

A LONGITUDINAL STUDY ON THE ACQUISITION OF SIX ENGLISH VOWELS BY BRAZILIAN LEARNERS

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ABSTRACT

This study analyzed the production of English vowels [i ɪ e æ u ʊ] by Brazilian undergraduate students of English Language Teaching throughout the four first semesters of their studies. These vowels are challenging for Brazilians for they are not contrasted in Brazilian Portuguese. Ten participants were recorded reading target words in a carrier sentence every semester from semester 1 through 4. Euclidean distances between pairs of vowels were calculated using Lobanov-normalized F1-F2 values, and such distances were used to fit a mixed-effects model to the data. The results show that: most learners increased their contrasts of the target vowels; learners developed their vowels at different paces and in different moments; not all learners were able to create new phonetic categories for the target vowels.

Keywords: English as a foreign language, vowels, L2 acquisition, longitudinal

1. INTRODUCTION

The main goal of this study was to analyze the development of English vowels [i ɪ e æ u ʊ] by Brazilian college learners of English Language Teaching over the four first semesters of their studies. These six vowels are particularly challenging for Brazilians due to the natural difficulty to perceive and produce sounds of an L2 which are very similar yet not contrasted in the learner's L1, as already stated by Flege's Speech Learning Model [8, 9, 10].

When acquiring their L1, one needs to learn how to accommodate the variation inherent to the acoustic signal into prototypical phonological categories of their L1 so that communication can take place, and the brain does so by taking statistics of the input and assigning exemplars to the corresponding categories [3, 4, 11, 14, 19]. Therefore, it is a very challenging task to perceive and produce L2 contrasting sounds that are very close to a single sound of the L1 [8, 9, 10]. This is the case with English vowels [i ɪ e æ u ʊ], which tend to be assimilated by Brazilian

learners into the prototypical categories of Brazilian Portuguese [i e u], respectively [16, 2, 20, 18].

Assuming that the process of L2 acquisition is a complex dynamic system [7, 5, 12, 15], the prototypical categories created for communication in the L1 act as attractor states for the L2. Attractors are states of temporary accommodation of a complex dynamic system, where the system finds temporary stability amidst chaos. These states are temporary due to the dynamic nature of such systems, which may move, or even keep moving, from one attractor state to another. That is why Language Acquisition would be more accurately described as Language Development, due to its dynamic, never-ending change in time as the system moves through different attractor states.

Some attractor states require more energy for the system to move away from, and that is why some learners need more perturbation to have their systems exit an attractor state, but they can all potentially do so. These perturbations might be language lessons, exposure to the L2, interaction with L2 speakers, experiences abroad, etc., but since the relation between perturbation and movement of the system is non-linear, the effects of language lessons, for instance, might not be immediately seen.

In addition, dynamic systems are complex in the sense that the overall behavior of the system is more than the sum of the behavior of its elements, rather it emerges from the iterative interaction of the many elements that make up the system within themselves and with the environment. This makes the L2 learning experience extremely idiosyncratic, for each system (learner) will behave differently at different moments of their developmental route.

This dynamic and idiosyncratic nature of L2 phonological development is what makes dynamic systems better examined in a longitudinal study that, besides looking into group patterns, also analyzes individual routes of development [17, 13, 21, 6], which is the contribution this study attempts to make.

Longitudinal Analysis Of The Acquisition Of English

Robert B. Kaplan



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A Longitudinal Analysis of the Acquisition of English Thom Huebner, 1983 **A Longitudinal Analysis of the Acquisition of English by an Adult Hmong Speaker** Thomas G. Huebner, 1982 *The Handbook of Language Teaching* Michael H. Long, Catherine J. Doughty, 2011-08-15 Bringing together an international and interdisciplinary team of contributors this Handbook is a wide ranging and invaluable reference guide to language teaching A comprehensive reference work on language teaching which combines the latest research findings coverage of core topics and examples of teaching experience from a variety of languages and settings Provides a unique breadth of coverage including the psycholinguistic underpinnings of language learning social political and educational contexts program design materials writing and course design teaching and testing teacher education and assessment and evaluation Offers a balanced evaluation of the major positions and approaches including examining the increasingly important social and political context of language teaching Written by an international and interdisciplinary group of authors from a dozen different countries English is only one of the many languages used as examples throughout the volume **The Oxford Handbook of Applied Linguistics** Robert B. Kaplan, 2010-09-03 The Oxford Handbook of Applied Linguistics contains 39 original chapters on a broad range of topics in applied linguistics by a diverse group of contributors Its goal is to provide a comprehensive survey of the current state of the field the many connections among its various sub disciplines and the likely directions of its future development The Oxford Handbook of Applied Linguistics addresses a broad audience applied linguists educators and other scholars working in language acquisition language learning language planning teaching and testing and linguists concerned with applications of their work Systematically encompassing the major areas of applied linguistics and drawing from a wide range of disciplines such as education language policy bi and multi lingualism literacy language and gender neurobiology of language psycholinguistics and cognition language and computers discourse analysis language and concordances ecology of language pragmatics translation and many other fields the editors and contributors to The Oxford Handbook of Applied Linguistics provide a panoramic and comprehensive look at this complex and vigorous field This second edition includes five new chapters and the remaining chapters have been thoroughly revised and updated to give a clear picture of the current state of applied linguistics **Emerging Hispanicized English in the Nuevo New South** Erin Callahan, 2018-04-17 This volume provides a comprehensive overview of contemporary language shift and identity in a language community in the mid Atlantic South to offer a unique window into ethnic dialect formation and sociolinguistic processes underpinning dialect acquisition Drawing on data collected from over 100 interviews of members North Carolina Hispanicized English speakers in Durham North Carolina the book employs a quantitative approach and uses statistical software in analyzing the data collected to focus on the sociolinguistic variable of past tense unmarking to explore sociolinguistic processes at work in English language learner variation The focus on a specific variable allows for the opportunity to explore specific processes in

more detail including the ways in which speakers accommodate regional and ethnic varieties of their peers and the internal and environmental factors guiding dialect acquisition Illuminating new facets to the processes of language learning language contact and ethnolect emergence this volume is key reading for students and researchers in second language acquisition and variationist sociolinguistics Contemporary Perspectives on Language Policy and Literacy Instruction in Early Childhood Education Olivia Saracho, Bernard Spodek, 2006-07-01 CONTENTS Language Policy and Literacy Instruction Olivia N Saracho and Bernard Spodek Historical Perspectives in Language Policy and Literacy Reform Olivia N Saracho and Bernard Spodek Second Language Issues in Early Literacy and Instruction Elizabeth S Pang and Michael L Kamil The Acquisition of Literacy Reframing Definitions Paradigms Ideologies and Practices Mary Renck Jalongo Beatrice S Fennimore and Laurie Nicholson Stamp The Teacher of Beginning Reading Robert C Calfee and Linda Scott Hendrick Effective Early Reading Programs for English Language Learners Robert E Slavin and Alan Cheung Language Learners Early Literacy and Reading Policy Reform Paula Wolfe and Betsy J Cahill Children s Literature and Children s Literacy Preparing Early Literacy Teachers to Understand the Aesthetic Values of Children s Literature Barbara Z Kiefer A Critical Examination of India s National Language Policy in Primary Education Jyotsna Pattnaik Issues in Early Childhood Education for English Learners Assessment Professional Training Preschool Interventions and Performance in Elementary School David Yaden Robert Rueda Tina Tsai and Alberto Esquinca Bilingualism is not the Arithmetic Sum of Two Languages Eugene E Garc a Educating the Next Generation Culture Centered Teaching for School Aged Children Esther Elena L pez and Michael William Mulnix Language Policy in the United States An Historical and Contemporary Perspective Olivia N Saracho and Bernard Spodek

Developmental and Crosslinguistic Perspectives in Learner Corpus Research Yukio Tono, Yuji Kawaguchi, Makoto Minegishi, 2012-03-28 This volume provides a state of the art overview of current research and developments on the use of learner corpora perceived from developmental and crosslinguistic perspectives The book is divided into two parts The eleven contributions of Part I investigate the development of English language skills of young learners across seven countries regions on the basis of a new corpus resource called the International Corpus of Crosslinguistic Interlanguage ICCI Part II contains seven papers devoted to other varieties of learner corpora especially spoken learner corpora and learner corpora of languages other than English Presenting original research in corpus linguistics this book will be of interest to researchers and postgraduates in the fields of learner corpus research and second language acquisition and those who wish to apply corpus methodology in teaching and learning For sale in all countries except Japan For customers in Japan please contact Yushodo Co UPRT 2010: Empirical Studies in English Applied Linguistics , *New Perspectives on Transfer in Second Language Learning* Liming Yu, Terence Odlin, 2016 When people attempt to learn a new language the language s they already know can help but also hinder their understanding or production of new forms This phenomenon known as language transfer is the focus of this book The collection offers new theoretical perspectives some in the empirical studies and some in other

chapters and consists of four sections considering lexical syntactic phonological and cognitive perspectives The volume provides a wealth of studies on the influence of Chinese on the acquisition of English but also includes studies involving Finnish French Hindi Korean Persian Spanish Swedish and Tamil It will be of great interest to researchers and students working in the areas of crosslinguistic influence in second language acquisition language pedagogy and psycholinguistics

New Methodological Approaches to Foreign Language Teaching Thomas H. Schmidt, Laura

Torres-Zúñiga, 2017-06-23 This volume explores how the traditional academic disciplines of linguistics translation literature and cultural studies can contribute to or be integrated into the teaching of a foreign language by means of innovative methodologies techniques and instruments The book begins with a selection of essays on applied linguistics that share some significant findings in the context of second or foreign language acquisition It then examines the ways in which linguistics translation theory literature and cultural studies are brought into the foreign language classroom not just as objects of study but also as vehicles for language learning By presenting studies on four main foreign languages English Spanish French and German the collection offers to the foreign language profession an opportunity for the sharing and comparison of strategies across languages at both the secondary and higher education level The text is a valuable resource for language teachers with a more philologically oriented background who would like to learn how to apply their research knowledge and experience to the design and implementation of new methodological approaches Early Learning and Teaching of English Jelena

Mihaljević Djigunović, Marta Medved Krajnović, 2015-03-02 This book offers an insight into the dynamics and complexities of learning and teaching English as a foreign language at primary level Taking a Dynamic Systems Theory perspective the chapters present the findings of longitudinal research undertaken in Croatia into the development of English in young learners The book includes both qualitative and quantitative research and provides insights into internal individual learner factors and external micro and macro contextual factors which impact English learner development Importantly it tackles the unique position of English in today's globalised world in detail It therefore makes a major contribution to work on learning English by the digitalised generation and to understanding the impact of practices in the modern EFL classroom The volume will appeal to anyone interested in new ways of researching the complex and dynamic phenomenon of the early learning of English

Language in Cognition and Affect Ewa Piechurska-Kuciel, Elżbieta Szymańska-Czaplak, 2013-01-30 The volume

contains most updated theoretical and empirical research on foreign or second language processes analyzed from the perspective of cognition and affect It consists of articles devoted to various issues related to such broad topics as gender literacy translation or culture to mention a few The collection of papers offers a constructive and inspiring insight into a fuller understanding of the interconnection of the language cognition affect trichotomy **Accuracy Across Proficiency**

Levels Jennifer Thewissen, 2015-12-23 This volume is a corpus study of the construct of accuracy by learners of English as a Foreign Language based on the International Corpus of Learner English It offers valuable information about the development

of more than forty error types in a wide variety of domains such as grammar lexis lexico grammar spelling and punctuation

Corpus Applications in Applied Linguistics Ken Hyland, Chau Meng Huat, Michael Handford, 2012-04-26 Demonstrates the importance of corpus research to applied linguistics covering a range of areas Referring in a Second Language Jonathon Ryan, Peter Crosthwaite, 2020-03-19 The introduction and tracking of reference to people or individuals known as referential movement is a central feature of coherence and accounts for about every third word of discourse Located at the intersection of pragmatics and grammar reference is now proving a rich and enduring source of insight into second language development The challenge for second language L2 learners involves navigating the selection and positioning of reference in the target language continually shifting and balancing the referential means used to maintain coherence while remaining acutely sensitive to the discourse and social context The present volume focuses on how L2 learners meet that challenge bringing together both eminent and up and coming researchers in the field of L2 acquisition The chapters address a range of problems in second language acquisition SLA e g form function mapping first language L1 influence developmental trajectories and do so in relation to various theoretical approaches to reference e g Accessibility Theory Givenness Hierarchy The global outlook of these studies relates to the L2 acquisition of English French Japanese Korean and Spanish and covers a diverse range of situational contexts including heritage language learning English as a medium of instruction and the development of sociolinguistic competence *Promoting the Educational Success of Children and Youth Learning English* National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division, Division of Behavioral and Social Sciences and Education, Board on Science Education, Board on Children, Youth, and Families, Committee on Fostering School Success for English Learners: Toward New Directions in Policy, Practice, and Research, 2017-09-25 Educating dual language learners DLLs and English learners ELs effectively is a national challenge with consequences both for individuals and for American society Despite their linguistic cognitive and social potential many ELs who account for more than 9 percent of enrollment in grades K 12 in U S schools are struggling to meet the requirements for academic success and their prospects for success in postsecondary education and in the workforce are jeopardized as a result *Promoting the Educational Success of Children and Youth Learning English Promising Futures* examines how evidence based on research relevant to the development of DLLs ELs from birth to age 21 can inform education and health policies and related practices that can result in better educational outcomes This report makes recommendations for policy practice and research and data collection focused on addressing the challenges in caring for and educating DLLs ELs from birth to grade 12 **Articles in English as a Second Language** Justyna Leśniewska, 2019-06-02 The aim of this study is twofold firstly to provide an overview of research findings on the acquisition and use of articles in English as a second language secondly to investigate this issue from a phraseological perspective The book also presents an examination of various linguistic accounts of the English article system with respect to their application to English language teaching In view of the growing body of theoretical and

empirical studies indicating that language use is to a considerable degree phraseologically motivated this book argues for a connection between formulaicity and correct article use This possibility is explored in two studies presented in the final chapter which suggest that correctness in the use of articles depends on the frequency of the phrases in which they appear These findings support the view that frequency driven conventionality in language may play a role in the acquisition and use of articles in L2 English This is a very important contribution to the discussion of the L2 acquisition of articles with particular regard to the L2 acquisition of English Such a discussion is required in view of the confusing variety of opinions expressed on this matter and the unsatisfactory nature of the pedagogical advice on offer to teachers of English as an L2 Dr Le niewska s study reviews the relevant literature interestingly and fully and it proposes an approach to article acquisition in L2 English which is long overdue Prof David Singleton Fellow Emeritus Trinity College **Second Language Pronunciation** Ubiratã Kickhöfel Alves, Jeniffer Imaregna Alcantara de Albuquerque, 2022-12-19 In the field of second language L2 acquisition the number of studies focusing on L2 pronunciation instruction and perceptual production training has increased as new classroom methodologies have been proposed and new goals for L2 pronunciation have been set This book brings together different approaches to L2 pronunciation research in the classroom or in the language laboratory 13 chapters written by well known researchers focusing on a variety of first and target languages are divided into four parts Pronunciation development and intelligibility implications for teaching and training studies L2 pronunciation teaching L2 pronunciation training implications for the classroom and Pronunciation in the laboratory High Variability Phonetic Training Intended for researchers in the fields of second language acquisition phonetics phonology psycholinguistics speech therapies speech technology as well as second language teaching this book not only summarizes the current research questions on L2 pronunciation teaching and training but also predicts future scenarios for both researchers and practitioners in the field

Reforming Bilingual Education United States. Congress. House. Committee on Education and the Workforce.

Subcommittee on Early Childhood, Youth, and Families, 1999 **Teaching and Learning in Two Languages** Eugene E. Garcia, 2005 This is the most comprehensive up to date volume on the state of bilingual education in the United States and in particular on effective curriculum and instructional approaches Eugene Garcia a renowned authority on bilingual education depicts the vast scope and complexity of the problem of educating English language learners He sets forth a conceptual framework to guide educational policy and practice that reflects democratic ideals and values This authoritative reference Provides a comprehensive review of theory research practice and policy that accurately characterizes the education of bilingual students in U S schools Presents an analysis of teachers classrooms schools and communities that have successfully educated bilingual children by employing diverse instructional strategies Addresses language social and cognitive issues as they intersect with various instructional practices Identifies the characteristics of effective bilingual education programs presenting examples of school programs that exemplify these characteristics A valuable resource for teachers administrators

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