives forward most effectively the development of second language syntax and morphology.

These theoretical claims have led to extensive empirical work, examining the detail of target language input, output and interaction involving second language learners, and seeking to explain its relationship with interlanguage

development. In this chapter we review and evaluate this work, which has taught us a great deal about the kinds of interaction in which learners typically engage, and about a range of variables that seem to influence the quality of these interactions. (Other useful overviews can be found in Pica, 1994; R. Ellis, 1999a, 1999b; Nicholas *et al.*, 2001; Shehadeh, 2002; Gass, 2003.)

6.2 Input and interaction in first language acquisition

Before examining the second language interactionist tradition in more detail, however, it will be helpful to recap briefly on current understandings of the role of input and interaction in first language acquisition. It is well known that adults and other caretakers commonly use 'special' speech styles when talking with young children, and terms such as **baby talk** are commonly used to refer to this. The idea that 'baby talk' with its particular characteristics might actually be helpful to language acquisition, and the empirical study of caretakers' interactions with young children, date back to the 1960s. This empirical research tradition of investigating **child-directed speech (CDS)** has remained very active, although it has undergone criticism especially from Universal Grammar theorists. In 1986, for example, Noam Chomsky described as 'absurd' the notion that aspects of first language acquisition could be related to the input (quoted in Snow, 1994, p. 4). In turn, some child language specialists have criticized parameter-setting models of acquisition as overly deterministic (Valian, 1990) and ignoring substantial evidence of probabilistic learning from 'noisy' input (Sokolov and Snow, 1994, p. 52).

A collection edited by Gallaway and Richards (1994) provides a useful overview of the interactionist tradition within first language acquisition studies. The editors of this volume point out that child-directed speech might be expected to facilitate language acquisition in a wide variety of ways, including:

- managing attention
- promoting positive affect
- improving intelligibility
- facilitating segmentation
- providing feedback
- provision of correct models
- reducing processing load
- encouraging conversational participation
- explicit teaching of social routines.

(Richards and Gallaway, 1994, p. 264)

However, the contributors to the 1994 collection are cautious about the extent to which any of these possible child-directed speech contributions to language acquisition have been solidly demonstrated. Some of the clearest findings and conclusions from this tradition, which are also potentially relevant for SLL, are the following:

1. Child-directed speech has mostly been studied in English-speaking contexts in the developed world, and most usually in a middle-class family setting. In such contexts, child-directed speech is typically **semantically contingent**; that is, the caretaker talks with the child about objects and events to which the child is already paying attention. Richards and Gallaway (1994, p. 265) comment that 'there is much evidence that semantic contingency . . . is facilitative, [though] the final causal link is frequently lacking'. Also, in child-directed speech explicit formal corrections of the child's productions are unusual, but **recasts** are common; that is, utterances in which the caretaker produces an expanded and grammatically correct version of a prior child utterance:

CHILD: Fix Lily
MOTHER: Oh . . . Lily will fix it

(Sokolov and Snow, 1994, p. 47)

Sokolov and Snow (1994) argue that these recasts offer children potentially useful **negative evidence** about their own hypotheses on the workings of the target language, at least implicitly. There is also very substantial empirical evidence for positive correlations between the proportion of recasts used by a child's caretakers, and his or her overall rate of development.

2. As well as more general claims about the overall contribution of semantic contingency and of recasts, there is evidence for some more specific claims about the relationship of particular formal characteristics of child-directed speech and children's developing control of particular constructions. For example, there seems to be a relationship between the caretaker's use of inverted yes-no questions, for example *Have you been sleeping?*, and children's developing control of verbal auxiliaries in English as a first language, presumably because the fronted auxiliary is perceptually more salient than questions marked through intonation only (Pine, 1994, pp. 25-33). However, such relationships are complex and dependent on the precise developmental stage reached by the individual child. Again, we meet the notion of 'currently sensitive areas of development' already encountered in Chapter 5, or as some first language researchers have expressed it, 'hot spots' of engagement and analysis that lead to a heavy concentration of available processing capacity on highly relevant

exemplars for stage-relevant acquisition' (Nelson *et al.*, 1989, quoted in Richards and Gallaway, 1994, p. 262).

3. Despite the potential usefulness of child-directed speech as input data, it is clear that caretakers are not typically motivated by any prime language-teaching goal, nor is their speech in general specially adapted so as to model the target grammar. Instead, its special characteristics derive primarily from the communicative goal of engaging in conversation with a linguistically and cognitively less competent partner, and sustaining and directing their attention (Pine, 1994, p. 19).

4. Cross-cultural studies of interaction with young children have made it clear that styles of child-directed speech found in middle class Anglophone societies are far from universal, and that societies can be found where infants are not seen as conversation partners (*see review by Lieven 1994*). For example, in Trackton, a poor rural community studied by Heath (1983), in the south-eastern USA, children are not usually addressed directly by adults, until they can themselves produce multi-word utterances. Similarly among the Kaluli of Papua New Guinea, infant babbling is seen as 'bird talk' and something to be discouraged rather than engaged with (Schieffelin, 1985). As children nonetheless learn to speak perfectly well under these widely differing conditions, this cross-cultural evidence seems to challenge strongly environmentalist explanations of language learning, by weakening any notion that finely tuned child-directed speech is actually necessary.

However, Lieven and others point out that even in cultures where child-directed speech of the Western type is rare or absent, children are constantly in group settings, and surrounded by contextualized talk routines. In such settings, their early utterances frequently include partial imitations and the production of 'unanalysed and rote-learned segments, picked up in routinised situations' (Lieven, 1994, p. 62). Indeed, in some cultures, such as that of the Kaluli, adults actively teach language by requiring children to imitate conversational routines directly. We also know that children will not normally learn a language to which they are merely exposed in a decontextualized way, for example on television (Snow *et al.*, 1976, quoted in Lieven, 1994, p. 59). As Lieven concludes:

The study of child language development cross culturally supports the idea that children will only learn to talk in an environment of which they can make some sense and which has a structure of which the child is a part; on the other hand, children can clearly learn to talk in a much wider variety of environments than those largely studied to date. This is . . . only partly because of the repertoire of skills that the child brings to the task of learning to talk. It is also because there are systematic ways in which the struc-

ture within which the child is growing up gives her/him access to ways of working out the language.

(Lieven, 1994, p. 73)

From a wide-ranging review of the whole area, Snow concludes that:

The normally developing child is well buffered against variation in the input . . . buffering implies either that only a relatively small amount of social support of the right sort might be necessary, or alternately that any of several different environmental events might be sufficient for some bit of learning to occur. Under these circumstances, variations at the margin in the quality of the linguistic environment a child is exposed to might not have any measurable effect on the speed or the ease of language acquisition.

(Snow, 1994, p. 11)

This naturally makes the study of environmental effects very difficult! And researchers in this field seem generally to agree:

- that multi-dimensional (modular?) models of acquisition are necessary, which will in some way reconcile a range of components which will include parental input, learning mechanisms and procedures, and innate (linguistic) constraints built into the child (Sokolov and Snow, 1994, p. 51)
- that the way forward in clarifying just how it is that input and interaction may be facilitating language acquisition lies at present in close, detailed studies of relationships between particular features of the input, and of related features in the child's linguistic repertoire, as they evolve over time.

They remain hopeful that such studies will eventually demonstrate exactly how it is that environmental linguistic evidence interacts with and constrains the linguistic hypotheses under development by the child learner.

6.3 Input in second language acquisition: Krashen's 'Input hypothesis'

Just as 'baby talk' was noted in the early work on child language development, as a simplified register used to talk to children, so a number of sociolinguists in the 1960s and 1970s noticed and commented on what they called **foreigner talk**, a simplified and pidgin-like variety sometimes used to address strangers and foreigners (on *Me Tarzan, you Jane* lines; see review in Long, 1996, pp. 414–18). It has always been obvious that comprehensible and appropriately contextualized second language data is necessary

for learning to take place. However, the precise developmental contribution of the language used to address second language learners first attracted serious attention from psycholinguists and second language researchers in the light of the **Input hypothesis** proposed by Stephen Krashen (1982, 1985; see also Chapter 2).

In its most developed form the Input hypothesis claims that exposure to **comprehensible input** is both necessary and sufficient for SLL to take place. The hypothesis states that:

Humans acquire language in only one way – by understanding messages, or by receiving 'comprehensible input'. . . We move from *i*, our current level, to *i* + 1, the next level along the natural order, by understanding input containing *i* + 1 (Krashen, 1985, p. 2).

Linked to the hypothesis are two further ideas:

- Speaking is a result of acquisition and not its cause.
- If input is understood, and there is enough of it, the necessary grammar is automatically provided. (Krashen, 1985, p. 2)

According to this hypothesis then, how exactly does acquisition take place? At one point Krashen proposed three stages in turning input into **intake**: (a) understanding a second language *i* + 1 form (i.e. linking it to a meaning); (b) noticing a gap between the second language *i* + 1 form and the interlanguage rule which the learner currently controls; and (c) the re-appearance of the *i* + 1 form with minimal frequency (Krashen, 1983, pp. 138–9). In other versions of the hypothesis, however, the concept of 'noticing a gap' is omitted, and it seems that acquisition takes place entirely incidentally or without awareness.

As numerous critics have pointed out, the Input hypothesis as originally formulated by Krashen is supported by rather little empirical evidence, and is not easily testable (e.g. McLaughlin, 1987, pp. 36–51). The concepts of 'understanding' and 'noticing a gap' are not clearly operationalized, or consistently proposed; it is not clear how the learner's present state of knowledge ('*i*') is to be characterized, or indeed whether the '*i* + 1' formula is intended to apply to all aspects of language, including vocabulary and phonology as well as syntax. Above all, the processes whereby language in the social environment is analysed and new elements are identified and processed by the 'language acquisition device' so that they can influence and modify the learner's existing interlanguage system, are not spelled out.

In the following sections of this chapter, we begin by discussing those research traditions that ultimately take their inspiration from Krashen's

proposals. First of all, we examine empirical research associated with the **Interaction hypothesis**, which has itself moved through two phases: an earlier, more descriptive phase, and a later phase which has been more strongly concerned with the processing of environmental language. Next, we examine the current state of the **Output hypothesis**. We then follow up researchers' growing interest in a particular aspect of interaction, that is, the provision of different types of **feedback** on learners' second language utterances, by teachers and other interlocutors, and its possible contributions to the acquisition process. Lastly, we examine briefly some alternative psycholinguistic theories and claims about the ways in which 'new' language elements in environmental discourse are identified, analysed and integrated into the developing second language system: the '**noticing**' hypothesis, the '**input processing**' hypothesis and the '**autonomous induction**' hypothesis.

6.4 Interaction in second language acquisition

As we have seen, Krashen's proposals encouraged other researchers to examine more closely the characteristics of the language input being made available to second language learners. A range of studies conducted in the 1970s and 1980s demonstrated that talk addressed to learners was rarely of the *Me Tarzan, you Jane* type. Instead, it was typically grammatically regular, but often somewhat simplified linguistically by comparison with talk between native speakers (e.g. using shorter utterances and a narrower range of vocabulary or less complex grammar; see review in Long, 1983a). However, as Long also showed, the degree of simplification reported in many descriptive studies was puzzlingly variable. Also, these studies typically stopped short at the description of distinctive features of Foreigner Talk Discourse, as it came to be known. They did not generally go on to demonstrate either that these special qualities made Foreigner Talk Discourse more comprehensible, or that it actually promoted second language acquisition.

Long proposed a more systematic approach to linking features of 'environmental' language, and learners' second language development. He argued that this could be done in the following way:

- Step 1: Show that (a) linguistic/conversational adjustments promote (b) comprehension of input.
- Step 2: Show that (b) comprehensible input promotes (c) acquisition.
- Step 3: Deduce that (a) linguistic/conversational adjustments promote (c) acquisition.

(Long, 1985, p. 378)

In two studies reported in the same 1985 paper, he showed that 'lectettes' pre-scripted and delivered in a modified, Foreigner Talk Discourse style were more comprehensible to adult second language learners than were versions of the same talks delivered in an unmodified style, thus supporting the argument that linguistic modifications could promote comprehension of input. However, these lectettes involved passive listening by the learners. In other work, Long shifted the attention of the second language acquisition field towards more interactive aspects of Foreigner Talk Discourse.

6.4.1 Long's 'Interaction hypothesis'

Long went on to propose his Interaction hypothesis as an extension of Krashen's original Input hypothesis. For his own doctoral research (Long, 1980, 1981, 1983a), Long conducted a study of 16 native speaker–native speaker and 16 native speaker–non-native speaker pairs, carrying out the same set of face-to-face oral tasks (informal conversation, giving instructions for games, playing the games, etc.). He showed that there was little linguistic difference between the talk produced by native speaker–native speaker and native speaker–non-native speaker pairs, as shown on measures of grammatical complexity. However, there were important differences between the two sets of conversations when these were analysed from the point of view of conversational management and language functions performed. Specifically, in order to solve ongoing communication difficulties, the native speaker–non-native speaker pairs were much more likely to make use of conversational tactics such as **repetitions**, **confirmation checks**, **comprehension checks** or **clarification requests** (see Table 6.1 for examples).

As in child-directed speech, native speakers apparently resort to these tactics in order to solve communication problems when talking with less fluent non-native speakers, and not with any conscious motive to teach grammar (Long, 1983b). However, from the perspective of the Interaction hypothesis, such collaborative efforts should be very useful for language learning. As they struggle to maximize comprehension, and negotiate their way through trouble spots, the native speaker–non-native speaker partnerships are incidentally fine-tuning the second language input so as to make it more relevant to the current state of learner development. That is, they are collaborating to ensure that the learner is receiving $i + 1$, in Krashen's terms, rather than $i + 3$, or indeed, $i + 0$. As Larsen-Freeman and Long put it:

Modification of the interactional structure of conversation ... is a better candidate for a necessary (not sufficient) condition for acquisition. The role it plays in negotiation for meaning helps to make input comprehensible while still containing unknown linguistic elements, and, hence, potential intake for acquisition.

(Larsen-Freeman and Long, 1991, p. 144)

Following on Long's original studies, many others drew on the Interaction hypothesis and used a similar taxonomy of conversational moves to track meaning negotiations and conversational repair. These are usefully reviewed by Larsen-Freeman and Long (1991, pp. 120–8) and by Pica (1994). On the whole, these studies followed designs similar to that of Long (1980), tracking pairs of native and non-native speakers in various combinations, undertaking a variety of semi-controlled conversational tasks. They have taught us a good deal about the types of task that are likely to promote extensive negotiation of meaning, inside and outside the classroom. (For example, convergent, problem-solving tasks in which both partners control necessary information are more likely to promote negotiation than are more open-ended discussions.) They have also demonstrated that negotiation of meaning occurs between non-native speaker peers, as

Table 6.1 Examples of interactional modifications in NS conversations

NS	NNS
And right on the roof of the truck place the duck. The duck.	I to take it? Dog? ^a
Duck.	Duck.
It's yellow and it's a small animal. It has two feet.	I put where it? ^b
You take the duck and put it on top of the truck. Do you see the duck? ^c	Duck? ^a
Yeah. Quack, quack, quack. That one. The one that makes that sound.	Ah yes, I see in the—in the head of him.
OK. See? ^c	Put what? ^b
OK. Put him on top of the truck.	Truck? ^a
The bus. Where the boy is.	Ah yes.

^a Confirmation checks: Moves by which one speaker seeks confirmation of the other's preceding utterance through repetition, with rising intonation, of what was perceived to be all or part of the preceding utterance.

^b Clarification requests: Moves by which one speaker seeks assistance in understanding the other speaker's preceding utterance through questions (including *wh-*, polar, disjunctive, uninverted with rising intonation or tag), statements such as *I don't understand*, or imperatives such as *Please repeat*.

^c Comprehension checks: Moves by which one speaker attempts to determine whether the other speaker has understood a preceding message.

(Source: Pica *et al.*, 1987, p. 74)

well as between more fluent and less fluent speakers, given the right task conditions.

However, as Long (1996) points out, these studies have mostly been undertaken in Western educational institutions, and we still know little about the kinds of negotiation and repair that may typify second language interactions in other contexts. Also, many early interaction studies did not go beyond the first descriptive steps of establishing the existence and general patterning of conversational repair.

6.4.2 Empirical studies linking interaction and comprehension

One of the first studies that attempted to establish a link between interactional modifications and increased comprehension, was conducted by Pica and colleagues (Pica *et al.*, 1987). Groups of second language learners listened to different versions of a script instructing them to place coloured cut-outs on a landscape picture, and tried to complete the task. One group heard a linguistically modified version of the script (e.g. with increased redundancy and simplified grammar), but individuals were not allowed to ask any questions as they carried out the instructions. The second group heard a version of the script originally recorded with native speakers, but individuals were encouraged to ask for clarifications, etc., from the person reading the script. The main result of these requests was a great increase in repetitions of content words, rather than, for example, any particular simplification of grammar. Indeed, the authors note that 'interaction resulted in input that was more complex than input that was modified according to conventional criteria of linguistic simplification' (Pica *et al.*, 1987, p. 750).

Pica *et al.* (1987) were nonetheless able to show that the learners allowed to negotiate the meaning of an unmodified script were more successful on the task than those who simply heard the simplified script, and argue that this shows increased comprehension because of interactional modifications of the input. This study, and others like it, are relevant to Long's Step 1 quoted above (Long, 1985); they seem to show that interactional adjustments are more effective in promoting comprehension of input than are linguistic adjustments alone.

6.4.3 Empirical studies linking interaction and acquisition

In Long's Steps 2 and 3, he challenged researchers to link interactional modifications and learner comprehension to language acquisition. These links were pursued in several studies reported in the 1990s, though with somewhat mixed results. Three examples will be briefly considered here.

A study by Loschky (1994) involved the administration of listening comprehension tasks to learners of Japanese as a foreign language. The learners heard individual locative sentences (in Japanese) such as 'To the right of the pen is a ruler', 'A big black circle is above the big black square', and had to locate and number the correct items on a range of picture sheets. One group of learners heard these sentences without any further support; a second group heard linguistically modified versions (with some added redundancy) and a third group were allowed to ask for clarifications, etc., as the sentences were presented.

As in earlier studies, Loschky found that the third condition was most helpful to the learners in completing the task, that is, he offered further evidence that interaction around meaning aids second language comprehension. But Loschky also administered pre- and post-tests of language proficiency to his subjects, comprising a recognition test of relevant vocabulary, and a grammaticality judgement test on similar locative structures. Here, he found that all his subjects made significant gains in course of the study, but that no single group was advantaged over the others by the differing intervening treatment. Thus, while his study showed interactional modifications leading to increased comprehension (Long's Step 1), it failed to show any clear link between increased comprehension and acquisition (Long's Step 2).

In a not dissimilar study, Gass and Varonis (1994) asked native speaker-non-native speaker pairs to undertake a problem-solving communication game. As in the study by Pica *et al.* (1987) this involved placing figures in particular locations on a landscape scene. The 'game' was run twice, first of all with the native speaker participants issuing instructions to their non-native speaker interlocutors, and second, the other way around.

When the native speaker participants gave instructions on the first occasion, half were asked to follow a linguistically pre-modified script, and the other half followed an unmodified script. For each script, half the native speaker subjects were instructed to allow negotiation about meaning, and the other half were not. In this study, both the modified script *without* interaction, and either script *with* interaction, seemed to increase non-native speaker comprehension (as measured by success on the task), compared with those who heard the unmodified script and could not negotiate around it. This part of the study is obviously relevant once again to Long's Step 1.

In the second part of the experiment, however, when the non-native speaker participants took responsibility for giving instructions, they were not given any scripts to follow. Once more, half of them were allowed to negotiate meaning with their native speaker interlocutor, the other half were not. (The design of this experiment is shown in Figure 6.1.)

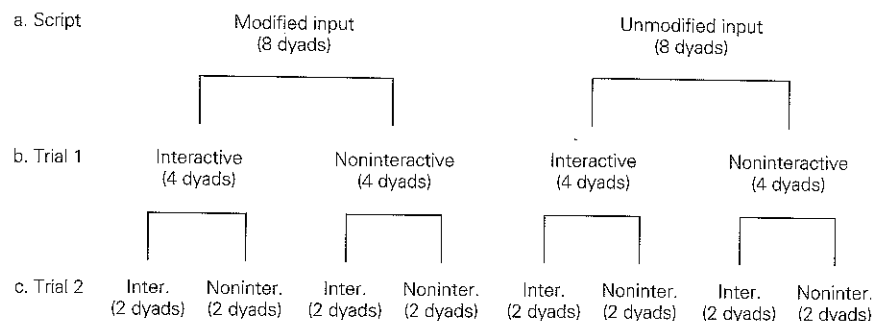


Fig. 6.1 The contributions of modified input and interaction to task success; diagram of experimental design (Source: Gass and Varonis, 1994, p. 290)

Interestingly, this time around, it did not make any difference to the success of the native speakers on the task, whether their non-native speaker instructors were allowed to interact with them or not. It seemed that the quality or intelligibility of non-native speaker directions could not be improved significantly by ongoing interaction.

A somewhat different kind of development did take place for the 'negotiation' group however. It turned out that those non-native speaker subjects who had been allowed to interact with their interlocutor during Trial 1, were significantly better at giving directions during Trial 2, than those who had not. Gass and Varonis consider the possibility that the non-native speakers might have learnt a larger number of useful vocabulary items during their interactive experience of Trial 1, only to reject it. Instead, they argue that the Trial 2 data shows evidence of non-native speakers having internalized various useful communicative strategies, as exemplified below:

- First trial
 JANE: All right now, above the sun place the squirrel. He's right on top of the sun.
 HIROSHI: What is . . . the word?
 JANE: OK. The sun.
 HIROSHI: Yeah, sun, but . . .
 JANE: Do you know what the sun is?
 HIROSHI: Yeah, of course. Wh-what's the
 JANE: Squirrel. Do you know what a squirrel is?
 HIROSHI: No.
 JANE: OK. You've seen them running around on campus. They're little furry animals. They're short and brown and they *eat nuts* like crazy.

- Second trial
 HIROSHI: The second will be . . . put here. This place is . . . small animal which *eat nuts*.
 JANE: Oh, squirrel?
 HIROSHI: Yeah (laughter).

(Gass and Varonis, 1994, p. 296)

Using the data from the example above, the researchers point out that the subject Hiroshi seems to have learnt, not the lexical item *squirrel*, but a strategy for defining it, using more basic vocabulary.

In a third study, Mackey (1999) set out to test whether opportunities to interact and negotiate for meaning would boost the knowledge of question forms among learners of English as a second language. Question forms were selected as the syntactic focus of the study for a number of reasons. They are readily elicited, and are present at all stages of learning; in addition, their acquisition has been well studied, and the normal six-stage acquisition sequence for English question forms is known (see Pienemann and Johnston, 1987). The participants in the study were lower-intermediate adult learners, who undertook a range of information-gap tasks that required them to ask and answer questions (e.g. story completion, spot the difference, picture sequencing). Some participants (the 'interactors') were allowed to negotiate meanings with their native speaker interlocutor, whereas others were not; all participants carried out further tasks as pre-tests and as post-tests.

Mackey's (1999) experimental study produced statistically significant results showing that the learners who had engaged in interaction progressed one (or more) stages in second language question formation, while the non-interactors failed to do so. The following extract illustrates this development, in the case of one 'interactor' participant:

- | | | | |
|-----------|----|------|--|
| Pretest | 55 | NNS: | <i>The meal is not there?</i> |
| | 56 | NS: | <i>No it's gone, what do you think happened?</i> |
| | 57 | NNS: | <i>Happened? The cat?</i> |
| | 58 | NS: | <i>Do you think the cat ate it?</i> |
| | 59 | NNS: | <i>The meal is the is the cat's meal?</i> |
| | 60 | NS: | <i>It's not supposed to be the cat's dinner. I don't think so.</i> |
| | 61 | NNS: | <i>But although this, this cat have eaten it.</i> |
| Treatment | 4 | NNS: | <i>What the animal do?</i> |
| | 5 | NS: | <i>They aren't there, there are no bears.</i> |
| | 6 | NNS: | <i>Your picture have this sad girl?</i> |
| | 7 | NS: | <i>Yes, what do you have in your picture?</i> |
| | 8 | NNS: | <i>What my picture have to make her crying? I don't know your picture.</i> |

- | | | | |
|----------|----|------|---|
| | 9 | NS: | <i>Yeah ok, I mean what does your picture show? What's the sign?</i> |
| | 10 | NNS: | <i>No sign? . . . No, ok, what the mother say to the girl for her crying?</i> |
| | 11 | NS: | <i>It's the sign 'no bears' that's making her cry. What does your sign say?</i> |
| | 12 | NNS: | <i>The sign? Why the girl cry?</i> |
| Posttest | 1 | NNS: | <i>What do your picture have?</i> |
| Posttest | 2 | NNS: | <i>What has the robber done?</i> |
| | | NNS: | <i>Where has she gone in your picture?</i> |

(Mackey, 1999, p. 577)

In this example we see that the non-native speaker was using canonical word order with question intonation, in order to ask questions during the pre-test (Stage 2 of the developmental sequence proposed by Pienemann and Johnston, 1987). During the treatment the learner produced *wh*-fronting, but still with canonical word order (Stage 3). However, by the time of the second post-test (without any further English as a second language instruction), the learner was correctly placing an auxiliary verb in second position to *wh*- words (Stage 5). This kind of progress was not documented for the non-interactor group.

Mackey's study thus provides some of the clearest evidence available that 'taking part in interaction can facilitate second language development (1999, p. 565)', that is, in support of Long's Step 3. However, the somewhat contradictory findings of these three studies show a need for stronger theoretical models clarifying the claimed link between interaction and acquisition.

In fact, these research teams appeal to ideas of **noticing**, **consciousness-raising**, **attention**, etc., as elements to be added to the equation; see Section 6.8 below. Other researchers, such as Braid (1995), also criticized the earlier interactionist research as being too one-sidedly preoccupied with functional aspects of second language interaction and of neglecting linguistic theory. Braid went on to argue for a research agenda tracking the development of individual grammatical structures in second language interaction in much fuller detail (1995, pp. 164-5).

6.5 Rethinking the Interaction hypothesis

Over time, second language input or interaction researchers have shown themselves quite responsive to the ongoing development of both linguistic and information processing theory within second language acquisition studies. This is evident in Long's eventual reformulation of the Interaction hypothesis (1996), which places much more emphasis on linking features of

input and the linguistic environment with 'learner-internal factors', and explaining how such linkages may facilitate subsequent language development (Long, 1996, p. 454).

Long's 1996 version of the Interaction hypothesis reads as follows:

It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner's developing L2 processing capacity, and that these resources are brought together most usefully, although not exclusively, during *negotiation for meaning*. Negative feedback obtained during negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology and language-specific syntax, and essential for learning certain specifiable L1-L2 contrasts.

(Long, 1996, p. 414)

This new version of the hypothesis highlights the possible contribution to second language learning of **negative evidence** as to the structure of the target language, derivable from environmental language (i.e. from Foreigner Talk Discourse). It also highlights the attempt to clarify the processes by which input becomes intake, through introducing the notion of **selective attention**. These concepts are also repeatedly referred to, in current discussions of output and its contribution to language development. In the next section we review recent empirical investigations into Swain's Output hypothesis, before considering these concepts more fully in later sections.

6.6 Output in second language acquisition

Most language learning researchers agree that output is necessary to increase fluency, that is, learners must practise producing second language utterances if they are to learn to use their interlanguage system confidently and routinely. However, the **Output hypothesis** advanced by Swain (1985, 1995) makes a number of claims which go beyond this 'practice' function of output, and which have to do with the development of the interlanguage system, and not only increased efficiency in using it.

Swain (1995, p. 128) proposes three further functions for learner output:

- the 'noticing/triggering' function, or what might be referred to as the consciousness-raising role
- the hypothesis-testing function
- the metalinguistic function, or what might be referred to as its 'reflective' role.

That is to say, she believes that the activity of producing the target language may push learners to become aware of gaps and problems in their current

second language system (first function); it provides them with opportunities to reflect on, discuss and analyse these problems explicitly (third function); and of course, it provides them with opportunities to experiment with new structures and forms (second function).

In her own ongoing research, Swain has concentrated largely on the 'reflective' role of output, and especially the possible contribution of metalinguistic talk between peers to second language development (*see* Swain and Lapkin, 1995, 1998; the latter discussed more fully in Chapter 7). Other researchers have conducted research that tries to link learners' opportunities for output more directly to second language development. For example, R. Ellis and He (1999) and de la Fuente (2002) have researched the contribution of learner output to second language vocabulary acquisition.

In the first of these studies, R. Ellis and He (1999) worked with low-proficiency English second language learners, using a pool of unfamiliar furniture vocabulary (*lamp, cushion, etc.*). All the learners carried out a design task, placing small pictures of the furniture items around the plan of an apartment, but one group received pre-modified instructions that they could not negotiate. A second group received the same instructions but could negotiate if meanings were not clear, while the third group were required to give the instructions to an interlocutor. In this study, pre-tests and post-tests of the selected vocabulary showed that the third, 'output' group outperformed the others both receptively and productively. The de la Fuente study (2002) had a similar design, though with learners of Spanish as a second language rather than English. In this case, the 'output' group of learners also outperformed the rest of the students at post-tests, as far as productive vocabulary was concerned. However for receptive vocabulary, the 'negotiation' group achieved the same level as the 'output' group, while outperforming the 'no negotiation' group.

The studies just quoted seem to show clear benefits arising from 'pushing' students to produce second language output, at least as far as vocabulary is concerned. Regarding second language grammar, as Shehadeh (2002) points out, there is still relatively little evidence. Nobuyoshi and Ellis (1993) conducted a small-scale study of the role of output in the development of English past tense. They tried to encourage English second language learners to modify their output by means of clarification requests, as in the following example:

Learner: last weekend, a man painting, painting 'Beware of the dog'

Teacher: sorry?

Learner: a man painted, painted, painted on the wall 'Beware of the dog'

(Nobuyoshi and Ellis, 1993, p. 205)

Of the three students who had received this treatment, two maintained the resulting increased accuracy in using past tense forms, whereas no one in a comparison group improved.

Larger studies by Izumi *et al.* (1999) and Izumi and Bigelow (2000) explored the potential of pushed output to promote English second language students' learning of the counterfactual conditional in English (e.g. *If Ann had travelled to Spain in 1992, she would have seen the Olympics*). Experimental groups were given different kinds of texts including rich examples of the structure, and had to generate similar texts (in an essay writing task and a text reconstruction task). Control groups meanwhile received the same textual inputs, but did other activities based on them (e.g. answered comprehension questions). The writings of the experimental groups showed significant improvement during the experimental treatment, but on the eventual post-tests, focusing on the target grammar structure, the control groups performed just as well. Thus it seemed that rich input combined with a variety of 'noticing' activities, may have been enough in this case to lead to grammar learning, without any added benefit being derived from the output requirement.

Up to now therefore, it seems that the benefits of 'pushed output' remain somewhat elusive and hard to demonstrate, at least as far as second language grammar development is concerned. In an extensive review, Shehadeh (2002, p. 597) comments that 'there is still a severe lack of data showing that learner output or output modifications have any effect on second language learning'. Like Braidi (1995) he argues the need to trace learners' linguistic development much more closely, and also argues for a closer examination of the psycholinguistic and information-processing functions of learner output.

6.7 Feedback, recasts and negative evidence

In this section we look more closely at recent research on the role of feedback in second language interaction, and its possible contribution to interlanguage development. First, in Section 6.7.1, we return briefly to child first language acquisition and review the debate around the significance of adult recasts of child utterances for first language development. In sections 6.7.2 and 6.7.3 we then examine observational research into the naturalistic use of recasts and other related kinds of feedback with second language learners, in dyadic settings and in classrooms. Lastly, we consider experimental research where the occurrence of recasts was controlled and manipulated, and its impact on learner development was studied using pre-test and post-test designs.

6.7.1 Negative evidence in first language acquisition

We saw in Section 6.2 that the existence and usability of **negative evidence** in child-directed speech has become important in debates on first language acquisition. The argument sharpened as studies of child-directed revealed that caretakers' speech with young children was, in general, regular and well formed, that is, it seemed to provide essentially **positive** evidence on the nature of the language system to be learnt. Moreover, it seems that explicit negative evidence, in the form of parental correction of children's grammar mistakes, is rare.

Theorists arguing for a strongly innatist model of language learning have claimed that language is simply not learnable from the normal type of input, which provides mostly positive evidence of the structure of the target language, and lacks negative evidence in the form of, for example, grammar corrections (Wexler and Culicover, 1980; Pinker, 1989). In the absence of negative evidence, how are learners to discover the limits and boundaries of the language system they are learning? For nativists, the answer lies in the existence of some form of Universal Grammar, which is needed to eliminate many possible generalizations about language structure that are compatible with the input received, but are actually incorrect.

We saw in Section 6.2 that a number of child language researchers have responded to this view, by re-examining and reinterpreting child-directed speech data. Researchers such as Bohannon *et al.* (1990) and Farrar (1992) assert that negative evidence is much more prevalent in child-directed speech than was previously thought, in particular by asserting that caretakers' **recasts** of poorly formed child utterances offer implicit negative evidence about children's interim grammatical hypotheses. There is controversy among child language researchers on this issue, particularly concerning the standards to be applied to evidence supporting claims that recasts promote grammatical development (*see Morgan et al.*, 1995; Bohannon *et al.*, 1996). From his review, however, Long (1996) concludes that first language acquisition researchers have generally succeeded in demonstrating that (implicit) negative evidence: (a) is regularly available in child-directed speech; (b) exists in usable form; and (c) is picked up and used by child learners, at least in the short term. Whether negative evidence is **necessary** for the acquisition of core aspects of language (e.g. of the principles specified by Universal Grammar theory) still remains less clear, however.

6.7.2 Negative feedback and recasts in native speaker–non-native speaker and non-native speaker–non-native speaker discourse

In the light of this first language debate, related questions can be asked about the role of negative evidence in SLL. For example: To what extent is indirect negative evidence about the nature of second languages made available to second language learners, in the course of interaction? And to what extent do learners (a) notice and (b) make use of this evidence?

A number of studies have recently pursued these questions by analysing spoken interaction involving second language learners. These studies have looked for different kinds of **negative feedback** produced in response to learners' non-standard utterances, including negotiation moves such as clarification requests and confirmation checks, discussed in Section 6.4 above. However, particular attention has been paid to the occurrence of **recasts**, re-defined by second language researchers as 'responses to non-target non-native speaker utterances that provide a target-like way of expressing the original meaning' (Mackey *et al.*, 2003, p. 36). An example of a recast offered by Mackey *et al.* (2000, p. 11) reads:

Student: Why does the aliens attacked earth?
Teacher: Right. Why did the aliens attack earth?

Here, the teacher does not explicitly criticize the student's utterance, or provide any grammatical explanation, and this is typical of feedback in the form of recasts. However, such reformulations of faulty utterances are believed by many interactionist second language acquisition researchers to provide important indirect negative evidence for the learner about problems in their output. These researchers have also been very interested in uptake of the recasts, in immediately following utterances produced by the learner. The following example comes from Oliver:

Teacher: What did you do in the garden?
NNS student (child): Mm, cut the tree
Teacher: You cut the trees. Were they big trees or were they little bushes?
NNS student (child): Big trees

(Oliver, 2000, p. 140)

Here, the teacher recasts the child's first utterance 'cut the tree', expanding it by the addition of plural *-s*. The child's second utterance 'big trees' also includes plural *-s*, and can be interpreted as reflecting uptake of the foregoing recast.

In order to explore the extent to which negative feedback is actually available to second language learners, and how far they make use of it, Oliver (1995) recorded pairs of native speaker and non-native speaker children carrying out problem-solving tasks in English (picture completion). In this study, more than 60% of the errors made by the non-native speaker children received some form of negative feedback from their native speaker partner. Most frequent were negotiations of some kind (clarification requests, confirmation checks); these predominated where non-native speaker utterances included multiple errors or were semantically ambiguous. However, recasts also occurred, usually in response to utterances containing single errors, and also in association with particular types of grammar mistake (*see* the following example; *see also* Table 6.2 for the general relationships found in Oliver's data between error types and native speaker responses).

The following example illustrates the pattern in which a native speaker responded with negotiation when the NNS's meaning was ambiguous, such as that caused by poor word choice:

(4) NNS: It go just one line
NS: Just along the line?
Yer.

In the next example, an error was recast as the meaning was transparent:

(5) NNS: And the . . . boy is holding the girl hand and . . .
NS: Yer.
The boy is holding the girl's hand.
(Oliver, 1995, p. 473)

Table 6.2 Child NS responses to different types of error

Error	Negotiate (%)	Recast (%)	Ignore (%)	<i>p</i>
Article (<i>n</i> = 69)	32	25	43	0.1645
Aux/copula (<i>n</i> = 132)	54	7	39	0.0001***
Sing/pl/conc (<i>n</i> = 17)	18	47	35	0.007**
Pronoun (<i>n</i> = 27)	63	7	30	0.0399*
Tense (<i>n</i> = 19)	37	16	47	0.7853
Word order/omission (<i>n</i> = 77)	53	14	33	0.0364*
Word choice (<i>n</i> = 78)	54	10	36	0.0102*
No subject (<i>n</i> = 39)	64	5	31	0.0032**
Pronunciation (obvious error) (<i>n</i> = 42)	48	26	26	0.1245

p* < .05; *p* < .01; ****p* = 0.001

(Source: Oliver, 1995, p. 471)

As well as documenting extensive negative feedback produced by her native speaker subjects, Oliver also showed that her non-native speaker learners could make use of the information provided. In this particular study, the learners incorporated just under 10% of the recasts into their following utterances. This seems a low figure, but Oliver argues that on many occasions, it was not conversationally appropriate or possible to do so. She also points out that the learners were operating under developmental constraints:

NNSs can only incorporate structures when it is within their morphosyntactic ability to do so (Meisel *et al.*, 1981; Pienemann, 1989). That is to say, input, and in this case, recasts can only be usable if they are within the learnability range of the NNS . . . It is quite probable that a substantial proportion of the recasts that were not incorporated were beyond the current L2 processing abilities of the NNSs.

(Oliver, 1995, p. 476)

Overall then, Oliver interprets her data optimistically as showing not only the availability of negative evidence in conversational Foreigner Talk Discourse involving children, but also its usability and take-up, within the limits of the learners' current processing ability.

Further studies of this type have been carried out with adult learners as well as children, and with non-native speaker interlocutors as well as native speaker interlocutors (Oliver, 2000; Mackey *et al.*, 2003). These later studies show that the amount of negative feedback made available is somewhat variable, depending on interlocutor and on setting. This is also true of the extent to which learners act upon it and make use of the recasts in following utterances. However, both these later studies confirm the basic finding of Oliver (1995): that negative feedback occurs regularly in most kinds of second language interaction, in response to non-target-like utterances, and that learners regularly avail themselves of the opportunities offered to produce more target-like utterances.

6.73 Negative feedback and recasts in the second language classroom

Further observational studies have examined the occurrence, and apparent effects, of negative feedback in the second language classroom. These classroom studies are variants on a quite longstanding tradition of research into classroom error correction, which had already suggested some benefits from active correction strategies (*see* detailed reviews in Chaudron, 1988, pp. 175–8; DeKeyser, 1993). They typically evaluate the usefulness of

recasts as compared with other types of negative feedback, as reflected in student uptake in immediately following interaction sequences.

A number of studies by Lyster and colleagues illustrate this type of classroom investigation. For example, a study conducted in a Canadian immersion context (Lyster and Ranta, 1997) looked at different types of error feedback offered by teachers, during content lessons and 'thematic' French language arts lessons. They noted that recasts were much the most common type of feedback (60% compared with 34% for negotiation of form and 6% for explicit meta-linguistic corrections). However, recasts were much less likely to lead to immediate self-correction by the students, relatively speaking, than were other feedback types. A further analysis of the same recorded lessons (Lyster, 1998) showed that the kind of negative feedback provided by the teachers varied according to the type of error that had been made. The teachers were much more likely to respond to lexical errors with some kind of negotiation (e.g. clarification requests), while they typically responded to both grammatical and phonological errors with recasts. As far as the phonological errors were concerned, recasting seemed an effective teacher strategy, as the students later repaired more than 60% of these mistakes. However, recasting was much less effective for repair of grammar mistakes; only 22% of all spoken grammar mistakes were corrected, and the majority of these grammar repairs happened when the teachers adopted the (less usual) strategy of negotiation. Similar evidence is offered by a study of a communicatively oriented adult English second language classroom, by Panova and Lyster (2002).

Lyster and his colleagues interpret their findings as showing that while recasts may offer valuable negative evidence, students are not necessarily under pressure to attend to them, at least in communicatively oriented classroom settings. They suggest that more interactive feedback modes may therefore be more effective in pushing classroom learners to amend their hypotheses about second language grammar, as well as vocabulary.

6.74 Experimental studies of negative feedback

How can we tell whether negative feedback provided during face-to-face interaction is promoting second language development? The studies that we have just described seem to make the assumption that improved performance in immediately succeeding utterances can be taken seriously as evidence of learning. However, the researchers responsible for these descriptive studies are generally aware that this is a somewhat speculative assumption. It is possible that the corrections which are produced by learners immediately after negative feedback are quickly forgotten, and do not

affect their underlying interlanguage system; it is also possible that recasts, etc., can function as effective input and lead to learning, without any explicit repair being produced.

For these reasons, a number of researchers have moved beyond descriptive accounts of negative feedback, and have tried to design more focused experimental studies of its effect on SLL. An example is the study by Mackey and Philp (1998) of the use of recasts, and their impact on the learning of English as second language question forms. In this study, 35 adult learners took part in a specially designed programme of information-gap tasks, which pushed them towards production of English as second language questions (story completion, picture sequencing, picture drawing). The students carried out the tasks with a native speaker interlocutor, and also completed a series of pre- and post-tests that identified their level on the Pienemann and Johnston (1987) developmental scale for English questions (see Section 6.4 above).

Some of the adults in the study received intensive recasting from the native speaker interlocutor whenever they made an error in question formation. Others did the same tasks, but without receiving the recasting 'treatment', whereas a control group did the pre- and post-tests only. During the actual study, the learners who received the recasts very seldom repaired or modified their utterances in response to them (only 5% of recasts were followed by learner repairs). However, the post-tests showed that most of the learners who began the study at Stage 4 on the developmental scale for questions, and who experienced recasting, progressed by at least one Stage (i.e. to Stage 5) in course of the study. No other group made similar progress; the researchers interpret these results as showing that recasting was beneficial for learners who were developmentally ready, in spite of the lack of overt uptake while interaction was actually in progress.

The Mackey and Philp (1998) study compared the effectiveness of interaction plus recasting, with interaction alone, and found that the inclusion of recasting seemed to promote interlanguage development as far as question formation was concerned (though only for the most advanced learners in the study). Similar results have been found in a small study of English as second language storytelling with and without interlocutor recasts (Han 2002); in this case, the recast condition led to greater consistency in use of English past tense inflections as measured on delayed post-tests. Other experimental studies have compared the provision of models (positive examples of selected second language structures) with the provision of reactive recasts (Long *et al.*, 1998; Ayoun, 2001). However, these studies have produced mixed findings. For example, the carefully designed study of Long *et al.* (1998) used communicative games played by learners with

native speaker interlocutors, to explore the effect of recasts versus modelling on acquisition of four grammatical structures, two in Japanese as second language and two in Spanish as second language. In this case the 'recasting' condition produced significantly enhanced learning for only one of the four target structures.

As Nicholas *et al.* (2001) point out the findings to date for 'negative feedback' research are still somewhat inconclusive and difficult to interpret. One increasingly recognized problem is that we still know very little about how much attention learners pay to the feedback they receive, or how they interpret it. Some researchers are now trying to use a variety of introspection techniques, in order to tap into learners' thought processes during second language interaction. For example, Mackey *et al.* (2000) made video-recordings of dyadic interactions, and played them back to the learners concerned, asking them to recall their thinking during selected correction episodes, as these were replayed to them. The recall showed that learners had been aware of lexical and phonological correction episodes, which they could identify and comment on. However, they were less likely to have noticed grammatical episodes, or to identify them correctly if they did notice them, as the learner's comment on the following episode shows:

Morphosyntactic feedback without recall of content

NNS (on video): It have mixed colours

NS: It has mixed colours

NNS: Mixed colours aha

NNS (subsequent recall): Uh, I was thinking . . . nothing, she just repeat what I said

(Mackey *et al.*, 2000, p. 486)

Here, the learner made a verb inflection mistake during the video interaction, which was recast by the native speaker interlocutor. However, her comments during the recall activity suggest she was aware only that her message was repeated, and had not noticed the grammatical correction in the recast.

6.8 Attention, consciousness-raising and 'focus on form'

We saw in Section 6.5 how recent versions of the Interaction hypothesis have given more importance to the internal processing capacities of the language learner. In particular, researchers have developed the idea that the amount of attention which the learner is paying to matters of form may influence the extent to which second language input and interaction

actually produce second language **intake**, that is, new language which has been processed sufficiently for it to become incorporated into the learner's developing second language system. This argument is attractive, in view of the mixed results of studies of output, negative feedback, etc., and their effect on second language development.

One of the researchers who has been most influential in promoting this view is Richard Schmidt (1990, 1994, 2001). Schmidt is careful to distinguish among different types of attention that learners might pay to language form. He uses the term **noticing** to refer to the process of bringing some stimulus into focal attention, that is, registering its simple occurrence, whether voluntarily or involuntarily ('for example when one notices the odd spelling of a new vocabulary word', Schmidt, 1994, p. 17). He reserves the terms **understanding** and **awareness** for explicit knowledge: 'awareness of a rule or generalisation' (Schmidt, 1994, p. 18).

Schmidt is generally optimistic about the contribution of both kinds of attention to language learning. His main evidence in support of the significance of **noticing** comes from his own personal diary, kept while learning Portuguese (with accompanying tapes of his own conversational development; Schmidt and Frota, 1986). An extract from the diary, recording evidence of noticing for certain Portuguese question forms is presented below:

Journal entry, Week 21 . . . 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 alternative long and short 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* . . .

Journal entry, Week 22. I just said to N *o que é que você quer*, but quickly: [kek-seker]. Previously, I would have said just *o que*. N didn't blink, so I guess I got it right.

(Schmidt, 1990, p. 140)

Schmidt comments on this data extract as follows:

In this particular case, it is very clear that these forms had been present in comprehensible input all along. *É que* variants of question words were used by my interlocutor on all the conversational tapes; 43 per cent of all question words on the first tape are of this type. I heard them and processed them for meaning from the beginning, but did not notice the form for five months. When I finally did notice the form, I began to use it.

(Schmidt, 1990, p. 141)

On the basis of this kind of evidence, Schmidt (1994, p. 17) has argued that 'noticing is the necessary and sufficient condition for the conversion of input to intake for learning', though he later modified this view to the weaker claim that 'more noticing leads to more learning' (Schmidt, 1994, p. 18).

The possible significance of attention for second language uptake is highlighted by Long in the revised version of his Interaction hypothesis, as pointed out above in Section 6.5, and has been commented on by a range of interactionist researchers (Pica, 1994; Nicholas *et al.*, 2001). In particular, Nicholas *et al.* (2001) try to explain the mixed results of research into the effectiveness of negative feedback, by stressing the linked issues of saliency and attention, quoting Doughty (1999) to the effect that:

recasts in L2 classrooms are effective if they are accompanied by some additional cue, telling learners that it is the *form* and not only the meaning of their utterance that is in focus.

(Nicholas *et al.*, 2001, p. 748)

Some interactionist researchers have recently undertaken empirical investigations to clarify how selective attention, or 'noticing', may be influencing the processing of utterances during second language interaction. In a laboratory study, Philp (2003) gave English second language learners a story completion and a picture learning task, similar to those used in previous studies of question formation by Mackey and colleagues. The learners had to ask questions to complete the tasks, and their errors received active recasts from their native speaker interlocutors. However, at intervals the learners were prompted by a signal to repeat what the interlocutor had just said, and their ability to do this was taken as evidence that they had been 'noticing' the recasts, at least enough to be holding them in working memory.

It turned out that the participants in Philp's study could reproduce a high proportion of the recasts that they heard. However, the accuracy of these repetitions depended on: (a) the learner's language level; (b) the length of the recast; and (c) the number of corrections it contained. In particular, learners had great difficulty in repeating question forms that were not currently part of their interlanguage grammar, unless the utterances containing them were very short. Philp concludes that:

In terms of understanding the processes of SLA, these findings support the claim for an interface between interaction, noticing, and SLA (Long 1996). However, the relationship between interactional modifications, noticing, and intake is highly complex, balancing the learner's IL knowledge and attentional resources against linguistic forms in the input.

(Philp, 2003, p. 120)

Introducing another recent experimental study, Leeman (2003) discusses further the ambiguous status of recasts. She argues that they are best interpreted as offering both positive and negative evidence about second language form (the positive evidence being contained in the recasting utterance itself, the negative evidence in the contrast between the recast and the foregoing erroneous utterance). Like Nicholas *et al.* (2001), she claims that the most important feature of recasts may not be the negative evidence they provide. Instead, it may be the increased prominence or **saliency** of the new form within the recast, which is most helpful in catching the attention of the learner, and thus making the second language form available for processing and internalization.

In Leeman's laboratory study with adult learners of second language Spanish, noun-adjective agreement was the language focus. The learners completed picture comparison tasks working in pairs with native speakers in which objects (such as chairs and tables) were only distinguished by features (such as colour). Leeman (2003) tried to trace the effects of the different aspects of recasts, by providing and comparing the following treatments:

- Negative evidence alone: learners are told that they have made an error but not given any positive model.
- Enhanced salience alone: learners are given exaggerated models of the target form (normally unstressed endings are stressed).
- Recasts (interpreted as negative evidence plus enhanced salience): learners receive conventional recasts.
- Control: learners receive ordinary models of the target form.

The results of this laboratory study showed that the recasts group and the enhanced salience group both significantly outperformed the control group on almost all measures of noun-adjective agreement, while the negative evidence group did not. This leads Leeman to conclude that:

The findings reported here are highly suggestive regarding the role of attention and salience in SLA . . . A logical interpretation is that enhancing the salience of certain forms led learners to attend to those forms . . . It seems that some interactional features, recasts among them, can lead to greater development by highlighting specific forms in the input.

(Leeman, 2003, p. 57)

6.9 Theorizing input and interaction research

Our survey of input, output and interaction research has shown that a good deal of the research carried out has been descriptive in nature, and attempts to link different types of second language use with SLL have so far produced only mixed results. Commentators such as Braidí (1995) and Shehadeh (2002) have argued for greater clarity about the linguistic models which underpin this research, and numerous commentators have argued for more detailed attention to the internal processing which makes externally encountered language stimuli interpretable and usable for restructuring the interlanguage system. That is, it seems that stronger theorizing is required, for interaction studies to progress.

Clearly, interactionist researchers themselves are increasingly interested in modelling internal linguistic and psycholinguistic factors, as their concern, for example with selective attention, shows. However, no very full or detailed models of language processing have been proposed by any of the interactionist researchers discussed so far in this chapter.

In this section we comment briefly on two models that have been advanced with the intention of solving this problem: these are known as **input processing** theory and **autonomous induction** theory.

6.9.1 Input processing

Input processing theory has been developed over the last decade by Bill VanPatten and associates (VanPatten, 1996, 2002). This particular theory has become well known largely because of an associated research programme on language pedagogy, known as **processing instruction** (*see* VanPatten and Cadierno, 1993). The theory is concerned to explain how environmental second language input becomes converted into intake:

Intake is defined as the linguistic data actually processed from the input and held in working memory for further processing. As such, IP attempts to explain how learners get form from input and how they parse sentences during the act of comprehension while their primary attention is on meaning.

(VanPatten, 2002, p. 757)

Input processing theory does not offer a complete model of these processes. Instead, it offers a set of 'principles' that seem designed primarily to explain the apparent failure of second language learners to process completely the linguistic forms encountered in second language input, and hence to explain their impoverished intake which in turn restricts the development

of grammatical form. The input processing principles assume that learners have preferences for semantic processing over morphological processing, so that, for example, they process content words in the input before anything else, prefer to extract semantic information from lexical items rather than grammatical items (such as inflections), and prefer to process 'meaningful' morphology rather than 'non-meaningful' morphology. Take, for example, an English sentence such as, *We travelled to London by train yesterday*. In this sentence, past time is signalled twice, by the *-ed* verb inflection, and by the adverb '*yesterday*'. According to input processing theory, learners are likely to parse a sentence like this only incompletely, extracting temporal information from the adverb and ignoring the 'redundant' verb inflection. (We have come across similar suggestions associated with other theories, e.g. the Output hypothesis.)

Input processing theory also imputes to learners a number of other operating strategies, such as the 'first-noun' strategy which assigns the role of Subject to the first noun encountered in an utterance, and a preference for processing the beginnings and ends of sentences, over analysing medial elements. (This preference would also favour the processing of sentence-final '*yesterday*' in the earlier example.)

This approach has led to a series of pedagogical experiments that have tried to force second language classroom learners to parse input morphology more fully. In these experiments, learners are typically provided with input data in which morphology provides the main clues as to meaning. For example, they may be exposed to input in which verb inflections are the only available clues that provide temporal information, or in which prepositional phrases are the only available clues for location; see various studies reviewed in VanPatten (2002).

However, input processing theory is primarily focused on explaining the shortcuts and restricted processing strategies which learners seem to use. Thus it clearly does not offer a complete model of normal or successful processing of input, which presumably involves full parsing of input on a number of levels, plus procedures for the linking of form to meaning. Input processing theory also does not offer any extended explanation of how intake (defined here as analysed input, held in working memory) is processed further and becomes integrated more permanently in some way into the developing interlanguage system.

6.9.2 Autonomous induction theory

A much more complete and ambitious model of these processes is offered by Suzanne Carroll's Autonomous Induction theory (Carroll, 2000).

Carroll reminds us that the understanding of second language acquisition processes requires:

- an adequate theory of the representation of language in the mind (i.e. a property theory)
- an adequate theory of how language is processed, both receptively and productively
- a theory of how our mental representations of language can be changed, when we discover that our (interlanguage) representations are not adequate to process the environmental language we encounter (i.e. a transition theory).

Carroll accepts that our mental representations of language involve a number of distinct modules, as suggested by Universal Grammar, with limited interconnections. However, she rejects parameter (re)setting as a totally inadequate metaphor for the ways in which SLL takes place, that is, it is inadequate as a transition theory. Instead, she proposes a version of inductive learning (i-learning), which is initiated when we fail to parse incoming language stimuli adequately using our existing mental representations and analysis procedures. 'Inductive learning' is the term applied to learning by generalization from examples. It has been commonly criticized as inadequate with reference to language learning, because it fails to explain why learners processing the environmental language around them are so successful at working out the complexities of natural language, and in particular, why they never produce so-called 'wild grammars'. Carroll argues that the i-learning of Autonomous Induction theory differs from other inductive language learning theories such as the Competition Model (MacWhinney, 1999; 2001) because it is constrained by the pre-existing mental representations of language, which are strongly resistant to change.

Carroll's model is complex, and the full details are beyond the scope of this book. However, it is relevant to this chapter because she also presents a well-developed critique of interactionist research, for its theoretical limitations; for example, for its neglect of the detail of language processing which converts language stimuli into interpretable input. For example, she challenges a commonplace among interactionist researchers, who claim that increased comprehension (of second language meaning) can lead to identification and acquisition of language form, in a sequential manner (Steps 2 and 3 in Long's original Interaction hypothesis). Carroll points out that this is logically impossible. For one thing, unless enough formal analysis is done so that elements such as phonemes, syllables and words are identified in the

speech stimulus as it flows by the learner, there is no way of generating any interpretation of its meaning.

6.10 Evaluation: the scope of interactionist research

The Input, Output and Interaction hypotheses have led to very active strands of empirical research. A first phase of research leaned heavily towards documenting the phenomenon of meaning negotiation. If it could be shown that negotiation increased comprehensibility of target language input, it was assumed that this would also enhance second language acquisition.

Later phases of interactionist research have developed in at least two ways. First, researchers have shown rather more concern to relate environmental factors in language learning to linguistic theory, and in particular to the assumptions of Universal Grammar. One obvious manifestation of this concern has been the recent interest in the possible significance of the negative evidence made available in second language interaction, for language acquisition. On the other hand, interactionist researchers have still not fully clarified their views regarding the most appropriate property theory that could be used to conceptualize the target of interaction-based learning. Some researchers have suggested that interaction may be most helpful in learning those aspects of the target language that fall outside the Universal Grammar core (e.g. peripheral, language-specific features of syntax). But it is still rare to find extensive discussions of these issues in the interactionist literature (with clear exceptions such as Carroll, 2000).

Second, interactionist research has paid increased attention to information processing issues, and the complications that are involved in the conversion of environmental language firstly into input, and subsequently into intake. Again however, interactionists have fixed on particular aspects of this problem, such as the possible role of selective attention, the usefulness of heightened saliency for promoting language processing, or the possible influence of a variety of processing constraints on intake. Attempts such as those of VanPatten and of Carroll to build fuller and more detailed models of the complete parsing process, and of what happens when parsing fails, remain relatively unusual and have not been fully integrated with the empirical traditions of interactionist research. However, calls for a more principled approach to theory building continue to be made (Nicholas *et al.*, 2001; Shehadeh, 2002).

6.10.1 Achievements of interactionist research

The achievements to date of research in the Input or Interaction tradition may be summarized as follows:

- It has been shown that native speaker and non-native speaker interlocutors (child and adult) can and will work actively to achieve mutual understanding, at least when undertaking a fairly wide range of problem-solving tasks.
- It has been shown that these negotiations involve both linguistic and interactional modifications, which together offer repeated opportunities to 'notice' aspects of target language form, whether from positive or negative evidence.
- It has been shown that non-native speaker participants in 'negotiations for meaning' can attend to, take up and use language items made available to them by their native speaker interlocutors.
- It has been shown that learners receiving negative feedback, relating to particular target language structures, can in some circumstances be significantly advantaged when later tested on those structures.

6.10.2 Limitations of interactionist research

However, the achievements of this tradition are still constrained by a number of important limitations:

- Work on interaction has been carried out almost entirely within a Western or Anglophone educational setting; more cross-cultural studies of second language interaction will be needed, before any claims can be made that 'negotiation for meaning' is a universal phenomenon.
- All researchers in the Input or Interactionist tradition seem to accept in general terms that second language acquisition must be the result of interaction between environmental stimuli, a learner-internal language system, and some language-specific learning capabilities. Attempts at modelling this interaction are mostly still very fragmentary and incomplete however, and the best-developed theoretical models (Carroll, 2000) have as yet not been widely adopted to guide empirical research. This means that we are still far from identifying what may be the most productive research questions to ask, about the role of interaction, etc., in learning.

- Much research on interaction, etc., has been of a broad-brush kind, for example producing global characterizations of interactional modifications, or demonstrating the existence of recasts or learners' re-use of negotiated items. There are still not very many studies that focus on particular language structures, tracking them through processes of instruction, negotiation, output or recasting, and documenting learners' subsequent use and control of these particular items. Such focused studies as exist have differing theoretical motivations, and do not (yet) add up to a coherent and developmentally oriented treatment of different aspects of target language grammar.
- It is clear that negotiation, recasts, etc., can vary in their usefulness for acquisition, and it seems that this variation is related to the developmental stage of the learner, as well as to different areas of the target language system (lexis, phonology, syntax, etc.). There is now some interactionist research that tries to take account of developmental readiness (Mackey and Philp, 1998; Mackey, 1999) and to differentiate among linguistic sub-systems (Lyster, 1998). But we are still not in a position to generalize or to make any very powerful predictions about the likely usefulness of interaction in either of these domains of variability.

One thing is clear, however, while Input or Interaction research remains highly active, it cannot solve these difficulties alone. Its future is intertwined with the development of more comprehensive models of the learner-internal second language acquisition process itself. (As we shall see, however, many of these comments apply not only to this particular research perspective but also to other primarily 'environmentalist' traditions to be explored in following chapters.)

7

Socio-cultural perspectives on second language learning

The co-construction of linguistic knowledge in dialogue is language learning in progress.

(Swain and Lapkin, 1998, p. 321)

7.1 Introduction

In this chapter and the next (Chapter 8), we turn our attention to theorists who view language learning in essentially social terms. In both these chapters, we examine the work of those who claim that target language interaction cannot be viewed simply as a source of 'input' for autonomous and internal learning mechanisms, but that it has a much more central role to play in learning. Indeed, for some researchers, interaction itself constitutes the learning process, which is quintessentially social rather than individual in nature. This is not a new view (*see* Hatch, 1978), but it was given extra impetus in the 1990s by an increasing interest in applying learning theory associated with the name of the Soviet developmental psychologist, Lev S. Vygotsky, to the domain of second language learning (SLL). In this chapter, we review and evaluate this strand of thinking and research, here called 'socio-cultural' theory following most current writers in this field.

Since the 1980s, the foremost figure advocating the relevance of socio-cultural theory to SLL has been James Lantolf. In the mid-1990s Lantolf edited two collections of papers that illustrate the application of different facets of Vygotskian thinking to SLL (Lantolf, 1994; Lantolf and Appel, 1994). These have been followed by a further collection, which illustrates ongoing work in this tradition (Lantolf, 2000b), plus surveys by Lantolf and others which provide useful updates about theoretical developments as well as summarizing a wider range of empirical socio-cultural research (Dunn and Lantolf, 1998; Lantolf, 2000; Swain *et al.*, 2002).

In general, however, the learning documented in socio-cultural research is local, individual and short term. Ohta's attempt to track over a full year her case study students' developing control of 'good listener' formulae in their Japanese second language classroom talk (such as *aa soo desu ka*) remains unusual in the field. Compared with other traditions that have addressed the issues of **rates** and **routes** of learning very centrally (see Chapter 3), the Vygotskian tradition has almost nothing to say. There are some suggestions in recent studies (Nassaji and Swain, 2000; Storch, 2002) that people who receive timely and effective scaffolding or means of mediation learn faster than those who are denied this help. But while socio-cultural theorists are ready to claim that Zone of Proximal Development-supported intentional learning can precede development (Dunn and Lantolf, 1998), they have not seriously addressed the empirical question as to whether intervention in the Zone of Proximal Development simply scaffolds people more rapidly along common routes of interlanguage development, or whether it can bypass or alter these routes, by skilled co-construction. For example, Ohta's longitudinal study makes an isolated claim to have detected a common developmental route for the acquisition of formulaic 'listener response expressions' (Ohta, 2001, p. 228), but does not make any similar claims regarding morphosyntax, which is discussed in a much more short term, item-focused way. By comparison with other theoretical traditions, this is a major gap.

Finally, the preoccupation of socio-cultural SLL theorists with classroom learning should be noted. This reflects current enthusiasm among educators more generally for Vygotsky's ideas (Wells, 1999; Mercer, 2000). Concepts such as the Zone of Proximal Development, scaffolding and activity theory provide appealing alternative interpretations of the SLL and developmental opportunities afforded by classroom basics such as teacher-student interaction, problem-solving and communicative tasks, learner strategy training, focus on form and corrective feedback. This ensures that socio-cultural theory will receive continuing attention, despite its apparent 'incommensurability' with the vision of language as an autonomous and abstract system acquired through specialized mechanisms, which predominates in SLL research and has inspired most of the empirical work reviewed in this book.

8

Sociolinguistic perspectives

At present, SLA could probably benefit from an enhanced sense of the empirical world's complex socio-cultural diversity.

(Rampton, 1995a, p. 294)

8.1 Introduction

In this chapter we review aspects of the relationship between sociolinguistics and second language learning (SLL) theory. As we have seen in earlier chapters, theorizing about SLL has largely concentrated on modeling the development of language within the individual learner, in response to an environment defined fairly narrowly as a source of linguistic information. In much of this work sociolinguistic issues were addressed only as afterthoughts, if at all. However, it is clear that some sustained programmes of empirical research are now developing, in which sociolinguistic ideas are viewed as much more central to the understanding of SLL.

Sociolinguistics, or the **study of language in use**, is itself a diverse field, with multiple theoretical perspectives. This is clear from any of the current survey volumes (Coupland and Jaworski, 1997; Holmes, 2001; Mesthrie *et al.*, 2000; Wardhaugh, 2002). Here, we will necessarily be selective, identifying the theoretical strands within contemporary sociolinguistics and anthropological linguistics that are having the clearest impact on the field of SLL. Successive main sections of the chapter will therefore deal with:

- variability in second language use
- second language socialization
- communities of practice and situated SLL
- SLL and the (re)construction of identity
- affect and emotion in SLL.

8.2 Variability in second language use

8.2.1 Introduction

Socially patterned variation in language use has been seen by sociolinguistics as one of its major themes: '[Sociolinguists] are interested in explaining why we speak differently in different social contexts' (Holmes, 2001, p. 1). Variability is also an obvious feature of both child language and of learners' second language interlanguage, which has been noted and discussed in many studies, and was briefly introduced in Section 1.4.4; Towell and Hawkins (1994) argued that it is one of the basic characteristics of interlanguage which SLL theorists have to explain. In this opening section we review a wide range of factors that have been invoked to explain patterns of interlanguage variability, and highlight the extent to which these originate in sociolinguistic theory. We show how quantitative research methods developed by sociolinguists have been used to study these patterns, and finally, we assess how far interlanguage variability can be attributed to socially motivated choices by second language learners.

By variability, we refer to the fact that second language learners commonly produce different versions of particular constructions, more or less close to the target language form, within a short time span (even, perhaps, within succeeding utterances). In Chapter 2 we have already referred briefly to Schumann's (1978a) case study of Alberto, an adult learner of English as a second language. Schumann reports an example of variability in Alberto's English interlanguage, where two alternative forms were in use to express negation. Alberto seemed to be a slow, almost fossilized learner, who:

showed considerably less development than any other subjects. He used both *no V* and *don't V* constructions throughout; however *no V* was clearly the most dominant of the two and consistently achieved a higher frequency of use until the very last sample.

(Schumann, 1978a, p. 20)

The point to note here is that although one pattern was more common, two patterns were clearly in use simultaneously, by a single learner, over an extended period of time (the Alberto study ran over a period of 40 weeks). In Section 1.4.4 above, we have already cited other similar examples of variability for child second language learners.

The phenomenon of variability has led to considerable debate in the second language acquisition literature, not least over the problems it creates for the notion of 'acquisition' itself. Is a target language form to be counted

as 'acquired', on the first occasion when a learner is observed to use it without immediate prompting or suppliance by an interlocutor? Or, must we wait to accept that it has been fully 'acquired', until the learner is producing the form in 90% or more of expected contexts? At different points in this book, we have encountered second language acquisition theorists and researchers who have adopted different positions on this key issue.

But apart from the need to take account of variability in trying to establish definitions of 'acquisition', we also need to explain why it is such a striking and distinctive feature of second language use. In a recent review, Romaine (2003) comments that second language variability is usually 'conditioned by multiple causes'. She lists a series of possible explanations for second language variability, which she sub-divides into 'internal' and 'external' groups. Romaine's typology is summarized below under these two headings. The reader will notice that her 'internal' list is a mixed grouping of linguistic and sociolinguistic elements, while the 'external' list is entirely sociolinguistic in origin.

8.2.2 Explanations for internal variability

Linguistic markedness: Romaine's first suggestion is narrowly linguistic; it is claimed that second language learners will tend to produce more target-like performance for structures which are 'unmarked' in linguistic terms, and will produce less target-like performance for 'marked' structures. As an example, Romaine cites the study of Gass and Ard (1984), which found that 'acquisition of English relative clauses by learners of various L1 backgrounds proceeded from left to right in the ... accessibility hierarchy postulated by Keenan and Comrie (1977): Subject > Direct Object > Indirect object > Oblique > Genitive > Object of comparison' (Romaine, 2003, p. 414). Keenan and Comrie had proposed that languages in general are most likely to form relative clauses applying to Subject position (the unmarked end of the hierarchy), and least likely to form them at Object of comparison position (the marked end). English allows relative clauses to be created at all points on the hierarchy, but second language learners of English begin by producing Subject relative clauses and move systematically towards the marked end of the hierarchy as they develop the ability to produce other types of relative clause. This gradual acquisitional process will give rise to variability in relative clause production at any given moment in time.

Language change: sociolinguists have long been interested in the idea that current variation in a given language may reflect ongoing processes of language change. The suggestion is that a new language rule may be

implemented initially only in a particular linguistic environment, and can then spread step by step to other environments. A linguistic snapshot at a given moment will show the rule being applied in some environments but not others. Such a 'wave' model of language change has been used by some researchers to explain variability in learner interlanguage. Romaine cites a study by Gatbonton (1978) of the acquisition of English interdental fricatives [θ] and [ð] by French Canadian learners; her results show that 'new pronunciations move through learner interlanguage systems in a similar way to forms undergoing change in native-speaker varieties' (Gatbonton 1978, cited in Romaine, 2003, p. 416).

Universal developmental constraints: since the 1980s, scholars have been interested in the possibility that second language interlanguages share characteristics with other 'simple' and rapidly evolving linguistic systems, in particular contact languages such as *pidgins* (Andersen, 1983; Romaine, 1988). Pidgin languages are contact varieties without native speakers, which arise in settings of military or trade contact, slavery or plantation labour (Sebba, 1997; Mesthrie *et al.*, 2000, Chapter 9). By comparison with other natural languages, pidgins appear simplified in characteristic ways, having the following cluster of grammatical features:

- no definite or indefinite article
- no copula *to be* (at least in present tense)
- tense, aspect, modality and negation marked externally to the verb – often by a content word like an adverb
- no complex sentences (therefore e.g. no relative clauses)
- no passive forms
- very few or no inflections for number, case, tense, etc.
- analytic constructions used to mark possessive, for example X of Y rather than Y's X (Sebba, 1997, p. 39).

Some researchers have suggested that pidgins themselves developed as a result of SLL in circumstances of very limited and/or multilingual input (Bickerton, 1977; deGraff, 1999). This encouraged investigations that showed 'how the early stages of SLA shared features with pidgins' (Romaine, 2003, p. 418). For example, in the case of the learner Alberto, mentioned at the start of this section, negation was expressed variably by use of pre-verbal *no* and *don't*. The reader will notice other overlaps between the grammatical characteristics of pidgins, with the 'Basic Variety' stage of interlanguage development described by Perdue and Klein (*see* Chapter 5). Such resemblances led Schumann (1978a, p. 110) to make the more general claim that 'pidginisation may be a universal first stage in second

language acquisition', a view maintained by, for example, deGraff (1999, p. 493) at least with reference to adult SLL.

L1 transfer: finally, Romaine (2003) suggests that first language transfer is also a source of linguistic variability in second language interlanguage. She cites a number of studies of the acquisition of the definite article in a range of European languages, by learners from different first language backgrounds (some with article systems, some without). Generally, these studies show that learners whose first language has an article system make faster progress than those without (e.g. Italian first language vs Turkish first language learners of second language German: Gilbert, 1983, cited in Romaine, 2003, pp. 419–20). However, these findings co-exist alongside evidence of pidginization (even learners from first language backgrounds with article systems do not use second language articles consistently, and also do not use the full range of forms). Romaine comments that the Gilbert study 'supports the idea that there are universal principles of pidginisation, as well as positive and negative transfer effects. These manifest themselves in variable frequencies of occurrence of different features in L2' (Romaine, 2003, p. 420).

8.2.3 Explanations for external variability

Style and task-based variation: it is well established by sociolinguists that first language speakers vary their language use in regular ways, dependent on style, task, interlocutor, etc. Similarly, Tarone (1988) has suggested that second language learners control a number of varieties of second language, ranging from a more pidgin-like style used in informal and unmonitored speech, to a more target-like 'careful style' used in tasks with a focus on form. For example, Tarone's own work showed that both Japanese first language and Arabic first language learners of English as a second language supplied the third-person singular verb inflection *-s* more reliably in formal contexts. However, Romaine (2003) concludes from her survey that stylistic variation is relatively weak among second language learners, and also points out the problems involved in trying to conflate attention or degree of monitoring (both psycholinguistic concepts) and the sociolinguistic concept of style. In Section 8.2.5 below, we report similar conclusions by researchers working with learners of immersion French.

Gender-based variation: many sociolinguistic studies of native varieties have suggested that women have a preference for more conservative or high prestige speech styles, as compared with men. Romaine (2003, p. 428) suggests that there is little evidence for this type of social variability in second language speech. We follow this issue further in Section 8.2.5, where

we discuss studies of immersion French students in Canada that provide some evidence of gender-based variability.

Widening beyond Romaine's gender focus, some studies have shown that change of interlocutor may also have an effect on second language speech style. For example, Young (1991) studied the extent to which Chinese first language learners of English marked plural *-s* on English nouns. His main finding was that linguistic factors such as the position of the noun within the Noun Phrase, its syntactic function and its phonological context, all affected the likelihood that these learners would produce the plural ending. However, he found that the identity of the interlocutor – Chinese or English – also influenced the likelihood that learners would mark or fail to mark English nouns as plural.

R. Ellis has proposed an alternative typology for interlanguage variability, shown here as Figure 8.1. This typology differs from Romaine's list in two main ways, both of which tend to weaken the idea that sociolinguistic influences are central to second language variability. First, Ellis divides his explanations of systematic variation into three, including the 'psycholinguistic context' as a possible source of variation, alongside the linguistic context and external or situational context considered by Romaine. This fills a rather obvious gap in Romaine's list; as we have seen, for example, in

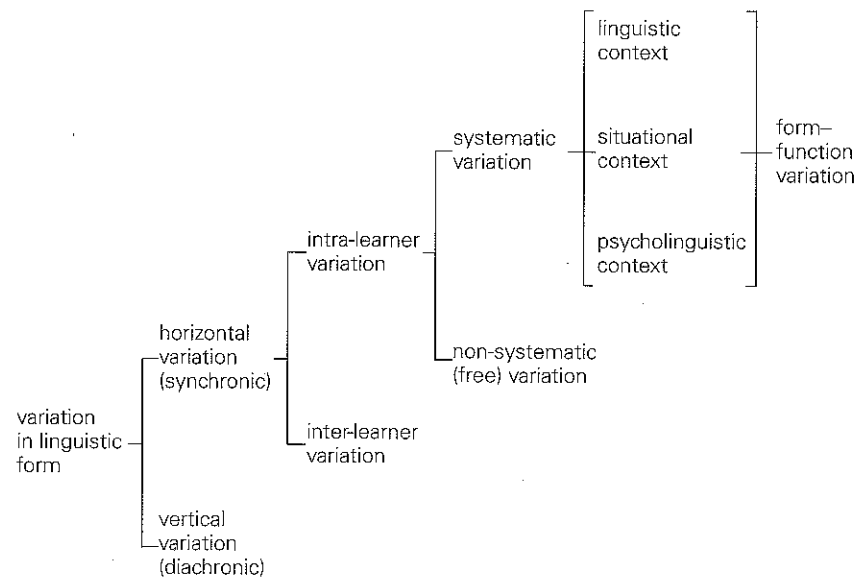


Fig. 8.1 A typology of variation in interlanguage (Source: R. Ellis, 1994, p. 134)

Chapter 4, it is now commonplace to explain variation in learner performance in terms of psycholinguistic factors such as processing constraints, short term memory load, planning time available, etc. For example, in a study of task based learning, Foster and Skehan (1996) found considerable variation in accuracy of performance depending on the extent of pre-task planning.

A second noticeable difference between this typology and Romaine's is the inclusion of the category of **non-systematic variation**. Ellis has argued consistently that some variation in second language performance is simply free or random (for a recent overview, see R. Ellis 1999a). Others have argued that variation which appears to be 'unsystematic' may merely be variation for which the underlying system has not yet been discovered (Schachter, 1986; Preston, 1996a, 1996b). However, Ellis (1999) claims that there is a positive psychological reason for the existence of non-systematic or free variation. He argues that learners experience an expressive need for greater variety in their interlanguage, which leads them to learn new forms piecemeal and to use them as alternative expressions for existing form-meaning combinations. Once these items are being used in free variation, they are then available for subsequent integration into the interlanguage system, and will also eventually acquire differentiated social or pragmatic functions. Ellis interprets the changing patterns of English second language article *da* usage by the Hmong first language learner Ge, already discussed in Section 5.3.2, as reflecting this progression. At an early stage, once the *da* form was available, Ge used it with most NPs, without any identifiable functional constraints. For Ellis, this is an example of an item only loosely connected to the interlanguage system, that is, in free variation. Subsequently, Ge progressively systematized his usage of *da*, as he sorted out the functional constraints which apply to definite article usage in native speaker English.

In this introductory section we have briefly surveyed a wide range of factors that have been linked with interlanguage variability, and shown that they may be linguistic, psycholinguistic or sociolinguistic. However, from this brief survey, the overall significance of sociolinguistic factors is not clear. In Section 8.2.4 we examine in more detail the extent to which there is quantitative evidence for the existence of sociolinguistically inspired second language variability.

8.2.4 Quantifying second language variability

In trying to make sense of the variability phenomenon, one group of second language acquisition researchers has turned to a quantitative approach to

the description of variation in interlanguage use which was originally developed within mainstream sociolinguistics to study first language variation (see Bayley and Preston, 1996; Preston 1996b).

In the 1970s the sociolinguist William Labov pioneered this approach to studying variability in everyday speech. He concentrated on features in spoken language, often pronunciation features, where choices are possible that are endowed with positive or negative value by a given speech community. An example from contemporary spoken British English would be variation between the alveolar plosive [t] or glottal stop [ʔ] to realize the /t/ phoneme in words such as *better*, *Britain*, etc. The glottal stop variant is very common in many forms of spoken English; yet it is typically described as 'lazy', 'sloppy' speech, etc., that is, it has negative social value or prestige. Labov has proposed the term sociolinguistic **marker** for such items, whose use involves some value-laden choice.

Labov and his followers systematically recorded first language speech samples from people representing different social groups, in a variety of situations. In many studies they have shown that the relative frequencies of use for more positively or negatively esteemed variants can be correlated with factors such as the immediate linguistic context, the speaker's social class, age and gender, and the formality or informality of the speech setting (for an overview, see Labov 1972).

Table 8.1 shows an example drawn from 1970s quantitative research in the Labov tradition, discussed by Preston (1996b). This study investigated the simplification of word-final consonant clusters in English among African American speakers from Detroit city (i.e. the deletion of final [t] or [d] in these phonetic environments). The researchers recorded extended

Table 8.1 t/d deletion in Detroit African-American speech

Environments	Social classes			
	Upper middle	Lower middle	Upper working	Lower working
Following vowel:				
t/d is past morpheme (e.g. 'missed in')	0.07	0.13	0.24	0.34
t/d is not past morpheme (e.g. 'mist in')	0.28	0.43	0.65	0.72
Following consonant:				
t/d is past morpheme (e.g. 'missed by')	0.49	0.62	0.73	0.76
t/d is not past morpheme (e.g. 'mist by')	0.79	0.87	0.94	0.97

(Source: Wolfram and Fasold, 1974, cited in Preston, 1996b, p. 4)

speech samples from their subjects, and analysed the percentage of final consonant clusters within which [t] or [d] deletion was found.

As Table 8.1 shows, in this study the percentage of observed occasions of deletion of final [t] and [d] could be linked both to the immediate linguistic context and to speakers' social class.

Researchers in this tradition moved to a greater level of statistical sophistication, with the development of a computer program known as VARBRUL. (For a guide to using current versions of the program in second language research, see Young and Bayley, 1996.) This program is based on the statistical procedure known as logistic regression. VARBRUL draws on data such as presented in Table 8.1 and calculates the statistical probability that speakers will produce one variant rather than another, in a range of given contexts. Probabilities are expressed in terms of weightings ranging from 1.00 to 0.00; a weighting of 0.50 or more means that a form is systematically more likely to be produced in a given environment, a weighting of less than 0.50 means that this is less likely. One important feature of VARBRUL-type programs is that they can handle simultaneously a number of different contextual factors that may influence learner production, and can also handle interactions between them.

Preston (1996b) has run the VARBRUL program on hypothetical raw data based on the table presented earlier as Table 8.1. This VARBRUL analysis produced the pattern of probabilities for the different linguistic and social contextual factors, shown in Table 8.2.

(The term 'input probability' used in this table refers to the overall likelihood that the deletion rule will operate – note the specialized use of

Table 8.2 VARBRUL results for t/d deletion by African-American speakers from Detroit: hypothetical data inferred from Table 8.1

Result	Probability
Following vowel (V)	0.25
Following consonant (C)	0.75
Morpheme (M)	0.31
Non-morpheme (N)	0.69
Upper middle class (UMC)	0.29
Lower middle class (LMC)	0.42
Upper working class (UWC)	0.60
Lower working class (LWC)	0.69
Input probability	0.60

(Source: Preston, 1996b, p. 10)

the term 'input' here!) In this hypothetical example we see that two linguistic factors, 'Following Consonant' and 'Nonmorpheme' have probabilities higher than 0.50, and are therefore predictive of consonant deletion; the same applies for working class membership (whether 'Upper' or 'Lower'). Thus we see that the likelihood of consonant deletion depends in this case on a combination of both linguistic and social factors.

Preston and others have applied different versions of the VARBRUL tool to the study of variation in second language use, and its relationship with a range of contextual factors. For example, a study by Bayley (1996) investigated variability in word-final [t] or [d] deletion by Chinese learners of English. This study analysed more than 3000 final consonant clusters produced during lengthy second language-medium sociolinguistic interviews by a group of 20 learners, and compared patterns of [t] or [d] deletion with those reported for native speakers of English. Using the VARBRUL procedure, the extent to which the final consonant was deleted was related to a wide range of factors, including the immediate phonetic environment, the grammatical category of the word to which the consonant cluster belonged, different speech styles (reading aloud, narrative, and informal conversation) and the learners' reported social networks (first language mono-cultural, or mixed American and Chinese).

Table 8.3 shows part of the resulting analysis. It shows VARBRUL values for [t] or [d] deletion for the first language Chinese learners in the study, for the different grammatical categories studied, and compares them with values found in various other studies of North American English. The table shows that [t] or [d] deletion occurred to some extent for all grammatical categories, but was the most usual choice of the second language speakers

Table 8.3 t or d absence by grammatical category in Chinese-English interlanguage and in native English dialects

Variety	Single-morpheme word (e.g. <i>just</i>)	Semi-weak verb (e.g. <i>he left + t</i>)	Regular past participle (e.g. <i>he had walk#ed</i>)	Regular preterite (e.g. <i>he walk#ed</i>)
Chinese-English interlanguage	0.46	0.39	0.47	0.66
African-American English vernacular %	0.68	0.46	-	0.35
Philadelphia and NYC white English	1.00	0.91	0.49	0.52

(Source: Bayley, 1996, p. 109)

only for regular past tense inflections. This contrasted, for example, with the African American speakers, who deleted final [t] or [d] most for single morpheme words, but least where the final [t] or [d] was a grammar morpheme (past tense inflection).

Bayley explains this finding by arguing that not one, but two variable rules are operating for the second language speakers. Unlike the native speakers, they are not consistently inflecting verbs for past tense. So, their use of, for example, *he walk* in past tense contexts results on some occasions from the use of a non-inflected verb form (as in the Basic Variety described in Chapter 5), and on other occasions from 'true' [t] or [d] deletion. (The researchers claimed they could distinguish the two patterns, by making comparisons with the same learners' use of base forms versus inflected past tense forms for irregular verbs, e.g. use of *come* vs. *came* in past tense contexts.)

8.2.5 Acquiring sociolinguistic variation in interlanguage

The Bayley (1996) study of [t] or [d] deletion illustrates Romaine's view that variability between second language learners has mixed origins, and that sociolinguistic factors play a relatively restricted role. However, there is another recent group of studies concerned with the learning of second language French that shows that second language learners may become sensitive to sociolinguistic variation in the target language, and may vary their usage patterns over time to accommodate increasingly to the norms of the target community. Much of this work has been conducted with English first language learners in Canada, who are learning French as a second language in an immersion setting (i.e. receiving French-medium education but alongside other English first language students rather than French first language students; see Rehner *et al.*, 2003 for a review). Work has also been carried out in Europe with advanced learners studying French in an academic setting (Regan, 1996; Dewaele and Regan, 2002).

Rather than studying individual sociolinguistic markers in isolation, as in the studies we have looked at earlier, Rehner *et al.* (2003, p. 129) are aiming to study the acquisition by second language French learners of a 'complete repertoire of variants and of their linguistic and extra-linguistic constraints'. According to their description, contemporary spoken French has three types of variant:

- Vernacular: non-conforming to the rules of standard French, associated with lower class speakers and stigmatized.

- Mildly marked: non-conforming to the rules of standard French, but not socially stratified or stigmatized.
- Formal: typical of careful speech and written standard French, associated with speakers from upper social strata.

Their studies show that immersion students rarely or never use vernacular variants (such as the non-standard Canadian French lexical items *ouvrage* = job, *rester* = to reside). However, they do make use of mildly marked variants, though at lower frequency than native speakers. For example, in formal written French, the first person plural pronoun *nous* predominates. In spoken Canadian French, this form is almost entirely replaced by the mildly marked variant *on* (studies regularly report over 95% use of *on*). In a global analysis of interview data collected from 41 immersion students, Rehner *et al.* (2003) report that the *on* variant was used 56% of the time, and *nous* was used 44% of the time. However, factor analysis using a version of VARBRUL showed that girls were more likely to use *nous* than *on*, whereas boys showed the reverse pattern. The same was also true of middle class students compared with working class students. On the other hand, the more contact the students reported with French-speaking people and environments, the greater the predominance of *on* in their speech. This study suggests that even students who encounter the second language mainly in school are acquiring a repertoire of variants, including some awareness of their social meaning. These findings are generally confirmed in studies of other French sociolinguistic variants. For example the advanced learners studied by Regan (1996), who were interviewed before and after an extended stay in metropolitan France, became much more native-like in respect of deletion of the negative particle *ne*, as shown when a VARBRUL-type program was used to compare Time 1 and Time 2. However, the research of Rehner *et al.* (2003) has shown much the clearest relationships between the acquisition and use of sociolinguistic variants, and factors such as gender, social class and extent of contact with first language speakers. The evidence that second language learners acquire and use stylistic constraints on variation is much less clear (Rehner *et al.*, 2003, p. 134).

This brief survey of research into second language variability confirms its complex nature. For our present purposes, it is clear that sociolinguistic factors play a role, although probably outweighed in importance by linguistic factors. There is little hard evidence that beginning second language learners control stylistic variation. On the other hand, it is clear that more advanced learners who engage actively with first language users move rapidly towards community norms of (mildly) informal usage. Their motivations for doing so are explored in following sections of this chapter.

8.3 Second language socialization

8.3.1 Introduction

In this section we turn to a strand of sociolinguistic research that is centrally concerned with language learning and development: the study of **language socialization**. This work has its roots in anthropological linguistics (Foley, 1997), and centres on ethnographic studies of children learning to talk (and to read and write) their first language, in non-Western, non-urban societies. The work by Elinor Ochs in Western Samoa (Ochs, 1988), and that of Bambi Schieffelin among the Kaluli people of Papua New Guinea (Schieffelin, 1990), are influential examples. The work of Shirley Brice Heath on children's first language development among rural working class communities in south-eastern USA can also be linked to this tradition (Heath, 1983, 1986).

8.3.2 Developmental links between first language and culture

Researchers in the language socialization tradition believe that language and culture are not separable, but are acquired together, with each providing support for the development of the other:

It is evident that acquisition of linguistic knowledge and acquisition of sociocultural knowledge are interdependent. A basic task of the language acquirer is to acquire tacit knowledge of principles relating linguistic forms not only to each other but also to referential and nonreferential meanings and functions . . . Given that meanings and functions are to a large extent socioculturally organised, linguistic knowledge is embedded in sociocultural knowledge. On the other hand, understandings of the social organization of everyday life, cultural ideologies, moral values, beliefs, and structures of knowledge and interpretation are to a large extent acquired through the medium of language . . . Children develop concepts of a socioculturally structured universe through their participation in language activities.

(Ochs, 1988, p. 14)

In a 1995 review, Ochs and Schieffelin stress the relevance of language socialization even to grammatical development:

This approach rests on the assumption that, in every community, grammatical forms are inextricably tied to, and hence index, culturally organised situations of use and that the indexical meanings of grammatical forms influence children's production and understanding of these forms.

(Ochs and Schieffelin 1995, p. 74)

They point out that a language socialization perspective differs from functionalist approaches to grammar development, which concentrate on studying the local, moment-to-moment performance of speech acts, or creation of information structure, and their influence on the selection and learning of isolated elements of the language system. A language socialization perspective, in contrast, aims to take systematic account of the wider frameworks and socially recognized situations within which speech acts are performed. In summary, a language socialization perspective predicts that there will be a structured strategic relationship between language development and 'culturally organized situations of use'.

First, Ochs and Schieffelin (1984, 1995) examine talk to children and by children in a variety of different societies, and show that these practices are themselves culturally organized. In the well studied white middle class communities of North America, infants are viewed as conversational partners almost from birth, with caretakers interacting with them extensively one-to-one, and compensating for their conversational limitations by imputing meaning to their utterances, and engaging in clarification routines (e.g. by use of comprehension checks and recasts). In Samoa, by contrast, infants are not viewed as conversational partners at all for the first few months (though they are constantly in adult company, as 'overhearers' of all kinds of social interactions). After this time, they are encouraged to get involved in different types of interaction, for example being taught explicitly to call out the names of passers-by on the village road. Among the Kaluli, there is much direct teaching of interactional routines (*elemā*); however, in both communities, children's unintelligible utterances are seldom clarified or recast. These features are explained by reference to wider social structures that characterize the Pacific communities. For example, in the Samoan community described by Ochs, individuals are strictly ranked, and higher-ranked persons do not have any particular responsibility to figure out the intended meanings of lower-ranked persons (such as small children); thus, extended comprehension checks and recasts of children's utterances would be inappropriate.

In all these cultural settings, of course, children learn successfully to talk, leading Ochs and Schieffelin (1995, p. 84) to conclude that: 'grammatical development per se can not be accounted for in terms of any single set of speech practices involving children'. But do children's different cultural experiences influence the course of language acquisition, and if so in what way? Ochs (1988) examines children's early utterances, and provides examples of links between linguistic development and socialization into particular roles and routines. For example, the first word produced by Samoan infants is generally claimed to be *tae* ('shit'), symbolic of the naughtiness

and wildness expected of little children, and Ochs documented instances of infants' early vocalizations being interpreted in this way.

Ochs and Schieffelin (1995) provide further instances of young children's language productions, which show that their grammar choices are also linked to their social and gender roles. In Samoan, for example, the language offers a choice of first-person pronouns, including the neutral form *a'u* ('I', 'me') and the form *ta ita* which is marked for affect ('poor me'). In the early productions of the children studied by Ochs, the affect-marked form appeared several months before the neutral form (Ochs, 1988, p. 186), linked to a speech act of 'begging' (usually for food); children generally 'are concerned with the rhetorical force of their utterances, and . . . rhetorical strategies may account for certain acquisition patterns' (Ochs, 1988, p. 188). In Kaluli, the imperative verb form, *elemā* 'say like that', is regularly used by female caregivers prompting a very young child to copy and produce an utterance. This form is quickly learnt and used by girls from age two onwards, both in play and to direct even younger children to 'say like that'. However, boys never produce this imperative verb form, though they know and use other forms of the verb (Schieffelin, 1990). It seems in this case that the children's language choice is influenced by their socialization into gender-appropriate behaviour, rather than, for example, by the frequency with which forms are encountered in input.

8.3.3 Second language socialization

The language socialization perspective has proved appealing to second language acquisition researchers who are concerned to develop a more integrated perspective on language learning, viewed as 'both a cognitive and a social process' (Watson-Gegeo and Nielsen, 2003, p. 156). One of the first second language researchers to use this perspective was Poole (1992), who conducted an ethnographic study of adult English second language classrooms, claiming that 'a teacher's language behaviour is culturally motivated to an extent not generally acknowledged in most L2 literature' (Poole, 1992, p. 593). For example, Poole shows that the teachers in her study scaffolded their learners extensively, and led and directed whole class tasks as group activities. However, in the closing stages of these same tasks, the teachers praised the students as if they alone had accomplished them. This was reflected in the teachers' pronoun usage; thus one teacher introduced a task with 'Describe the picture and see if *we* can make a story out of it'. However, at the end of that same task, the teacher praised the class: 'Good work you guys! That's hard! *you* - *you* did a good job. I'm impressed'

(Poole, 1992, p. 605). Poole argues that the same pattern is found in other novice-expert settings in white middle class American culture (such as child-rearing), and that this reflects a deep-seated cultural norm concerned with the attribution of success to individuals rather than groups. She did not, however, trace in detail the impact of these teachers' socialization activities on their learners.

Poole's study has been followed by other classroom-based work using a language socialization perspective, which provides rather more evidence about learner development. Much of this has focused on young children who are learning a new language in a primary school context. For example, Pallotti (2001) traced how a five-year-old Moroccan girl, Fatma, developed as a conversational participant over a period of eight months in an Italian nursery school. To be accepted in this setting, full of fluid, multi-party talk, Fatma had to learn to take conversational turns, which were both relevant to the ongoing conversational topic and interesting to other participants. Pallotti shows that Fatma's main early strategy was to repeat the utterances of others, or parts of them. In the beginning she simply joined in choral performances of activities like greeting or requesting. She began to make individual conversational contributions by appropriating words and phrases already produced by others, but adding minimal new elements, such as a negative expression. The example below comes from a mealtime interaction involving another child, Idina, and a teacher, when Fatma has been in nursery school for a few weeks only:

- Idina: Ho fre:ddo
I'm cold
- Teacher 2: Hai freddo? In effeti è un po' freddo
You're cold? It's a bit cold actually
- Teacher 2: Mangia Fatma. Tieni (placing a bowl of custard before her)
Eat Fatma. Take it.
- Teacher 2: È buona (giving custard to Idina)
It's good
- Fatma: (turns to T2 and touches her)
- Teacher 2: (doesn't turn, as she is turned to Idina)
- Fatma: Maestra (still touching her)
Teacher
- Fatma: Maestra (still touching her)
Teacher
- Teacher 2: (keeps looking at Idina, then turns to Fatma)
- Fatma: No no io freddo, [ke] questa (pointing to sleeve of pullover),
questa no freddo
No no I cold, [ke] this, this no cold
- Teacher 2: Non hai freddo? (looks at Fatma)
You're not cold?

- Fatma: Questo (pointing to arm) questo no freddo
This, this no cold
- Teacher 2: (Throws a grape in front of Fatma)
- Fatma: (Picks up grape and eats it)

(after Pallotti, 2001, p. 307)

This example shows Fatma trying to add her own contribution to an existing conversational topic ('being cold'), though a little late – the teacher has already moved on to the topic of 'food'. Her turns include a mix of borrowed and new language, plus vigorous gestures, to make her point (that she is kept warm by her pullover). The topic is a here-and-now one, which can be supported by reference to the immediate context, and Fatma makes up to some extent for linguistic gaps by determined repetition. The small group setting and regular routines of the nursery school provide Fatma with guidance on how to become an accepted participant, though conversation still presents her with many challenges, and it is only after several months that she can engage in more 'open' talk about non-present topics.

Routines and repetition are prominent in numerous other second language socialization studies of young children, for example the study of English first language children in Japanese immersion kindergarten reported by Kanagy (1999). Over 12 months, Kanagy traced the children's participation in three structured classroom routines: morning greetings or *aisatsu*; checking attendance (*shusseki*); and personal introductions (*jiko-shookai*). The children learnt both the verbal and non-verbal behaviour appropriate to Japanese classroom culture, by imitating the teacher's 'carefully staged demonstrations of Japanese societal and educational norms' (Kanagy, 1999, p. 1489). Especially through the 'personal introductions' routine, they appropriated an increasing variety of formulaic expressions (questions and answers about name, age, eye colour, etc., etc.), and could eventually use them in new combinations and with new people. However, their creative use of Japanese progressed at a much slower pace than for children such as Fatma, or others in 'mainstream' second language education, like the first grade children of diverse language backgrounds studied by Willett (1995). While mainstreamed young second language learners seem to use the predictable routines and socialization of primary education as a sheltered context for rapid grammar development, the creative utterances of the early immersion children studied by Kanagy developed slowly and had not progressed beyond the one-word level by the end of the first immersion year.

As the examples just quoted show, most second language research from a language socialization perspective uses ethnographic methods of inquiry and is relatively small scale. Watson-Gegeo and Nielsen (2003) see some weaknesses in this developing field, which they believe must be addressed if

it is to make a more significant contribution to our understanding of 'socialisation through language and socialisation to use language' (Ochs, 1988, p.14). In particular, they argue that language socialization researchers have concentrated too one-sidedly on language use, and need to pay more systematic attention to the cognitive dimensions of linguistic and cultural development. A researcher who is clearly trying to develop an integrated approach of this kind is Ohta (1999, 2001). As we have seen in Chapter 7, Ohta's classroom study of adult Japanese second language learners makes links between neo-Vygotskian theory and language processing theory to explain learner development. However, Ohta (1999) also shows that the second language socialization perspective is relevant to adult classroom learning. Her example is the achievement of Japanese-style conversational 'alignment' among interlocutors, that is, the culturally appropriate use of a range of expressions to show interlocutor interest and collaboration. In the classrooms studied by Ohta (1999), teacher-led classroom interactional routines are shown to play a part in socializing her case study learners into appropriate use of Japanese-style follow-up expressions, and thus into the achievement of this alignment.

8.4 Communities of practice and situated second language learning

8.4.1 Introduction

Sociolinguists have traditionally studied the social roles of language in structuring the identities of individuals and the culture of entire communities and societies. In particular, ethnographers of communication have studied the characteristics of *speech events* that have patterning and significance for members of a particular *speech community* (see Hymes, 1972; Saville-Troike, 1989). Examples of speech events with their own distinctive structures and routines in current urban society might be telephone conversations, service encounters (in shops, banks, etc.), classroom lessons or job interviews. The ability to participate appropriately in relevant speech events has been seen as an important part of communicative competence, generally accepted since the 1970s as the broad eventual target of SLL, as well as of first language development.

Ethnographers of second language communication aim similarly to study contexts and events where participants are struggling to achieve communicative goals through the means of a second or other language. However, while the traditional ethnography of communication has typically studied relatively well-established and stable speech events and communities, those

studied by ethnographers of second language communication have frequently been more fluid and transitory, and involve participants whose roles and identities as well as their linguistic abilities may be much more problematic and subject to change.

The need to explain processes of interaction and development among changeable and dynamic groups and situations has led a number of sociolinguists and second language researchers to turn to an alternative concept of greater flexibility, the *community of practice*, proposed by Lave and Wenger (1991). The sociolinguists Eckhert and McConnell-Ginet suggest the following definition for a community of practice:

An aggregate of people who come together around mutual engagement in an endeavour. Ways of doing things, ways of talking, beliefs, values, power relations – in short, practices – emerge in the course of this mutual endeavour. As a social construct, a community of practice is different from the traditional community, primarily because it is defined simultaneously by its membership and by the practice in which that membership engages.

(Eckhert and McConnell-Ginet, 1992, p. 464)

Different individuals may be *peripheral members* or *core members* of a given community of practice. All may be engaged to different degrees in the joint enterprise, but they may have differential access to the 'repertoire of negotiable resources' accumulated by the community (Wenger, 1998, p. 76). For Lave and Wenger (1991, p. 49), learning itself is socially situated, and involves 'increasing participation in communities of practice', alongside experienced community members who already possess the necessary resources. The social structure of communities and the power relations obtaining within them define the learning possibilities available to members.

8.4.2 Empirical studies of second language learning as a situated social practice

The ideas of socially situated learning which takes place through participation in the activities of one or more communities of practice, has been used to study second language development among both children and adults. One obvious application is to view the classroom as a community of practice, as Toohey (2000, 2001) has done in an ethnographic study of a group of six young English as second language learners. Over a three-year period, the study tracked the children's developing identities and patterns of participation as they progressed from kindergarten through to second grade of elementary school. Toohey shows that some children were more successful than others in establishing themselves as legitimate peripheral participants

in the classroom community, and that this affected the extent to which they gained conversational and other language learning opportunities, including access to resources. For example a Polish first language child, named Julie, who had come to school speaking little English, successfully graduated over time from her English as second language status and established herself as an 'average' mainstream student. Another Punjabi first language child, named Surjeet, was positioned differently as a 'struggling' student who would need continuing English as second language support. Disputes were common among the children in the class, and Toohey (2001) analyses these in some detail, showing how Julie's relatively aggressive and skilful responses to threats of subordination allowed her to develop a more powerful place in the classroom community, and consequently to win access to resources and conversational opportunities. Surjeet, on the other hand, was regularly subordinated by peers and excluded from conversation. The following example drawn from a dispute about the recognition to be given to work completed, illustrates Surjeet's non-powerful position:

- Surjeet: Look! Two more pages. [She shows her notebook to Jean Paul.]
 Earl: So what?
 Jean Paul: I don't care.
 Earl: Yeah, we don't care.
 Jean Paul: We've got two pages too. Look!
 Surjeet: No, three.
 Jean Paul: [aggressive tone] Oh! There's not three.
 Earl: I've got one page.
 Jean Paul: Let's see.
 Surjeet: [to Earl] You're m:::
 [She watches as Jean Paul inspects Earl's book.]

(Toohey, 2001, pp 266-7)

A similar incident shows Julie's greater ability to switch topic and achieve acceptance as a conversationally interesting participant:

- Julie: I'm almost finished Martin! Look Martin, I'm almost finished.
 [Martin does not look, and for a few turns, other children take over the conversation.]
 Julie: See, I'm just colouring this part.
 [Martin does not look, and he and Julie keep on colouring.]
 Julie: Who has the Lion King video? I have the Lion King.
 Martin: I have the Lion King.
 Earl: I have the Lion King.
 Daisy: Clark doesn't.
 [Children laugh.]

(Toohey, 2001, p. 267)

Another ethnographic study that adopts the same overall view of language learning as a social practice, located in communities of practice, is that of Norton (Pierce, 1995; Norton, 2000). This study was conducted with five adult women from diverse language backgrounds, all of them recent immigrants to Canada, who were attending English as second language classes but also using English to different degrees at home and in a variety of workplaces. The women participants completed questionnaires and diaries, and were also interviewed at intervals, over a space of two years.

One participant in the study was a Polish girl called Eva, who was living with a Polish partner, and hoped eventually to study at university. In the meantime, however, she was working at a restaurant called Munchies, where at first she could not approach her co-workers or engage them in conversation:

When I see that I have to do everything and nobody cares about me because – then how can I talk to them? I hear they doesn't care about me and I don't feel to go and smile at them.

(Norton, 2000, p. 128)

As time passed, however, she gained enough confidence to find conversational openings, joining in conversations about holidays with her own experiences of holidays in Europe, for example, getting her boyfriend to offer lifts to fellow workers on social outings, or teaching a little Italian to a colleague. In these ways she gained acceptance as a 'legitimate speaker' (Bourdieu, 1977), and correspondingly developed her opportunities for using English. At the beginning, also, Eva was allocated tasks in the restaurant that did not involve interacting with customers. However, she paid close attention to how her fellow workers did this, appropriated their utterances during routines such as ordering meals, and took the initiative to start serving customers directly. In this way Eva widened her participation in the linguistic practices of the restaurant, and further increased her own language learning opportunities as a result.

In a joint review of their two studies, Toohey and Norton (2001) argue that the qualities that make the adult Eva and the child Julie relatively successful second language learners have to do only partly with their own actions and interventions. Critical to their success was the fact that they both gained more and more access to the social and verbal activities of the target language community of practice. In both cases, they experienced attempts to subordinate or isolate them; however, they could and did draw on both social and intellectual resources to overcome these difficulties. Eva's attractive boyfriend, and Julie's big cousin, Agatha, were both seen as socially desirable by the very different groups of Munchies workers and

elementary school children, and this seemed to reflect positively on the learners themselves. We have seen how Eva used her knowledge of Italian to build relationships, and Julie similarly used cultural knowledge such as 'secrets' to position herself as a desirable playmate. In both cases the learners' success in being accepted was central to access to language learning opportunity; and this success derived partly from their own actions, partly from their respective communities' willingness to adapt and to accept them as legitimate participants.

8.4.3 Power relations and opportunities for second language learning

Norton (2000, p. 7) is also concerned to investigate how 'relations of power impact on language learning and teaching'. For example, another relatively successful participant in Norton's study of English as second language immigrants in Canada was a girl named Mai, of Vietnamese origin. On arrival in Canada, Mai lived in an extended multilingual family in which she was subject to the patriarchal authority of her brother, the head of the household, who wished to marry her off quickly to another immigrant. However, Mai resisted the proposed marriage and found a job, so that she could contribute economically to the family. She also developed her relationship with her brother's (English-speaking) children, despite his initial suspicion, and made herself useful in looking after them. Thus in two ways she negotiated greater independence of her brother's patriarchal authority, and at the same time created increased opportunities for using and learning English.

Norton's study relies primarily on interviews and reports by immigrant English as second language learners about their second language encounters, positive and negative. More direct evidence of the nature of such encounters, and the power relationships which prevail within them, is provided by the European Science Foundation study of adult migrants learning a range of second languages informally in European settings, previously discussed in Chapter 5. As we have seen, the main concern of the European Science Foundation team was to clarify the linguistic course of development of the Basic Variety. A sub-group within the European Science Foundation team also undertook more sociolinguistically oriented work, and concentrated in particular on examining adult migrants' encounters with a wide variety of *gatekeepers* (Bremer *et al.*, 1993, 1996). These European Science Foundation sociolinguists focused on speech events such as job interviews, counselling or advice sessions, or service encounters (in

shops, travel agencies, etc.), where the migrant workers were seeking some instrumental goal (to find a job, to send a parcel, etc.). Sometimes the events studied were real, sometimes simulated, but in all cases they involved interaction with 'genuine' officials or service personnel, who controlled the desired outcomes. Thus these speech events involved a clear mismatch of power, with the TL speaker as the more powerful gatekeeper, the second language speaker as the less powerful (potential) beneficiary of the encounter.

In their detailed analysis of specific encounters, Bremer and colleagues concentrate on how the participants succeeded (or failed) in developing and maintaining mutual understanding from moment to moment. For them, understanding is an interactive process, 'mutually constructed in the course of inferencing by all participants in an encounter' (Gumperz, 1982, in Bremer *et al.*, 1996, pp. 15–16). It is clearly a prerequisite for ongoing and sustained language learning opportunity.

An example of the data collected and analysed by the European Science Foundation researchers in their work on gatekeeping encounters is taken from a meeting between a Moroccan informant (Abdelmalek), a learner of French as a second language, and a French travel agent. This extract shows, first of all, how misunderstanding can arise from a mishearing of a single lexical element. (Abdelmalek mishears *par quoi* 'how', as *pourquoi* 'why', and proceeds to explain his reasons for needing to travel.) But, second, it illustrates the additional communication problems arising from a mismatch in power relations, at least as perceived by Abdelmalek. It is not normally appropriate for a travel agent to enquire about a client's reasons for a trip, so why did Abdelmalek think that *pourquoi* 'why' was a reasonable interpretation of what he had heard? Bremer *et al.* (1996) suggest that Abdelmalek had already experienced many official encounters during his short stay in France, when he had been interrogated about his motives and his personal life; he assumed that a travel agent, too, had the right to ask such questions. But on this occasion the travel agent is merely puzzled, and indicates that Abdelmalek's response was not appropriate – though on this occasion he remains sufficiently co-operative to rephrase his original query:

- (1) A: je partir à casablanca, maroc
i am leaving for casablanca, morocco
 N: par quoi vous voulez partir ↑
how do you wish to go ↑
 A: [se] beaucoup problèmes là-bas papa malade
 je partir tout de suite
a lot of problems there father is ill
i'm leaving right away

- (5) N: je comprends pas là qu'est-ce que vous voulez
 où vous voulez aller ↑
*i don't understand that what do you want
 where do you want to go ↑*

(Deulofeu and Taranger, 1984, in Bremer *et al.*, 1996, pp. 12–13)

A final, classroom-based example of the ways in which unequal power relations can affect learners' participation in a second language community of practice, and hence their learning opportunity, is offered by Losey (1995). In this classroom study, Losey moves beyond a concern with teacher–student relations, to examine the classroom roles of different ethnic and gender groups. The study again involves adult minority informants, but the research setting is a North American adult literacy classroom. The students were a mix of monolingual (English as first language) Anglo Americans and bilingual (Spanish as first language) Mexican Americans. A first analysis showed that in teacher-led, English-medium whole-class discussions, the Anglo students dominated overwhelmingly. Closer study also showed a striking gender difference within the Mexican American group; the few Mexican American males participated at a similar rate to the Anglo students, while Mexican American women scarcely contributed at all to whole-class discussions, though they comprised almost half the class. In small group settings, however, whether with peers or with a tutor, these women talked freely, asking many work-related questions, and jointly solving problems. Losey (1995, p. 655) attributes the women's silence in class – and hence, their restricted learning opportunity – to their powerless position as a 'double minority', in terms of both ethnicity and gender.

8.5 Second language learning and the (re)construction of identity

8.5.1 Introduction

The concept of **social identity** has been borrowed into SLL studies and applied linguistics from social psychology. A notable theorist of social identity has defined it as 'That part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership' (Tajfel, 1974, p. 69, quoted in Hansen and Liu, 1997, pp. 567–8). Social identity, therefore, is the sense of 'belonging' to a particular social group, whether defined by ethnicity, by language, or any other means.

As originally proposed by Tajfel and others, the concept of social identity has been criticized for being too static, and being too focused on the

individual (though Tajfel himself is defended by McNamara, 1997). In her research with adult immigrant language learners, Norton aimed to develop a more dynamic view of identity:

I use the term identity to reference how a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future.

(Norton, 2000, p. 5)

For Norton, language, identity, and context interact mutually:

I foreground the role of language as constitutive of and constituted by a language learner's social identity ... It is through language that a person negotiates a sense of self within and across different sites at different points in time, and it is through language that a person gains access to – or is denied access to – powerful social networks that give learners the opportunity to speak.

(Norton, 2000, p. 5)

8.5.2 Adult transformations of identity

Norton's longitudinal study explored changes in the participants' social identity over time, and in particular, their struggles to achieve the right to speak in second language settings. Thus, the young worker Eva transformed her self-concept over time from that of unskilled immigrant with no right to speak, to that of multicultural citizen possessing 'the power to impose reception' (Bourdieu, 1977, in Norton, 2000, p. 128). Another participant in Norton's study was Martina, a Czech-speaking immigrant in her 30s and a mother, who relied at first on her own children's support in undertaking a range of both public and domestic English-medium negotiations. But Martina viewed herself as the primary caregiver in the family, and struggled to resume these responsibilities herself (e.g. challenging the landlord by phone, in a disagreement over rental payments). Similarly, in the fast food restaurant where she worked, she was bossed around initially by her teenage fellow workers; but soon she reasserted her status as an adult with authority over children, and claimed the 'right to speak' in this role:

In restaurant was working a lot of children, but the children always thought that I am – I don't know – maybe some broom or something. They always said 'Go and clean the living room', and I was washing the dishes and they didn't do nothing. They talked to each other and they thought that I had to do everything. And I said 'no'. The girl is only 12 years old. She is younger than my son. I said 'No, you are doing nothing. You can go and clean the tables or something'.

(Norton, 2000, p. 99)

Pierce argues that as Martina's identity changed, from submissive immigrant to caregiver, so did her opportunities to speak and to learn English.

While Norton relies largely on self-report, the European Science Foundation researchers again provide analyses of ongoing second language interactions that illustrate the local negotiation of aspects of learner identity. In particular they pay attention to learner *face* and *self-esteem*, and how they may be threatened or consolidated by attempts to negotiate understanding. Thus, threats to second language speakers' self-esteem can arise, when misunderstandings are too frequent in interactional data. For example, a Spanish first language speaker, Berta, living in a French-speaking environment, attempted to get some shelves made to order in a woodworking shop (Bremer *et al.*, 1996, p. 91). She failed to cope with the shop assistant's more technical enquiries, and eventually lost his attention to another customer. The European Science Foundation data show that first language speakers in service encounters are often not very co-operative with second language learners, so that the major burden of achieving understanding rests with the latter. In face-threatening situations, second language speakers may use a range of strategies. At one extreme, the European Science Foundation team found examples of **resistance**, that is, more or less complete withdrawal from second language interaction, and a re-assertion of the speaker's first language identity (e.g. by switching to monolingual first language use); the minority speakers resorting to this strategy were most usually women. At the other extreme, they found speakers who worked hard during second language interactions to assert a positive, native-speaker-like identity, by, for example, indicating explicitly that they had understood, or using excuse formulae when they had to interrupt to clarify meaning (Bremer *et al.*, 1996, p.100). These speakers were mostly men, though Berta was one of the women learners who eventually discovered ways of asserting herself and taking more conversational control.

8.5.3 Adolescents and second language identities

Other ethnographic studies of adolescent second language learners produce similarly complex and dynamic portraits. McKay and Wong (1996) studied a group of Chinese first language immigrant adolescents attending high school in the USA, many of whom were 'caught in the [conflicting] demands made by multiple discourses in their environment' (McKay and Wong, 1996, p. 598). These included colonialist or racialized discourses which positioned immigrants as deficient and backward; 'model minority' discourses which celebrated the economic success of Asian Americans (by contrast e.g. with African Americans); Chinese cultural-nationalist

discourses which defined 'being Chinese'; social and academic school discourses, and gender discourses. The individual students 'managed' their identities differently in this complex environment, with differential consequences for their ambitions and success in learning English oral and literacy skills.

Further illustrating the relationship between identity construction and second language development, Lam (2000) conducted a case study of a single adolescent English as second language learner, Almon, whose English literacy was poor even after five years of schooling in the USA. However, Almon became interested in computer-mediated communication and developed a new identity and 'nurturing' relationships, with teenage peers, through chat-room friendships. Almon described the change this way in an email message:

I believe most people has two different 'I', one is in the realistic world, one is in the imaginal world. There is no definition to define which 'I' is the original 'I', though they might have difference. Because they both are connect together. The reality 'I' is develop by the environment changing. The imaginative 'I' is develop by the heart growing. But, sometime they will influence each other. For example me, 'I' am very silent, shy, straight, dummy, serious, outdate, etc. in the realistic world. But, 'I' in the imaginal world is talkative, playful, prankish, naughty, open, sentimental, clever, sometime easy to get angry, etc. . . . I don't like the 'I' of reality. I'm trying to change myself.

(Lam, 2000, p. 475)

Almon's development of this alternative identity, and his engagement with a global community of practice through computer-mediated communication, produced a qualitatively different relationship to English:

even if it's still not very good, I can express myself much more easily now . . . it's not a matter of typing skill, it's the English . . . now I've improved, it's because of [instant messaging] or email or other reasons . . . Now it's somewhat different, before I was the type who hated English, really, I didn't like English. Maybe it was a kind of escapism, knowing I wasn't doing well at it, and so I used hating it as a way to deal with the problem. But I think it's easier for me to write out something now . . . to express better.

(Lam, 2000, p. 468)

8.5.4 Autobiographical narrative

Finally, Pavlenko (1998) has analysed yet another kind of data in order to explore relationships between SLL and identity formation on a more strategic level. She has studied autobiographical narratives produced by literary figures who successfully learnt a second language after puberty,

and became writers in that language. Using a range of these writings, Pavlenko argues that 'language learning in immigration' involves a first stage of continuous losses (rather than immediate acquisition), and only later a stage of gains and (re) construction. These stages can be subdivided as follows:

The stage of losses

- Careless baptism: loss of one's linguistic identity
- Loss of all subjectivities
- Loss of the frame of reference and the link between the signifier and the signified
- Loss of the inner voice
- First language attrition

The stage of gains and (re)construction

- Appropriation of other's voices;
- Emergence of one's own voice, often first in writing;
- Translation therapy: reconstruction of one's past
- Continuous growth 'into' new positions and subjectivities

Pavlenko (2001) further explores the transformation among women second language English learners of their gendered identities and subject positions, as documented in a larger corpus of autobiographical narratives. She identifies a range of spaces as central to the (re)negotiation of gendered identities: educational sites, intimate relationships, friendships, parent-child relationships and workplaces. She claims that many women second language users in this corpus chose or accepted second language English as 'the language that gives them enough freedom to be the kind of women they would like to be' (Pavlenko, 2001, p. 147), perhaps because of positive associations between American English and feminist discourses. Conversely, other studies have documented the ambivalence with which English first language learners of Japanese as a second language regard Japanese 'feminine' identity, and show how they resist features of spoken Japanese, such as a raised pitch level, which are associated with being 'polite, cute, gentle, weak, and modest' (Ohara, 2001).

8.6 Affect and investment in second language learning

Many researchers in SLL have tried to explain differing degrees of learner success by appealing to factors, such as instrumental or integrative motivation, which are assumed to be relatively fixed and stable (see Section 1.5.2). The research reviewed in previous sections of this chapter already suggests that learners' attitudes and feelings about SLL may be much more dynamic and negotiable. In this section we look more closely at

sociolinguistic discussions of the role of affect and language attitudes in promoting or inhibiting learning success, and introduce the sociolinguistic concept of 'investment' as an alternative to the traditional social psychological concept of motivation.

Krashen's **affective filter** is perhaps the best-known hypothesis in SLL theory, which tries to deal with the impact of attitudes and emotion on learning effectiveness (see Chapter 2). However, like the social psychological construct of motivation, the affective filter hypothesis can be criticized as insufficiently flexible and asocial.

For adult migrant learners such as Berta, the second language is the only available communicative option, in many difficult encounters with the powerful (Bremer *et al.*, 1996). Her emotional response to the second language is inextricably entwined with the social context in which she has to use it. For example, the European Science Foundation team recorded a conversation with Berta in which she retells her experience in hospital, where she had gone to enquire after her child, hurt in an accident, late in the evening. She had located the relevant doctor, but he had sent her away, telling her only that she should come back tomorrow for more information. Her actual interaction with the doctor was not recorded, but the extract below quotes the conclusion of her narrative, with its vivid recollection of her strong feelings of anger, and how these feelings frustrated her second language-medium attempts to force the doctor to give her proper attention.

B: il me dit que je sorte tout de suite de/*del hospital* pasque bon je crois que c'est l'heure pasque + c'est la/la neuf + vingt ↑/vingt et un ↑ vingt et un heure je crois que c'est possible *por* ça

he told me that i leave at once from/from the hospital because well i think it is the time because + it is nine + twenty ↑/ twenty-one ↑ twenty-one i think it is possible that's why

N: Oui mais c'est quand même pas normal
Yes but it is not really normally like that

B: oui c'est ça *lo que* jé dis pasque je suis très fâchée avec lui je le dis bon je n'/*yo/yo* voudrais que vous m'expliquiez qu'est-ce qui passe non non non il me dit

yes it is what i said because i was very angry with him i told him well i don't li i wish you would explain to me what happens no no no he told me

N: qu'est-ce que tu as fait alors ↑
what did you do then ↑

B: bon je suis fâchée avel/avec lui *y* je le dis beaucoup de choses avec m/ + :et + je m'énervé beaucoup
well i got angry with h/ with him and i told him a lot of things with m/ + and + i got very worked up

N: ah oui + je comprends ça oui + et tu es partie ↑
Yes + i understand it yes + and did you go ↑

- B: alors oui il est parti pasque je n'avais le/ avais le + que je suis fâchée je ou/
je oubliais les mots en français *por por* dire + je ne/je ne trouvais + rien
de mots *por* dire les choses que/ que je le dis à lui *por* pasque n'est
pas bon la manière qu'il me dit au revoir
*then yes he went because i did not have the/ have the + that i was angry for/ i
forget the words in french to say + i did not/ did not find + nothing of words to
say the things which/ which i tell him because it is not good the manner he said
goodbye to me*

(Bremer *et al.*, 1996, p. 94)

In a classroom study, Rampton (2002) observed the foreign language German lessons on offer to a group of adolescents at a multi-ethnic London secondary school. The audiolingual-style lessons were strongly structured and controlled, and students' own agendas and experience were 'kept at arms length', much more so than in other curriculum subjects. Active public commitment to German was expected, through involvement in the collective practices of oral drills, etc., and the students showed their ambivalent response in class by 'ragged and reluctant participation' (Rampton, 2002, p. 502). However, in other lessons, unexpectedly, Rampton documented these same students as using bits and pieces of 'management German', at moments of potential conflict with other teachers. The following example comes from an English lesson:

- 1 Mr N: As I've said before
2 I get a bit fed up with saying (.)
3 shshsh
4 John: (*addressed to Mr N?*) LOU/DER
5 Mr N: You're doing your SATs (*tests*) now
6 Hanif: VIEL LAUTER SPRECHEN
Speak much louder
7 VIEL LAUTER SPRECHEN
Speak much louder
8 John: (*smile-voice*) lauter spricken
9 Whatever that is

(Rampton, 2002, p. 506)

Rampton suggests that as far as the students were concerned, 'language lessons turned German into a ritual language, and that this ritual dimension was both acknowledged and taken in vain in the subversive orientation to order and propriety displayed in impromptu *Deutsch* [German]' (Rampton, 2002, p. 511). This downgrading of German to a ritual language from which their personal experience was excluded, made German only useful immediately for procedural management, and led in the longer term to language learning failure.

Norton (2000) further shows that learners' motivation to succeed in SLL, and the amount of effort that Eva, Mai and the other women in her study were willing to 'invest' in practising English, is closely related to the social identities they were aiming to construct over time. This variable investment is also seen among the Chinese teenagers studied by McKay and Wong (1996), some of whom concentrated on developing the English literacy skills needed for a 'good student' identity, while others concentrated on developing speaking skills, so as to be accepted among the students' informal networks. (Interestingly, these students seemed to invest in those aspects of English needed for acceptance in their immediate surroundings, rather than those which would eventually be needed to meet their parents' aspirations for them, or those of the wider society.) In an extensive ethnographic study of a French-medium high school in the English-dominant city of Toronto, Heller (1999) compared the social motivations for learning French of local white students, with those of students of migrant background (e.g. from Francophone Africa). The African students held ambivalent views towards both French and English, as languages of colonialism, and rejected them as languages of personal cultural significance. Nonetheless, they saw excellent mastery of the standard varieties of both languages as central to their individual economic success, as skilled multilingual individuals. In contrast, Heller cites a white female student, whose dominant language is English, who is pleased to have studied through French, as part of her family identity, but whose ambitions, for example, for French literacy are self-limiting, as she does not see herself needing or using French in her future career:

So I mean like people on my Mom's side and my Dad's side, like they know French sort of thing. So it's kind of like that's kind of not the background, but a lot of . . . they always knew French, so I also want my kids to speak French as well. It's like it's my background you know. They spoke French, so I think I should keep it up as well.

(. . .)

I know I'm going to an English university because, first of all, they offer more programmes, like the programmes that I want, and it will be easier for me to like explain myself in English, you know, especially when I'm going to have to do like a lot of essays and stuff. English is my first language and I can write better and stuff.

(Student Sandra, in Heller, 1999, pp. 144–5)

8.7 Evaluation: the scope and achievements of sociolinguistic enquiry

In this chapter we have introduced several different strands of sociolinguistic theorizing about second language use and second language development. One of these strands, the quantitative study of second language variation, is very different from the others, focusing on interlanguage variability at the lexical and morphological level. Here, we have seen that sociolinguistic factors play a role of increasing importance as learners become more advanced, but it is clear that much variability must be attributed primarily to psycholinguistic influences.

The remaining strands deal with SLL in a broad way, embedded in its social context. This work is typically qualitative and interpretive in nature, using the techniques of ethnography or of conversational analysis, and providing longitudinal accounts of the social processes of second language interaction and development. It frequently involves case studies of individuals or groups of learners; great attention is paid to the personal qualities and ambitions of the learner, and their own social contribution to the learning context. Valuable concepts such as the 'community of practice' have been introduced to this field in recent work, which have been helpful for theorizing SLL as a social practice, in an integrative way. On the other hand, it is still rare to find in sociolinguistic work of this kind, any close attention being paid to the linguistic detail of the learning path being followed (i.e. to the precise learning *route*), or the cognitive processes involved (see comments of Watson-Gegeo and Nielsen, 2003).

8.7.1 Sociolinguistic perspectives on interlanguage and interlanguage communication

One of the obvious strengths of the sociolinguistic tradition in second language acquisition is the rich accounts offered of cross-cultural second language communication. In Chapter 5, we noted that the functionalist tradition in second language acquisition had paid relatively little attention to second language interaction, despite being very interested in learners' naturalistic second language output. The interactionist tradition reviewed in Chapter 6 does of course systematically analyse second language interaction, but adopts a mainly quantitative approach, tallying the occurrence or non-occurrence of significant functions such as the negotiation of meaning, recasts, etc. The ethnographers of second language communication whose work we sampled in this chapter explore complete speech events in a much more holistic way. They take a multi-level view of conversational

interaction; they are concerned with the relationships between linguistic and non-linguistic aspects of communication, and with the development of pragmatic and discourse competence appropriate to particular identities and communities of practice, rather than centring on the linguistic aspect *per se*, which is not seen as autonomous or pre-eminent.

In contrast, the variationists discussed in Section 8.3 look at a range of relatively 'micro' linguistic features in learner language. They have demonstrated that such variability is patterned rather than random, and that it is linked to some extent to social factors, though much less so than first language varieties. The emergence of socially patterned variation among more advanced or more integrated learners can be linked to learners' aspirations to develop appropriate second language identities, and thus to the themes discussed in later sections of the chapter. However, it has not been shown that interlanguage contains 'variable rules' of a formal kind.

8.7.2 Sociolinguistic perspectives on language learning and development

As far as language learning itself is concerned, sociolinguistically oriented research has provided rich descriptions of the context for language learning, and the speech events (from gatekeeping encounters to classroom lessons) through which it is presumed to take place. Like the Vygotskian socio-cultural theorists discussed in Chapter 7, the second language ethnographers studied here believe that learning is a collaborative affair, and that language knowledge is socially constructed through interaction. They have paid less attention than the socio-cultural theorists to the linguistic detail of expert or novice interaction, or to the 'microgenesis' of new language forms in the learner's second language repertoire. There is no real parallel as yet in second language 'language socialization' studies to the detailed work of Ochs (1988) on linguistic development in first language socialization. Thus, while Ochs offers evidence to support her claim that the actual *route* of first language development can be influenced by the nature and quality of interactions in which the child becomes engaged, this idea has not yet seriously been investigated for second language development, from a 'socialization' perspective. (For a small-scale exception, see Tarone and Liu, 1995.)

On the other hand, current ethnographies of second language communication and of second language socialization offer a great deal of evidence about how the learning context, and the learner's evolving style of engagement with it, may affect the *rate* of SLL. The patterning of learning opportunities, through communities of practice with structured and sometimes

very unequal power relationships, has been invoked to explain learners' differential success even where motivation is high.

8.7.3 Sociolinguistic accounts of the second language learner

Second language ethnographies take an interest in a wide variety of second language learners, from the youngest classroom learners to adult migrants. The second language ethnographers that we have encountered take a more rounded view of the learner as a social being, than is true for other perspectives we have surveyed. Thus, for example, dimensions such as gender and ethnicity are seen as significant for language learning success (Sunderland, 2000).

Most striking, though, is the emphasis placed by contemporary ethnographic researchers such as Norton on the dynamic and alterable nature of learners' identity and engagement with the task of SLL. Self-esteem, motivation, etc., are believed to be both constructed and reconstructed in the course of second language interaction, with significant consequences for the rate of learning and ultimate level of success. Alongside rich characterizations of the learning context, the importance attributed to agency and investment is one of the most distinctive current themes offered by this particular perspective on SLL.

9 Conclusion

9.1 One theory or many?

Having come to the end of our survey of current trends in second language learning (SLL) research, we are left with a reinforced impression of great diversity. Different research groups are pursuing theoretical agendas that centre on very different parts of the total language learning process; while many place the modelling of learner grammars at the heart of the enterprise, others focus on language processing, or on second language interaction. Each research tradition has developed its cluster of specialized research procedures, ranging from the grammaticality judgement tests associated with Universal Grammar-inspired research, to the naturalistic observation and recording practised by ethnographers and language socialization theorists. On the whole, grand synthesizing theories, which try to encompass all aspects of SLL in a single model, have not received general support. Rather than a process of theory reduction and consolidation, of the kind proposed by Beretta and others (1993), we find that new theoretical perspectives (such as connectionism or socio-cultural theory) have entered the field, without displacing established ones (such as Universal Grammar).

On the other hand, some attempts have been made at the principled linking of specific theories on a more modest scale, to account for different aspects of the SLL process; a clear example is that made by Towell and Hawkins (1994) to link Universal Grammar theory with a theory of information processing.

9.2 Main achievements of recent second language learning research

Drawing on the wealth of studies that have been carried out in the last 15 years or so, what are the most significant changes that can be noted in SLL theorizing in its many forms?

From a linguistic perspective, the continuing application of Universal Grammar to the modelling of second language competence has led to an increasingly sophisticated and complex range of proposals about the possible contents of that mysterious black box originally imported by Krashen into second language research, the 'Language Acquisition Device'. One complication is the growing view among some Universal Grammar specialists that the innate language module may itself be modular, with different aspects of language knowledge being learnt and stored relatively autonomously. The Universal Grammar approach has also been instrumental in providing sharper linguistic descriptions of learner language, and has helped to better document the linguistic route followed by second language learners and to explain cross-linguistic influences.

From a cognitive perspective, the main evolutionary developments have been the application of information processing models to domains complementary to the learning of grammar, for example the application of Anderson's ACT* model to the acquisition of learning strategies, or the development of fluency. As far as grammar learning itself is concerned, connectionist models offer a much more radical challenge to traditional linguistic thinking, given that they make do without the accepted paraphernalia of abstract rules and symbolic representations, and suggest that a network of much more primitive associationist links can underlie language learning and performance. However, the empirical evidence supporting these claims remains limited, and contentious in its interpretation.

Descriptively, recent work in the functionalist tradition has added substantially to our understanding of the course of second language development, and especially the key role played by pragmatics and lexis in interlanguage communication, in particular in the early stages. Variationist studies also suggest that much second language variability can be accounted for by evolving links between form and function.

In terms of descriptive accounts, we have also learnt much from recent research about the contexts within which SLL takes place, and the kinds of interactions in which learners become engaged, and have also started seriously to investigate the links between interactional engagement and SLL itself. In their different ways, the interactionist, socio-cultural and sociolinguistic perspectives all address this issue. The sociolinguistic perspective has shown us how learners' engagement in second language interaction is influenced by power relations and other cultural factors. On the other hand, we have seen that these factors are not inalterably fixed, but can be renegotiated as learners build new identities. Both interactionist and socio-cultural research, in their different ways, show how the ongoing character of second language interaction can systematically affect the learning

opportunities it makes available, and have started to demonstrate how learners actually use these opportunities.

However, a major limitation shared by these particular strands remains that identified by Braidí (1995) in her commentary on the interactionist tradition in particular: the continuing scarcity of studies which track and document learners' linguistic development in detail over time, and link their evolving control of linguistic structure, to a narrative account of their interactional experiences. As researchers in the socio-cultural tradition have explicitly recognized, even in longitudinal studies, such as that of Ohta (2001), links have so far been made on a limited scale, in respect of small 'patches' of language knowledge only. We have not yet seen the systematic linking over time of longitudinal accounts of interlanguage development like those provided by the functionalist strand, with evolving accounts of second language negotiation, scaffolding, etc.

9.3 Future directions for second language learning research

For the foreseeable future, it seems that SLL will be treated as a modular phenomenon, with different research programmes addressing different aspects. The influence of linguistics on the modelling of second language competence is unlikely to diminish, so that we can expect to see continuing reflexes of evolving linguistic thinking in second language research, as we have already seen in the application of successive versions of Universal Grammar theory to the second language problem. On the other hand, the application of general learning theories derived from cognitive psychology, neural science, etc., can also be expected to continue, as can be seen clearly, for example, in Doughty and Long (2003); the attempts to bring to bear on SLL such diverse general learning theories as connectionism, on the one hand, and Vygotskian socio-cultural theory, on the other, are current examples, but others may follow.

Although we believe these different research strands within second language acquisition will retain their autonomy and individual impetus, however, it is clear that attempts to cross-refer between them and examine relations between different learning 'modules' in a systematic way, a process already exemplified in, for example, Towell and Hawkins (1994) and Carroll (2000), will continue to prove a productive way of developing our understanding of the specific modular domains. Much recent work has examined various interfaces in detail, for example between syntax and morphology, between the lexicon and syntax, or between semantics and syntax (Juffs, 1998, 2000; Lardière 1998; Parodi, 2000; Prévost and White, 2000;

Franceschina, 2001; Hawkins, 2001, 2003; Herschensohn, 2001; Van Hout *et al.*, 2003; Myles, in press a).

From a methodological point of view, one productive development within certain strands of second language research is the greater use of computer-aided techniques for the analysis of second language data. In the past, corpus-based studies of second language development or second language interaction have usually involved manual analysis of a very labour-intensive kind. Child language research has shown the potential of computer-aided analysis for the handling of corpus data, using software such as the CHILDES package (MacWhinney 2000a, 2000b). The development of electronic second language corpora, plus work to devise appropriate tools for analysis, is making possible the more systematic linking of second language grammar development with second language interaction (Granger, 1998; Granger *et al.*, 2002; Marsden *et al.*, 2003; Rule *et al.*, 2003). They also facilitate much closer attention to second language lexis and lexico-grammar, and to the role of prefabricated chunks and routines in second language use and SLL. Recent advances in computer technology have also enabled the development of computer modelling of SLL (e.g. the recent application of connectionism to SLL).

Such technical developments do not challenge the fundamental assumptions of SLL research, which by and large have remained those of rationalist 'modern' science. In recent years, however, a number of critiques have developed of 'autonomous' applied linguistics and second language acquisition, from more socially engaged perspectives (Phillipson, 1992; Pennycook, 1994); Rampton (1995b) charts what he sees as the rise of more 'ideological' forms of applied linguistics. We can find in contemporary theoretical discussions, proposals for more socially engaged forms of second language acquisition research, on the one hand (Block, 1996), and for post-modern interpretations of second language use and learning, on the other (reviewed by Brumfit, 1997). Post-modernism offers a relativist critique of 'attempts to see human activity as part of a grand scheme, driven by notions of progressive improvement of any kind' (Brumfit, 1997, p. 23). As far as language is concerned, it highlights problems of textuality, and the complex relationship between language and any sort of external reality; 'we are positioned by the requirements of the discourse we think we adopt, and our metaphors of adoption hide the fact that *it* adopts *us*' (Brumfit, 1997, p. 25). The post-modern concept of intertextuality – the idea that all language use is a patchwork of borrowings from previous users – has been claimed to be of central importance for SLL (Hall, 1995).

So far, however, the critical and post-modern commentary on second language acquisition has not dislodged its central modernist assumptions.

It will be for the future to tell how much impact it eventually makes on programmes of second language empirical enquiry; this evolution will evidently be linked to wider ongoing debates in the social sciences.

9.4 Second language learning research and language education

We noted in Chapter 2 that theorizing about SLL has its historic roots in reform movements connected to the practical business of language teaching. Howatt (1984, pp. 12–72) shows that this has been true since Renaissance times at least. In the last quarter-century, however, as we have clearly seen, it has become a much more autonomous field of enquiry, with an independent, 'scientific' rationale.

But what kind of connections should this now relatively independent research field maintain, with its language teaching origins? From time to time, it has been argued that the 'scientific' findings of second language acquisition should guide the practices of classroom teachers; the recommendations that flowed from Krashen's Input hypothesis, in the form of the 'Natural Approach' to language pedagogy, are an obvious example (Krashen and Terrell, 1983). Another example that we encountered briefly earlier is the Teachability hypothesis, advanced by Pienemann, who suggests that new second language items might most effectively be taught in sequences that imitate empirically documented developmental sequences.

R. Ellis (1997) reviews a number of well-known difficulties with such a top-down, rationalist approach to linking research-derived theory and classroom practice. The findings of second language acquisition research are not sufficiently secure, clear and uncontested, across broad enough domains, to provide straightforward prescriptive guidance for the teacher (nor, perhaps, will they ever be so). They are not generally presented and disseminated in ways accessible and meaningful to teachers; the agenda of second language acquisition research does not necessarily centre on the issues which teachers are most conscious of as problematic. But most importantly, teaching is an art as well as a science, and irreducibly so, because of the constantly varying nature of the classroom as a learning community. There can be no 'one best method', however much research evidence supports it, which applies at all times and in all situations, with every type of learner. Instead, teachers 'read' and interpret the changing dynamics of the learning context from moment to moment, and take what seem to them to be appropriate contingent actions, in the light of largely implicit, proceduralized pedagogic knowledge. This has been built up over

time very largely from their own previous experience, and usually derives only to a much more limited extent from study or from organized training.

However, present second language acquisition research offers a rich variety of concepts and descriptive accounts, which can help teachers to interpret and make better sense of their own classroom experiences, and significantly broaden the range of pedagogic choices open to them. For example, SLL research has produced descriptive accounts of the course of interlanguage development, which show that learners follow relatively invariant routes of learning, but that such routes are not linear, including phases of restructuring and apparent regression. Such accounts have helped teachers to understand patterns of learner error and its inevitability, and more generally, to accept the indirect nature of the relationship between what is taught and what is learnt. Similarly, in the recent literature, discussions about the role of recasts and negative evidence in learning (reviewed in Chapter 6), about scaffolding and microgenesis (Chapter 7), or about language socialization (Chapter 8) have great potential to stimulate teacher reflections on the discourse choices available to them, when enacting their own role as second language guide and interlocutor.

Of course, the sub-field of research on 'instructed second language acquisition' (R. Ellis, 1990; Spada, 1997; Norris and Ortega, 2000; Cook, 2001; Lyster, 2001; Robinson, 2001; Doughty, 2003) plays a special role in addressing concerns somewhat closer to those of the classroom teacher, and may offer opportunities for more direct involvement of teachers as research partners. But even 'instructed second language acquisition' research is not identical with problem solving and development in language pedagogy, and does not ensure a shared agenda between teachers and researchers. There is a continuing need for dialogue between the 'practical theories' of classroom educators, and the more decontextualized and abstract ideas deriving from programmes of research. Researchers thus have a continuing responsibility to make their findings and their interpretations of them as intelligible as possible to a wider professional audience, with other preoccupations. We hope that this book continues to contribute usefully to this dialogue.

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