

Contemporary Approaches to Second Language Acquisition

Edited by
María del Pilar García Mayo
María Junkal Gutierrez Mangado
and María Martínez Adrián

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In memory of Teresa Pica (1945-2011),
outstanding researcher and warm friend

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Foreword

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This is an ambitious volume: Second Language Acquisition (SLA) research has grown exponentially in the past decade or so, not only in terms of the number of empirical studies investigating an increasingly wide range of phenomena and languages, but also in terms of the theoretical approaches productively used in the field. As a result, SLA researchers have become more sophisticated in the kind of questions they are asking and in the methodological tools they use in order to investigate these questions. This has led to the emergence of a range of new approaches, some thanks to technological advances (e.g. in neurolinguistics or psycholinguistics), others to borrowing from neighbouring disciplines (e.g. dynamic systems theory).

This volume covers all the main theoretical approaches, from the best established to the most recent newcomers to the field. This complements in a timely fashion the plethora of recent very lengthy handbooks, as, rather than attempting to provide a comprehensive treatment of all aspects of the various SLA theoretical approaches which are currently productive, it focuses on providing a situated illustration of some of the current work within the various paradigms. It thus gives an up-to-date and non-technical account of some of the ways in which influential theories are used in this field, for the relative newcomer to SLA theorising as well as the SLA researcher working within a specific paradigm but wanting to keep abreast of development in neighbouring approaches. It also enables SLA researchers from a range of perspectives to gain an insight into complementary approaches, thus facilitating interdisciplinary crossovers. Additionally, many of the chapters make it a central concern to outline the links between a particular theory and its pedagogical applications and implications.

Not only is the volume comprehensive in terms of its coverage of old and new theories or approaches, it is also wide ranging in terms of its breadth of coverage, inclusive of the linguistic as well as the cognitive, social and pedagogical dimensions of SLA theorising.

The first linguistic theory introduced is the *generative* perspective (Slabakova, Chapter 1), still one of the best established and most prolific approach within SLA. However, rather than attempting to review it comprehensively, which would be impossible given the scope of the volume, the approach adopted is to give an illustration of one way in which it has been conceptualised within SLA research recently: in this case, Slabakova outlines her *Bottleneck Hypothesis*, in which she argues that the main source of difficulty for second language learners is functional morphology, whereas syntax and semantics are relatively straightforward.

Other well established SLA paradigms reviewed in the volume include *Processability Theory* (Håkansson, Chapter 6), with its focus on how processing constraints shape development, and here again, the emphasis is on illustrating from recent work which has extended the range of typologically different languages this approach has been applied to (German, Swedish and Arabic in this chapter), as well as its application to the diagnosis of language impairment in bilingual children.

The contribution on the *Interactionist* approach (Pica, Chapter 3), after tracing the evolution of this long standing tradition, focuses on its more recent links with psychological constructs such as noticing or attention, as well as its strong pedagogical basis and applications, making a concluding plea for its application to the study of new computer-based communicative patterns.

Also preoccupied with the role of input and of processing in SLA, is the *Input Processing* approach (Benati, Chapter 5). The focus here is on its precise contribution to the field of SLA, in terms of a better understanding of how learners relate forms to meanings when exposed to an L2, and the pedagogical applications of the strategies they employ in so doing.

Firmly focused on the classroom and the role of contextualised practice within it, Lyster and Sato apply *Skill Acquisition Theory* (Chapter 4) to the analysis of the proceduralisation of knowledge in SLA, through providing awareness-practice-feedback instructional sequences to enhance learner performance.

The classroom is also an important player in the *Sociocultural* approach (Gánem-Gutiérrez, Chapter 7), as the locus for mediated activity which is claimed to drive the acquisition process. The focus of this approach, however, is on the social rather than cognitive processes involved, with language seen as a culturally created means of mediation for mental activity, rather than as a separate cognitive faculty.

A model of language which is also very different from the generative perspective is applied to the understanding of classroom processes by Llinares (Chapter 2), who adopts a Hallidayan Systemic-Functional model to investigate EFL and CLIL – Content and Language Integrated Learning – classrooms. In this view, language cannot be separated from the meanings it encodes nor the context in which it is used; language is seen as both process and product.

Yet another conception of language underpins both the usage-based and connectionist chapters. In the chapter adopting a *Usage-based* framework (Weinert, Basterrechea & García Mayo, Chapter 8), the focus is on the need to base SLA analysis on spoken grammars rather than the grammar of traditional reference textbooks. This is demonstrated through the lens of an investigation of subordination in native and non-native spoken language.

Connectionist models (Li & Zhao, Chapter 9) argue that the emergence of human cognition, including language, is the outcome of large networks of interactive processing units operating simultaneously. They review the progress that this relative newcomer to SLA has made recently in designing increasingly sophisticated computational models of bilingual acquisition and processing.

A complete newcomer to the field of SLA research is the application of the *Dynamic Systems Theory* (de Bot, Lowie, Thorne & Verspoor, Chapter 10), originating from applied mathematics, to the study of second language development, conceptualised as a complex adaptive system undergoing constant changes. This approach emphasises the crucial importance of both spatial and temporal dynamics in second language development (both acquisition and attrition), and the authors explore its potential complementarity with other SLA approaches such as sociocultural theory and usage-based theories.

Last but not least, recent technological advances have enabled great strides to be made in the application of neurolinguistics to SLA research. The use of event-related brain potentials (ERPs) to measure cognitive brain activity is enabling researchers to isolate differences in the nature of processing in L1 and L2 populations of different kinds. And although results of studies to-date are rather inconclusive, this approach enables very fine grained investigations to be carried out on the role of e.g. proficiency and age of onset of acquisition on the organisation of language in the brain, as explained by Sabourin, Brien and Tremblay (Chapter 11).

This book offers a good reflection of the growth of SLA theorising in recent years. The end result could have been a volume lacking in coherence, making it difficult for the reader to get a comprehensive overview of this complex field. This is not the case, however, as each approach is clearly situated within the field as a whole, before being exemplified and illustrated with relevant empirical studies.

Florence Myles

Essex, October 2012

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Introduction

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Second language acquisition (SLA) is a field of inquiry that has increased in importance since the 1960s. Early research was descriptive and mainly tied to language teaching pedagogy, but the interest in the nature of learner language changed this direction of inquiry. Currently, researchers adopt multiple perspectives in the analysis of learner language, all of them providing different but complementary answers to the understanding of oral and written data produced by young and older learners in different settings. After all, and as acknowledged by researchers in the field, SLA is a multi-faceted phenomenon that needs to be considered from multiple perspectives in order to gain insights into the complex process of acquiring and using a new language.

In May 2010 some of the contributors to this volume converged in Vitoria-Gasteiz (Spain) to participate in a seminar entitled 'Multiple Perspectives on Second Language Acquisition', organized by the research group *Language and Speech* (<http://www.laslab.org>), to which the editors of the book belong. One of the aims of the seminar was to make both young researchers in the field and second/foreign language practitioners aware of the latest developments of this exciting field of research and, above all, to convey the idea that SLA research provides informed answers to some of the problems that practitioners face in their classrooms.

Following the seminar, we contacted several colleagues and asked them to write state-of-the art chapters on the perspectives within which they develop their research and illustrate the claims made with relevant empirical findings whenever possible. Thus, the main goal of this volume is to provide the reader with updated reviews of the major contemporary approaches to SLA, the research carried out within them and, wherever appropriate, the implications and/or applications for theory, research and pedagogy that might derive from the available empirical evidence. The volume, therefore, features a selection of current approaches to SLA and, as Rothman and VanPatten point out in their Afterword, it presents "[...] a snapshot in time of the historical progression of [the SLA] enterprise".

There are several clarifications that need to be made regarding the choice of some of the words in the title of the volume. We have used the adjective *contemporary* in its literal meaning to refer to approaches that are contemporary in that they are currently being employed in SLA research to shed light on second language (L2) processing and L2 language use as well as to analyze learner language. We have also chosen the noun *approach* as an encompassing term to refer to the different theories/models/perspectives/frameworks that are represented in this volume. We are well aware of recent work where an effort is made to characterize different proposals offered to explain the SLA process on a number of dimensions (see Hulstijn 2012; Ortega 2007). However, given that assessing whether or not each of those proposals qualifies as a theory, model, or framework is beyond the scope of this volume, the term *approach* has been chosen. As for the term *SLA*, we understand it as encompassing both the simultaneous and the sequential acquisition of an L2. It is not our intention to use SLA and bilingualism as synonymous terms.

The book is divided into eleven chapters. The first two focus on two well-established linguistic theories. Slabakova (Universal Grammar) and Llinares (Systemic-functional approach) consider the relevance of those theories for the analysis of learner language and both offer implications for research carried out within their respective approaches and for pedagogy. The next five chapters by Pica (the Interactionist model), Lyster and Sato (Skill Acquisition theory), Benati (Input Processing theory), Håkansson (Processability theory) and Gánem-Gutiérrez (Sociocultural theory) present the main tenets of well-established SLA theories/models and also implications for theory and research as well as for pedagogy (Pica, Benati). The last four chapters feature more recent approaches to the study of SLA: Weinert, Basterrechea and García Mayo (Usage-based approach), Li and Zhao (Connectionist approach), de Bot, Lowie, Thorne and Verspoor (Dynamic Systems theory) and Sabourin, Brien and Tremblay (electrophysiology of second language processing). The afterword by Rothman and VanPatten presents an epistemological reflection on SLA theory on the basis of the different issues raised in the chapters that comprise the volume.

All the contributors to this volume were provided with a set of guidelines about the internal organization of their chapters. Following this common set of guidelines, each chapter starts by informing the reader about the main tenets of the approach in focus and about the manner in which each approach addresses L2 processing, L2 use and the analysis of learner language. In addition, contributors were asked to provide a review of the empirical research carried out within the different approaches, draw theoretical implications stemming from that research, provide implications and/or applications for pedagogy whenever possible and suggest future directions in the field.

The book is intended for SLA researchers as well as for graduate (MA, Ph.D.) students in SLA research, applied linguistics and linguistics, as the different chapters will be a guide in their research within the approaches presented. The volume will also be of interest to professionals from other fields interested in the SLA process and the different explanations that have been put forward to account for it.

During the preparation of the manuscript, Teresa Pica (University of Pennsylvania) unexpectedly passed away on November 14th, 2011. Tere was very excited about contributing her chapter on interaction. She had visited the Basque Country back in 1998 and since then she had advised the first editor of this volume and collaborated with her on several projects. Tere also participated in the 2010 workshop and was planning a visit scheduled precisely for November 2011. An outstanding researcher and a warm friend, her work and her contribution to the field will not be forgotten. This book is dedicated to her memory.

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CHAPTER 1

What is easy and what is hard to acquire in a second language

A generative perspective

Roumyana Slabakova

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Explaining why some linguistic features and constructions are easy or difficult to acquire in a second language has become a prominent current concern in generative second language acquisition (SLA) research. Based on a comparison of findings on the L2 acquisition of functional morphology, syntax, the syntax-semantics and syntax-discourse interfaces, the Bottleneck Hypothesis argues that functional morphemes and their features are the bottleneck of L2 acquisition; acquisition of syntax and semantics (and maybe even the syntax-discourse interface) flows smoothly (Slabakova 2006, 2008). The chapter presents recent experimental studies supporting this view. A pedagogical implication of this model is discussed, namely, that an enhanced focus on practicing grammar in language classrooms is beneficial to learners.

Introduction

In recent years, there has been increased interest in examining and explaining the differential difficulty of acquisition of language modules, operations, and constructions. Within the Interactionist approach (Mackey, Abduhl & Gass 2012 – see Pica, this volume), researchers are interested in what linguistic structures benefit the most from classroom interaction, and more specifically, interactional feedback (Jeon 2007; Long et al. 1998). DeKeyser (2005) has argued that a number of linguistic elements are hard or impossible to learn through mere exposure in the sense of communicating in the target language, because these elements have low frequency or otherwise lack salience, especially where form-meaning mapping is concerned. Therefore his practice approach (DeKeyser 2007) recommends systematic and deliberate practice in the classroom with the goal of creating explicit knowledge and skills in the L2. The generative framework of second language acquisition (SLA) has taken a somewhat

different slant to the issue: it identifies the harder and easier to acquire properties based on their inherent characteristics as defined by linguistic theory. The goal of the present chapter is to endorse, justify and promote such an approach.

Generative theory argues that the linguistic competence of speakers can be described as a highly abstract and unconscious system, a grammar, that allows them to produce and comprehend language. The structure of sentences (syntax), the sound of sentences (phonetics/phonology) and the meaning of sentences (semantics) are components of this unconscious system, or Universal Grammar (UG). Some properties that pertain to syntax, semantics and pragmatics are universal to all languages; some other properties, however, mostly pertaining to functional morphology encoding the universal grammatical meanings, are language specific and are described as subject to parametric variation. Since its inception in the 80ies, this approach to SLA has inherently been interested in how UG facilitates and constrains the process of acquisition. Universal properties such as principles of UG can be transferred from the native language; parameter values different from the native ones but available from UG have been discussed as potential sources of L2 knowledge.

As generative SLA theory has evolved, the fundamental issue of how UG aids acquisition has been augmented with scrutiny of concrete parameter values and the composition of features within these values. For example, Lardiere's (2005, 2009) Feature Re-assembly Hypothesis recently argued that morphological competence should be accorded a special status and highlighted its difference from syntactic competence. In a nutshell, the hypothesis postulates that learning a second language involves figuring out how to reconfigure the formal features of the native language and those available from UG into new or different configurations in the L2. It is precisely this assembly and re-assembly of formal features (which is almost never straightforward mapping) that is at the core of language acquisition. White (2003, Chapter 4), asked the question of whether knowledge of functional morphology drives learning the syntax, or the other way around: knowledge of syntax comes before knowledge of functional morphology. She dubbed the two views *morphology-before-syntax* and *syntax-before-morphology* (see more on this below). Slabakova (2006), building on the insights of White and Lardiere, and viewing the issue from the point of modular critical periods in SLA, argued that there is no critical period for the acquisition of semantics; that is, meaning comes for free if functional morpho-syntactic competence is already in place.

It is crucial that we use principled distinctions, well understood in linguistic theory, and solid bodies of data in assembling this relative delineation of linguistic processes and modules. The ultimate goal of this endeavor is, of course, to explain the cognitive process of language acquisition. However, it can also inform language teaching by applying the insights achieved by generative SLA research and

theory in the last thirty years. It makes practical sense that if teachers know what is hard to acquire and practice it more in the classroom, they will be in a more favorable position to help learners achieve better fluency and higher accuracy in the second language.

Presenting the first of the multiple perspectives on SLA in this volume, this chapter will make the case that generative SLA research findings are eminently applicable to the language classroom. In this chapter, I will argue for the Bottleneck Hypothesis as a partial answer to the question of the title: what is easy and what is hard in second language acquisition. I will show that it is functional morphology that is the bottleneck of L2 acquisition; acquisition of syntax and semantics (and maybe even pragmatics) flows smoothly (Slabakova 2006, 2008). The hypothesis is based on a comparison of findings on the acquisition of functional morphology, syntax, the syntax-semantics interface, the syntax-discourse interface, and the semantics-pragmatics interface. I will summarize findings from representative studies in these areas to make the main point: Functional morphology is the bottleneck of acquisition.

Language architecture and the location of functional morphology

In order to understand how the SLA of various linguistic properties proceeds, we need to have a clear idea of the various units that make up the language faculty and their interaction. The architecture of the language faculty is important because it directly bears on what has to be learned or not, and what comes for free in acquiring a second language. I will assume a widely accepted model of grammar following Reinhart (2006), which is illustrated in Figure 1.

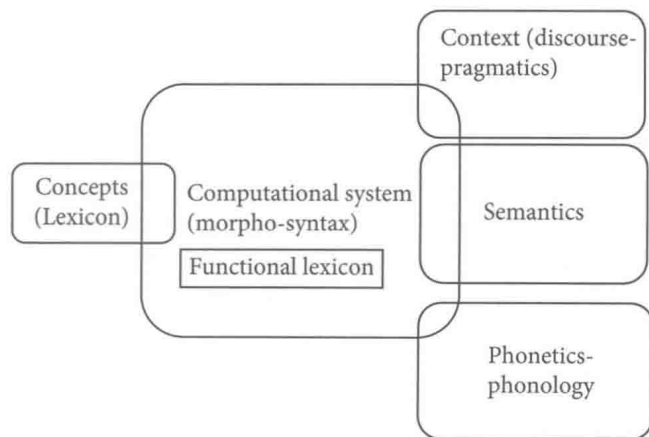


Figure 1. Modular design of the language faculty, modified from Reinhart (2006)