# Introduction

## Aims of this book

This book is the result of collaboration between a linguist with research interests in second language acquisition (Myles) and an educationist with research interests in second language teaching and learning in the classroom (Mitchell). Our general aim is to provide an up-to-date, introductory overview of the current state of second language learning (SLL) studies. Our intended audience is wide: undergraduates following first degrees in language or linguistics; graduate students embarking on courses in foreign language education/EFL/applied linguistics; and a broader audience of teachers and other professionals concerned with second-language education and development. SLL is a field of research with potential to make its own distinctive contribution to fundamental understandings, for example of the workings of the human mind or the nature of language. It also has the potential to inform the improvement of social practice in many fields, most obviously in language education. We are interested in SLL from both perspectives, and are concerned to make it intelligible to the widest possible audience.

Our first (1998) edition was strongly influenced by the 1987 volume by McLaughlin, *Theories of Second Language Learning*, which provided a selective and authoritative introduction to key second-language learning theories of the day. In this second edition, our primary aim remains the same: to introduce the reader to those theoretical orientations on language learning that seem currently most productive and interesting for our intended audience. We have revised our text throughout to reflect the substantial developments that have taken place in the field in the last few years, so that the work aims to be fully up to date for a 21st century readership. New studies have been incorporated as examples, and theoretical advances are presented and explained. The evaluation sections in each chapter have been expanded and generally the book is rebalanced in favour of newer material.

All commentators recognize that although the field of second language learning research has been extremely active and productive in recent decades, we have not yet arrived at a unified or comprehensive view as to how second languages are learnt. We have therefore organized this book as a presentation and critical review of a number of different theories of SLL, which can broadly be viewed as linguistic, psycholinguistic and sociolinguistic. Indeed, the 'map' of the field we proposed in the first edition largely survives today, reflecting the fact that strands of research already active 20 years ago have continued to flourish. The most obvious example is the ongoing linguistic research inspired by the Universal Grammar theory of Noam Chomsky. However, while this vein of theorizing and empirical investigation remains active and productive, it has not succeeded in capturing the whole field, nor indeed has it attempted to do so. No single theoretical position has achieved dominance, and new theoretical orientations continue to appear. Whether or not this is a desirable state of affairs has been an issue of some controversy for SLL researchers (Beretta, 1993; van Lier, 1994; Lantolf, 1996; Gregg, 2003). On the whole, though we accept fully the arguments for the need for cumulative programmes of research within the framework of a particular theory, we incline towards a pluralist view of SLL theorizing. In any case, it is obvious that students entering the field today need a broad introduction to a range of theoretical positions, with the tools to evaluate their goals, strengths and limitations, and this is what we aim to offer.

## Distinctive features of this book

As one sign of the vigour and dynamism of SLL research, a good number of surveys and reviews are already on the market. Reflecting the variety of the field, these books vary in their focus and aims. Some are written to argue the case for a single theoretical position (Sharwood Smith, 1994; Carroll, 2000; Hawkins, 2001; White, 2003); some are encyclopaedic in scope and ambition (R. Ellis, 1994; Ritchie and Bhatia, 1996; Doughty and Long, 2003); and some pay detailed attention to research methods and data analysis (Larsen-Freeman and Long, 1991).

This book is intended as an introduction to the field, for students without a substantial prior background in linguistics. We have adopted a 'pluralist' approach, and made a selection from across the range of SLL studies, of a range of theoretical positions that we believe are most active and significant. Some of the theories we review are well-established in SLL research, but evolving in the light of new evidence (e.g. Universal Grammar theory; reviewed in Chapter 3); others are relative newcomers to SLL

studies, but offer a productive challenge to established thinking (e.g. connectionism discussed in Chapter 4, or socio-cultural theory discussed in Chapter 7).

From its early days, SLL research has been a varied field, involving a variety of disciplinary perspectives. However, it is fair to say that the dominant theoretical influences have been linguistic and psycholinguistic, and this continues to be reflected in many contemporary reviews of the subject (Gass and Selinker, 1994; Ritchie and Bhatia, 1996; Hawkins, 2001; Long and Doughty, 2003). This has been the case despite widespread acceptance of the sociolinguistic construct of communicative competence as the goal of second language learning and teaching (Brumfit and Johnson, 1979).

A distinctive feature of our first edition was its extended treatment of some theoretical positions that view the language learning process as essentially social, and which also view the learner as essentially a social being, whose identity is continually reconstructed through the processes of engagement with the second language and its speech community. In the second edition these treatments have been extended and updated. To illustrate the first of these positions we focus on Vygotskian socio-cultural theory, now well established in the SLL field as part of its growing influence on educational thinking and learning theory more generally (discussed in Chapter 7). To illustrate the second, we look at recent work in the ethnography of second-language communication, and in second language socialization; *see* discussion in Chapter 8.

Just as we have been selective in choosing the theories we wish to discuss, we have also been selective in reviewing the empirical evidence that underpins these theories. Our overall approach has been to illustrate a particular theoretical position by discussion of a small number of key studies that have been inspired by that approach. We use these studies to illustrate: the methodologies that are characteristic of the different traditions in SLL research (from controlled laboratory-based studies of people learning artificial languages to naturalistic observation of informal learning in the community); the scope and nature of the language 'facts' that are felt to be important; and the kinds of generalizations which are drawn. Where appropriate, we refer our readers to more comprehensive treatments of the research evidence relevant to different theoretical positions.

Lastly, the field of SLL research and theorizing has historically depended heavily on theories of first language learning, as well as on theoretical and descriptive linguistics. We think that students entering the field need to understand something about these origins, and have therefore included brief overviews of relevant thinking in first-language acquisition research, at several points in the book.

## Ways of comparing SLL perspectives

We want to encourage our readers to compare and contrast the various theoretical perspectives we discuss in the book, so that they can get a better sense of the kinds of issues that different theories are trying to explain, and the extent to which they are supported to date with empirical evidence.

In reviewing our chosen perspectives, therefore, we evaluate each individual theory systematically, paying attention to the following factors:

- the claims and scope of the theory
- the view of language involved in the theory
- the view of the language learning process
- the view of the learner
- the nature and extent of empirical support.

In Chapter 1 we discuss each of these factors briefly, introducing key terminology and critical issues that have proved important in distinguishing one theory from another.

# I

# Second language learning: key concepts and issues

## 1.1 Introduction

This preparatory chapter provides an overview of key concepts and issues that will recur throughout the book in our discussions of individual perspectives on second language learning (SLL). We offer introductory definitions of a range of key terms, and try to equip the reader with the means to compare the goals and claims of particular theories with one another. We summarize key issues, and indicate where they will be explored in more detail later in the book.

The main themes to be dealt with in the following sections are:

1.2 What makes for a 'good' explanation or theory
1.3 Views on the nature of language
1.4 Views of the language learning process
1.5 Views of the language learner
1.6 Links between language learning theory and social practice.

First, however, we must offer a preliminary definition of our most basic concept, 'second language learning'. We define this broadly, to include the learning of any language, to any level, provided only that the learning of the 'second' language takes place some time later than the acquisition of the first language. (Simultaneous infant bilingualism is a specialist topic, with its own literature, which we do not try to address in this book; *see* relevant sections in Hamers and Blanc, 1989; Romaine, 1995; Dopke, 2000; Tokuhama-Espinosa, 2000.)

For us, therefore, 'second languages' are any languages other than the learner's 'native language' or 'mother tongue'. They include both languages of wider communication encountered within the local region or community (e.g. at the workplace or in the media) and truly foreign languages, which

have no immediately local uses or speakers. They may indeed be a second language learners are working with, in a literal sense, or they may be their third, fourth, or even fifth language. It is sensible to include 'foreign' languages under our more general term of 'second' languages, because we believe that the underlying learning processes are essentially the same for more local and for more remote target languages, despite differing learning purposes and circumstances.

We are also interested in all kinds of learning, whether formal, planned and systematic (as in classroom-based learning) or informal and unstructured (as when a new language is 'picked up' in the community). Some second language researchers have proposed a principled distinction between formal, conscious **learning** and informal, unconscious **acquisition**. This distinction attracted much criticism when argued in a strong form by Stephen Krashen; it still has both its active supporters and its critics (Zobl, 1995; Robinson, 1997). It is difficult to sustain systematically when surveying SLL research in the broad way proposed here, and unless specially indicated, we will be using both terms interchangeably.

## 1.2 What makes for a good theory?

Second language learning is an immensely complex phenomenon. Millions of human beings have experience of SLL, and may have a good practical understanding of the activities that helped them to learn (or perhaps blocked them from learning). But this practical experience, and the commonsense knowledge which it leads to, are clearly not enough to help us understand fully how the process happens. We know, for a start, that people cannot reliably describe the language rules that they have somehow internalized, nor the inner mechanisms which process, store and retrieve many aspects of that new language.

We need to understand SLL better than we do, for two basic reasons:

1. Because improved knowledge in this particular domain is interesting in itself, and can also contribute to more general understanding about the nature of language, of human learning and of intercultural communication, and thus about the human mind itself, as well as how all these are interrelated and affect each other.
2. Because the knowledge will be useful. If we become better at explaining the learning process, and are better able to account for both success and failure in SLL, there will be a payoff for millions of teachers, and tens of millions of students and other learners, who are struggling with the task.

We can only pursue a better understanding of SLL in an organized and productive way if our efforts are guided by some form of theory. For our purposes, a **theory** is a more or less abstract set of claims about the units that are significant within the phenomenon under study, the relationships that exist between them and the processes that bring about change. Thus, a theory aims not just at description but also at explanation. Theories may be embryonic and restricted in scope, or more elaborate, explicit and comprehensive. They may deal with different areas of interest to us; thus, a **property theory** will be primarily concerned with modelling the nature of the language system that is to be acquired, whereas a **transition theory** will be primarily concerned with modelling the change or developmental processes of language acquisition. (A particular transition theory for SLL may deal only with a particular stage or phase of learning, or with the learning of some particular sub-aspect of language; or it may propose learning mechanisms which are much more general in scope.) Worthwhile theories are produced collaboratively, and evolve through a process of **systematic enquiry** in which the claims of the theory are assessed against some kind of evidence or data. This may take place through a process of **hypothesis testing** through formal experiment, or through more ecological procedures, where naturally occurring data are analysed and interpreted (*see* Brumfit and Mitchell, 1990, for fuller discussion and exemplification of methods). Lastly, the process of theory building is a reflexive one; new developments in the theory lead to the need to collect new information and explore different phenomena and different patterns in the potentially infinite world of 'facts' and data. Puzzling 'facts', and patterns which fail to fit in with expectations, lead to new theoretical insights.

To make these ideas more concrete, an example of a particular theory or 'model' of SLL is shown in Figure 1.1, taken from Spolsky, 1989, p. 28.

This model represents a 'general theory of second language learning' (Spolsky, 1989, p. 14). The model encapsulates this researcher's theoretical views on the overall relationship between contextual factors, individual learner differences, learning opportunities and learning outcomes. It is thus an ambitious model in the breadth of phenomena it is trying to explain. The rectangular boxes show the factors (or **variables**) that the researcher believes are most significant for learning, that is, where variation can lead to differences in success or failure. The arrows connecting the various boxes show directions of influence. The contents of the various boxes are defined at great length, as consisting of clusters of interacting 'Conditions' (74 in all; Spolsky, 1989, pp. 16–25), which make language learning success more or less likely. These 'conditions' summarize the results of a great variety of empirical language learning research, as Spolsky interprets it.

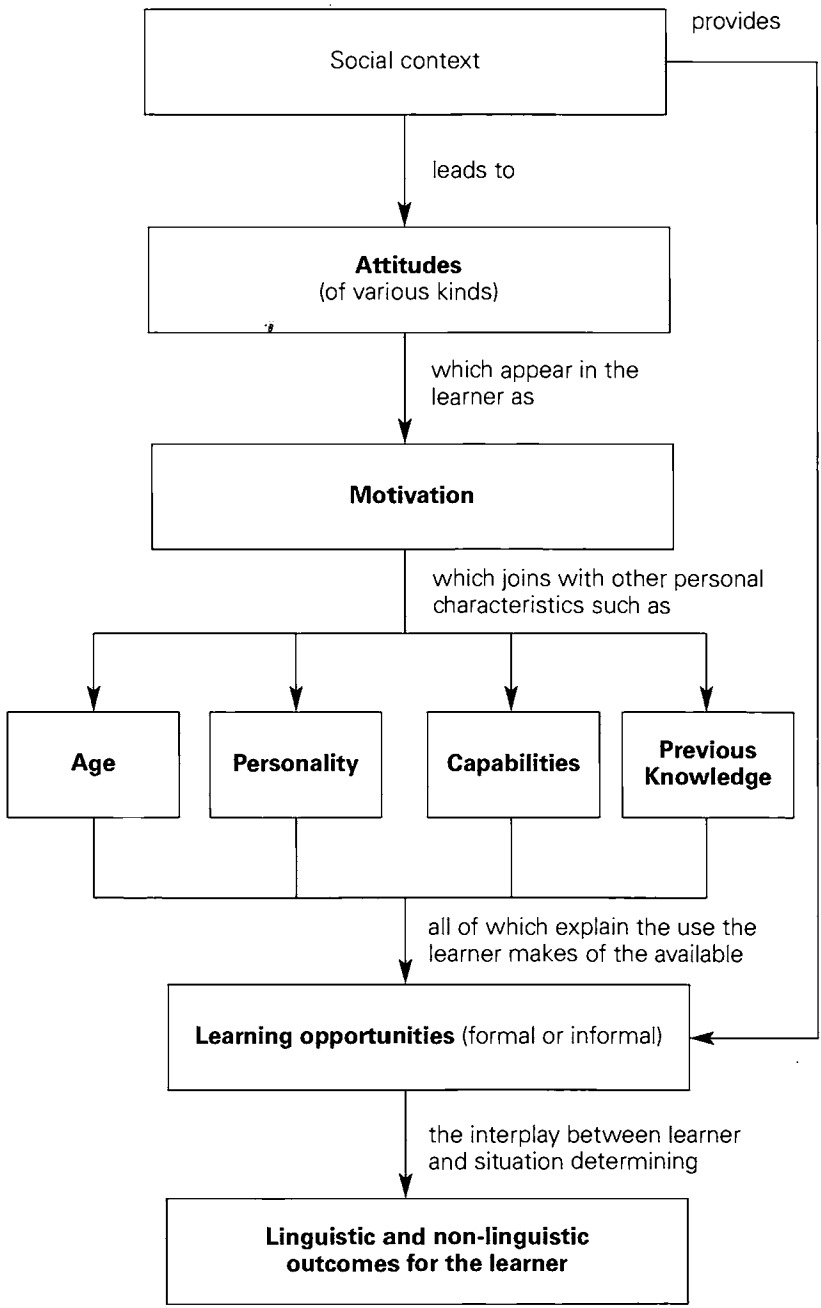


**Fig. 1.1** Spolsky's general model of second language learning (*Source*: Spolsky, 1989, p. 28)

How would we begin to 'evaluate' this or any other model, or even more modestly, to decide that this was a view of the language learning process with which we felt comfortable and within which we wanted to work? This would depend partly on broader philosophical positions; for example, are we satisfied with an account of human learning that sees individual differences as both relatively fixed, and also highly influential for learning? It would also depend on the particular focus of our own interests, within SLL; this particular model seems well-adapted for the study of individual learners, but has relatively little to say about the social relationships in which they engage, for example.

But whatever the particular focus of a given theory, we would expect to find the following:

- Clear and explicit statements of the ground the theory is supposed to cover, and the claims it is making.
- Systematic procedures for confirming or disconfirming the theory, through data gathering and interpretation: a good theory must be testable or falsifiable in some way.
- Not only descriptions of second-language phenomena, but attempts to explain why they are so, and to propose mechanisms for change.
- Last but not least, engagement with other theories in the field, and serious attempts to account for at least some of the phenomena that are 'common ground' in ongoing public discussion (Long, 1990a). The remaining sections of this chapter offer a preliminary overview of numbers of these.

(For fuller discussion of evaluation criteria, *see* McLaughlin 1987, pp. 12–18; Long, 1993; Gregg, 2003.)

## 1.3 Views on the nature of language

### 1.3.1 Levels of language

Linguists have traditionally viewed language as a complex communication system, which must be analysed on a number of levels: **phonology**, **syntax**, **morphology**, **semantics** and **lexis**, **pragmatics**, and **discourse**. (Readers unsure about this basic descriptive terminology will find help from a range of introductory linguistics texts, such as Graddol *et al.*, 1994; Fromkin and Rodman, 1997). They have differed about the degree of separateness or integration of these levels; for example, while Chomsky (1957, p. 17) argued at one time that 'grammar is autonomous and independent of meaning', another tradition initiated by the British linguist, Firth, claims

that 'there is no boundary between lexis and grammar: lexis and grammar are interdependent' (Stubbs, 1996, p. 36). When examining different perspectives on SLL, we will first of all be looking at the levels of language that these linguists attempt to take into account, and the relative degree of priority they attribute to the different levels. (Does language-learning start with words, or with discourse?) We will also examine the degree of integration or separation that they assume, across the various levels. We will find that the control of syntax and morphology is commonly seen as somehow 'central' to language learning, and that most general SLL theories try to account for development in this area. Other levels of language receive much more variable attention, and some areas are commonly treated in a semi-autonomous way, as specialist fields; this is often true for SLL-oriented studies of pragmatics and of lexical development, for example (*see* Kasper and Rose, 2003, on pragmatics; Singleton, 1999, or Nation, 2001, on vocabulary).

### 1.3.2 Competence and performance

Throughout the 20th century, linguists also disagreed in other ways over their main focus of interest and of study. Should this be the collection and analysis of actual attested samples of language in use; for example, by recording and analysing people's speech? Or, should it be to theorize underlying principles and rules that govern language behaviour, in its potentially infinite variety? The linguist, Noam Chomsky, famously argued that it is the business of theoretical linguistics to study and model underlying language **competence**, rather than the **performance** data of actual utterances that people have produced (Chomsky, 1965). By competence, Chomsky is referring to the abstract and hidden representation of language knowledge held inside our minds, with its potential to create and understand original utterances in a given language. As we shall see, this view has been influential in much SLL research.

However, for linguists committed to this dualist position, there are difficulties in studying competence. Language performance data are believed to be imperfect reflections of competence, partly because of the processing complications that are involved in speaking or other forms of language production, and which lead to errors and slips. More importantly, it is believed that, in principle, the infinite creativity of the underlying system can never adequately be reflected in a finite data sample (*see* Chomsky, 1965, p. 18). Strictly speaking, many researchers of language competence believe it can be accessed only indirectly, and under controlled conditions, through different types of tests such as **grammati-**

**cality judgement tests** (roughly, when people are offered sample sentences, which are in (dis)agreement with the rules proposed for the underlying competence, and are invited to say whether they think they are grammatical or not; Sorace, 1996).

This split between competence and performance has *never* been accepted by all linguists, however, with linguists in the British tradition of Firth and Halliday (for example) arguing for radically different models in which this distinction between competence and performance does not appear. In a recent review of this tradition, Stubbs quotes Firth as describing such dualisms as 'a quite unnecessary nuisance' (Firth, 1957, p. 2n, quoted in Stubbs, 1996, p. 44). In the Firthian view, the only option for linguists is to study language in use, and there is no opposition between language as system and observed instances of language behaviour; the only difference is one of perspective.

Of course, the abstract language system cannot be 'read' directly off small samples of actual text, any more than the underlying climate of some geographical regions of the world can be modelled from today's weather (a metaphor of Michael Halliday, quoted in Stubbs, 1996, pp 44–5). The arrival of **corpus linguistics**, in which very large corpora comprising millions of words of running text can be stored electronically and analysed with a growing range of software tools, has revitalized the writing of 'observation-based grammars' (Aarts, 1991), of the integrated kind favoured by Firthian linguistics. 'Work with corpora provides new ways of considering the relation between data and theory, by showing how theory can be grounded in publicly accessible corpus data' (Stubbs, 1996, p. 46). For example, the English corpus-based work of the COBUILD team, directed by John Sinclair, has claimed to reveal 'quite unsuspected patterns of language' (Sinclair, 1991, p. xvii), offering new insights into the interconnectedness of lexis and grammar. Within the field of second language acquisition, recent advances in software development are also making it possible to analyse large databases of learner language, both from a 'bottom-up' perspective (to find patterns in the data) and from a 'top-down' perspective (to test specific hypotheses) (Granger, 1998; MacWhinney, 2000a, 2000b; Rutherford and Thomas, 2001; Granger *et al.*, 2002; Marsden *et al.*, 2002).

In making sense of contemporary perspectives on SLL, then, we need to take account of the extent to which a competence or performance distinction is assumed. This will have significant consequences for the research methodologies associated with various positions; for example, the extent to which these pay attention to naturalistic corpora of learner language, spoken and written, or rely on more controlled and focused – but more indirect – testing of learners' underlying knowledge. For obvious reasons,

theorists' views on the relationship between competence and performance are also closely linked to their view of the language learning process itself, and in particular, to their view of the ways in which **language use** (i.e. speaking or writing a language) can contribute to **language learning** (i.e. developing grammatical or lexical competence in the language).

## 1.4 The language learning process

### 1.4.1 Nature and nurture

Discussions about processes of SLL have always been coloured by debates on fundamental issues in human learning more generally. One of these is the **nature–nurture** debate. How much of human learning derives from innate predispositions, that is, some form of genetic pre-programming, and how much of it derives from social and cultural experiences that influence us as we grow up? In the 20th century, the best-known controversy on this issue as far as first language learning was concerned involved the behaviourist psychologist, B. F. Skinner, and the linguist, Noam Chomsky. Skinner attempted to argue that language in all its essentials could be and was taught to the young child, by the same mechanisms that he believed accounted for other types of learning. (In Skinner's case, the mechanisms were those envisaged by general behaviourist learning theory – essentially, copying and memorizing behaviours encountered in the surrounding environment. From this point of view, children could learn language primarily by imitating the speech of their caretakers. The details of the argument are discussed further in Chapter 2.)

Chomsky, on the other hand, has argued consistently for the view that human language is too complex to be learnt in its entirety, from the performance data actually available to the child; we must therefore have some innate predisposition to expect natural languages to be organized in particular ways and not others. For example, all natural languages have word classes, such as Noun and Verb, and grammar rules that apply to these word classes. It is this type of information which Chomsky doubts children could discover from scratch, in the speech they hear around them. Instead, he argues that there must be some innate core of abstract knowledge about language form, which pre-specifies a framework for all natural human languages. This core of knowledge is currently known as **Universal Grammar** (*see* Chapter 3 for detailed discussion).

For our purposes, it is enough to note that child language specialists now generally accept the basic notion of an innate predisposition to language,

though this cannot account for all aspects of language development, which results from an interaction between innate and environmental factors. That is, complementary mechanisms, including active involvement in language use, are equally essential for the development of communicative competence (*see* Foster-Cohen, 1999).

How does the nature–nurture debate affect SLL theories? If humans are endowed with an innate predisposition for language then perhaps they should be able to learn as many languages as they need or want to, provided (important provisos!) that the time, circumstances and motivation are available. On the other hand, the environmental circumstances for SLL differ systematically from first-language learning, except where infants are reared in multilingual surroundings. Should we be aiming to reproduce the 'natural' circumstances of first-language learning as far as possible for the SLL student? This was a fashionable view in the 1970s, but one which downplayed some very real social and psychological obstacles. In the last 30 years there has been a closer and more critical examination of 'environmental' factors which seem to influence SLL; some of these are detailed briefly below, in Section 1.4.8, and will be elaborated on in a number of following chapters (especially Chapters 6, 7 and 8).

### 1.4.2 Modularity

A further issue of controversy for students of the human brain and mind has been the extent to which the mind should be viewed as **modular** or unitary. That is, should we see the mind as a single, flexible organism, with one general set of procedures for learning and storing different kinds of knowledge and skills? Or, is it more helpfully understood as a bundle of **modules**, with distinctive mechanisms relevant to different types of knowledge (Fodor, 1983; Smith and Tsimpli, 1995; Lorenzo and Longa, 2003)?

The modular view has consistently found support from within linguistics, most famously in the further debate between Chomsky and the child development psychologist, Jean Piaget. This debate is reported in Piatelli-Palmarini (1980), and has been re-examined many times: Johnson (1996, pp. 6–30) offers a helpful summary. Briefly, Piaget argued that language was simply one manifestation of the more general skill of symbolic representation, acquired as a stage in general cognitive development; no special mechanism was therefore required to account for first language acquisition. Chomsky's general view is that not only is language too complex to be learnt from environmental exposure (his criticism of Skinner), it is also too distinctive in its structure to be 'learnable' by general cognitive means. Universal Grammar is thus endowed with its own distinctive

mechanisms for learning (so-called **parameter-setting**; *see* Chapter 3 below).

There are many linguists today who support the concept of a distinctive language module in the mind, the more so as there seems to be a dissociation between the development of cognition and of language in some cases (Bishop and Mogford, 1993; Smith and Tsimpli, 1995; Bishop, 2001; Lorenzo and Longa 2003). As we shall see later in the book, there are also those who argue that language competence itself is modular, with different aspects of language knowledge being stored and accessed in distinctive ways. However, there is still no general agreement on the number and nature of such modules, or how they relate to other aspects of cognition.

### 1.4.3 Modularity and second language learning

The possible role of an innate, specialist language module in SLL has been much discussed in recent years. If such innate mechanisms indeed exist, there are four logical possibilities:

1. They continue to operate during SLL, and make key aspects of SLL possible, in the same way that they make first-language learning possible.
2. After the acquisition of the first language in early childhood, these mechanisms cease to be operable, and second languages must be learnt by other means.
3. The mechanisms themselves are no longer operable, but the first language provides a model of a natural language and how it works, which can be 'copied' in some way when learning a second language.
4. Distinctive learning mechanisms for language remain available, but only in part, and must be supplemented by other means. (From a Universal Grammar point of view, this would mean that Universal Grammar was itself modular, with some modules still available and others not.)

The first position was popularized in the SLL field by Stephen Krashen in the 1970s, in a basic form (*see* Chapter 2). Although Krashen's theoretical views have been criticized, this has by no means led to the disappearance of modular proposals to account for SLL. Instead, this particular perspective has been revitalized by the continuing development of Chomsky's Universal Grammar proposals (Chomsky, 1995, 2000; Cook and Newson, 1996; Herschensohn, 2000; Hawkins, 2001; White, 2003). An example is Sharwood Smith (1994), who argues not only for the continuing contribution of a Universal Grammar 'module' to SLL,

but for a view of SLL that is itself modular, so that a range of distinct learning mechanisms contribute to the learning of different aspects of language. (Thus vocabulary and pragmatics, for example, would be learnt by mechanisms quite different from those which account for grammar learning; Sharwood Smith, 1994, p. 171.) Such Universal Grammar-based views are discussed more fully below in Chapter 3.

On the other hand, thinking about the general learning mechanisms that may be operating at least for adult learners of second languages has also developed considerably further since the original proposals of McLaughlin (1987, pp. 133–53) for example. The work of the cognitive psychologist J. R. Anderson, on human learning from an information-processing perspective, has been applied to various aspects of SLL by different researchers (O'Malley and Chamot, 1990; Towell and Hawkins, 1994; Johnson, 1996). This work is reviewed in detail in Chapter 4 below; here, it is worth pointing out the attempt of Towell and Hawkins in particular to integrate information-processing with Universal Grammar, as two complementary mechanisms that together develop second-language fluency as well as second-language knowledge. There has also been a significant recent revival of interest in behaviourist (associative) theories of learning with reference to language, especially in the work termed 'connectionism', which models SLL processes in computer simulations (N.C. Ellis, 2003). These revitalized generalist theories are discussed further in Chapter 4 below.

### 1.4.4 'Systematicity' and variability in SLL

When the utterances produced by second-language learners are examined and compared with traditionally accepted target language norms, they are often condemned as full of errors or mistakes. Traditionally, language teachers have often viewed these errors as the result of carelessness or lack of concentration on the part of learners. If only learners would try harder, surely their productions could accurately reflect the target language rules that they had been taught! In the mid-20th century, under the influence of behaviourist learning theory, errors were often viewed as the result of 'bad habits', which could be eradicated if only learners did enough rote learning and pattern drilling using target language models.

As will be shown in more detail in Chapter 2, one of the big lessons that has been learnt from the research of recent decades is that though learners' second-language utterances may be deviant by comparison with target language norms, they are by no means lacking in **system**. Errors and mistakes are patterned, and although some regular errors are caused by the influence of the first language, this is by no means true of all of them. Instead, there

is a good deal of evidence that learners work their way through a number of **developmental stages**, from apparently primitive and deviant versions of the second language, to progressively more elaborate and target-like versions. Just like fully proficient users of a language, their language productions can be described by a set of underlying rules; these interim rules have their own integrity and are not just inadequately applied versions of the target language rules.

One clear example, which has been studied for a range of target languages, concerns the formation of negative sentences. It has commonly been found that learners start off by tacking a negative particle of some kind on to the beginning or the end of an utterance (*no you are playing here*). Next, they learn to insert a negative particle of some kind into the verb phrase (*Mariana not coming today*) and, finally, they learn to manipulate modifications to auxiliaries and other details of negation morphology, in line with the full target language rules for negation (*I can't play that one*) (English examples from R. Ellis, 1994, p. 100). This kind of data has commonly been interpreted to show that, at least as far as key parts of the second language grammar are concerned, learners' development follows a common **route**, even if the speed (or **rate**) at which learners actually travel along this common route may be very different.

This **systematicity** in the language produced by second-language learners is of course paralleled in the early stages through which first language learners also pass in a highly regular manner, described more fully in Chapter 2. Towell and Hawkins (1994, p. 5) identify it as one of the key features that SLL theories are required to explain, and throughout the book we will be examining how current explanations handle this feature.

However, learner language (or **interlanguage**, as it is commonly called) is not only characterized by systematicity. Learner language systems are presumably – indeed, hopefully – unstable and in course of change; certainly, they are also characterized by high degrees of **variability** (Towell and Hawkins, 1994, p. 5). Most obviously, learners' utterances seem to vary from moment to moment, in the types of 'errors' that are made, and learners seem liable to switch between a range of correct and incorrect forms over lengthy periods of time. A well-known example offered by R. Ellis (1985a) involves a child learner of English as a second language who seemed to produce the utterances *no look my card, don't look my card* interchangeably over an extended period. Myles *et al.* (1998) produced similar data from a classroom learner of French as a second language, who variably produced forms such as *non animal, je n'ai pas de animal* within the same 20 minutes or so (to say that he did not have a pet; the correct French form should be *je n'ai pas d'animal*). Here, in contrast to the underlying system-

aticity earlier claimed for the development of rules of negation, we see performance varying quite substantially from moment to moment.

Like systematicity, variability is also found in child language development. However, the variability found among second-language learners is undoubtedly more 'extreme' than that found for children; again, variability is described by Towell *et al.* (1996) as a central feature of learner interlanguage that SLL theories have to explain, and we will see various attempts to do this in later chapters (especially Chapters 4 and 8).

### 1.4.5 Creativity and routines in SLL

In the last section, we referred to evidence which shows that learners' interlanguage productions can be described as systematic, at least in part. This systematicity is linked to another key concept, that of originality or **creativity**. Learners' surface utterances can be linked to underlying rule systems, even if these seem primitive and deviant compared with the target language system. It logically follows that learners can produce original utterances, that is, that their rule system can **generate** utterances appropriate to a given context, which the learner has never heard before.

There is, of course, plenty of commonsense evidence that learners can put their second language knowledge to creative use, even at the very earliest stages of SLL. It becomes most obvious that this is happening when learners produce utterances like the highly deviant *non animal* (no animal = 'I haven't got any pet'), which we cited before. This is not an utterance that any native speaker of French would produce (other than, perhaps, a very young child); much the most likely way that the learner has produced it is through applying a very early interlanguage rule for negation, in combination with some basic vocabulary.

But how did this same learner manage to produce the near-target *je n'ai pas de animal*, with its negative particles correctly inserted within the verb phrase, within a few minutes of the earlier form? For us, the most likely explanation is that at this point he was reproducing an utterance that he has indeed heard before (and probably rehearsed), which has been memorized as an unanalysed whole, that is, a formula or a **prefabricated chunk**.

Work in corpus linguistics has led to the increasing recognition that formulas and routines play an important part in everyday language use by native speakers; when we talk, our everyday first-language utterances are a complex mix of creativity and prefabrication (Sinclair, 1991). In first-language acquisition research also, the use of unanalysed chunks by young children has commonly been observed (Wray, 2002; Tomasello, 2003). For first language learners, the contribution of chunks seems limited by pro-

cessing constraints; for older second-language learners, however, memorization of lengthy, unanalysed language routines is much more possible. (Think of those opera singers who successfully memorize and deliver entire arias, in languages they do not otherwise control!)

Analysis of second language data produced by classroom learners, in particular, shows extensive and systematic use of chunks to fulfil communicative needs in the early stages (Myles *et al.*, 1998, 1999). Studies of informal learners also provide some evidence of chunk use. This phenomenon has attracted relatively little attention in recent times, compared with that given to learner creativity and systematicity. However, we believe it is common enough in second language spontaneous production (and not only in the opera house) to receive more sustained attention from SLL theory, and this is now happening to some extent (Weinert, 1995; Wray, 2002).

### 1.4.6 Incomplete success and fossilization

Young children learning their first language embark on the enterprise in widely varying situations around the world, sometimes in conditions of extreme poverty and deprivation, whether physical or social. Yet with remarkable uniformity, at the end of five years or so, they have achieved a very substantial measure of success. Teachers and students know to their cost that this is by no means the case with second languages, embarked on after these critical early years. Few, if any, adult learners ever come to blend indistinguishably with the community of target language 'native speakers'; most remain noticeably different in their pronunciation, and many continue to make grammar mistakes and to search for words, even when well-motivated to learn, after years of study, residence or work in contact with the target language.

If the eventual aim of the SLL process is to become indistinguishable from native speaker usage, therefore, it is typified by **incomplete success**. Indeed, while some learners go on learning, and arrive very close to the target language norm, others seem to cease to make any visible progress, no matter how many language classes they attend, or how actively they continue to use their second language for communicative purposes. The term **fossilization** is commonly used to describe this phenomenon, when a learner's second language system seems to 'freeze', or become stuck, at some more or less deviant stage.

These phenomena of incomplete success and fossilization are also significant 'facts' about the process of SLL, which any serious theory must eventually explain. As we will see, explanations of two basic types have been offered. The first group of explanations are **psycholinguistic**: the

language-specific learning mechanisms available to the young child simply cease to work for older learners, at least partly, and no amount of study and effort can recreate them. The second group of explanations are **socio-linguistic**: older second language learners do not have the social opportunities, or the motivation, to identify completely with the native speaker community, but may instead value their distinctive identity as learners or as members of an identifiable minority group. These ideas are discussed in more detail in the relevant chapters that follow.

### 1.4.7 Cross-linguistic influences in SLL

Everyday observation tells us that learners' performance in a second language is influenced by the language, or languages, that they already know. This is routinely obvious from learners' 'foreign accent'; that is, pronunciation that bears traces of the phonology of their first language. It is also obvious when learners make certain characteristic mistakes, such as when a native speaker of English says something in French like *je suis douze*, an utterance parallel to the English 'I am twelve'. (The correct French expression would be *j'ai douze ans* = I have twelve years.)

This kind of phenomenon in learner productions is often called **language transfer**. But how important is it, and what exactly is being transferred? Second language researchers have been through several 'swings of the pendulum' on this question, as Gass (1996) puts it, and as we shall see in a little more detail in Chapter 2. Behaviourist theorists viewed language transfer as an important source of error and interference in SLL, because first-language 'habits' were so tenacious and deeply rooted. The interlanguage theorists who followed downplayed the influence of the first language in SLL however, because of their preoccupation with identifying creative processes at work in second language development. They pointed out that many second language errors could not be traced to first language influence, and they were primarily concerned with discovering patterns and developmental sequences on this creative front.

Theorists today, as we shall see, generally accept once more that cross-linguistic influences play an important role in SLL. However, we will still find widely differing views on the extent and nature of these influences. In Chapter 5 below we discuss multilingual research on the acquisition of a range of second languages by adult migrants in Europe, conducted by a team sponsored by the European Science Foundation (ESF). These ESF researchers argue that the early grammars produced by learners in their multilingual study show little trace of first language influence, though they

do not discount the likelihood of increasing variation due to first-language influence as second-language grammars become more complex. Other researchers have claimed that learners with different first languages progress at somewhat different rates, and even follow different acquisitional routes, at least in some areas of the target grammar (Keller-Cohen, 1979; Zobl, 1982, both quoted in Gass, 1996, pp. 322–3).

From a Universal Grammar perspective, the language transfer problem is looked at somewhat differently. If second language learners have continuing **direct** access to their underlying Universal Grammar, first language influence will affect only the more peripheral areas of second language development. If, on the other hand, learners' only access to Universal Grammar is **indirect**, via the working example of a natural language that the first language provides, then first language influence lies at the heart of SLL. In Chapter 3 we will review some of the evidence for these different views current among different Universal Grammar-inspired researchers, and we will see that the dichotomy between direct or indirect access is being replaced by more complex hypotheses about the role of the first language in second language acquisition.

### 1.4.8 The relationship between second language use and SLL

In Section 1.3.2 above, we considered the distinction between language **competence** and **performance**, which many linguists have found useful. Here, we look more closely at the concept of performance, and in particular, look at the possible relationship between using (i.e. performing in) a second language, and learning (i.e. developing one's competence in) that same language.

We should note first of all, of course, that 'performing' in a language not only involves speaking it. Making sense of the language data that we hear around us is an equally essential aspect of performance. Indeed, it is basic common ground among all theorists of language learning, of whatever description, that it is necessary to interpret and to process incoming language data in some form, for normal language development to take place.

There is thus a consensus that language **input** of some kind is essential for normal language learning. In fact, during the late 1970s and early 1980s, the view was argued by Stephen Krashen and others that input (at the right level of difficulty) was all that was necessary for second language acquisition to take place (Krashen, 1982, 1985; *see* fuller discussion of the **comprehensible input hypothesis** in Chapter 2). More recent theorists have viewed Krashen's early formulation as inadequate. However, it has

inspired a range of theory-building and associated empirical research about the role of input in SLL, which we review in Chapter 6 (Long, 1996; Carroll, 2000; VanPatten, 2002).

Krashen was unusual in not seeing any central role for language production in his theory of second language acquisition. Most other theoretical viewpoints support in some form the commonsense view that speaking a language is helpful for learning it, though they offer a wide variety of explanations as to why this should be the case. For example, behaviourist learning theory saw regular (oral) practice as helpful in forming correct language 'habits'. This view became less popular, as part of linguists' general loss of interest in behaviourist thinking, although it is enjoying something of a revival because of developing interest in **connectionism**; *see* Chapter 4.

Other contemporary theorists continue to lay stress on the 'practice' function of language production, especially in building up **fluency** and **control** of an emergent second language system. For example, information-processing theorists commonly argue that language competence consists of both a **knowledge** component ('knowing that') and a **skill** component ('knowing how'). While they may accept a variety of possible sources for the first component, ranging from parameter-setting in a Universal Grammar framework (Towell and Hawkins, 1994) to systematic classroom instruction (Johnson, 1996), researchers in this perspective agree in seeing a vital role for second language use or second language performance in developing the second, skill component (*see* Chapter 4 for fuller discussion).

An even more strongly contrasting view to that of Krashen is the so-called **comprehensible output** hypothesis, argued by Swain and colleagues (Swain, 1985; Swain and Lapkin, 1995). Swain points out that much incoming second language input is comprehensible, without any need for a full grammatical analysis. If we do not need to pay attention to the grammar, in order to understand the message, why should we be compelled to learn it? On the other hand, when we try to say something in our chosen second language, we are forced to make grammatical choices and hypotheses in order to put our utterances together. The act of speaking forces us to try out our ideas about how the target grammar actually works, and of course gives us the chance of getting some feedback from interlocutors who may fail to understand our efforts.

So far in this section, we have seen that theorists can hold different views on the contribution both of language **input** and language **output** to language learning. However, another way of distinguishing among current theories of SLL from a 'performance' perspective concerns their view of second-language **interaction** – when the speaking and listening

in which the learner engages is viewed as an integral and mutually influential whole, such as in everyday conversation. Two major perspectives on interaction are apparent: one psycholinguistic, one sociolinguistic.

From a psycholinguistic point of view, second language interaction is mainly interesting because of the opportunities it seems to offer to individual second language learners, to fine-tune the language input they are receiving. This ensures that the input is well adapted to their internal needs (i.e. to the present state of development of their second language knowledge). What this means is that learners need the chance to talk with native speakers in a fairly open-ended way, to ask questions and to clarify meanings when they do not immediately understand. Under these conditions, it is believed that the utterances that result will be at the right level of difficulty to promote learning: in Krashen's terms, they will provide true 'comprehensible input'. Conversational episodes involving the regular **negotiation of meaning** have been intensively studied by many researchers influenced by Krashen (e.g. Long, 1996), whose work is discussed in Chapter 6.

Interaction is also interesting to linguistic theorists, because of recent controversies over whether the provision of **negative evidence** is necessary or helpful for second language development. By 'negative evidence' is meant some kind of input that lets the learner know that a particular form is *not* acceptable according to target language norms. In second language interaction this might take different forms, ranging from a formal correction offered by a teacher, to a more informal rephrasing of a learner's second language utterance, offered by a native-speaking conversational partner.

Why is there a controversy about negative evidence in SLL? The problem is that correction often seems ineffective – and not only because second language learners are lazy. It seems that learners often cannot benefit from correction, but continue to make the same mistakes however much feedback is offered. For some current theorists, any natural language must therefore be learnable from **positive** evidence alone, and corrective feedback is largely irrelevant. Others continue to see value in corrections and negative evidence, though it is generally accepted that these will be useful only when they relate to 'hot spots' currently being restructured in the learner's emerging second language system, or to its more peripheral aspects.

These different (psycho)linguistic views have one thing in common, however; they view the learner as operating and developing a relatively autonomous second language system, and they see interaction as a way of feeding that system with more or less fine-tuned input data, whether positive or negative. **Sociolinguistic** views of interaction are very different.

Here, the language learning process is viewed as essentially social; both the identity of the learner, and his or her language knowledge, are collaboratively constructed and reconstructed in the course of interaction. The details of how this is supposed to work vary from one theory to another, as we shall see. Some theorists stress a broad view of the SLL process as an apprenticeship into a range of new discourse practices (Hall, 1995); others are more concerned with analysing the detail of interaction between more expert and less expert speakers, to determine how the learner is **scaffolded** into using (and presumably learning) new second-language forms (Ohta, 2001). These more social interpretations of second language interaction and its consequences for SLL are examined in some detail in Chapters 7 and 8.

## 1.5 Views of the language learner

Who is the second language learner, and how is he or she introduced to us, in current SLL research?

We have already made it clear that the infant bilingual (i.e. a child who is exposed to more than one language from birth and acquires them more or less simultaneously in the first few years of life) is not the subject of this book. Instead, 'second language' research generally deals with learners who embark on the learning of an additional language, at least some years after they have started to acquire their first language. This learning may take place formally and systematically, in a classroom setting; or it may take place through informal social contact, through work, through migration or other social forces that bring speakers of different languages into contact and make communication a necessity.

So, second language learners may be children, or they may be adults; they may be learning the target language formally in school or college, or 'picking it up' in the playground or the workplace. They may be learning a highly localized language, which will help them to become insiders in a local speech community; or the target language may be a language of wider communication relevant to their region, which gives access to economic development and public life.

Indeed, in the first part of the 21st century, the target language is highly likely to be English; a recent estimate suggests that while around 375 million people speak English as their first language, another billion or so are using it as a second language, or learning to do so (Graddol, 1997, p. 10). Certainly it is true that much research on SLL, whether with children or adults, is concerned with the learning of English, or with a small number of other languages (French, German, Japanese, Spanish . . .). There are many

multilingual communities today (e.g. townships around fast-growing mega-cities) where SLL involves a much wider range of languages. However, these have been comparatively little studied.

It is possible to distinguish three main points of view, or sets of priorities, among SLL researchers as far as the learner is concerned: the linguistic perspective, which is concerned with modelling language structures and processes within the mind; the social psychological perspective, which is concerned with modelling individual differences among learners, and their implications for eventual learning success; and the socio-cultural perspective, which is concerned with learners as social beings and members of social groups and networks. These different perspectives are briefly introduced in following sections.

### 1.5.1 The learner as language processor

Linguists and psycholinguists have typically been concerned primarily with analysing and modelling the **inner mental mechanisms** available to the individual learner, for processing, learning and storing new language knowledge. As far as language learning in particular is concerned, their aim is to document and explain the developmental route along which learners travel. (We have already seen that the **route** of development is the sequence of linguistic stages through which learners seem to pass.) Researchers for whom this is the prime goal are less concerned with the speed or **rate** of development, or indeed with the degree of ultimate second language success. Thus they tend to minimize or disregard social and contextual differences among learners; their aim is to document universal mental processes available to all normal human beings.

As we shall see, however, there is some controversy among researchers in this psycholinguistic tradition on the question of **age**. Do child and adult second language learners learn in essentially similar ways? Or, is there a **critical age** that divides younger and older learners, a moment when early learning mechanisms atrophy and are replaced or at least supplemented by other compensatory ways of learning? The balance of evidence has been interpreted by Long (1990b) in favour of the existence of such a cut-off point, and many other researchers agree with some version of a view that 'younger = better in the long run' (Singleton, 1995, p. 3). Other researchers argue that this debate is far from resolved (for an overview, *see* Birdsong, 1999). However, explanations of why this should be are still provisional; *see* Chapter 3 below.

## 1.5.2 Differences between individual learners

Real-life observation quickly tells us, however, that even if second-language learners can be shown to be following a common developmental route, they differ greatly in the degree of success that they achieve. Social psychologists have argued consistently that these differences in learning outcomes must be due to **individual differences** among learners, and many proposals have been made concerning the characteristics that supposedly cause these differences.

In a two-part review, Gardner and MacIntyre (1992, 1993) divide what they see as the most important learner traits into two groups: the **cognitive** and the **affective** (emotional). Here, we follow their account and summarize very briefly the factors claimed to have the most significant influence on SLL success. For fuller treatment of this social psychological perspective on learner difference, we refer the reader to sources such as R. Ellis, 1994, pp. 467–560; Skehan, 1998; Dörnyei, 2001a, 2001b; Robinson, 2001, 2002; Dörnyei and Skehan, 2002.

### 1.5.2.1 Cognitive factors

**Intelligence**: not very surprisingly perhaps, there is clear evidence that second-language students who are above average on formal measures of intelligence or general academic attainment tend to do well in SLL, at least in formal classroom settings.

**Language aptitude**: is there really such a thing as a 'gift' for language learning, distinct from general intelligence, as folk wisdom often holds? The best known formal test of language aptitude was designed in the 1950s by Carroll and Sapon (1959, in Gardner and MacIntyre, 1992, p. 214). This 'Modern Language Aptitude Test' assesses a number of sub-skills believed to be predictive of SLL success: (a) phonetic coding ability; (b) grammatical sensitivity; (c) memory abilities; and (d) inductive language learning ability. In general, learners' scores on this and other similar tests do indeed 'correlate with ... achievement in a second language' (Gardner and MacIntyre, 1992, p. 215), and in a range of contexts measures of aptitude have been shown to be one of the strongest available predictors of success (Harley and Hart, 1997).

**Language learning strategies**: do more successful language learners set about the task in some distinctive way? Do they have at their disposal some special repertoire of ways of learning, or **strategies**? If this were true, could these even be taught to other, hitherto less successful learners? Much research has been done to describe and categorize the

strategies used by learners at different levels, and to link strategy use to learning outcomes; it is clear that more proficient learners do indeed employ strategies that are different from those used by the less proficient (Oxford and Crookall, 1989, quoted in Gardner and MacIntyre, 1992, p. 217). Whether the strategies cause the learning, or the learning itself enables different strategies to be used, has not been fully clarified, however. We look more closely at learning strategies and their role in acquisition in Chapter 4.

#### 1.5.2.2 Affective factors

**Language attitudes**: social psychologists have long been interested in the idea that the attitudes of the learner towards the target language, its speakers and the learning context, may all play some part in explaining success or lack of it. Research on second language attitudes has largely been conducted within the framework of broader research on motivation, of which attitudes form one part.

**Motivation**: for Gardner and MacIntyre (1993, p. 2), the motivated individual 'is one who wants to achieve a particular goal, devotes considerable effort to achieve this goal, and experiences satisfaction in the activities associated with achieving this goal'. So, motivation is a complex construct, defined by three main components: 'desire to achieve a goal, effort extended in this direction, and satisfaction with the task' (Gardner and MacIntyre, 1993, p. 2). Gardner and his Canadian colleagues have carried out a long programme of work on motivation with English Canadian school students learning French as a second language, and have developed a range of formal instruments to measure motivation. Over the years consistent relationships have been demonstrated between language attitudes, motivation and second-language achievement, with the strongest relationships obtaining between motivation and achievement (Masgoret and Gardner, 2003); these relationships are complex, however, as the factors interact and influence each other. Dornyei and Otto (1998, p. 48, cited in Dörnyei, 2001b, p. 86) recognized the dynamic and changing nature of motivation over time, in their so-called 'process model' of second-language motivation.

**Language anxiety and willingness to communicate**: the final learner characteristic that Gardner and MacIntyre consider to hold a relationship with learning success is language anxiety (and its obverse, self-confidence). For these authors, language anxiety 'is seen as a stable personality trait referring to the propensity for an individual to react in a nervous manner when speaking . . . in the second language' (Gardner and MacIntyre, 1993, p. 5). It is typified by self-belittling, feelings of

apprehension, and even bodily responses such as a faster heartbeat! The anxious learner is also less willing to speak in class, or to engage target language speakers in informal interaction. Gardner and MacIntyre cite many studies that suggest that language anxiety has a negative relationship with learning success, and some others that suggest the opposite, for learner self-confidence. More recently, a broad overarching construct 'willingness to communicate' has been proposed as a mediating factor in second-language use and SLL (MacIntyre *et al.*, 2002). This construct includes anxiety and confidence alongside a range of other variables which together produce 'readiness to enter into discourse at a particular time with a specific person or persons, using a L2' (MacIntyre *et al.*, 1998, p. 547, cited in Dornyei and Skehan, 2002, p. 13).

### 1.5.3 The learner as social being

The two perspectives on the learner that we have highlighted so far have concentrated (a) on universal characteristics and (b) on individual characteristics. But it is also necessary to view the second language learner as essentially a social being, taking part in structured social networks and social practices, and we will encounter later in this book some of the researchers who do just that. Indeed, after some decades when psycholinguistic and individualist perspectives on second language learners predominated, recent research is redressing the balance, as will be seen in Chapters 7 and 8 below.

Interest in learners as social beings will lead to concern with their relationship with the social context in which their language learning is taking place, and the structuring of the learning opportunities that this makes available. The learning process itself may also be viewed as essentially social, and inextricably entangled in second language use and second language interaction. Two major characteristics distinguish this social view of the learner from the 'individual differences' view that we have just dipped into.

First, interest in the learner as a social being leads to concern with a range of socially constructed elements in learners' identities, and their relationship with learning – so **social class**, **power**, **ethnicity** and **gender** make their appearance as potentially significant for SLL research. Second, the relationship between the individual learner and the social context of learning is viewed as **dynamic**, reflexive and constantly changing. The 'individual differences' tradition saw that relationship as being governed by a bundle of learner traits or characteristics (such as aptitude, anxiety, etc.), which were relatively fixed and slow to change. More socially oriented researchers view motivation, learner anxiety, etc., as being constantly

reconstructed through ongoing second-language experience and second-language interaction.

## 1.6 Links with social practice

Is SLL theory 'useful'? Does it have any immediate practical applications in the real world, most obviously in the second language classroom? In our field, theorists have been and remain divided on this point. Beretta and colleagues (1993) argued for 'pure' theory in SLL, uncluttered by requirements for practical application. Van Lier (1994), Rampton (1995b) and others have argued for a socially engaged perspective, where theoretical development is rooted in, and responsive to, social practice and language education, in particular. Yet others have argued that second language teaching in particular should be guided systematically by SLL research findings (Krashen, 1985).

This tension has partly been addressed by the emergence of 'instructed language learning' as a distinct sub-area of research (*see* recent surveys by Spada, 1997; Cook, 2001; Robinson, 2001, 2002; Doughty, 2003). However, much of the theorizing and empirical evidence reviewed in this book cannot be captured within this particular sub-field. We think that language teachers, who will form an important segment of our readership, will themselves want to take stock of the relations between the theories we survey, and their own beliefs and experiences in the classroom. They will, in other words, want to make some judgement on the 'usefulness' of theorizing in making sense of their own experience and their practice, while not necessarily changing it. In our general conclusions to this book, therefore, we end by some brief consideration of the connections we ourselves perceive between learning theory and classroom practice.

## 1.7 Conclusion

This chapter has aimed to introduce a range of recurrent concepts and issues that most theorists agree will have to be taken into account, if we are to arrive eventually at any complete account of SLL. In Chapter 2 we provide a brief narrative account of the recent history of SLL research, plus summary descriptions of some of the more specific language learning phenomena that any theory must explain. We then move in remaining chapters of the book to a closer examination of a number of broad perspectives, or families of theories, with their distinctive views of the key questions that must be answered and the key phenomena that need to be explained.