

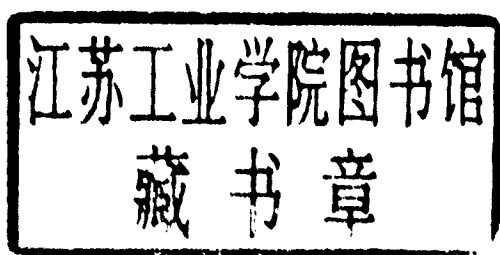
MODERN LINGUISTICS

# LINGUISTICS AND SECOND LANGUAGE ACQUISITION

VIVIAN COOK

# Linguistics and Second Language Acquisition

Vivian Cook



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# Preface

This book arose out of the problems of teaching second language acquisition in a linguistics department, when existing books were not written from a linguistics perspective. I am grateful to the annual generations of students who have lived with the evolving ideas and organisation of this material. I am also indebted to the following people who provided vital reactions to the various stages of its development: Noël Burton-Roberts, Rod Ellis, Hans Dechert, Roger Hawkins, Eric Kellerman, Patsy Lightbown, Nanda Poulisse, Clive Matthews, Mike Sharwood-Smith, Vera Regan, and Lydia White; needless to say, few of them would agree with everything here, particularly the interpretation of their own work. The book would never have been finished without the constant inspiration of David Murray, Charlie Parker and, as always, Sidney Bechet.

VIVIAN COOK

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# List of Abbreviations

ACT	Adaptive Control of Thought
AGR	Agreement
AH	Accessibility Hierarchy
AP	Adjective phrase (A")
BSM	Bilingual Syntax Measure
CA	Contrastive Analysis
COALA	Computer Aided Linguistic Analysis
CP	Complement phrase (C")
CS	Communicative strategies
ECP	Empty Category Principle
EFL	English as a Foreign Language
E-language	External language
ESL	English as a Second Language
GB	Government/Binding (theory)
IL	Interlanguage
I-language	Internal language
INFL(I)	Inflection
IP	Inflection phrase (I")
L1	First language
L2	Second language
L3	Language other than L1 or L2
LAD	Language Acquisition Device
LARSP	Language Assessment Remediation and Screening Procedure
LFG	Lexical-Functional Grammar
LV	Local Variable
MAL	Micro-Artificial Language
N	Noun
Neg	Negation
NL	Native Language
NP	Noun phrase (N")
P	Preposition
PBD	Principal Branching Direction
PP	Prepositional phrase (P")
RRC	Restrictive relative clause
SLA	Second language acquisition
SLOPE	Second Language Oral Production English
SOV	Subject, Object, Verb (order)
SVO	Subject, Verb, Object (order)
TL	Target language
TNS	Tense



<b>TPR</b>	<b>Total Physical Response (teaching method)</b>
<b>UG</b>	<b>Universal Grammar</b>
<b>V</b>	<b>Verb</b>
<b>VOS</b>	<b>Verb, Object, Subject (order)</b>
<b>VP</b>	<b>Verb phrase (V")</b>
<b>ZISA</b>	<b>Zweisprachenerwerb italienischer und spanischer Arbeiter</b>

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# 1 The Background to Current Second Language Acquisition Research

## 1.1 THE GOALS OF SECOND LANGUAGE RESEARCH

Relating second language acquisition to linguistics means looking at the nature of both linguistics and second language research. Chomsky (1986a, p. 3) defined three basic questions for linguistics:

### **(i) What Constitutes Knowledge of Language?**

The prime goal of linguistics is to describe the language contents of the human mind; its task is to represent what native speakers know about language – their linguistic competence. Achieving this goal means producing a fully explicit representation of the speaker's competence, that is to say, a generative grammar of a 'particular language'. From the outset, this question defines linguistics as based on the internal reality of language in the individual mind rather than on the external reality of language in society.

### **(ii) How is Knowledge of Language Acquired?**

A second goal for linguistics is discovering how knowledge of language comes into being – how linguistic competence is acquired by the human mind. Chomsky proposes to achieve this goal by describing how innate principles of the child's mind create linguistic competence, that is to say how the child's mind turns the language input it encounters into a grammar by using its built-in capabilities. Phrased in another way, knowledge of language is not only created by the human mind but also constrained by its structure.

### **(iii) How is Knowledge of Language Put to Use?**

Language knowledge can be used in many ways – for communicating, for planning, for worship, for declaring war, for saving the rain forest, or for achieving the myriad of goals human beings may have. Discovering how knowledge of language is used means, according to Chomsky, seeing how it relates to thinking, comprehension, and communication. This involves

both the psychological processes through which the mind understands and produces speech, and the processes through which speech is adapted to an actual moment of speaking in a particular context of situation. To some, this area of use is covered by the speakers' 'communicative competence' (Hymes, 1972) – their ability to adapt language to communicate with other people; to others, use is covered by 'pragmatic competence' – knowing how language relates to situation for any purpose the speakers intend (Chomsky, 1980).

For second language research these questions need to be rephrased to take in knowledge of more than one language, in other words as multilingual rather than monolingual goals.

### **(i) What Constitutes Knowledge of Languages?**

A person who speaks two languages knows two grammars; two systems of language knowledge are present in the same mind. One goal of second language research is to describe grammars of more than one language simultaneously existing in the same person.

### **(ii) How is Knowledge of Languages Acquired?**

A person who knows two languages has been through the acquisition process twice. Second Language research must explain the means by which the mind can acquire more than one grammar. It must decide whether the ways of acquiring a second language differ from those for acquiring a first, or whether they are aspects of the same acquisition process.

### **(iii) How is Knowledge of Languages Put to Use?**

People who know two languages can decide how to use them according to where they are, what they are talking about, who they are talking to, and so on. Describing their language use means showing how knowledge of two or more languages is used by the same speaker psychologically and sociologically. As Labov (1970a, p. 21) points out, 'Research in stable bilingual communities indicates that one natural unit of study may be the linguistic repertoire of each speaker rather than individual languages'.

Linguistic approaches to second language (L2) research deal with minds that are acquiring, or have acquired, knowledge of more than one language. The three questions are central to the relationship between linguistics and second language research. Second language research answers the knowledge question (1) by describing the grammars of the second language speaker, their differences and similarities from that of a monolingual speaker, and how they interact with each other. The importance of second

language research lies not in its account of the knowledge and acquisition of the L2 in isolation, but its account of the second language present and acquired in a mind that already knows a first – the state of knowledge of two languages I have called ‘multi-competence’ (Cook, 1991b). Second language research answers the acquisition question (2) by seeing how this complex state of knowledge of two languages originates. It answers the use question (3) by examining how knowledge of both languages is put to use. The present book covers approaches to second language research that are in some way related to this agenda for linguistics. The three questions will be referred to throughout as the knowledge question, the acquisition question, and the use question.

The main foundations of this book are then the Chomskyan goals for linguistics, in which knowledge of language is the central issue. This emphasis distinguishes it from, for example functionalist theories of linguistics that combine language as a system of meaning with language as an aspect of social reality (Halliday and Hasan, 1985). One reason for concentrating on the Chomskyan view is its central position as the most comprehensive theory in current linguistics, encompassing both description and acquisition within the same framework, and as the central linguistic theory against which other theories measure themselves. Another reason is that linguistic theories such as functionalism have sadly not been applied to L2 learning on a comparable scale; systemic grammar for example (Halliday, 1975; 1985a), though sporadically mentioned at a general level, has hardly figured in actual L2 research. Tomlin (1990) provides an overview of functionalist work on Second Language learning, within a broader sense of functionalism.

The assumption implicit in the very title of this book is that linguistics is indeed relevant to second language acquisition research. Second language learning takes many forms and occurs in many situations; in particular second languages are not only picked up by learners in natural circumstances similar to first language acquisition but are also taught in classrooms. Hence there is often a tension between approaches to second language research that see ideas about language and about language acquisition as directly relevant and approaches that see the ways in which the mind acquires other types of knowledge as more fruitful than the questions of linguistics. Given the diversity of L2 learners and L2 learning, obviously neither position is completely true, as we shall see throughout. This book takes the ‘modular’ view that the knowledge of a second language is an aspect of language knowledge rather than of some other type of knowledge.

Chomsky divides linguistics into *E-language* (External language) and *I-language* (Internal language) approaches. The E-language tradition in linguistics is concerned with behaviour and with social convention, in short with language as an external social reality; hence its methodology is based

on collecting large samples of spoken language data. The grammar of the language is derived by working out the 'structures' or patterns in these data; 'a grammar is a collection of descriptive statements concerning the E-language' (Chomsky, 1986a, p. 20). The I-language tradition in linguistics on the other hand is concerned with mental reality and with knowledge, in short with representing the internal aspects of the mind: it is based on linguistic competence. Observable behaviour is only one way of getting into these non-observable aspects. I-language research may use any type of data that is available to it – 'perceptual experiments, the study of acquisition and deficit or of partially invented languages such as Creoles, or of literary usage or language change, neurology, biochemistry and so on' (Chomsky, 1986a, pp. 36–7). In practice its easiest source of data is enquiring whether single sentences conform to the speaker's knowledge of language – is "John is eager to please" a sentence of English, say? The I-language approach to linguistics is inherent in the goals specified above; 'linguistics is the study of I-languages, knowledge of I-languages, and the basis for attaining this knowledge' (Chomsky, 1987). This book accepts linguistics as the study of I-language; this serves on the one hand to provide its perspective on the issues of second language acquisition, on the other to delimit the bounds of what it is *not* concerned with.

A related distinction that underlies much linguistics is that between 'competence' and 'performance' (Chomsky, 1965b). In an I-language theory the speaker's knowledge of language is called 'linguistic competence'; the speaker's use of this knowledge is 'performance' – 'the actual use of language in concrete situations' (Chomsky, 1965b, p. 4). Competence is a state of the speaker's mind – what he or she knows – separate from performance – what he or she does while producing or comprehending language. The knowledge that constitutes linguistic competence is only available to the speaker through processes of one type or another; competence is put to use through performance. An analogy can be made to the Highway Code regulations for driving in the UK. The driver probably knows the Code and has indeed been tested on it to obtain a driving licence; in actual driving, however, the driver has to relate the Code to a continuous flow of changing circumstances, and may even break it from time to time. Knowing the Highway Code is not the same as driving along a street; the relationship between the Code the person knows and actual driving is complex and indirect. So phrasing the first question for linguistics in terms of knowledge rather than use is a commitment to a competence model based on knowledge rather than to a performance model based on process. The other two questions of acquisition and use presuppose an answer to the competence question. For second language research the first question is then what it means to know a second language – what is the knowledge of language of a person who knows English and

Japanese, or French and Arabic, or any other combination involving more than one language in the same mind?

The competence/performance distinction has fundamental methodological implications for research. Competence as knowledge in the mind cannot be tapped directly but only through various forms of performance. Often these may distort our view of competence; the inefficiencies of memory, the complex psychological processes of production, even the physical limitations of breathing, all affect performance but are irrelevant to the underlying knowledge of language. Studying examples of the speaker's actual performance is not a good guide to competence; as with driving, any actual speech is bound up with the complexities of the situation and of mental processing. As a native speaker, I know English but it would be hard to establish my knowledge solely from the limited examples of what I actually say. The methodological difficulty for research is how to deduce knowledge of language from examples of performance of different kinds, tricky enough in the first language, but still more difficult for second language research, as we shall repeatedly find.

Before proceeding further, it is necessary to establish some of the terms to be used. The term 'second language' (L2) is used to mean a language acquired by a person in addition to the first language (L1); in other words no distinction is made here between 'second' and 'foreign' language learning. The learner's second language will sometimes be referred to as the target language (TL), that is, the language that the learner is heading towards. Second language *acquisition* (SLA) is not distinguished from second language *learning* (L2 learning), as is done, for example, in Krashen's theory to be described later. The general area of linguistics concerned with all three multilingual goals is 'second language research'; the specific area concerned with acquisition is 'second language acquisition (SLA) research'. When it is necessary to give examples of sentences that would be ungrammatical if uttered by natives, these are marked with an asterisk. Phonetic script is avoided, except for incidental examples when a point depends on it.

## 1.2 THE SCOPE OF THIS BOOK

The book attempts to present some major aspects of SLA research in relationship to linguistics for those concerned with the discipline of SLA research. While it assumes that the reader has an interest in linguistics and is generally familiar with the ideas presented in an introductory course or textbook, it does not assume a knowledge of the diverse background concepts used in SLA research; explanations of these are normally interwoven here with the discussion of SLA. The empirical basis of research is



emphasised by presenting the actual methodology and results rather than just the conclusions or interpretations, enabling readers to judge for themselves the validity of the conclusions that are reached. In one dimension, the progression is, broadly speaking, historical, starting in this chapter with the earlier work, ending in the last two chapters with contrasting theories around which work is currently taking place. In another dimension, it surveys a range of SLA research methods and techniques, moving for instance from observational data in Chapter 2 to experiments in Chapter 7 to grammaticality judgements in Chapter 9. In a third dimension, it considers the crucial problems involved in relating SLA to linguistics, looking for example at the problem of syntactic models in Chapter 2, the relationship to neighbouring disciplines in Chapter 4, and the issues involved in using the Universal Grammar (UG) theory in Chapter 9. Finally, Chapter 10 presents an account of the main psychological alternatives to the linguistics approach.

The book is thus selective within SLA research, describing the work that can be related to I-language linguistics rather than the vast array of approaches that are currently being adopted in this field. Chapter 2 deals with the first major studies of SLA based on data from the speech of L2 learners, selecting the areas of grammatical morphemes and negation. Chapters 2 to 5 look at general explanations of second language acquisition based to a greater or lesser extent on this type of data. Chapter 3 deals with the Input Hypothesis of Stephen Krashen. Chapter 4 concerns the creole-based studies conducted by Roger Andersen and John Schumann and with theories concerned with variation. Chapter 5 looks at the stages approach put forward by Manfred Pienemann as the Multidimensional Model and the Teachability Hypothesis and at their links to psychological processing. Chapter 6 turns to alternative approaches that investigate the learner's internal strategies for learning and communication, particularly the learning strategies of J. Michael O'Malley and Ann Chamot and the compensatory strategies of Eric Kellerman and Nanda Poulisse. Chapter 7 starts looking at data from other areas of syntax, particularly relative clauses. Chapter 8 goes on to the acquisition of syntax in the principles and parameters model of syntax, concentrating on the pro-drop parameter, binding, and the head direction parameter. Chapter 9 looks at explanations of this in terms of the UG theory of language acquisition, particularly subadjacency and word order. Chapter 10 contrasts the linguistic approaches of other chapters with those based on speech processes and the psychological theories of John Anderson and Brian MacWhinney.

By and large the treatment does not aim at completeness of coverage but concentrates on representative areas and pieces of research. Each chapter aims to present the area covered as fairly as possibly through detailed description of key pieces of research, to provide a criticism of it in terms of